



City of Chicago



O2019-9946

Office of the City Clerk

Document Tracking Sheet

Meeting Date:	12/18/2019
Sponsor(s):	Lightfoot (Mayor)
Type:	Ordinance
Title:	Designation of municipal depositaries for 2020
Committee(s) Assignment:	Committee on Finance



OFFICE OF THE MAYOR
CITY OF CHICAGO

LORI E. LIGHTFOOT
MAYOR

December 18, 2019

TO THE HONORABLE, THE CITY COUNCIL
OF THE CITY OF CHICAGO

Ladies and Gentlemen:

At the request of the City Comptroller, I transmit herewith an ordinance designating the 2020 municipal depositaries.

Your favorable consideration of this ordinance will be appreciated.

Very truly yours,

A handwritten signature in black ink, reading "Lori E. Lightfoot".
Mayor

ORDINANCE

WHEREAS, on October 7, 2019 and October 8, 2019, the City Comptroller advertised for bids from national and state banks and federal and state savings and loan associations for interest upon the funds of the City of Chicago and of the Chicago Board of Education to be deposited in banks and savings and loan associations, in accordance with Section 2-32-400 of the Municipal Code of Chicago (the "Code"); and

WHEREAS, on or prior to November 18, 2019, the City Comptroller received bids from financial institutions seeking to be designated as municipal depositories, and subsequently, determined that 12 bidders were eligible to be so designated; and

WHEREAS, pursuant to Section 2-32-400 of the Code, the City Comptroller reported such bids to the City Council on December 12, 2019 to the end that an award or awards may be made upon such bids; now, therefore,

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF CHICAGO:

SECTION 1. The following national and state banks and federal and state savings and loan associations, pursuant to an advertisement required by the Code have applied to become municipal depositories of the City of Chicago and of the Chicago Board of Education for the purpose of holding and paying interest on municipal deposits, and each such financial institution has satisfactorily filed with the City Comptroller the information required by Sections 2-32-430, 2-32-440 and 2-32-450 of the Code:

Amalgamated Bank of Chicago;
Associated Bank, N.A.;
Bank of America, National Association;
BMO Harris Bank N.A.;
Citibank, N.A.;
Fifth Third Bank, National Association;
JPMorgan Chase Bank, N.A.;
MUFG Union Bank, N.A.;
PNC Bank, National Association;
The Huntington National Bank;
Wells Fargo Bank, N.A.; and
Zions Bancorporation, National Association.

SECTION 2. The financial institutions listed in Section 1 are hereby designated as legal depositories for the City of Chicago and the Chicago Board of Education and the Treasurer of the City of Chicago may deposit monies received by him in any of these institutions in accordance with Sections 2-32-470, 2-32-480 and 2-32-490 of the Code.

SECTION 3. To the extent that any ordinance, resolution, rule, order or provision of the Code, or part thereof, is in conflict with the provisions of this ordinance, the provisions of this

ordinance shall control. If any section, paragraph, clause or provision of this ordinance shall be held invalid, the invalidity of such section, paragraph, clause or provision shall not affect any of the other provisions of this ordinance.

SECTION 4. This ordinance shall be effective from and after its passage and approval.

S:\Finance\Monroe\MunicipalDepositories2019.ord

AMALGAMATED
BANK
OF CHICAGO

O2019-9946

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT
AND AFFIDAVIT**

SECTION I -- GENERAL INFORMATION

A. Legal name of the Disclosing Party submitting this EDS. Include d/b/a/ if applicable:

AMALGAMATED BANK OF CHICAGO

Check ONE of the following three boxes:

Indicate whether the Disclosing Party submitting this EDS is:

1. ☒ the Applicant

OR

2. ☐ a legal entity currently holding, or anticipated to hold within six months after City action on the contract, transaction or other undertaking to which this EDS pertains (referred to below as the "Matter"), a direct or indirect interest in excess of 7.5% in the Applicant. State the Applicant's legal name: _____

OR

3. ☐ a legal entity with a direct or indirect right of control of the Applicant (see Section II(B)(1)) State the legal name of the entity in which the Disclosing Party holds a right of control: _____

B. Business address of the Disclosing Party: 30 N. LASALLE STREET
CHICAGO, IL 60602

C. Telephone: 312-822-3188 Fax: 312-267-8770 Email: LRYAN@ABOC.COM

D. Name of contact person: LAURA D. RYAN

E. Federal Employer Identification No. (if you have one): _____

F. Brief description of the Matter to which this EDS pertains. (Include project number and location of property, if applicable):

RFP for Payment of Interest on the Monies of the City of Chicago and the Chicago Board of Education.

G. Which City agency or department is requesting this EDS? City of Chicago, Department of Finance

If the Matter is a contract being handled by the City's Department of Procurement Services, please complete the following:

Specification # _____ and Contract # _____

SECTION II -- DISCLOSURE OF OWNERSHIP INTERESTS

A. NATURE OF THE DISCLOSING PARTY

1. Indicate the nature of the Disclosing Party:

- | | |
|---|--|
| <input type="checkbox"/> Person | <input type="checkbox"/> Limited liability company |
| <input type="checkbox"/> Publicly registered business corporation | <input type="checkbox"/> Limited liability partnership |
| <input checked="" type="checkbox"/> Privately held business corporation | <input type="checkbox"/> Joint venture |
| <input type="checkbox"/> Sole proprietorship | <input type="checkbox"/> Not-for-profit corporation |
| <input type="checkbox"/> General partnership | (Is the not-for-profit corporation also a 501(c)(3))? |
| <input type="checkbox"/> Limited partnership | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| <input type="checkbox"/> Trust | <input type="checkbox"/> Other (please specify) |
-

2. For legal entities, the state (or foreign country) of incorporation or organization, if applicable:

ILLINOIS

3. For legal entities not organized in the State of Illinois: Has the organization registered to do business in the State of Illinois as a foreign entity?

☐ Yes ☐ No ☒ Organized in Illinois

B. IF THE DISCLOSING PARTY IS A LEGAL ENTITY:

1. List below the full names and titles, if applicable, of: (i) all executive officers and all directors of the entity; (ii) **for not-for-profit corporations**, all members, if any, which are legal entities (if there are no such members, write "no members which are legal entities"); (iii) **for trusts, estates or other similar entities**, the trustee, executor, administrator, or similarly situated party; (iv) **for general or limited partnerships, limited liability companies, limited liability partnerships or joint ventures**, each general partner, managing member, manager or any other person or legal entity that directly or indirectly controls the day-to-day management of the Applicant.

NOTE: Each legal entity listed below must submit an EDS on its own behalf.

Name	Title
SEE ATTACHED SHEET.	

2. Please provide the following information concerning each person or legal entity having a direct or indirect, current or prospective (i.e. within 6 months after City action) beneficial interest (including ownership) in excess of 7.5% of the Applicant. Examples of such an interest include shares in a corporation, partnership interest in a partnership or joint venture, interest of a member or manager in a

limited liability company, or interest of a beneficiary of a trust, estate or other similar entity. If none, state "None."

NOTE: Each legal entity listed below may be required to submit an EDS on its own behalf.

Name	Business Address	Percentage Interest in the Applicant
Amalgamated Investments Company	30 N. LaSalle Street	100%
	Chicago, IL 60602	

SECTION III -- INCOME OR COMPENSATION TO, OR OWNERSHIP BY, CITY ELECTED OFFICIALS

Has the Disclosing Party provided any income or compensation to any City elected official during the 12-month period preceding the date of this EDS? ☐ Yes ☒ No

Does the Disclosing Party reasonably expect to provide any income or compensation to any City elected official during the 12-month period following the date of this EDS? ☐ Yes ☒ No

If "yes" to either of the above, please identify below the name(s) of such City elected official(s) and describe such income or compensation:

Does any City elected official or, to the best of the Disclosing Party's knowledge after reasonable inquiry, any City elected official's spouse or domestic partner, have a financial interest (as defined in Chapter 2-156 of the Municipal Code of Chicago ("MCC")) in the Disclosing Party?

☐ Yes ☒ No

If "yes," please identify below the name(s) of such City elected official(s) and/or spouse(s)/domestic partner(s) and describe the financial interest(s).

SECTION IV -- DISCLOSURE OF SUBCONTRACTORS AND OTHER RETAINED PARTIES

The Disclosing Party must disclose the name and business address of each subcontractor, attorney, lobbyist (as defined in MCC Chapter 2-156), accountant, consultant and any other person or entity whom the Disclosing Party has retained or expects to retain in connection with the Matter, as well as the nature of the relationship, and the total amount of the fees paid or estimated to be paid. The Disclosing Party is not required to disclose employees who are paid solely through the Disclosing Party's regular payroll. If the Disclosing Party is uncertain whether a disclosure is required under this Section, the Disclosing Party must either ask the City whether disclosure is required or make the disclosure.

Name (indicate whether retained or anticipated to be retained)	Business Address	Relationship to Disclosing Party (subcontractor, attorney, lobbyist, etc.)	Fees (indicate whether paid or estimated.) NOTE: "hourly rate" or "t.b.d." is not an acceptable response.
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(Add sheets if necessary)

☒ Check here if the Disclosing Party has not retained, nor expects to retain, any such persons or entities.

SECTION V -- CERTIFICATIONS

A. COURT-ORDERED CHILD SUPPORT COMPLIANCE

Under MCC Section 2-92-415, substantial owners of business entities that contract with the City must remain in compliance with their child support obligations throughout the contract's term.

Has any person who directly or indirectly owns 10% or more of the Disclosing Party been declared in arrearage on any child support obligations by any Illinois court of competent jurisdiction?

☐ Yes ☐ No ☒ No person directly or indirectly owns 10% or more of the Disclosing Party.

If "Yes," has the person entered into a court-approved agreement for payment of all support owed and is the person in compliance with that agreement?

☐ Yes ☐ No

B. FURTHER CERTIFICATIONS

1. [This paragraph 1 applies only if the Matter is a contract being handled by the City's Department of Procurement Services.] In the 5-year period preceding the date of this EDS, neither the Disclosing Party nor any Affiliated Entity [see definition in (5) below] has engaged, in connection with the performance of any public contract, the services of an integrity monitor, independent private sector inspector general, or integrity compliance consultant (i.e., an individual or entity with legal, auditing, investigative, or other similar skills, designated by a public agency to help the agency monitor the activity of specified agency vendors as well as help the vendors reform their business practices so they can be considered for agency contracts in the future, or continue with a contract in progress).

2. The Disclosing Party and its Affiliated Entities are not delinquent in the payment of any fine, fee, tax or other source of indebtedness owed to the City of Chicago, including, but not limited to, water and sewer charges, license fees, parking tickets, property taxes and sales taxes, nor is the Disclosing Party delinquent in the payment of any tax administered by the Illinois Department of Revenue.

3. The Disclosing Party and, if the Disclosing Party is a legal entity, all of those persons or entities identified in Section II(B)(1) of this EDS:

- a. are not presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from any transactions by any federal, state or local unit of government;
- b. have not, during the 5 years before the date of this EDS, been convicted of a criminal offense, adjudged guilty, or had a civil judgment rendered against them in connection with: obtaining, attempting to obtain, or performing a public (federal, state or local) transaction or contract under a public transaction; a violation of federal or state antitrust statutes; fraud; embezzlement; theft; forgery; bribery; falsification or destruction of records; making false statements; or receiving stolen property;
- c. are not presently indicted for, or criminally or civilly charged by, a governmental entity (federal, state or local) with committing any of the offenses set forth in subparagraph (b) above;
- d. have not, during the 5 years before the date of this EDS, had one or more public transactions (federal, state or local) terminated for cause or default; and
- e. have not, during the 5 years before the date of this EDS, been convicted, adjudged guilty, or found liable in a civil proceeding, or in any criminal or civil action, including actions concerning environmental violations, instituted by the City or by the federal government, any state, or any other unit of local government.

4. The Disclosing Party understands and shall comply with the applicable requirements of MCC Chapters 2-56 (Inspector General) and 2-156 (Governmental Ethics).

5. Certifications (5), (6) and (7) concern:

- the Disclosing Party;
- any "Contractor" (meaning any contractor or subcontractor used by the Disclosing Party in connection with the Matter, including but not limited to all persons or legal entities disclosed under Section IV, "Disclosure of Subcontractors and Other Retained Parties");
- any "Affiliated Entity" (meaning a person or entity that, directly or indirectly: controls the Disclosing Party, is controlled by the Disclosing Party, or is, with the Disclosing Party, under common control of another person or entity). Indicia of control include, without limitation: interlocking management or ownership; identity of interests among family members, shared facilities and equipment; common use of employees; or organization of a business entity following the ineligibility of a business entity to do business with federal or state or local government, including the City, using substantially the same management, ownership, or principals as the ineligible entity. With respect to Contractors, the term Affiliated Entity means a person or entity that directly or indirectly controls the Contractor, is controlled by it, or, with the Contractor, is under common control of another person or entity;
- any responsible official of the Disclosing Party, any Contractor or any Affiliated Entity or any other official, agent or employee of the Disclosing Party, any Contractor or any Affiliated Entity, acting pursuant to the direction or authorization of a responsible official of the Disclosing Party, any Contractor or any Affiliated Entity (collectively "Agents").

Neither the Disclosing Party, nor any Contractor, nor any Affiliated Entity of either the Disclosing Party or any Contractor, nor any Agents have, during the 5 years before the date of this EDS, or, with respect to a Contractor, an Affiliated Entity, or an Affiliated Entity of a Contractor during the 5 years before the date of such Contractor's or Affiliated Entity's contract or engagement in connection with the Matter:

- a. bribed or attempted to bribe, or been convicted or adjudged guilty of bribery or attempting to bribe, a public officer or employee of the City, the State of Illinois, or any agency of the federal government or of any state or local government in the United States of America, in that officer's or employee's official capacity;
- b. agreed or colluded with other bidders or prospective bidders, or been a party to any such agreement, or been convicted or adjudged guilty of agreement or collusion among bidders or prospective bidders, in restraint of freedom of competition by agreement to bid a fixed price or otherwise; or
- c. made an admission of such conduct described in subparagraph (a) or (b) above that is a matter of record, but have not been prosecuted for such conduct; or
- d. violated the provisions referenced in MCC Subsection 2-92-320(a)(4)(Contracts Requiring a Base Wage); (a)(5)(Debarment Regulations); or (a)(6)(Minimum Wage Ordinance).

6. Neither the Disclosing Party, nor any Affiliated Entity or Contractor, or any of their employees, officials, agents or partners, is barred from contracting with any unit of state or local government as a result of engaging in or being convicted of (1) bid-rigging in violation of 720 ILCS 5/33E-3; (2) bid-rotating in violation of 720 ILCS 5/33E-4; or (3) any similar offense of any state or of the United States of America that contains the same elements as the offense of bid-rigging or bid-rotating.

7. Neither the Disclosing Party nor any Affiliated Entity is listed on a Sanctions List maintained by the United States Department of Commerce, State, or Treasury, or any successor federal agency.

8. [FOR APPLICANT ONLY] (i) Neither the Applicant nor any "controlling person" [see MCC Chapter 1-23, Article I for applicability and defined terms] of the Applicant is currently indicted or charged with, or has admitted guilt of, or has ever been convicted of, or placed under supervision for, any criminal offense involving actual, attempted, or conspiracy to commit bribery, theft, fraud, forgery, perjury, dishonesty or deceit against an officer or employee of the City or any "sister agency"; and (ii) the Applicant understands and acknowledges that compliance with Article I is a continuing requirement for doing business with the City. NOTE: If MCC Chapter 1-23, Article I applies to the Applicant, that Article's permanent compliance timeframe supersedes 5-year compliance timeframes in this Section V.

9. [FOR APPLICANT ONLY] The Applicant and its Affiliated Entities will not use, nor permit their subcontractors to use, any facility listed as having an active exclusion by the U.S. EPA on the federal System for Award Management ("SAM").

10. [FOR APPLICANT ONLY] The Applicant will obtain from any contractors/subcontractors hired or to be hired in connection with the Matter certifications equal in form and substance to those in Certifications (2) and (9) above and will not, without the prior written consent of the City, use any such

contractor/subcontractor that does not provide such certifications or that the Applicant has reason to believe has not provided or cannot provide truthful certifications.

11. If the Disclosing Party is unable to certify to any of the above statements in this Part B (Further Certifications), the Disclosing Party must explain below:

N/A.

If the letters "NA," the word "None," or no response appears on the lines above, it will be conclusively presumed that the Disclosing Party certified to the above statements.

12. To the best of the Disclosing Party's knowledge after reasonable inquiry, the following is a complete list of all current employees of the Disclosing Party who were, at any time during the 12-month period preceding the date of this EDS, an employee, or elected or appointed official, of the City of Chicago (if none, indicate with "N/A" or "none").

NONE

13. To the best of the Disclosing Party's knowledge after reasonable inquiry, the following is a complete list of all gifts that the Disclosing Party has given or caused to be given, at any time during the 12-month period preceding the execution date of this EDS, to an employee, or elected or appointed official, of the City of Chicago. For purposes of this statement, a "gift" does not include: (i) anything made generally available to City employees or to the general public, or (ii) food or drink provided in the course of official City business and having a retail value of less than \$25 per recipient, or (iii) a political contribution otherwise duly reported as required by law (if none, indicate with "N/A" or "none"). As to any gift listed below, please also list the name of the City recipient.

NONE

C. CERTIFICATION OF STATUS AS FINANCIAL INSTITUTION

1. The Disclosing Party certifies that the Disclosing Party (check one)

☒ is ☐ is not

a "financial institution" as defined in MCC Section 2-32-455(b).

2. If the Disclosing Party IS a financial institution, then the Disclosing Party pledges:

"We are not and will not become a predatory lender as defined in MCC Chapter 2-32. We further pledge that none of our affiliates is, and none of them will become, a predatory lender as defined in MCC Chapter 2-32. We understand that becoming a predatory lender or becoming an affiliate of a predatory lender may result in the loss of the privilege of doing business with the City."

If the Disclosing Party is unable to make this pledge because it or any of its affiliates (as defined in MCC Section 2-32-455(b)) is a predatory lender within the meaning of MCC Chapter 2-32, explain here (attach additional pages if necessary):

If the letters "NA," the word "None," or no response appears on the lines above, it will be conclusively presumed that the Disclosing Party certified to the above statements.

D. CERTIFICATION REGARDING FINANCIAL INTEREST IN CITY BUSINESS

Any words or terms defined in MCC Chapter 2-156 have the same meanings if used in this Part D.

1. In accordance with MCC Section 2-156-110: To the best of the Disclosing Party's knowledge after reasonable inquiry, does any official or employee of the City have a financial interest in his or her own name or in the name of any other person or entity in the Matter?

☐ Yes ☒ No

NOTE: If you checked "Yes" to Item D(1), proceed to Items D(2) and D(3). If you checked "No" to Item D(1), skip Items D(2) and D(3) and proceed to Part E.

2. Unless sold pursuant to a process of competitive bidding, or otherwise permitted, no City elected official or employee shall have a financial interest in his or her own name or in the name of any other person or entity in the purchase of any property that (i) belongs to the City, or (ii) is sold for taxes or assessments, or (iii) is sold by virtue of legal process at the suit of the City (collectively, "City Property Sale"). Compensation for property taken pursuant to the City's eminent domain power does not constitute a financial interest within the meaning of this Part D.

Does the Matter involve a City Property Sale?

☐ Yes ☐ No

3. If you checked "Yes" to Item D(1), provide the names and business addresses of the City officials or employees having such financial interest and identify the nature of the financial interest:

Name	Business Address	Nature of Financial Interest

4. The Disclosing Party further certifies that no prohibited financial interest in the Matter will be acquired by any City official or employee.

E. CERTIFICATION REGARDING SLAVERY ERA BUSINESS

Please check either (1) or (2) below. If the Disclosing Party checks (2), the Disclosing Party must disclose below or in an attachment to this EDS all information required by (2). Failure to comply with these disclosure requirements may make any contract entered into with the City in connection with the Matter voidable by the City.

X 1. The Disclosing Party verifies that the Disclosing Party has searched any and all records of the Disclosing Party and any and all predecessor entities regarding records of investments or profits from slavery or slaveholder insurance policies during the slavery era (including insurance policies issued to slaveholders that provided coverage for damage to or injury or death of their slaves), and the Disclosing Party has found no such records.

2. The Disclosing Party verifies that, as a result of conducting the search in step (1) above, the Disclosing Party has found records of investments or profits from slavery or slaveholder insurance policies. The Disclosing Party verifies that the following constitutes full disclosure of all such records, including the names of any and all slaves or slaveholders described in those records:

SECTION VI -- CERTIFICATIONS FOR FEDERALLY FUNDED MATTERS

NOTE: If the Matter is federally funded, complete this Section VI. If the Matter is not federally funded, proceed to Section VII. For purposes of this Section VI, tax credits allocated by the City and proceeds of debt obligations of the City are not federal funding.

A. CERTIFICATION REGARDING LOBBYING

1. List below the names of all persons or entities registered under the federal Lobbying Disclosure Act of 1995, as amended, who have made lobbying contacts on behalf of the Disclosing Party with respect to the Matter: (Add sheets if necessary):

(If no explanation appears or begins on the lines above, or if the letters "NA" or if the word "None" appear, it will be conclusively presumed that the Disclosing Party means that NO persons or entities registered under the Lobbying Disclosure Act of 1995, as amended, have made lobbying contacts on behalf of the Disclosing Party with respect to the Matter.)

2. The Disclosing Party has not spent and will not expend any federally appropriated funds to pay any person or entity listed in paragraph A(1) above for his or her lobbying activities or to pay any person or entity to influence or attempt to influence an officer or employee of any agency, as defined by applicable federal law, a member of Congress, an officer or employee of Congress, or an employee

of a member of Congress, in connection with the award of any federally funded contract, making any federally funded grant or loan, entering into any cooperative agreement, or to extend, continue, renew, amend, or modify any federally funded contract, grant, loan, or cooperative agreement.

3. The Disclosing Party will submit an updated certification at the end of each calendar quarter in which there occurs any event that materially affects the accuracy of the statements and information set forth in paragraphs A(1) and A(2) above.

4. The Disclosing Party certifies that either: (i) it is not an organization described in section 501(c)(4) of the Internal Revenue Code of 1986; or (ii) it is an organization described in section 501(c)(4) of the Internal Revenue Code of 1986 but has not engaged and will not engage in "Lobbying Activities," as that term is defined in the Lobbying Disclosure Act of 1995, as amended.

5. If the Disclosing Party is the Applicant, the Disclosing Party must obtain certifications equal in form and substance to paragraphs A(1) through A(4) above from all subcontractors before it awards any subcontract and the Disclosing Party must maintain all such subcontractors' certifications for the duration of the Matter and must make such certifications promptly available to the City upon request.

B. CERTIFICATION REGARDING EQUAL EMPLOYMENT OPPORTUNITY

If the Matter is federally funded, federal regulations require the Applicant and all proposed subcontractors to submit the following information with their bids or in writing at the outset of negotiations.

Is the Disclosing Party the Applicant?

☐ Yes

☐ No

If "Yes," answer the three questions below:

1. Have you developed and do you have on file affirmative action programs pursuant to applicable federal regulations? (See 41 CFR Part 60-2.)

☐ Yes

☐ No

2. Have you filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance Programs, or the Equal Employment Opportunity Commission all reports due under the applicable filing requirements?

☐ Yes

☐ No

☐ Reports not required

3. Have you participated in any previous contracts or subcontracts subject to the equal opportunity clause?

☐ Yes

☐ No

If you checked "No" to question (1) or (2) above, please provide an explanation:

SECTION VII -- FURTHER ACKNOWLEDGMENTS AND CERTIFICATION

The Disclosing Party understands and agrees that:

- A. The certifications, disclosures, and acknowledgments contained in this EDS will become part of any contract or other agreement between the Applicant and the City in connection with the Matter, whether procurement, City assistance, or other City action, and are material inducements to the City's execution of any contract or taking other action with respect to the Matter. The Disclosing Party understands that it must comply with all statutes, ordinances, and regulations on which this EDS is based.
- B. The City's Governmental Ethics Ordinance, MCC Chapter 2-156, imposes certain duties and obligations on persons or entities seeking City contracts, work, business, or transactions. The full text of this ordinance and a training program is available on line at www.cityofchicago.org/Ethics, and may also be obtained from the City's Board of Ethics, 740 N. Sedgwick St., Suite 500, Chicago, IL 60610, (312) 744-9660. The Disclosing Party must comply fully with this ordinance.
- C. If the City determines that any information provided in this EDS is false, incomplete or inaccurate, any contract or other agreement in connection with which it is submitted may be rescinded or be void or voidable, and the City may pursue any remedies under the contract or agreement (if not rescinded or void), at law, or in equity, including terminating the Disclosing Party's participation in the Matter and/or declining to allow the Disclosing Party to participate in other City transactions. Remedies at law for a false statement of material fact may include incarceration and an award to the City of treble damages.
- D. It is the City's policy to make this document available to the public on its Internet site and/or upon request. Some or all of the information provided in, and appended to, this EDS may be made publicly available on the Internet, in response to a Freedom of Information Act request, or otherwise. By completing and signing this EDS, the Disclosing Party waives and releases any possible rights or claims which it may have against the City in connection with the public release of information contained in this EDS and also authorizes the City to verify the accuracy of any information submitted in this EDS.
- E. The information provided in this EDS must be kept current. In the event of changes, the Disclosing Party must supplement this EDS up to the time the City takes action on the Matter. If the Matter is a contract being handled by the City's Department of Procurement Services, the Disclosing Party must update this EDS as the contract requires. **NOTE:** With respect to Matters subject to MCC Chapter 1-23, Article I (imposing **PERMANENT INELIGIBILITY** for certain specified offenses), the information provided herein regarding eligibility must be kept current for a longer period, as required by MCC Chapter 1-23 and Section 2-154-020.

CERTIFICATION

Under penalty of perjury, the person signing below: (1) warrants that he/she is authorized to execute this EDS, and all applicable Appendices, on behalf of the Disclosing Party, and (2) warrants that all certifications and statements contained in this EDS, and all applicable Appendices, are true, accurate and complete as of the date furnished to the City.

AMALGAMATED BANK OF CHICAGO

(Print or type exact legal name of Disclosing Party)

By: _____

(Sign here)

JAMES T. LANDENBERGER

(Print or type name of person signing)

EXECUTIVE VICE PRESIDENT AND GENERAL COUNSEL

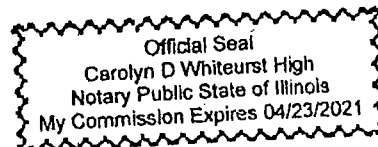
(Print or type title of person signing)

Signed and sworn to before me on (date) November 15, 2019

) at Cook County, ILLinois (state).

Carolyn D. Whiteurst High
Notary Public

Commission expires: 04/23/2021



**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
APPENDIX A**

**FAMILIAL RELATIONSHIPS WITH ELECTED CITY OFFICIALS
AND DEPARTMENT HEADS**

This Appendix is to be completed only by (a) the Applicant, and (b) any legal entity which has a direct ownership interest in the Applicant exceeding 7.5%. It is not to be completed by any legal entity which has only an indirect ownership interest in the Applicant.

Under MCC Section 2-154-015, the Disclosing Party must disclose whether such Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof currently has a "familial relationship" with any elected city official or department head. A "familial relationship" exists if, as of the date this EDS is signed, the Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof is related to the mayor, any alderman, the city clerk, the city treasurer or any city department head as spouse or domestic partner or as any of the following, whether by blood or adoption: parent, child, brother or sister, aunt or uncle, niece or nephew, grandparent, grandchild, father-in-law, mother-in-law, son-in-law, daughter-in-law, stepfather or stepmother, stepson or stepdaughter, stepbrother or stepsister or half-brother or half-sister.

"Applicable Party" means (1) all executive officers of the Disclosing Party listed in Section II.B.1.a., if the Disclosing Party is a corporation; all partners of the Disclosing Party, if the Disclosing Party is a general partnership; all general partners and limited partners of the Disclosing Party, if the Disclosing Party is a limited partnership; all managers, managing members and members of the Disclosing Party, if the Disclosing Party is a limited liability company; (2) all principal officers of the Disclosing Party; and (3) any person having more than a 7.5% ownership interest in the Disclosing Party. "Principal officers" means the president, chief operating officer, executive director, chief financial officer, treasurer or secretary of a legal entity or any person exercising similar authority.

Does the Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof currently have a "familial relationship" with an elected city official or department head?

☐ Yes

☒ No

If yes, please identify below (1) the name and title of such person, (2) the name of the legal entity to which such person is connected; (3) the name and title of the elected city official or department head to whom such person has a familial relationship, and (4) the precise nature of such familial relationship.

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
APPENDIX B**

BUILDING CODE SCOFFLAW/PROBLEM LANDLORD CERTIFICATION

This Appendix is to be completed only by (a) the Applicant, and (b) any legal entity which has a direct ownership interest in the Applicant exceeding 7.5% (an "Owner"). It is not to be completed by any legal entity which has only an indirect ownership interest in the Applicant.

1. Pursuant to MCC Section 2-154-010, is the Applicant or any Owner identified as a building code scofflaw or problem landlord pursuant to MCC Section 2-92-416?

☐ Yes

☒ No

2. If the Applicant is a legal entity publicly traded on any exchange, is any officer or director of the Applicant identified as a building code scofflaw or problem landlord pursuant to MCC Section 2-92-416?

☐ Yes

☐ No

☒ The Applicant is not publicly traded on any exchange.

3. If yes to (1) or (2) above, please identify below the name of each person or legal entity identified as a building code scofflaw or problem landlord and the address of each building or buildings to which the pertinent code violations apply.

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
APPENDIX C**

PROHIBITION ON WAGE & SALARY HISTORY SCREENING - CERTIFICATION

This Appendix is to be completed only by an Applicant that is completing this EDS as a “contractor” as defined in MCC Section 2-92-385. That section, which should be consulted (www.amlegal.com), generally covers a party to any agreement pursuant to which they: (i) receive City of Chicago funds in consideration for services, work or goods provided (including for legal or other professional services), or (ii) pay the City money for a license, grant or concession allowing them to conduct a business on City premises.

On behalf of an Applicant that is a contractor pursuant to MCC Section 2-92-385, I hereby certify that the Applicant is in compliance with MCC Section 2-92-385(b)(1) and (2), which prohibit: (i) screening job applicants based on their wage or salary history, or (ii) seeking job applicants’ wage or salary history from current or former employers. I also certify that the Applicant has adopted a policy that includes those prohibitions.

☐ Yes

☐ No

☒ N/A – I am not an Applicant that is a “contractor” as defined in MCC Section 2-92-385.

This certification shall serve as the affidavit required by MCC Section 2-92-385(c)(1).

If you checked “no” to the above, please explain.

EXHIBIT SECTION II. B. 1



DIRECTORS

Ken Bahk
Ronald A. Damashek
Donald Finn
Miriam L. Fitzgerald
Warren Katz
David E. Knopp
Gary Perinar
Robert Reiter
James Sweeny
Darrell Williams
Debra H. Wrobel
Robert M. Wrobel

OFFICERS

Robert M. Wrobel, Chairman and President

James T. Landenberger, Executive Vice President and General Counsel

Scott A. Rupp, Executive Vice President and Chief Financial Officer

Richard Wojtecki, Executive Vice President and Chief Lending Officer

FIRMWIDE

PLEASE POPULATE THE HIGHLIGHTED PORTIONS ONLY

Firm Name:	Amalgamated Bank of Chicago
Primary Representative:	Trina M. Tyler
Primary Representative Email and Telephone:	tyler@aboc.com; 312-822-3134
Headquarters Address:	30 N. LaSalle Street, Chicago, IL 60602
Chicago Public Finance Office Address:	
Total Number of Employees:	179
Number of Employees in Illinois:	179
Number of Employees in Chicago:	173
Capital Position:	
Minority Designation:	

Job Categories	72					107				
	Male					Female				
	White (Not Hispanic)	Black (Not Hispanic)	Hispanic	Asian	Native American	White (Not Hispanic)	Black (Not Hispanic)	Hispanic	Asian	Native American
Officials and Managers	78	32	5	4	0	18	16	3	0	0
Professionals	38	3	3	0	2	9	15	6	0	0
Technicians	11	3	3	1	3	0	1	0	0	0
Sales Workers	0	0	0	0	0	0	0	0	0	0
Office and Clerical	52	4	6	3	0	8	21	10	0	0
Craft Workers (Skilled)	0	0	0	0	0	0	0	0	0	0
Operatives (Semi-Skilled)	0	0	0	0	0	0	0	0	0	0
Laborers	0	0	0	0	0	0	0	0	0	0
Service Workers	0	0	0	0	0	0	0	0	0	0
Total	179	42	17	8	5	35	53	19	0	0

Male	Female	Total
40%	60%	100%

Job Categories	White (Not Hispanic)	Black (Not Hispanic)	Hispanic	Asian	Native American
Officials and Managers	44%	28%	12%	4%	0%
Professionals	21%	7%	10%	3%	0%
Technicians	6%	2%	2%	1%	0%
Sales Workers	0%	0%	0%	0%	0%
Office and Clerical	29%	7%	15%	7%	0%
Craft Workers (Skilled)	0%	0%	0%	0%	0%
Operatives (Semi-Skilled)	0%	0%	0%	0%	0%
Laborers	0%	0%	0%	0%	0%
Service Workers	0%	0%	0%	0%	0%
Total	100%	43%	39%	15%	3%

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT
AND AFFIDAVIT**

SECTION I -- GENERAL INFORMATION

A. Legal name of the Disclosing Party submitting this EDS. Include d/b/a/ if applicable:

AMALGAMATED INVESTMENTS COMPANY

Check ONE of the following three boxes:

Indicate whether the Disclosing Party submitting this EDS is:

1. ☐ the Applicant

OR

2. ☒ a legal entity currently holding, or anticipated to hold within six months after City action on the contract, transaction or other undertaking to which this EDS pertains (referred to below as the "Matter"), a direct or indirect interest in excess of 7.5% in the Applicant. State the Applicant's legal name: AMALGAMATED BANK OF CHICAGO

OR

3. ☐ a legal entity with a direct or indirect right of control of the Applicant (see Section II(B)(1)) State the legal name of the entity in which the Disclosing Party holds a right of control:

B. Business address of the Disclosing Party: 30 N. LASALLE STREET
CHICAGO, IL 60602

C. Telephone: 312-822-3188 Fax: 312-267-8770 Email: LRYAN@ABOC.COM

D. Name of contact person: LAURA D. RYAN

E. Federal Employer Identification No. (if you have one): _____

F. Brief description of the Matter to which this EDS pertains. (Include project number and location of property, if applicable):

RFP for Payment of Interest on the Monies of the City of Chicago and the Chicago Board of Education.

G. Which City agency or department is requesting this EDS? City of Chicago, Department of Finance

If the Matter is a contract being handled by the City's Department of Procurement Services, please complete the following:

Specification # _____ and Contract # _____

SECTION II -- DISCLOSURE OF OWNERSHIP INTERESTS

A. NATURE OF THE DISCLOSING PARTY

1. Indicate the nature of the Disclosing Party:

- | | |
|---|--|
| <input type="checkbox"/> Person | <input type="checkbox"/> Limited liability company |
| <input type="checkbox"/> Publicly registered business corporation | <input type="checkbox"/> Limited liability partnership |
| <input checked="" type="checkbox"/> Privately held business corporation | <input type="checkbox"/> Joint venture |
| <input type="checkbox"/> Sole proprietorship | <input type="checkbox"/> Not-for-profit corporation |
| <input type="checkbox"/> General partnership | (Is the not-for-profit corporation also a 501(c)(3))? |
| <input type="checkbox"/> Limited partnership | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| <input type="checkbox"/> Trust | <input type="checkbox"/> Other (please specify) |
-

2. For legal entities, the state (or foreign country) of incorporation or organization, if applicable:

ILLINOIS

3. For legal entities not organized in the State of Illinois: Has the organization registered to do business in the State of Illinois as a foreign entity?

☐ Yes ☐ No ☒ Organized in Illinois

B. IF THE DISCLOSING PARTY IS A LEGAL ENTITY:

1. List below the full names and titles, if applicable, of: (i) all executive officers and all directors of the entity; (ii) **for not-for-profit corporations**, all members, if any, which are legal entities (if there are no such members, write "no members which are legal entities"); (iii) **for trusts, estates or other similar entities**, the trustee, executor, administrator, or similarly situated party; (iv) **for general or limited partnerships, limited liability companies, limited liability partnerships or joint ventures**, each general partner, managing member, manager or any other person or legal entity that directly or indirectly controls the day-to-day management of the Applicant.

NOTE: Each legal entity listed below must submit an EDS on its own behalf.

Name	Title
SEE ATTACHED SHEET.	
<hr/>	
<hr/>	

2. Please provide the following information concerning each person or legal entity having a direct or indirect, current or prospective (i.e. within 6 months after City action) beneficial interest (including ownership) in excess of 7.5% of the Applicant. Examples of such an interest include shares in a corporation, partnership interest in a partnership or joint venture, interest of a member or manager in a

limited liability company, or interest of a beneficiary of a trust, estate or other similar entity. If none, state "None."

NOTE: Each legal entity listed below may be required to submit an EDS on its own behalf.

Name	Business Address	Percentage Interest in the Applicant
SEE ATTACHED EXHIBIT.		
<hr/>		
<hr/>		
<hr/>		

SECTION III -- INCOME OR COMPENSATION TO, OR OWNERSHIP BY, CITY ELECTED OFFICIALS

Has the Disclosing Party provided any income or compensation to any City elected official during the 12-month period preceding the date of this EDS? ☐ Yes ☒ No

Does the Disclosing Party reasonably expect to provide any income or compensation to any City elected official during the 12-month period following the date of this EDS? ☐ Yes ☒ No

If "yes" to either of the above, please identify below the name(s) of such City elected official(s) and describe such income or compensation:

Does any City elected official or, to the best of the Disclosing Party's knowledge after reasonable inquiry, any City elected official's spouse or domestic partner, have a financial interest (as defined in Chapter 2-156 of the Municipal Code of Chicago ("MCC")) in the Disclosing Party?

☐ Yes ☒ No

If "yes," please identify below the name(s) of such City elected official(s) and/or spouse(s)/domestic partner(s) and describe the financial interest(s).

SECTION IV -- DISCLOSURE OF SUBCONTRACTORS AND OTHER RETAINED PARTIES

The Disclosing Party must disclose the name and business address of each subcontractor, attorney, lobbyist (as defined in MCC Chapter 2-156), accountant, consultant and any other person or entity whom the Disclosing Party has retained or expects to retain in connection with the Matter, as well as the nature of the relationship, and the total amount of the fees paid or estimated to be paid. The Disclosing Party is not required to disclose employees who are paid solely through the Disclosing Party's regular payroll. If the Disclosing Party is uncertain whether a disclosure is required under this Section, the Disclosing Party must either ask the City whether disclosure is required or make the disclosure.

Name (indicate whether retained or anticipated to be retained)	Business Address	Relationship to Disclosing Party (subcontractor, attorney, lobbyist, etc.)	Fees (indicate whether paid or estimated.) NOTE: "hourly rate" or "t.b.d." is not an acceptable response.
--	------------------	--	---

(Add sheets if necessary)

[X] Check here if the Disclosing Party has not retained, nor expects to retain, any such persons or entities.

SECTION V -- CERTIFICATIONS

A. COURT-ORDERED CHILD SUPPORT COMPLIANCE

Under MCC Section 2-92-415, substantial owners of business entities that contract with the City must remain in compliance with their child support obligations throughout the contract's term.

Has any person who directly or indirectly owns 10% or more of the Disclosing Party been declared in arrearage on any child support obligations by any Illinois court of competent jurisdiction?

[] Yes [] No [X] No person directly or indirectly owns 10% or more of the Disclosing Party.

If "Yes," has the person entered into a court-approved agreement for payment of all support owed and is the person in compliance with that agreement?

[] Yes [] No

B. FURTHER CERTIFICATIONS

1. [This paragraph 1 applies only if the Matter is a contract being handled by the City's Department of Procurement Services.] In the 5-year period preceding the date of this EDS, neither the Disclosing Party nor any Affiliated Entity [see definition in (5) below] has engaged, in connection with the performance of any public contract, the services of an integrity monitor, independent private sector inspector general, or integrity compliance consultant (i.e., an individual or entity with legal, auditing, investigative, or other similar skills, designated by a public agency to help the agency monitor the activity of specified agency vendors as well as help the vendors reform their business practices so they can be considered for agency contracts in the future, or continue with a contract in progress).

2. The Disclosing Party and its Affiliated Entities are not delinquent in the payment of any fine, fee, tax or other source of indebtedness owed to the City of Chicago, including, but not limited to, water and sewer charges, license fees, parking tickets, property taxes and sales taxes, nor is the Disclosing Party delinquent in the payment of any tax administered by the Illinois Department of Revenue.

3. The Disclosing Party and, if the Disclosing Party is a legal entity, all of those persons or entities identified in Section II(B)(1) of this EDS:

- a. are not presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from any transactions by any federal, state or local unit of government;
- b. have not, during the 5 years before the date of this EDS, been convicted of a criminal offense, adjudged guilty, or had a civil judgment rendered against them in connection with: obtaining, attempting to obtain, or performing a public (federal, state or local) transaction or contract under a public transaction; a violation of federal or state antitrust statutes; fraud; embezzlement; theft; forgery; bribery; falsification or destruction of records; making false statements; or receiving stolen property;
- c. are not presently indicted for, or criminally or civilly charged by, a governmental entity (federal, state or local) with committing any of the offenses set forth in subparagraph (b) above;
- d. have not, during the 5 years before the date of this EDS, had one or more public transactions (federal, state or local) terminated for cause or default; and
- e. have not, during the 5 years before the date of this EDS, been convicted, adjudged guilty, or found liable in a civil proceeding, or in any criminal or civil action, including actions concerning environmental violations, instituted by the City or by the federal government, any state, or any other unit of local government. \

) 4. The Disclosing Party understands and shall comply with the applicable requirements of MCC Chapters 2-56 (Inspector General) and 2-156 (Governmental Ethics).

5. Certifications (5), (6) and (7) concern:

- the Disclosing Party;
- any "Contractor" (meaning any contractor or subcontractor used by the Disclosing Party in connection with the Matter, including but not limited to all persons or legal entities disclosed under Section IV, "Disclosure of Subcontractors and Other Retained Parties");
- any "Affiliated Entity" (meaning a person or entity that, directly or indirectly: controls the Disclosing Party, is controlled by the Disclosing Party, or is, with the Disclosing Party, under common control of another person or entity). Indicia of control include, without limitation: interlocking management or ownership; identity of interests among family members, shared facilities and equipment; common use of employees; or organization of a business entity following the ineligibility of a business entity to do business with federal or state or local government, including the City, using substantially the same management, ownership, or principals as the ineligible entity. With respect to Contractors, the term Affiliated Entity means a person or entity that directly or indirectly controls the Contractor, is controlled by it, or, with the Contractor, is under common control of another person or entity;
- any responsible official of the Disclosing Party, any Contractor or any Affiliated Entity or any other official, agent or employee of the Disclosing Party, any Contractor or any Affiliated Entity, acting pursuant to the direction or authorization of a responsible official of the Disclosing Party, any Contractor or any Affiliated Entity (collectively "Agents").

Neither the Disclosing Party, nor any Contractor, nor any Affiliated Entity of either the Disclosing Party or any Contractor, nor any Agents have, during the 5 years before the date of this EDS, or, with respect to a Contractor, an Affiliated Entity, or an Affiliated Entity of a Contractor during the 5 years before the date of such Contractor's or Affiliated Entity's contract or engagement in connection with the Matter:

- a. bribed or attempted to bribe, or been convicted or adjudged guilty of bribery or attempting to bribe, a public officer or employee of the City, the State of Illinois, or any agency of the federal government or of any state or local government in the United States of America, in that officer's or employee's official capacity;
- b. agreed or colluded with other bidders or prospective bidders, or been a party to any such agreement, or been convicted or adjudged guilty of agreement or collusion among bidders or prospective bidders, in restraint of freedom of competition by agreement to bid a fixed price or otherwise; or
- c. made an admission of such conduct described in subparagraph (a) or (b) above that is a matter of record, but have not been prosecuted for such conduct; or
- d. violated the provisions referenced in MCC Subsection 2-92-320(a)(4)(Contracts Requiring a Base Wage); (a)(5)(Debarment Regulations); or (a)(6)(Minimum Wage Ordinance).

6. Neither the Disclosing Party, nor any Affiliated Entity or Contractor, or any of their employees, officials, agents or partners, is barred from contracting with any unit of state or local government as a result of engaging in or being convicted of (1) bid-rigging in violation of 720 ILCS 5/33E-3; (2) bid-rotating in violation of 720 ILCS 5/33E-4; or (3) any similar offense of any state or of the United States of America that contains the same elements as the offense of bid-rigging or bid-rotating.

7. Neither the Disclosing Party nor any Affiliated Entity is listed on a Sanctions List maintained by the United States Department of Commerce, State, or Treasury, or any successor federal agency.

8. [FOR APPLICANT ONLY] (i) Neither the Applicant nor any "controlling person" [see MCC Chapter 1-23, Article I for applicability and defined terms] of the Applicant is currently indicted or charged with, or has admitted guilt of, or has ever been convicted of, or placed under supervision for, any criminal offense involving actual, attempted, or conspiracy to commit bribery, theft, fraud, forgery, perjury, dishonesty or deceit against an officer or employee of the City or any "sister agency"; and (ii) the Applicant understands and acknowledges that compliance with Article I is a continuing requirement for doing business with the City. NOTE: If MCC Chapter 1-23, Article I applies to the Applicant, that Article's permanent compliance timeframe supersedes 5-year compliance timeframes in this Section V.

9. [FOR APPLICANT ONLY] The Applicant and its Affiliated Entities will not use, nor permit their subcontractors to use, any facility listed as having an active exclusion by the U.S. EPA on the federal System for Award Management ("SAM").

10. [FOR APPLICANT ONLY] The Applicant will obtain from any contractors/subcontractors hired or to be hired in connection with the Matter certifications equal in form and substance to those in Certifications (2) and (9) above and will not, without the prior written consent of the City, use any such

contractor/subcontractor that does not provide such certifications or that the Applicant has reason to believe has not provided or cannot provide truthful certifications.

11. If the Disclosing Party is unable to certify to any of the above statements in this Part B (Further Certifications), the Disclosing Party must explain below:

N/A.

If the letters "NA," the word "None," or no response appears on the lines above, it will be conclusively presumed that the Disclosing Party certified to the above statements.

12. To the best of the Disclosing Party's knowledge after reasonable inquiry, the following is a complete list of all current employees of the Disclosing Party who were, at any time during the 12-month period preceding the date of this EDS, an employee, or elected or appointed official, of the City of Chicago (if none, indicate with "N/A" or "none").

NONE.

13. To the best of the Disclosing Party's knowledge after reasonable inquiry, the following is a complete list of all gifts that the Disclosing Party has given or caused to be given, at any time during the 12-month period preceding the execution date of this EDS, to an employee, or elected or appointed official, of the City of Chicago. For purposes of this statement, a "gift" does not include: (i) anything made generally available to City employees or to the general public, or (ii) food or drink provided in the course of official City business and having a retail value of less than \$25 per recipient, or (iii) a political contribution otherwise duly reported as required by law (if none, indicate with "N/A" or "none"). As to any gift listed below, please also list the name of the City recipient.

NONE.

C. CERTIFICATION OF STATUS AS FINANCIAL INSTITUTION

1. The Disclosing Party certifies that the Disclosing Party (check one)

☒ is ☐ is not

a "financial institution" as defined in MCC Section 2-32-455(b).

2. If the Disclosing Party IS a financial institution, then the Disclosing Party pledges:

"We are not and will not become a predatory lender as defined in MCC Chapter 2-32. We further pledge that none of our affiliates is, and none of them will become, a predatory lender as defined in MCC Chapter 2-32. We understand that becoming a predatory lender or becoming an affiliate of a predatory lender may result in the loss of the privilege of doing business with the City."

If the Disclosing Party is unable to make this pledge because it or any of its affiliates (as defined in MCC Section 2-32-455(b)) is a predatory lender within the meaning of MCC Chapter 2-32, explain here (attach additional pages if necessary):

If the letters "NA," the word "None," or no response appears on the lines above, it will be conclusively presumed that the Disclosing Party certified to the above statements.

D. CERTIFICATION REGARDING FINANCIAL INTEREST IN CITY BUSINESS

Any words or terms defined in MCC Chapter 2-156 have the same meanings if used in this Part D.

1. In accordance with MCC Section 2-156-110: To the best of the Disclosing Party's knowledge after reasonable inquiry, does any official or employee of the City have a financial interest in his or her own name or in the name of any other person or entity in the Matter?

☐ Yes ☒ No

NOTE: If you checked "Yes" to Item D(1), proceed to Items D(2) and D(3). If you checked "No" to Item D(1), skip Items D(2) and D(3) and proceed to Part E.

2. Unless sold pursuant to a process of competitive bidding, or otherwise permitted, no City elected official or employee shall have a financial interest in his or her own name or in the name of any other person or entity in the purchase of any property that (i) belongs to the City, or (ii) is sold for taxes or assessments, or (iii) is sold by virtue of legal process at the suit of the City (collectively, "City Property Sale"). Compensation for property taken pursuant to the City's eminent domain power does not constitute a financial interest within the meaning of this Part D.

Does the Matter involve a City Property Sale?

☐ Yes ☐ No

3. If you checked "Yes" to Item D(1), provide the names and business addresses of the City officials or employees having such financial interest and identify the nature of the financial interest:

Name	Business Address	Nature of Financial Interest
_____	_____	_____
_____	_____	_____
_____	_____	_____

4. The Disclosing Party further certifies that no prohibited financial interest in the Matter will be acquired by any City official or employee.

E. CERTIFICATION REGARDING SLAVERY ERA BUSINESS

Please check either (1) or (2) below. If the Disclosing Party checks (2), the Disclosing Party must disclose below or in an attachment to this EDS all information required by (2). Failure to comply with these disclosure requirements may make any contract entered into with the City in connection with the Matter voidable by the City.

 X 1. The Disclosing Party verifies that the Disclosing Party has searched any and all records of the Disclosing Party and any and all predecessor entities regarding records of investments or profits from slavery or slaveholder insurance policies during the slavery era (including insurance policies issued to slaveholders that provided coverage for damage to or injury or death of their slaves), and the Disclosing Party has found no such records.

 2. The Disclosing Party verifies that, as a result of conducting the search in step (1) above, the Disclosing Party has found records of investments or profits from slavery or slaveholder insurance policies. The Disclosing Party verifies that the following constitutes full disclosure of all such records, including the names of any and all slaves or slaveholders described in those records:

SECTION VI -- CERTIFICATIONS FOR FEDERALLY FUNDED MATTERS

NOTE: If the Matter is federally funded, complete this Section VI. If the Matter is not federally funded, proceed to Section VII. For purposes of this Section VI, tax credits allocated by the City and proceeds of debt obligations of the City are not federal funding.

A. CERTIFICATION REGARDING LOBBYING

1. List below the names of all persons or entities registered under the federal Lobbying Disclosure Act of 1995, as amended, who have made lobbying contacts on behalf of the Disclosing Party with respect to the Matter: (Add sheets if necessary):

(If no explanation appears or begins on the lines above, or if the letters "NA" or if the word "None" appear, it will be conclusively presumed that the Disclosing Party means that NO persons or entities registered under the Lobbying Disclosure Act of 1995, as amended, have made lobbying contacts on behalf of the Disclosing Party with respect to the Matter.)

2. The Disclosing Party has not spent and will not expend any federally appropriated funds to pay any person or entity listed in paragraph A(1) above for his or her lobbying activities or to pay any person or entity to influence or attempt to influence an officer or employee of any agency, as defined by applicable federal law, a member of Congress, an officer or employee of Congress, or an employee

of a member of Congress, in connection with the award of any federally funded contract, making any federally funded grant or loan, entering into any cooperative agreement, or to extend, continue, renew, amend, or modify any federally funded contract, grant, loan, or cooperative agreement.

3. The Disclosing Party will submit an updated certification at the end of each calendar quarter in which there occurs any event that materially affects the accuracy of the statements and information set forth in paragraphs A(1) and A(2) above.

4. The Disclosing Party certifies that either: (i) it is not an organization described in section 501(c)(4) of the Internal Revenue Code of 1986; or (ii) it is an organization described in section 501(c)(4) of the Internal Revenue Code of 1986 but has not engaged and will not engage in "Lobbying Activities," as that term is defined in the Lobbying Disclosure Act of 1995, as amended.

5. If the Disclosing Party is the Applicant, the Disclosing Party must obtain certifications equal in form and substance to paragraphs A(1) through A(4) above from all subcontractors before it awards any subcontract and the Disclosing Party must maintain all such subcontractors' certifications for the duration of the Matter and must make such certifications promptly available to the City upon request.

B. CERTIFICATION REGARDING EQUAL EMPLOYMENT OPPORTUNITY

If the Matter is federally funded, federal regulations require the Applicant and all proposed subcontractors to submit the following information with their bids or in writing at the outset of negotiations.

Is the Disclosing Party the Applicant?

☐ Yes

☐ No

If "Yes," answer the three questions below:

1. Have you developed and do you have on-file affirmative action programs pursuant to applicable federal regulations? (See 41 CFR Part 60-2.)

☐ Yes

☐ No

2. Have you filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance Programs, or the Equal Employment Opportunity Commission all reports due under the applicable filing requirements?

☐ Yes

☐ No

☐ Reports not required

3. Have you participated in any previous contracts or subcontracts subject to the equal opportunity clause?

☐ Yes

☐ No

If you checked "No" to question (1) or (2) above, please provide an explanation:

SECTION VII -- FURTHER ACKNOWLEDGMENTS AND CERTIFICATION

The Disclosing Party understands and agrees that:

- A. The certifications, disclosures, and acknowledgments contained in this EDS will become part of any contract or other agreement between the Applicant and the City in connection with the Matter, whether procurement, City assistance, or other City action, and are material inducements to the City's execution of any contract or taking other action with respect to the Matter. The Disclosing Party understands that it must comply with all statutes, ordinances, and regulations on which this EDS is based.
- B. The City's Governmental Ethics Ordinance, MCC Chapter 2-156, imposes certain duties and obligations on persons or entities seeking City contracts, work, business, or transactions. The full text of this ordinance and a training program is available on line at www.cityofchicago.org/Ethics, and may also be obtained from the City's Board of Ethics, 740 N. Sedgwick St., Suite 500, Chicago, IL 60610, (312) 744-9660. The Disclosing Party must comply fully with this ordinance.
- C. If the City determines that any information provided in this EDS is false, incomplete or inaccurate, any contract or other agreement in connection with which it is submitted may be rescinded or be void or voidable, and the City may pursue any remedies under the contract or agreement (if not rescinded or void), at law, or in equity, including terminating the Disclosing Party's participation in the Matter and/or declining to allow the Disclosing Party to participate in other City transactions. Remedies at law for a false statement of material fact may include incarceration and an award to the City of treble damages.
- D. It is the City's policy to make this document available to the public on its Internet site and/or upon request. Some or all of the information provided in, and appended to, this EDS may be made publicly available on the Internet, in response to a Freedom of Information Act request, or otherwise. By completing and signing this EDS, the Disclosing Party waives and releases any possible rights or claims which it may have against the City in connection with the public release of information contained in this EDS and also authorizes the City to verify the accuracy of any information submitted in this EDS.
- E. The information provided in this EDS must be kept current. In the event of changes, the Disclosing Party must supplement this EDS up to the time the City takes action on the Matter. If the Matter is a contract being handled by the City's Department of Procurement Services, the Disclosing Party must update this EDS as the contract requires. **NOTE:** With respect to Matters subject to MCC Chapter 1-23, Article I (imposing **PERMANENT INELIGIBILITY** for certain specified offenses), the information provided herein regarding eligibility must be kept current for a longer period, as required by MCC Chapter 1-23 and Section 2-154-020.

CERTIFICATION

Under penalty of perjury, the person signing below: (1) warrants that he/she is authorized to execute this EDS, and all applicable Appendices, on behalf of the Disclosing Party, and (2) warrants that all certifications and statements contained in this EDS, and all applicable Appendices, are true, accurate and complete as of the date furnished to the City.

AMALGAMATED INVESTMENTS COMPANY

(Print or type exact legal name of Disclosing Party)

By: _____

(Signature)

JAMES T. LANDENBERGER

(Print or type name of person signing)

SECRETARY

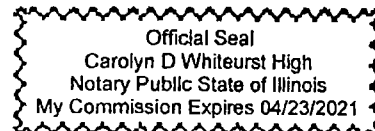
(Print or type title of person signing)

Signed and sworn to before me on (date) November 15, 2019,

) at COOK County, Illinois (state).

Carolyn D. Whiteurst High
Notary Public

Commission expires: 04/23/2021



**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
APPENDIX A**

**FAMILIAL RELATIONSHIPS WITH ELECTED CITY OFFICIALS
AND DEPARTMENT HEADS**

This Appendix is to be completed only by (a) the Applicant, and (b) any legal entity which has a direct ownership interest in the Applicant exceeding 7.5%. It is not to be completed by any legal entity which has only an indirect ownership interest in the Applicant.

Under MCC Section 2-154-015, the Disclosing Party must disclose whether such Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof currently has a "familial relationship" with any elected city official or department head. A "familial relationship" exists if, as of the date this EDS is signed, the Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof is related to the mayor, any alderman, the city clerk, the city treasurer or any city department head as spouse or domestic partner or as any of the following, whether by blood or adoption: parent, child, brother or sister, aunt or uncle, niece or nephew, grandparent, grandchild, father-in-law, mother-in-law, son-in-law, daughter-in-law, stepfather or stepmother, stepson or stepdaughter, stepbrother or stepsister or half-brother or half-sister.

"Applicable Party" means (1) all executive officers of the Disclosing Party listed in Section II.B.1.a., if the Disclosing Party is a corporation; all partners of the Disclosing Party, if the Disclosing Party is a general partnership; all general partners and limited partners of the Disclosing Party, if the Disclosing Party is a limited partnership; all managers, managing members and members of the Disclosing Party, if the Disclosing Party is a limited liability company; (2) all principal officers of the Disclosing Party; and (3) any person having more than a 7.5% ownership interest in the Disclosing Party. "Principal officers" means the president, chief operating officer, executive director, chief financial officer, treasurer or secretary of a legal entity or any person exercising similar authority.

Does the Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof currently have a "familial relationship" with an elected city official or department head?

[] Yes

[X] No

If yes, please identify below (1) the name and title of such person, (2) the name of the legal entity to which such person is connected; (3) the name and title of the elected city official or department head to whom such person has a familial relationship, and (4) the precise nature of such familial relationship.

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
APPENDIX B**

BUILDING CODE SCOFFLAW/PROBLEM LANDLORD CERTIFICATION

This Appendix is to be completed only by (a) the Applicant, and (b) any legal entity which has a direct ownership interest in the Applicant exceeding 7.5% (an "Owner"). It is not to be completed by any legal entity which has only an indirect ownership interest in the Applicant.

1. Pursuant to MCC Section 2-154-010, is the Applicant or any Owner identified as a building code scofflaw or problem landlord pursuant to MCC Section 2-92-416?

☐ Yes

☒ No

2. If the Applicant is a legal entity publicly traded on any exchange, is any officer or director of the Applicant identified as a building code scofflaw or problem landlord pursuant to MCC Section 2-92-416?

☐ Yes

☐ No

☒ The Applicant is not publicly traded on any exchange.

3. If yes to (1) or (2) above, please identify below the name of each person or legal entity identified as a building code scofflaw or problem landlord and the address of each building or buildings to which the pertinent code violations apply.

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
APPENDIX C**

PROHIBITION ON WAGE & SALARY HISTORY SCREENING - CERTIFICATION

This Appendix is to be completed only by an Applicant that is completing this EDS as a “contractor” as defined in MCC Section 2-92-385. That section, which should be consulted (www.amlegal.com), generally covers a party to any agreement pursuant to which they: (i) receive City of Chicago funds in consideration for services, work or goods provided (including for legal or other professional services), or (ii) pay the City money for a license, grant or concession allowing them to conduct a business on City premises. ✓

On behalf of an Applicant that is a contractor pursuant to MCC Section 2-92-385, I hereby certify that the Applicant is in compliance with MCC Section 2-92-385(b)(1) and (2), which prohibit: (i) screening job applicants based on their wage or salary history, or (ii) seeking job applicants’ wage or salary history from current or former employers. I also certify that the Applicant has adopted a policy that includes those prohibitions.

☐ Yes

☐ No

) ☒ N/A – I am not an Applicant that is a “contractor” as defined in MCC Section 2-92-385.

This certification shall serve as the affidavit required by MCC Section 2-92-385(c)(1).

If you checked “no” to the above, please explain.

EXHIBIT SECTION II. B. 1



DIRECTORS

Warren Katz

James Sweeney

Debra H. Wrobel

Robert M. Wrobel

OFFICERS

Robert M. Wrobel	Chairman of the Board and President
Scott A. Rupp	Vice President and Chief Financial Officer
James T. Landenberger	Vice President and Secretary
Laura Maher	Vice President/Audit
William J. Dunn	Assistant Secretary

SECTION II. B. 2.

<u>Name</u>	<u>Business Address</u>	Percentage Indirect Interest in Amalgamated Bank of Chicago (the "Applicant")
Robert M. Wrobel Trust dated November 13, 1997	Amalgamated Bank of Chicago 30 North LaSalle Street Chicago, Illinois 60602	
Debra H. Wrobel Trust dated November 13, 1997, as amended on March 16, 2006	Amalgamated Bank of Chicago 30 North LaSalle Street Chicago, Illinois 60602	

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT
AND AFFIDAVIT**

SECTION I -- GENERAL INFORMATION

A. Legal name of the Disclosing Party submitting this EDS. Include d/b/a/ if applicable:

ROBERT M. WROBEL TRUST DATED NOVEMBER 13, 1997.

Check ONE of the following three boxes:

Indicate whether the Disclosing Party submitting this EDS is:

1. ☐ the Applicant

OR

2. ☒ a legal entity currently holding, or anticipated to hold within six months after City action on the contract, transaction or other undertaking to which this EDS pertains (referred to below as the "Matter"), a direct or indirect interest in excess of 7.5% in the Applicant. State the Applicant's legal name: AMALGAMATED BANK OF CHICAGO

OR

3. ☐ a legal entity with a direct or indirect right of control of the Applicant (see Section II(B)(1)) State the legal name of the entity in which the Disclosing Party holds a right of control:

B. Business address of the Disclosing Party: 30 N. LASALLE STREET
CHICAGO, IL 60602

C. Telephone: 312-822-3188 Fax: 312-267-8770 Email: LRYAN@ABOC.COM

D. Name of contact person: LAURA D. RYAN

E. Federal Employer Identification No. (if you have one): N/A

F. Brief description of the Matter to which this EDS pertains. (Include project number and location of property, if applicable):

RFP for Payment of Interest on the Monies of the City of Chicago and the Chicago Board of Education.

G. Which City agency or department is requesting this EDS? City of Chicago, Department of Finance

If the Matter is a contract being handled by the City's Department of Procurement Services, please complete the following:

Specification # _____ and Contract # _____

SECTION II -- DISCLOSURE OF OWNERSHIP INTERESTS

A. NATURE OF THE DISCLOSING PARTY

1. Indicate the nature of the Disclosing Party:

- | | |
|---|--|
| <input type="checkbox"/> Person | <input type="checkbox"/> Limited liability company |
| <input type="checkbox"/> Publicly registered business corporation | <input type="checkbox"/> Limited liability partnership |
| <input type="checkbox"/> Privately held business corporation | <input type="checkbox"/> Joint venture |
| <input type="checkbox"/> Sole proprietorship | <input type="checkbox"/> Not-for-profit corporation |
| <input type="checkbox"/> General partnership | (Is the not-for-profit corporation also a 501(c)(3))? |
| <input type="checkbox"/> Limited partnership | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| <input checked="" type="checkbox"/> Trust | <input type="checkbox"/> Other (please specify) |

2. For legal entities, the state (or foreign country) of incorporation or organization, if applicable:

TRUSTS GOVERNED BY ILLINOIS LAW.

3. For legal entities not organized in the State of Illinois: Has the organization registered to do business in the State of Illinois as a foreign entity?

☐ Yes ☐ No ☒ Organized in Illinois

B. IF THE DISCLOSING PARTY IS A LEGAL ENTITY:

1. List below the full names and titles, if applicable, of: (i) all executive officers and all directors of the entity; (ii) **for not-for-profit corporations**, all members, if any, which are legal entities (if there are no such members, write "no members which are legal entities"); (iii) **for trusts, estates or other similar entities**, the trustee, executor, administrator, or similarly situated party; (iv) **for general or limited partnerships, limited liability companies, limited liability partnerships or joint ventures**, each general partner, managing member, manager or any other person or legal entity that directly or indirectly controls the day-to-day management of the Applicant.

NOTE: Each legal entity listed below must submit an EDS on its own behalf.

Name	Title
ROBERT M WROBEL	TRUSTEE

2. Please provide the following information concerning each person or legal entity having a direct or indirect, current or prospective (i.e. within 6 months after City action) beneficial interest (including ownership) in excess of 7.5% of the Applicant. Examples of such an interest include shares in a corporation, partnership interest in a partnership or joint venture, interest of a member or manager in a

limited liability company, or interest of a beneficiary of a trust, estate or other similar entity. If none, state "None."

NOTE: Each legal entity listed below may be required to submit an EDS on its own behalf.

Name	Business Address	Percentage Interest in the Applicant
SEE ATTACHED EXHIBIT.		
<hr/>		
<hr/>		

SECTION III -- INCOME OR COMPENSATION TO, OR OWNERSHIP BY, CITY ELECTED OFFICIALS

Has the Disclosing Party provided any income or compensation to any City elected official during the 12-month period preceding the date of this EDS? ☐ Yes ☒ No

Does the Disclosing Party reasonably expect to provide any income or compensation to any City elected official during the 12-month period following the date of this EDS? ☐ Yes ☒ No

If "yes" to either of the above, please identify below the name(s) of such City elected official(s) and describe such income or compensation:

Does any City elected official or, to the best of the Disclosing Party's knowledge after reasonable inquiry, any City elected official's spouse or domestic partner, have a financial interest (as defined in Chapter 2-156 of the Municipal Code of Chicago ("MCC")) in the Disclosing Party?

☐ Yes☒ No

If "yes," please identify below the name(s) of such City elected official(s) and/or spouse(s)/domestic partner(s) and describe the financial interest(s).

SECTION IV -- DISCLOSURE OF SUBCONTRACTORS AND OTHER RETAINED PARTIES

The Disclosing Party must disclose the name and business address of each subcontractor, attorney, lobbyist (as defined in MCC Chapter 2-156), accountant, consultant and any other person or entity whom the Disclosing Party has retained or expects to retain in connection with the Matter, as well as the nature of the relationship, and the total amount of the fees paid or estimated to be paid. The Disclosing Party is not required to disclose employees who are paid solely through the Disclosing Party's regular payroll. If the Disclosing Party is uncertain whether a disclosure is required under this Section, the Disclosing Party must either ask the City whether disclosure is required or make the disclosure.

Name (indicate whether retained or anticipated to be retained)	Business Address	Relationship to Disclosing Party (subcontractor, attorney, lobbyist, etc.)	Fees (indicate whether paid or estimated.) NOTE: "hourly rate" or "t.b.d." is not an acceptable response.
--	------------------	--	--

(Add sheets if necessary)

[X] Check here if the Disclosing Party has not retained, nor expects to retain, any such persons or entities.

SECTION V -- CERTIFICATIONS

A. COURT-ORDERED CHILD SUPPORT COMPLIANCE

Under MCC Section 2-92-415, substantial owners of business entities that contract with the City must remain in compliance with their child support obligations throughout the contract's term.

Has any person who directly or indirectly owns 10% or more of the Disclosing Party been declared in arrearage on any child support obligations by any Illinois court of competent jurisdiction?

[] Yes [X] No [] No person directly or indirectly owns 10% or more of the Disclosing Party.

If "Yes," has the person entered into a court-approved agreement for payment of all support owed and is the person in compliance with that agreement?

[] Yes [] No

B. FURTHER CERTIFICATIONS

1. [This paragraph 1 applies only if the Matter is a contract being handled by the City's Department of Procurement Services.] In the 5-year period preceding the date of this EDS, neither the Disclosing Party nor any Affiliated Entity [see definition in (5) below] has engaged, in connection with the performance of any public contract, the services of an integrity monitor, independent private sector inspector general, or integrity compliance consultant (i.e., an individual or entity with legal, auditing, investigative, or other similar skills, designated by a public agency to help the agency monitor the activity of specified agency vendors as well as help the vendors reform their business practices so they can be considered for agency contracts in the future, or continue with a contract in progress).

2. The Disclosing Party and its Affiliated Entities are not delinquent in the payment of any fine, fee, tax or other source of indebtedness owed to the City of Chicago, including, but not limited to, water and sewer charges, license fees, parking tickets, property taxes and sales taxes, nor is the Disclosing Party delinquent in the payment of any tax administered by the Illinois Department of Revenue.

3. The Disclosing Party and, if the Disclosing Party is a legal entity, all of those persons or entities identified in Section II(B)(1) of this EDS:

- a. are not presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from any transactions by any federal, state or local unit of government;
- b. have not, during the 5 years before the date of this EDS, been convicted of a criminal offense, adjudged guilty, or had a civil judgment rendered against them in connection with: obtaining, attempting to obtain, or performing a public (federal, state or local) transaction or contract under a public transaction; a violation of federal or state antitrust statutes; fraud; embezzlement; theft; forgery; bribery; falsification or destruction of records; making false statements; or receiving stolen property;
- c. are not presently indicted for, or criminally or civilly charged by, a governmental entity (federal, state or local) with committing any of the offenses set forth in subparagraph (b) above;
- d. have not, during the 5 years before the date of this EDS, had one or more public transactions (federal, state or local) terminated for cause or default; and
- e. have not, during the 5 years before the date of this EDS, been convicted, adjudged guilty, or found liable in a civil proceeding, or in any criminal or civil action, including actions concerning environmental violations, instituted by the City or by the federal government, any state, or any other unit of local government.

4. The Disclosing Party understands and shall comply with the applicable requirements of MCC Chapters 2-56 (Inspector General) and 2-156 (Governmental Ethics).

5. Certifications (5), (6) and (7) concern:

- the Disclosing Party;
- any "Contractor" (meaning any contractor or subcontractor used by the Disclosing Party in connection with the Matter, including but not limited to all persons or legal entities disclosed under Section IV, "Disclosure of Subcontractors and Other Retained Parties");
- any "Affiliated Entity" (meaning a person or entity that, directly or indirectly: controls the Disclosing Party, is controlled by the Disclosing Party, or is, with the Disclosing Party, under common control of another person or entity). Indicia of control include, without limitation: interlocking management or ownership; identity of interests among family members, shared facilities and equipment; common use of employees; or organization of a business entity following the ineligibility of a business entity to do business with federal or state or local government, including the City, using substantially the same management, ownership, or principals as the ineligible entity. With respect to Contractors, the term Affiliated Entity means a person or entity that directly or indirectly controls the Contractor, is controlled by it, or, with the Contractor, is under common control of another person or entity;
- any responsible official of the Disclosing Party, any Contractor or any Affiliated Entity or any other official, agent or employee of the Disclosing Party, any Contractor or any Affiliated Entity, acting pursuant to the direction or authorization of a responsible official of the Disclosing Party, any Contractor or any Affiliated Entity (collectively "Agents").

Neither the Disclosing Party, nor any Contractor, nor any Affiliated Entity of either the Disclosing Party or any Contractor, nor any Agents have, during the 5 years before the date of this EDS, or, with respect to a Contractor, an Affiliated Entity, or an Affiliated Entity of a Contractor during the 5 years before the date of such Contractor's or Affiliated Entity's contract or engagement in connection with the Matter:

- a. bribed or attempted to bribe, or been convicted or adjudged guilty of bribery or attempting to bribe, a public officer or employee of the City, the State of Illinois, or any agency of the federal government or of any state or local government in the United States of America, in that officer's or employee's official capacity;
- b. agreed or colluded with other bidders or prospective bidders, or been a party to any such agreement, or been convicted or adjudged guilty of agreement or collusion among bidders or prospective bidders, in restraint of freedom of competition by agreement to bid a fixed price or otherwise; or
- c. made an admission of such conduct described in subparagraph (a) or (b) above that is a matter of record, but have not been prosecuted for such conduct; or
- d. violated the provisions referenced in MCC Subsection 2-92-320(a)(4)(Contracts Requiring a Base Wage); (a)(5)(Debarment Regulations); or (a)(6)(Minimum Wage Ordinance).

6. Neither the Disclosing Party, nor any Affiliated Entity or Contractor, or any of their employees, officials, agents or partners, is barred from contracting with any unit of state or local government as a result of engaging in or being convicted of (1) bid-rigging in violation of 720 ILCS 5/33E-3; (2) bid-rotating in violation of 720 ILCS 5/33E-4; or (3) any similar offense of any state or of the United States of America that contains the same elements as the offense of bid-rigging or bid-rotating.

7. Neither the Disclosing Party nor any Affiliated Entity is listed on a Sanctions List maintained by the United States Department of Commerce, State, or Treasury, or any successor federal agency.

8. [FOR APPLICANT ONLY] (i) Neither the Applicant nor any "controlling person" [see MCC Chapter 1-23, Article I for applicability and defined terms] of the Applicant is currently indicted or charged with, or has admitted guilt of, or has ever been convicted of, or placed under supervision for, any criminal offense involving actual, attempted, or conspiracy to commit bribery, theft, fraud, forgery, perjury, dishonesty or deceit against an officer or employee of the City or any "sister agency"; and (ii) the Applicant understands and acknowledges that compliance with Article I is a continuing requirement for doing business with the City. NOTE: If MCC Chapter 1-23, Article I applies to the Applicant, that Article's permanent compliance timeframe supersedes 5-year compliance timeframes in this Section V.

9. [FOR APPLICANT ONLY] The Applicant and its Affiliated Entities will not use, nor permit their subcontractors to use, any facility listed as having an active exclusion by the U.S. EPA on the federal System for Award Management ("SAM").

10. [FOR APPLICANT ONLY] The Applicant will obtain from any contractors/subcontractors hired or to be hired in connection with the Matter certifications equal in form and substance to those in Certifications (2) and (9) above and will not, without the prior written consent of the City, use any such

contractor/subcontractor that does not provide such certifications or that the Applicant has reason to believe has not provided or cannot provide truthful certifications.

11. If the Disclosing Party is unable to certify to any of the above statements in this Part B (Further Certifications), the Disclosing Party must explain below:

N/A.

If the letters "NA," the word "None," or no response appears on the lines above, it will be conclusively presumed that the Disclosing Party certified to the above statements.

12. To the best of the Disclosing Party's knowledge after reasonable inquiry, the following is a complete list of all current employees of the Disclosing Party who were, at any time during the 12-month period preceding the date of this EDS, an employee, or elected or appointed official, of the City of Chicago (if none, indicate with "N/A" or "none").

NONE.

13. To the best of the Disclosing Party's knowledge after reasonable inquiry, the following is a complete list of all gifts that the Disclosing Party has given or caused to be given, at any time during the 12-month period preceding the execution date of this EDS, to an employee, or elected or appointed official, of the City of Chicago. For purposes of this statement, a "gift" does not include: (i) anything made generally available to City employees or to the general public, or (ii) food or drink provided in the course of official City business and having a retail value of less than \$25 per recipient, or (iii) a political contribution otherwise duly reported as required by law (if none, indicate with "N/A" or "none"). As to any gift listed below, please also list the name of the City recipient.

NONE.

C. CERTIFICATION OF STATUS AS FINANCIAL INSTITUTION

1. The Disclosing Party certifies that the Disclosing Party (check one)

☐ is ☒ is not

a "financial institution" as defined in MCC Section 2-32-455(b).

2. If the Disclosing Party IS a financial institution, then the Disclosing Party pledges:

"We are not and will not become a predatory lender as defined in MCC Chapter 2-32. We further pledge that none of our affiliates is, and none of them will become, a predatory lender as defined in MCC Chapter 2-32. We understand that becoming a predatory lender or becoming an affiliate of a predatory lender may result in the loss of the privilege of doing business with the City."

If the Disclosing Party is unable to make this pledge because it or any of its affiliates (as defined in MCC Section 2-32-455(b)) is a predatory lender within the meaning of MCC Chapter 2-32, explain here (attach additional pages if necessary):

If the letters "NA," the word "None," or no response appears on the lines above, it will be conclusively presumed that the Disclosing Party certified to the above statements.

D. CERTIFICATION REGARDING FINANCIAL INTEREST IN CITY BUSINESS

Any words or terms defined in MCC Chapter 2-156 have the same meanings if used in this Part D.

1. In accordance with MCC Section 2-156-110: To the best of the Disclosing Party's knowledge after reasonable inquiry, does any official or employee of the City have a financial interest in his or her own name or in the name of any other person or entity in the Matter?

☐ Yes

☒ No

NOTE: If you checked "Yes" to Item D(1), proceed to Items D(2) and D(3). If you checked "No" to Item D(1), skip Items D(2) and D(3) and proceed to Part E.

2. Unless sold pursuant to a process of competitive bidding, or otherwise permitted, no City elected official or employee shall have a financial interest in his or her own name or in the name of any other person or entity in the purchase of any property that (i) belongs to the City, or (ii) is sold for taxes or assessments, or (iii) is sold by virtue of legal process at the suit of the City (collectively, "City Property Sale"). Compensation for property taken pursuant to the City's eminent domain power does not constitute a financial interest within the meaning of this Part D.

Does the Matter involve a City Property Sale?

☐ Yes

☐ No

3. If you checked "Yes" to Item D(1), provide the names and business addresses of the City officials or employees having such financial interest and identify the nature of the financial interest:

Name

Business Address

Nature of Financial Interest

4. The Disclosing Party further certifies that no prohibited financial interest in the Matter will be acquired by any City official or employee.

E. CERTIFICATION REGARDING SLAVERY ERA BUSINESS

Please check either (1) or (2) below. If the Disclosing Party checks (2), the Disclosing Party must disclose below or in an attachment to this EDS all information required by (2). Failure to comply with these disclosure requirements may make any contract entered into with the City in connection with the Matter voidable by the City.

 X 1. The Disclosing Party verifies that the Disclosing Party has searched any and all records of the Disclosing Party and any and all predecessor entities regarding records of investments or profits from slavery or slaveholder insurance policies during the slavery era (including insurance policies issued to slaveholders that provided coverage for damage to or injury or death of their slaves), and the Disclosing Party has found no such records.

 2. The Disclosing Party verifies that, as a result of conducting the search in step (1) above, the Disclosing Party has found records of investments or profits from slavery or slaveholder insurance policies. The Disclosing Party verifies that the following constitutes full disclosure of all such records, including the names of any and all slaves or slaveholders described in those records:

SECTION VI -- CERTIFICATIONS FOR FEDERALLY FUNDED MATTERS

NOTE: If the Matter is federally funded, complete this Section VI. If the Matter is not federally funded, proceed to Section VII. For purposes of this Section VI, tax credits allocated by the City and proceeds of debt obligations of the City are not federal funding.

A. CERTIFICATION REGARDING LOBBYING

1. List below the names of all persons or entities registered under the federal Lobbying Disclosure Act of 1995, as amended, who have made lobbying contacts on behalf of the Disclosing Party with respect to the Matter: (Add sheets if necessary):

(If no explanation appears or begins on the lines above, or if the letters "NA" or if the word "None" appear, it will be conclusively presumed that the Disclosing Party means that NO persons or entities registered under the Lobbying Disclosure Act of 1995, as amended, have made lobbying contacts on behalf of the Disclosing Party with respect to the Matter.)

2. The Disclosing Party has not spent and will not expend any federally appropriated funds to pay any person or entity listed in paragraph A(1) above for his or her lobbying activities or to pay any person or entity to influence or attempt to influence an officer or employee of any agency, as defined by applicable federal law, a member of Congress, an officer or employee of Congress, or an employee

of a member of Congress, in connection with the award of any federally funded contract, making any federally funded grant or loan, entering into any cooperative agreement, or to extend, continue, renew, amend, or modify any federally funded contract, grant, loan, or cooperative agreement.

3. The Disclosing Party will submit an updated certification at the end of each calendar quarter in which there occurs any event that materially affects the accuracy of the statements and information set forth in paragraphs A(1) and A(2) above.

4. The Disclosing Party certifies that either: (i) it is not an organization described in section 501(c)(4) of the Internal Revenue Code of 1986; or (ii) it is an organization described in section 501(c)(4) of the Internal Revenue Code of 1986 but has not engaged and will not engage in "Lobbying Activities," as that term is defined in the Lobbying Disclosure Act of 1995, as amended.

5. If the Disclosing Party is the Applicant, the Disclosing Party must obtain certifications equal in form and substance to paragraphs A(1) through A(4) above from all subcontractors before it awards any subcontract and the Disclosing Party must maintain all such subcontractors' certifications for the duration of the Matter and must make such certifications promptly available to the City upon request.

B. CERTIFICATION REGARDING EQUAL EMPLOYMENT OPPORTUNITY

If the Matter is federally funded, federal regulations require the Applicant and all proposed subcontractors to submit the following information with their bids or in writing at the outset of negotiations.

Is the Disclosing Party the Applicant?

☐ Yes

☐ No

If "Yes," answer the three questions below:

1. Have you developed and do you have on file affirmative action programs pursuant to applicable federal regulations? (See 41 CFR Part 60-2.)

☐ Yes

☐ No

2. Have you filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance Programs, or the Equal Employment Opportunity Commission all reports due under the applicable filing requirements?

☐ Yes

☐ No

☐ Reports not required

3. Have you participated in any previous contracts or subcontracts subject to the equal opportunity clause?

☐ Yes

☐ No

If you checked "No" to question (1) or (2) above, please provide an explanation:

SECTION VII -- FURTHER ACKNOWLEDGMENTS AND CERTIFICATION

The Disclosing Party understands and agrees that:

A. The certifications, disclosures, and acknowledgments contained in this EDS will become part of any contract or other agreement between the Applicant and the City in connection with the Matter, whether procurement, City assistance, or other City action, and are material inducements to the City's execution of any contract or taking other action with respect to the Matter. The Disclosing Party understands that it must comply with all statutes, ordinances, and regulations on which this EDS is based.

B. The City's Governmental Ethics Ordinance, MCC Chapter 2-156, imposes certain duties and obligations on persons or entities seeking City contracts, work, business, or transactions. The full text of this ordinance and a training program is available on line at www.cityofchicago.org/Ethics, and may also be obtained from the City's Board of Ethics, 740 N. Sedgwick St., Suite 500, Chicago, IL 60610, (312) 744-9660. The Disclosing Party must comply fully with this ordinance.

C. If the City determines that any information provided in this EDS is false, incomplete or inaccurate, any contract or other agreement in connection with which it is submitted may be rescinded or be void or voidable, and the City may pursue any remedies under the contract or agreement (if not rescinded or void), at law, or in equity, including terminating the Disclosing Party's participation in the Matter and/or declining to allow the Disclosing Party to participate in other City transactions. Remedies at law for a false statement of material fact may include incarceration and an award to the City of treble damages.

D. It is the City's policy to make this document available to the public on its Internet site and/or upon request. Some or all of the information provided in, and appended to, this EDS may be made publicly available on the Internet, in response to a Freedom of Information Act request, or otherwise. By completing and signing this EDS, the Disclosing Party waives and releases any possible rights or claims which it may have against the City in connection with the public release of information contained in this EDS and also authorizes the City to verify the accuracy of any information submitted in this EDS.

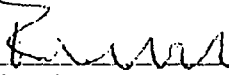
E. The information provided in this EDS must be kept current. In the event of changes, the Disclosing Party must supplement this EDS up to the time the City takes action on the Matter. If the Matter is a contract being handled by the City's Department of Procurement Services, the Disclosing Party must update this EDS as the contract requires. **NOTE:** With respect to Matters subject to MCC Chapter 1-23, Article I (imposing **PERMANENT INELIGIBILITY** for certain specified offenses), the information provided herein regarding eligibility must be kept current for a longer period, as required by MCC Chapter 1-23 and Section 2-154-020.

CERTIFICATION

Under penalty of perjury, the person signing below: (1) warrants that he/she is authorized to execute this EDS, and all applicable Appendices, on behalf of the Disclosing Party, and (2) warrants that all certifications and statements contained in this EDS, and all applicable Appendices, are true, accurate and complete as of the date furnished to the City.

ROBERT M. WROBEL TRUST DATED NOVEMBER 13, 1997.

(Print or type exact legal name of Disclosing Party)

By: 
(Sign here)

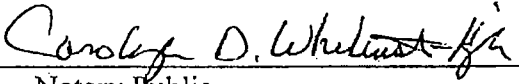
ROBERT M. WROBEL, as Trustee

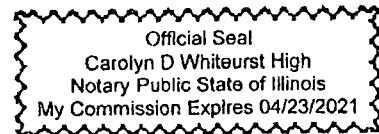
(Print or type name of person signing)

(Print or type title of person signing)

Signed and sworn to before me on (date) November 15, 2019,

at Cook County, Illinois (state).


Notary Public



Commission expires: 04/23/2021

CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
APPENDIX A

FAMILIAL RELATIONSHIPS WITH ELECTED CITY OFFICIALS
AND DEPARTMENT HEADS

This Appendix is to be completed only by (a) the Applicant, and (b) any legal entity which has a direct ownership interest in the Applicant exceeding 7.5%. It is not to be completed by any legal entity which has only an indirect ownership interest in the Applicant.

Under MCC Section 2-154-015, the Disclosing Party must disclose whether such Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof currently has a "familial relationship" with any elected city official or department head. A "familial relationship" exists if, as of the date this EDS is signed, the Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof is related to the mayor, any alderman, the city clerk, the city treasurer or any city department head as spouse or domestic partner or as any of the following, whether by blood or adoption: parent, child, brother or sister, aunt or uncle, niece or nephew, grandparent, grandchild, father-in-law, mother-in-law, son-in-law, daughter-in-law, stepfather or stepmother, stepson or stepdaughter, stepbrother or stepsister or half-brother or half-sister.

"Applicable Party" means (1) all executive officers of the Disclosing Party listed in Section II.B.1.a., if the Disclosing Party is a corporation; all partners of the Disclosing Party, if the Disclosing Party is a general partnership; all general partners and limited partners of the Disclosing Party, if the Disclosing Party is a limited partnership; all managers, managing members and members of the Disclosing Party, if the Disclosing Party is a limited liability company; (2) all principal officers of the Disclosing Party; and (3) any person having more than a 7.5% ownership interest in the Disclosing Party. "Principal officers" means the president, chief operating officer, executive director, chief financial officer, treasurer or secretary of a legal entity or any person exercising similar authority.

Does the Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof currently have a "familial relationship" with an elected city official or department head?

☐ Yes

☐ No

If yes, please identify below (1) the name and title of such person, (2) the name of the legal entity to which such person is connected; (3) the name and title of the elected city official or department head to whom such person has a familial relationship, and (4) the precise nature of such familial relationship.

Disclosing Party only has an indirect ownership interest in the Applicant.

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
APPENDIX B**

BUILDING CODE SCOFFLAW/PROBLEM LANDLORD CERTIFICATION

This Appendix is to be completed only by (a) the Applicant, and (b) any legal entity which has a direct ownership interest in the Applicant exceeding 7.5% (an "Owner"). It is not to be completed by any legal entity which has only an indirect ownership interest in the Applicant.

1. Pursuant to MCC Section 2-154-010, is the Applicant or any Owner identified as a building code scofflaw or problem landlord pursuant to MCC Section 2-92-416?

☐ Yes

☐ No

2. If the Applicant is a legal entity publicly traded on any exchange, is any officer or director of the Applicant identified as a building code scofflaw or problem landlord pursuant to MCC Section 2-92-416?

☐ Yes

☐ No

☐ The Applicant is not publicly traded on any exchange.

3. If yes to (1) or (2) above, please identify below the name of each person or legal entity identified as a building code scofflaw or problem landlord and the address of each building or buildings to which the pertinent code violations apply.

Disclosing Party only has an indirect ownership interest in the Applicant.

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
APPENDIX C**

PROHIBITION ON WAGE & SALARY HISTORY SCREENING - CERTIFICATION

This Appendix is to be completed only by an Applicant that is completing this EDS as a “contractor” as defined in MCC Section 2-92-385. That section, which should be consulted (www.amlegal.com), generally covers a party to any agreement pursuant to which they: (i) receive City of Chicago funds in consideration for services, work or goods provided (including for legal or other professional services), or (ii) pay the City money for a license, grant or concession allowing them to conduct a business on City premises.

On behalf of an Applicant that is a contractor pursuant to MCC Section 2-92-385, I hereby certify that the Applicant is in compliance with MCC Section 2-92-385(b)(1) and (2), which prohibit: (i) screening job applicants based on their wage or salary history, or (ii) seeking job applicants’ wage or salary history from current or former employers. I also certify that the Applicant has adopted a policy that includes those prohibitions.

☐ Yes

☐ No

☒ [X] N/A – I am not an Applicant that is a “contractor” as defined in MCC Section 2-92-385.

This certification shall serve as the affidavit required by MCC Section 2-92-385(c)(1).

If you checked “no” to the above, please explain.

EXHIBIT SECTION II. B. 2.

<u>Name</u>	<u>Business Address</u>	Percentage Indirect Interest in Amalgamated Bank of Chicago (the "Applicant")
Robert M. Wrobel Trust dated November 13, 1997	Amalgamated Bank of Chicago 30 North LaSalle Street Chicago, Illinois 60602	
Beneficiary		
Robert M. Wrobel	Amalgamated Bank of Chicago 30 North LaSalle Street Chicago, Illinois 60602	

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT
AND AFFIDAVIT**

SECTION I -- GENERAL INFORMATION

A. Legal name of the Disclosing Party submitting this EDS. Include d/b/a/ if applicable:

DEBRA H. WROBEL TRUST DATED NOVEMBER 13, 1997, as amended on March 16, 2006.

Check ONE of the following three boxes:

Indicate whether the Disclosing Party submitting this EDS is:

1. ☐ the Applicant

OR

2. ☒ a legal entity currently holding, or anticipated to hold within six months after City action on the contract, transaction or other undertaking to which this EDS pertains (referred to below as the "Matter"), a direct or indirect interest in excess of 7.5% in the Applicant. State the Applicant's legal name: AMALGAMATED BANK OF CHICAGO

OR

3. ☐ a legal entity with a direct or indirect right of control of the Applicant (see Section II(B)(1)) State the legal name of the entity in which the Disclosing Party holds a right of control:

B. Business address of the Disclosing Party: 30 N. LASALLE STREET
CHICAGO, IL 60602

C. Telephone: 312-822-3188 Fax: 312-267-8770 Email: LRYAN@ABOC.COM

D. Name of contact person: LAURA D. RYAN

E. Federal Employer Identification No. (if you have one): N/A

F. Brief description of the Matter to which this EDS pertains. (Include project number and location of property, if applicable):

RFP for Payment of Interest on the Monies of the City of Chicago and the Chicago Board of Education.

G. Which City agency or department is requesting this EDS? City of Chicago, Department of Finance

If the Matter is a contract being handled by the City's Department of Procurement Services, please complete the following:

Specification # _____ and Contract # _____

SECTION II -- DISCLOSURE OF OWNERSHIP INTERESTS

A. NATURE OF THE DISCLOSING PARTY

1. Indicate the nature of the Disclosing Party:

- | | |
|---|--|
| <input type="checkbox"/> Person | <input type="checkbox"/> Limited liability company |
| <input type="checkbox"/> Publicly registered business corporation | <input type="checkbox"/> Limited liability partnership |
| <input type="checkbox"/> Privately held business corporation | <input type="checkbox"/> Joint venture |
| <input type="checkbox"/> Sole proprietorship | <input type="checkbox"/> Not-for-profit corporation |
| <input type="checkbox"/> General partnership | (Is the not-for-profit corporation also a 501(c)(3))? |
| <input type="checkbox"/> Limited partnership | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| <input checked="" type="checkbox"/> Trust | <input type="checkbox"/> Other (please specify) |

2. For legal entities, the state (or foreign country) of incorporation or organization, if applicable:

TRUSTS GOVERNED BY ILLINOIS LAW.

3. For legal entities not organized in the State of Illinois: Has the organization registered to do business in the State of Illinois as a foreign entity?

☐ Yes ☐ No ☒ Organized in Illinois

B. IF THE DISCLOSING PARTY IS A LEGAL ENTITY:

1. List below the full names and titles, if applicable, of: (i) all executive officers and all directors of the entity; (ii) **for not-for-profit corporations**, all members, if any, which are legal entities (if there are no such members, write "no members which are legal entities"); (iii) **for trusts, estates or other similar entities**, the trustee, executor, administrator, or similarly situated party; (iv) **for general or limited partnerships, limited liability companies, limited liability partnerships or joint ventures**, each general partner, managing member, manager or any other person or legal entity that directly or indirectly controls the day-to-day management of the Applicant.

NOTE: Each legal entity listed below must submit an EDS on its own behalf.

Name	Title
DEBRA H. WROBEL	TRUSTEE

2. Please provide the following information concerning each person or legal entity having a direct or indirect, current or prospective (i.e. within 6 months after City action) beneficial interest (including ownership) in excess of 7.5% of the Applicant. Examples of such an interest include shares in a corporation, partnership interest in a partnership or joint venture, interest of a member or manager in a

limited liability company, or interest of a beneficiary of a trust, estate or other similar entity. If none, state "None."

NOTE: Each legal entity listed below may be required to submit an EDS on its own behalf.

Name	Business Address	Percentage Interest in the Applicant
SEE ATTACHED EXHIBIT.		
<hr/>		
<hr/>		
<hr/>		

SECTION III -- INCOME OR COMPENSATION TO, OR OWNERSHIP BY, CITY ELECTED OFFICIALS

Has the Disclosing Party provided any income or compensation to any City elected official during the 12-month period preceding the date of this EDS? ☐ Yes ☒ No

Does the Disclosing Party reasonably expect to provide any income or compensation to any City elected official during the 12-month period following the date of this EDS? ☐ Yes ☒ No

If "yes" to either of the above, please identify below the name(s) of such City elected official(s) and describe such income or compensation:

Does any City elected official or, to the best of the Disclosing Party's knowledge after reasonable inquiry, any City elected official's spouse or domestic partner, have a financial interest (as defined in Chapter 2-156 of the Municipal Code of Chicago ("MCC")) in the Disclosing Party?

☐ Yes ☒ No

If "yes," please identify below the name(s) of such City elected official(s) and/or spouse(s)/domestic partner(s) and describe the financial interest(s).

SECTION IV -- DISCLOSURE OF SUBCONTRACTORS AND OTHER RETAINED PARTIES

The Disclosing Party must disclose the name and business address of each subcontractor, attorney, lobbyist (as defined in MCC Chapter 2-156), accountant, consultant and any other person or entity whom the Disclosing Party has retained or expects to retain in connection with the Matter, as well as the nature of the relationship, and the total amount of the fees paid or estimated to be paid. The Disclosing Party is not required to disclose employees who are paid solely through the Disclosing Party's regular payroll. If the Disclosing Party is uncertain whether a disclosure is required under this Section, the Disclosing Party must either ask the City whether disclosure is required or make the disclosure.

Name (indicate whether retained or anticipated to be retained)	Business Address	Relationship to Disclosing Party (subcontractor, attorney, lobbyist, etc.)	Fees (<u>indicate whether paid or estimated.</u>) NOTE: "hourly rate" or "t.b.d." is not an acceptable response.
--	------------------	--	---

(Add sheets if necessary)

☒ Check here if the Disclosing Party has not retained, nor expects to retain, any such persons or entities.

SECTION V -- CERTIFICATIONS

A. COURT-ORDERED CHILD SUPPORT COMPLIANCE

Under MCC Section 2-92-415, substantial owners of business entities that contract with the City must remain in compliance with their child support obligations throughout the contract's term.

Has any person who directly or indirectly owns 10% or more of the Disclosing Party been declared in arrearage on any child support obligations by any Illinois court of competent jurisdiction?

☐ Yes ☒ No ☐ No person directly or indirectly owns 10% or more of the Disclosing Party.

If "Yes," has the person entered into a court-approved agreement for payment of all support owed and is the person in compliance with that agreement?

☐ Yes ☐ No

B. FURTHER CERTIFICATIONS

1. [This paragraph 1 applies only if the Matter is a contract being handled by the City's Department of Procurement Services.] In the 5-year period preceding the date of this EDS, neither the Disclosing Party nor any Affiliated Entity [see definition in (5) below] has engaged, in connection with the performance of any public contract, the services of an integrity monitor, independent private sector inspector general, or integrity compliance consultant (i.e., an individual or entity with legal, auditing, investigative, or other similar skills, designated by a public agency to help the agency monitor the activity of specified agency vendors as well as help the vendors reform their business practices so they can be considered for agency contracts in the future, or continue with a contract in progress).

2. The Disclosing Party and its Affiliated Entities are not delinquent in the payment of any fine, fee, tax or other source of indebtedness owed to the City of Chicago, including, but not limited to, water and sewer charges, license fees, parking tickets, property taxes and sales taxes, nor is the Disclosing Party delinquent in the payment of any tax administered by the Illinois Department of Revenue.

3. The Disclosing Party and, if the Disclosing Party is a legal entity, all of those persons or entities identified in Section II(B)(1) of this EDS:

- a. are not presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from any transactions by any federal, state or local unit of government;
- b. have not, during the 5 years before the date of this EDS, been convicted of a criminal offense, adjudged guilty, or had a civil judgment rendered against them in connection with: obtaining, attempting to obtain, or performing a public (federal, state or local) transaction or contract under a public transaction; a violation of federal or state antitrust statutes; fraud; embezzlement; theft; forgery; bribery; falsification or destruction of records; making false statements; or receiving stolen property;
- c. are not presently indicted for, or criminally or civilly charged by, a governmental entity (federal, state or local) with committing any of the offenses set forth in subparagraph (b) above;
- d. have not, during the 5 years before the date of this EDS, had one or more public transactions (federal, state or local) terminated for cause or default; and
- e. have not, during the 5 years before the date of this EDS, been convicted, adjudged guilty, or found liable in a civil proceeding, or in any criminal or civil action, including actions concerning environmental violations, instituted by the City or by the federal government, any state, or any other unit of local government.

4. The Disclosing Party understands and shall comply with the applicable requirements of MCC Chapters 2-56 (Inspector General) and 2-156 (Governmental Ethics).

5. Certifications (5), (6) and (7) concern:

- the Disclosing Party;
- any "Contractor" (meaning any contractor or subcontractor used by the Disclosing Party in connection with the Matter, including but not limited to all persons or legal entities disclosed under Section IV, "Disclosure of Subcontractors and Other Retained Parties");
- any "Affiliated Entity" (meaning a person or entity that, directly or indirectly: controls the Disclosing Party, is controlled by the Disclosing Party, or is, with the Disclosing Party, under common control of another person or entity). Indicia of control include, without limitation: interlocking management or ownership; identity of interests among family members, shared facilities and equipment; common use of employees; or organization of a business entity following the ineligibility of a business entity to do business with federal or state or local government, including the City, using substantially the same management, ownership, or principals as the ineligible entity. With respect to Contractors, the term Affiliated Entity means a person or entity that directly or indirectly controls the Contractor, is controlled by it, or, with the Contractor, is under common control of another person or entity;
- any responsible official of the Disclosing Party, any Contractor or any Affiliated Entity or any other official, agent or employee of the Disclosing Party, any Contractor or any Affiliated Entity, acting pursuant to the direction or authorization of a responsible official of the Disclosing Party, any Contractor or any Affiliated Entity (collectively "Agents").

Neither the Disclosing Party, nor any Contractor, nor any Affiliated Entity of either the Disclosing Party or any Contractor, nor any Agents have, during the 5 years before the date of this EDS, or, with respect to a Contractor, an Affiliated Entity, or an Affiliated Entity of a Contractor during the 5 years before the date of such Contractor's or Affiliated Entity's contract or engagement in connection with the Matter:

- a. bribed or attempted to bribe, or been convicted or adjudged guilty of bribery or attempting to bribe, a public officer or employee of the City, the State of Illinois, or any agency of the federal government or of any state or local government in the United States of America, in that officer's or employee's official capacity;
- b. agreed or colluded with other bidders or prospective bidders, or been a party to any such agreement, or been convicted or adjudged guilty of agreement or collusion among bidders or prospective bidders, in restraint of freedom of competition by agreement to bid a fixed price or otherwise; or
- c. made an admission of such conduct described in subparagraph (a) or (b) above that is a matter of record, but have not been prosecuted for such conduct; or
- d. violated the provisions referenced in MCC Subsection 2-92-320(a)(4)(Contracts Requiring a Base Wage); (a)(5)(Debarment Regulations); or (a)(6)(Minimum Wage Ordinance).

6. Neither the Disclosing Party, nor any Affiliated Entity or Contractor, or any of their employees, officials, agents or partners, is barred from contracting with any unit of state or local government as a result of engaging in or being convicted of (1) bid-rigging in violation of 720 ILCS 5/33E-3; (2) bid-rotating in violation of 720 ILCS 5/33E-4; or (3) any similar offense of any state or of the United States of America that contains the same elements as the offense of bid-rigging or bid-rotating.

7. Neither the Disclosing Party nor any Affiliated Entity is listed on a Sanctions List maintained by the United States Department of Commerce, State, or Treasury, or any successor federal agency.

8. [FOR APPLICANT ONLY] (i) Neither the Applicant nor any "controlling person" [see MCC Chapter 1-23, Article I for applicability and defined terms] of the Applicant is currently indicted or charged with, or has admitted guilt of, or has ever been convicted of, or placed under supervision for, any criminal offense involving actual, attempted, or conspiracy to commit bribery, theft, fraud, forgery, perjury, dishonesty or deceit against an officer or employee of the City or any "sister agency"; and (ii) the Applicant understands and acknowledges that compliance with Article I is a continuing requirement for doing business with the City. NOTE: If MCC Chapter 1-23, Article I applies to the Applicant, that Article's permanent compliance timeframe supersedes 5-year compliance timeframes in this Section V.

9. [FOR APPLICANT ONLY] The Applicant and its Affiliated Entities will not use, nor permit their subcontractors to use, any facility listed as having an active exclusion by the U.S. EPA on the federal System for Award Management ("SAM").

10. [FOR APPLICANT ONLY] The Applicant will obtain from any contractors/subcontractors hired or to be hired in connection with the Matter certifications equal in form and substance to those in Certifications (2) and (9) above and will not, without the prior written consent of the City, use any such

contractor/subcontractor that does not provide such certifications or that the Applicant has reason to believe has not provided or cannot provide truthful certifications.

11. If the Disclosing Party is unable to certify to any of the above statements in this Part B (Further Certifications), the Disclosing Party must explain below:

N/A.

If the letters "NA," the word "None," or no response appears on the lines above, it will be conclusively presumed that the Disclosing Party certified to the above statements.

12. To the best of the Disclosing Party's knowledge after reasonable inquiry, the following is a complete list of all current employees of the Disclosing Party who were, at any time during the 12-month period preceding the date of this EDS, an employee, or elected or appointed official, of the City of Chicago (if none, indicate with "N/A" or "none").

NONE.

13. To the best of the Disclosing Party's knowledge after reasonable inquiry, the following is a complete list of all gifts that the Disclosing Party has given or caused to be given, at any time during the 12-month period preceding the execution date of this EDS, to an employee, or elected or appointed official, of the City of Chicago. For purposes of this statement, a "gift" does not include: (i) anything made generally available to City employees or to the general public, or (ii) food or drink provided in the course of official City business and having a retail value of less than \$25 per recipient, or (iii) a political contribution otherwise duly reported as required by law (if none, indicate with "N/A" or "none"). As to any gift listed below, please also list the name of the City recipient.

NONE.

C. CERTIFICATION OF STATUS AS FINANCIAL INSTITUTION

1. The Disclosing Party certifies that the Disclosing Party (check one)

☐ is ☒ is not

a "financial institution" as defined in MCC Section 2-32-455(b).

2. If the Disclosing Party IS a financial institution, then the Disclosing Party pledges:

"We are not and will not become a predatory lender as defined in MCC Chapter 2-32. We further pledge that none of our affiliates is, and none of them will become, a predatory lender as defined in MCC Chapter 2-32. We understand that becoming a predatory lender or becoming an affiliate of a predatory lender may result in the loss of the privilege of doing business with the City."

If the Disclosing Party is unable to make this pledge because it or any of its affiliates (as defined in MCC Section 2-32-455(b)) is a predatory lender within the meaning of MCC Chapter 2-32, explain here (attach additional pages if necessary):

If the letters "NA," the word "None," or no response appears on the lines above, it will be conclusively presumed that the Disclosing Party certified to the above statements.

D. CERTIFICATION REGARDING FINANCIAL INTEREST IN CITY BUSINESS

Any words or terms defined in MCC Chapter 2-156 have the same meanings if used in this Part D.

1. In accordance with MCC Section 2-156-110: To the best of the Disclosing Party's knowledge after reasonable inquiry, does any official or employee of the City have a financial interest in his or her own name or in the name of any other person or entity in the Matter?

☐ Yes

☒ No

NOTE: If you checked "Yes" to Item D(1), proceed to Items D(2) and D(3). If you checked "No" to Item D(1), skip Items D(2) and D(3) and proceed to Part E.

2. Unless sold pursuant to a process of competitive bidding, or otherwise permitted, no City elected official or employee shall have a financial interest in his or her own name or in the name of any other person or entity in the purchase of any property that (i) belongs to the City, or (ii) is sold for taxes or assessments, or (iii) is sold by virtue of legal process at the suit of the City (collectively, "City Property Sale"). Compensation for property taken pursuant to the City's eminent domain power does not constitute a financial interest within the meaning of this Part D.

Does the Matter involve a City Property Sale?

☐ Yes

☐ No

3. If you checked "Yes" to Item D(1), provide the names and business addresses of the City officials or employees having such financial interest and identify the nature of the financial interest:

Name

Business Address

Nature of Financial Interest

4. The Disclosing Party further certifies that no prohibited financial interest in the Matter will be acquired by any City official or employee.

E. CERTIFICATION REGARDING SLAVERY ERA BUSINESS

Please check either (1) or (2) below. If the Disclosing Party checks (2), the Disclosing Party must disclose below or in an attachment to this EDS all information required by (2). Failure to comply with these disclosure requirements may make any contract entered into with the City in connection with the Matter voidable by the City.

 X 1. The Disclosing Party verifies that the Disclosing Party has searched any and all records of the Disclosing Party and any and all predecessor entities regarding records of investments or profits from slavery or slaveholder insurance policies during the slavery era (including insurance policies issued to slaveholders that provided coverage for damage to or injury or death of their slaves), and the Disclosing Party has found no such records.

 2. The Disclosing Party verifies that, as a result of conducting the search in step (1) above, the Disclosing Party has found records of investments or profits from slavery or slaveholder insurance policies. The Disclosing Party verifies that the following constitutes full disclosure of all such records, including the names of any and all slaves or slaveholders described in those records:

SECTION VI -- CERTIFICATIONS FOR FEDERALLY FUNDED MATTERS

NOTE: If the Matter is federally funded, complete this Section VI. If the Matter is not federally funded, proceed to Section VII. For purposes of this Section VI, tax credits allocated by the City and proceeds of debt obligations of the City are not federal funding.

A. CERTIFICATION REGARDING LOBBYING

1. List below the names of all persons or entities registered under the federal Lobbying Disclosure Act of 1995, as amended, who have made lobbying contacts on behalf of the Disclosing Party with respect to the Matter: (Add sheets if necessary):

(If no explanation appears or begins on the lines above, or if the letters "NA" or if the word "None" appear, it will be conclusively presumed that the Disclosing Party means that NO persons or entities registered under the Lobbying Disclosure Act of 1995, as amended, have made lobbying contacts on behalf of the Disclosing Party with respect to the Matter.)

2. The Disclosing Party has not spent and will not expend any federally appropriated funds to pay any person or entity listed in paragraph A(1) above for his or her lobbying activities or to pay any person or entity to influence or attempt to influence an officer or employee of any agency, as defined by applicable federal law, a member of Congress, an officer or employee of Congress, or an employee

of a member of Congress, in connection with the award of any federally funded contract, making any federally funded grant or loan, entering into any cooperative agreement, or to extend, continue, renew, amend, or modify any federally funded contract, grant, loan, or cooperative agreement.

3. The Disclosing Party will submit an updated certification at the end of each calendar quarter in which there occurs any event that materially affects the accuracy of the statements and information set forth in paragraphs A(1) and A(2) above.

4. The Disclosing Party certifies that either: (i) it is not an organization described in section 501(c)(4) of the Internal Revenue Code of 1986; or (ii) it is an organization described in section 501(c)(4) of the Internal Revenue Code of 1986 but has not engaged and will not engage in "Lobbying Activities," as that term is defined in the Lobbying Disclosure Act of 1995, as amended.

5. If the Disclosing Party is the Applicant, the Disclosing Party must obtain certifications equal in form and substance to paragraphs A(1) through A(4) above from all subcontractors before it awards any subcontract and the Disclosing Party must maintain all such subcontractors' certifications for the duration of the Matter and must make such certifications promptly available to the City upon request.

B. CERTIFICATION REGARDING EQUAL EMPLOYMENT OPPORTUNITY

If the Matter is federally funded, federal regulations require the Applicant and all proposed subcontractors to submit the following information with their bids or in writing at the outset of negotiations.

Is the Disclosing Party the Applicant?

☐ Yes

☐ No

If "Yes," answer the three questions below:

1. Have you developed and do you have on file affirmative action programs pursuant to applicable federal regulations? (See 41 CFR Part 60-2.)

☐ Yes

☐ No

2. Have you filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance Programs, or the Equal Employment Opportunity Commission all reports due under the applicable filing requirements?

☐ Yes

☐ No

☐ Reports not required

3. Have you participated in any previous contracts or subcontracts subject to the equal opportunity clause?

☐ Yes

☐ No

If you checked "No" to question (1) or (2) above, please provide an explanation:

SECTION VII -- FURTHER ACKNOWLEDGMENTS AND CERTIFICATION

The Disclosing Party understands and agrees that:

A. The certifications, disclosures, and acknowledgments contained in this EDS will become part of any contract or other agreement between the Applicant and the City in connection with the Matter, whether procurement, City assistance, or other City action, and are material inducements to the City's execution of any contract or taking other action with respect to the Matter. The Disclosing Party understands that it must comply with all statutes, ordinances, and regulations on which this EDS is based.

B. The City's Governmental Ethics Ordinance, MCC Chapter 2-156, imposes certain duties and obligations on persons or entities seeking City contracts, work, business, or transactions. The full text of this ordinance and a training program is available on line at www.cityofchicago.org/Ethics, and may also be obtained from the City's Board of Ethics, 740 N. Sedgwick St., Suite 500, Chicago, IL 60610, (312) 744-9660. The Disclosing Party must comply fully with this ordinance.

C. If the City determines that any information provided in this EDS is false, incomplete or inaccurate, any contract or other agreement in connection with which it is submitted may be rescinded or be void or voidable, and the City may pursue any remedies under the contract or agreement (if not rescinded or void), at law, or in equity, including terminating the Disclosing Party's participation in the Matter and/or declining to allow the Disclosing Party to participate in other City transactions. Remedies at law for a false statement of material fact may include incarceration and an award to the City of treble damages.

D. It is the City's policy to make this document available to the public on its Internet site and/or upon request. Some or all of the information provided in, and appended to, this EDS may be made publicly available on the Internet, in response to a Freedom of Information Act request, or otherwise. By completing and signing this EDS, the Disclosing Party waives and releases any possible rights or claims which it may have against the City in connection with the public release of information contained in this EDS and also authorizes the City to verify the accuracy of any information submitted in this EDS.

E. The information provided in this EDS must be kept current. In the event of changes, the Disclosing Party must supplement this EDS up to the time the City takes action on the Matter. If the Matter is a contract being handled by the City's Department of Procurement Services, the Disclosing Party must update this EDS as the contract requires. **NOTE:** With respect to Matters subject to MCC Chapter 1-23, Article I (imposing **PERMANENT INELIGIBILITY** for certain specified offenses), the information provided herein regarding eligibility must be kept current for a longer period, as required by MCC Chapter 1-23 and Section 2-154-020.

CERTIFICATION

Under penalty of perjury, the person signing below: (1) warrants that he/she is authorized to execute this EDS, and all applicable Appendices, on behalf of the Disclosing Party, and (2) warrants that all certifications and statements contained in this EDS, and all applicable Appendices, are true, accurate and complete as of the date furnished to the City.

DEBRA H. WROBEL TRUST DATED NOVEMBER 13, 1997,
as amended on March 16, 2006.

(Print or type exact legal name of Disclosing Party)

By: *Debra H. Wrobel*, Trustee
(Sign here)

DEBRA H. WROBEL, as Trustee
(Print or type name of person signing)

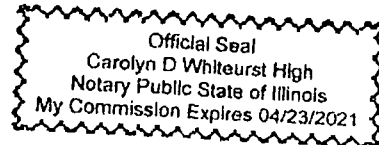
(Print or type title of person signing)

Signed and sworn to before me on (date) November 15, 2019

) at Cook County, Illinois (state).

Carolyn D. Whitehurst High
Notary Public

Commission expires: 04/23/2021



**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
APPENDIX A**

**FAMILIAL RELATIONSHIPS WITH ELECTED CITY OFFICIALS
AND DEPARTMENT HEADS**

This Appendix is to be completed only by (a) the Applicant, and (b) any legal entity which has a direct ownership interest in the Applicant exceeding 7.5%. It is not to be completed by any legal entity which has only an indirect ownership interest in the Applicant.

Under MCC Section 2-154-015, the Disclosing Party must disclose whether such Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof currently has a "familial relationship" with any elected city official or department head. A "familial relationship" exists if, as of the date this EDS is signed, the Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof is related to the mayor, any alderman, the city clerk, the city treasurer or any city department head as spouse or domestic partner or as any of the following, whether by blood or adoption: parent, child, brother or sister, aunt or uncle, niece or nephew, grandparent, grandchild, father-in-law, mother-in-law, son-in-law, daughter-in-law, stepfather or stepmother, stepson or stepdaughter, stepbrother or stepsister or half-brother or half-sister.

"Applicable Party" means (1) all executive officers of the Disclosing Party listed in Section II.B.1.a., if the Disclosing Party is a corporation; all partners of the Disclosing Party, if the Disclosing Party is a general partnership; all general partners and limited partners of the Disclosing Party, if the Disclosing Party is a limited partnership; all managers, managing members and members of the Disclosing Party, if the Disclosing Party is a limited liability company; (2) all principal officers of the Disclosing Party; and (3) any person having more than a 7.5% ownership interest in the Disclosing Party. "Principal officers" means the president, chief operating officer, executive director, chief financial officer, treasurer or secretary of a legal entity or any person exercising similar authority.

Does the Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof currently have a "familial relationship" with an elected city official or department head?

☐ Yes

☐ No

If yes, please identify below (1) the name and title of such person, (2) the name of the legal entity to which such person is connected; (3) the name and title of the elected city official or department head to whom such person has a familial relationship, and (4) the precise nature of such familial relationship.

Disclosing Party only has an indirect ownership interest in the Applicant.

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
APPENDIX B**

BUILDING CODE SCOFFLAW/PROBLEM LANDLORD CERTIFICATION

This Appendix is to be completed only by (a) the Applicant, and (b) any legal entity which has a direct ownership interest in the Applicant exceeding 7.5% (an "Owner"). It is not to be completed by any legal entity which has only an indirect ownership interest in the Applicant.

1. Pursuant to MCC Section 2-154-010, is the Applicant or any Owner identified as a building code scofflaw or problem landlord pursuant to MCC Section 2-92-416?

☐ Yes ☐ No

2. If the Applicant is a legal entity publicly traded on any exchange, is any officer or director of the Applicant identified as a building code scofflaw or problem landlord pursuant to MCC Section 2-92-416?

☐ Yes ☐ No ☐ The Applicant is not publicly traded on any exchange.

3. If yes to (1) or (2) above, please identify below the name of each person or legal entity identified as a building code scofflaw or problem landlord and the address of each building or buildings to which the pertinent code violations apply.

Disclosing Party only has an indirect ownership interest in the Applicant.

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
APPENDIX C**

PROHIBITION ON WAGE & SALARY HISTORY SCREENING - CERTIFICATION

This Appendix is to be completed only by an Applicant that is completing this EDS as a “contractor” as defined in MCC Section 2-92-385. That section, which should be consulted (www.amlegal.com), generally covers a party to any agreement pursuant to which they: (i) receive City of Chicago funds in consideration for services, work or goods provided (including for legal or other professional services), or (ii) pay the City money for a license, grant or concession allowing them to conduct a business on City premises.

On behalf of an Applicant that is a contractor pursuant to MCC Section 2-92-385, I hereby certify that the Applicant is in compliance with MCC Section 2-92-385(b)(1) and (2), which prohibit: (i) screening job applicants based on their wage or salary history, or (ii) seeking job applicants’ wage or salary history from current or former employers. I also certify that the Applicant has adopted a policy that includes those prohibitions.

☐ Yes

☐ No

☒ N/A – I am not an Applicant that is a “contractor” as defined in MCC Section 2-92-385.

This certification shall serve as the affidavit required by MCC Section 2-92-385(c)(1).

If you checked “no” to the above, please explain.

EXHIBIT SECTION II. B. 2.

<u>Name</u>	<u>Business Address</u>	Percentage Indirect Interest in Amalgamated Bank of Chicago (the "Applicant")
Debra H. Wrobel Trust dated November 13, 1997, as amended on March 16, 2006	Amalgamated Bank of Chicago 30 North LaSalle Street Chicago, Illinois 60602	8.85%

Beneficiary

Debra H. Wrobel	Amalgamated Bank of Chicago 30 North LaSalle Street Chicago, Illinois 60602
-----------------	---

ASSOCIATED BANK,
N.A.

02019-9946

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT
AND AFFIDAVIT**

SECTION I – GENERAL INFORMATION

A. Legal name of the Disclosing Party submitting this EDS. Include d/b/a/ if applicable:

Associated Bank, N.A.

Check ONE of the following three boxes:

Indicate whether the Disclosing Party submitting this EDS is:

1. ☒ the Applicant
OR

2. ☐ a legal entity currently holding, or anticipated to hold within six months after City action on the contract, transaction or other undertaking to which this EDS pertains (referred to below as the "Matter"), a direct or indirect interest in excess of 7.5% in the Applicant. State the Applicant's legal name: _____

OR

3. ☐ a legal entity with a direct or indirect right of control of the Applicant (see Section II(B)(1)) State the legal name of the entity in which the Disclosing Party holds a right of control: _____

B. Business address of the Disclosing Party: 525 West Monroe Street; Suite 2300
Chicago, IL 60661

C. Telephone: (847) 641-9655 Fax: (312) 861-0261 Email: Carl.Abrahamson@AssociatedBank.com

D. Name of contact person: Carl Abrahamson

E. Federal Employer Identification No. (if you have one): _____

F. Brief description of the Matter to which this EDS pertains. (Include project number and location of property, if applicable):

City of Chicago and Chicago Board of Education RFP for Payment of Interest on Municipal Depositories

G. Which City agency or department is requesting this EDS? Chicago Department of Finance

If the Matter is a contract being handled by the City's Department of Procurement Services, please complete the following:

Specification # N/A and Contract # N/A

SECTION II -- DISCLOSURE OF OWNERSHIP INTERESTS

A. NATURE OF THE DISCLOSING PARTY

1. Indicate the nature of the Disclosing Party:

- | | |
|---|--|
| <input type="checkbox"/> Person | <input type="checkbox"/> Limited liability company |
| <input type="checkbox"/> Publicly registered business corporation | <input type="checkbox"/> Limited liability partnership |
| <input type="checkbox"/> Privately held business corporation | <input type="checkbox"/> Joint venture |
| <input type="checkbox"/> Sole proprietorship | <input type="checkbox"/> Not-for-profit corporation |
| <input type="checkbox"/> General partnership | (Is the not-for-profit corporation also a 501(c)(3))? |
| <input type="checkbox"/> Limited partnership | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| <input type="checkbox"/> Trust | <input checked="" type="checkbox"/> Other (please specify) |
- National Association

2. For legal entities, the state (or foreign country) of incorporation or organization, if applicable:

3. For legal entities not organized in the State of Illinois: Has the organization registered to do business in the State of Illinois as a foreign entity?

- ☐ Yes ☐ No ☒ Organized in Illinois

B. IF THE DISCLOSING PARTY IS A LEGAL ENTITY:

1. List below the full names and titles, if applicable, of: (i) all executive officers and all directors of the entity; (ii) **for not-for-profit corporations**, all members, if any, which are legal entities (if there are no such members, write "no members which are legal entities"); (iii) **for trusts, estates or other similar entities**, the trustee, executor, administrator, or similarly-situated party; (iv) **for general or limited partnerships, limited liability companies, limited liability partnerships or joint ventures**, each general partner, managing member, manager or any other person or legal entity that directly or indirectly controls the day-to-day management of the Applicant.

NOTE: Each legal entity listed below must submit an EDS on its own behalf.

Name

Title

Please see page 15 of our 2018 Annual Report

2. Please provide the following information concerning each person or legal entity having a direct or indirect, current or prospective (i.e. within 6 months after City action) beneficial interest (including ownership) in excess of 7.5% of the Applicant. Examples of such an interest include shares in a corporation, partnership interest in a partnership or joint venture, interest of a member or manager in a

limited liability company, or interest of a beneficiary of a trust, estate or other similar entity. If none, state "None."

NOTE: Each legal entity listed below may be required to submit an EDS on its own behalf.

Name	Business Address	Percentage Interest in the Applicant
None		

SECTION III -- INCOME OR COMPENSATION TO, OR OWNERSHIP BY, CITY ELECTED OFFICIALS

Has the Disclosing Party provided any income or compensation to any City elected official during the 12-month period preceding the date of this EDS? ☐ Yes ☒ No

Does the Disclosing Party reasonably expect to provide any income or compensation to any City elected official during the 12-month period following the date of this EDS? ☐ Yes ☒ No

If "yes" to either of the above, please identify below the name(s) of such City elected official(s) and describe such income or compensation:

Does any City elected official or, to the best of the Disclosing Party's knowledge after reasonable inquiry, any City elected official's spouse or domestic partner, have a financial interest (as defined in Chapter 2-156 of the Municipal Code of Chicago ("MCC")) in the Disclosing Party?

☐ Yes ☒ No

If "yes," please identify below the name(s) of such City elected official(s) and/or spouse(s)/domestic partner(s) and describe the financial interest(s).

SECTION IV -- DISCLOSURE OF SUBCONTRACTORS AND OTHER RETAINED PARTIES

The Disclosing Party must disclose the name and business address of each subcontractor, attorney, lobbyist (as defined in MCC Chapter 2-156), accountant, consultant and any other person or entity whom the Disclosing Party has retained or expects to retain in connection with the Matter, as well as the nature of the relationship, and the total amount of the fees paid or estimated to be paid. The Disclosing Party is not required to disclose employees who are paid solely through the Disclosing Party's regular payroll. If the Disclosing Party is uncertain whether a disclosure is required under this Section, the Disclosing Party must either ask the City whether disclosure is required or make the disclosure.

Name (indicate whether retained or anticipated to be retained)	Business Address	Relationship to Disclosing Party (subcontractor, attorney, lobbyist, etc.)	Fees (<u>indicate whether paid or estimated.</u>) NOTE: "hourly rate" or "t.b.d." is not an acceptable response.
--	------------------	--	---

(Add sheets if necessary)

☒ Check here if the Disclosing Party has not retained, nor expects to retain, any such persons or entities.

SECTION V -- CERTIFICATIONS

A. COURT-ORDERED CHILD SUPPORT COMPLIANCE

Under MCC Section 2-92-415, substantial owners of business entities that contract with the City must remain in compliance with their child support obligations throughout the contract's term.

Has any person who directly or indirectly owns 10% or more of the Disclosing Party been declared in arrearage on any child support obligations by any Illinois court of competent jurisdiction?

☐ Yes ☐ No ☒ No person directly or indirectly owns 10% or more of the Disclosing Party.

If "Yes," has the person entered into a court-approved agreement for payment of all support owed and is the person in compliance with that agreement?

☐ Yes ☐ No

B. FURTHER CERTIFICATIONS

1. [This paragraph 1 applies only if the Matter is a contract being handled by the City's Department of Procurement Services.] In the 5-year period preceding the date of this EDS, neither the Disclosing Party nor any Affiliated Entity [see definition in (5) below] has engaged, in connection with the performance of any public contract, the services of an integrity monitor, independent private sector inspector general, or integrity compliance consultant (i.e., an individual or entity with legal, auditing, investigative, or other similar skills, designated by a public agency to help the agency monitor the activity of specified agency vendors as well as help the vendors reform their business practices so they can be considered for agency contracts in the future, or continue with a contract in progress).

2. The Disclosing Party and its Affiliated Entities are not delinquent in the payment of any fine, fee, tax or other source of indebtedness owed to the City of Chicago, including, but not limited to, water and sewer charges, license fees, parking tickets, property taxes and sales taxes, nor is the Disclosing Party delinquent in the payment of any tax administered by the Illinois Department of Revenue.

3. The Disclosing Party and, if the Disclosing Party is a legal entity, all of those persons or entities identified in Section II(B)(1) of this EDS:

- a. are not presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from any transactions by any federal, state or local unit of government;
- b. have not, during the 5 years before the date of this EDS, been convicted of a criminal offense, adjudged guilty, or had a civil judgment rendered against them in connection with: obtaining, attempting to obtain, or performing a public (federal, state or local) transaction or contract under a public transaction; a violation of federal or state antitrust statutes; fraud; embezzlement; theft; forgery; bribery; falsification or destruction of records; making false statements; or receiving stolen property;
- c. are not presently indicted for, or criminally or civilly charged by, a governmental entity (federal, state or local) with committing any of the offenses set forth in subparagraph (b) above;
- d. have not, during the 5 years before the date of this EDS, had one or more public transactions (federal, state or local) terminated for cause or default; and
- e. have not, during the 5 years before the date of this EDS, been convicted, adjudged guilty, or found liable in a civil proceeding, or in any criminal or civil action, including actions concerning environmental violations, instituted by the City or by the federal government, any state, or any other unit of local government.

4. The Disclosing Party understands and shall comply with the applicable requirements of MCC Chapters 2-56 (Inspector General) and 2-156 (Governmental Ethics).

5. Certifications (5), (6) and (7) concern:

- the Disclosing Party;
- any "Contractor" (meaning any contractor or subcontractor used by the Disclosing Party in connection with the Matter, including but not limited to all persons or legal entities disclosed under Section IV, "Disclosure of Subcontractors and Other Retained Parties");
- any "Affiliated Entity" (meaning a person or entity that, directly or indirectly: controls the Disclosing Party, is controlled by the Disclosing Party, or is, with the Disclosing Party, under common control of another person or entity). Indicia of control include, without limitation: interlocking management or ownership; identity of interests among family members, shared facilities and equipment; common use of employees; or organization of a business entity following the ineligibility of a business entity to do business with federal or state or local government, including the City, using substantially the same management, ownership, or principals as the ineligible entity. With respect to Contractors, the term Affiliated Entity means a person or entity that directly or indirectly controls the Contractor, is controlled by it, or, with the Contractor, is under common control of another person or entity;
- any responsible official of the Disclosing Party, any Contractor or any Affiliated Entity or any other official, agent or employee of the Disclosing Party, any Contractor or any Affiliated Entity, acting pursuant to the direction or authorization of a responsible official of the Disclosing Party, any Contractor or any Affiliated Entity (collectively "Agents").

Neither the Disclosing Party, nor any Contractor, nor any Affiliated Entity of either the Disclosing Party or any Contractor, nor any Agents have, during the 5 years before the date of this EDS, or, with respect to a Contractor, an Affiliated Entity, or an Affiliated Entity of a Contractor during the 5 years before the date of such Contractor's or Affiliated Entity's contract or engagement in connection with the Matter:

- a. bribed or attempted to bribe, or been convicted or adjudged guilty of bribery or attempting to bribe, a public officer or employee of the City, the State of Illinois, or any agency of the federal government or of any state or local government in the United States of America, in that officer's or employee's official capacity;
- b. agreed or colluded with other bidders or prospective bidders, or been a party to any such agreement, or been convicted or adjudged guilty of agreement or collusion among bidders or prospective bidders, in restraint of freedom of competition by agreement to bid a fixed price or otherwise; or
- c. made an admission of such conduct described in subparagraph (a) or (b) above that is a matter of record, but have not been prosecuted for such conduct; or
- d. violated the provisions referenced in MCC Subsection 2-92-320(a)(4)(Contracts Requiring a Base Wage); (a)(5)(Debarment Regulations); or (a)(6)(Minimum Wage Ordinance).

6. Neither the Disclosing Party, nor any Affiliated Entity or Contractor, or any of their employees, officials, agents or partners, is barred from contracting with any unit of state or local government as a result of engaging in or being convicted of (1) bid-rigging in violation of 720 ILCS 5/33E-3; (2) bid-rotating in violation of 720 ILCS 5/33E-4; or (3) any similar offense of any state or of the United States of America that contains the same elements as the offense of bid-rigging or bid-rotating.

7. Neither the Disclosing Party nor any Affiliated Entity is listed on a Sanctions List maintained by the United States Department of Commerce, State, or Treasury, or any successor federal agency.

8. [FOR APPLICANT ONLY] (i) Neither the Applicant nor any "controlling person" [see MCC Chapter 1-23, Article I for applicability and defined terms] of the Applicant is currently indicted or charged with, or has admitted guilt of, or has ever been convicted of, or placed under supervision for, any criminal offense involving actual, attempted, or conspiracy to commit bribery, theft, fraud, forgery, perjury, dishonesty or deceit against an officer or employee of the City or any "sister agency"; and (ii) the Applicant understands and acknowledges that compliance with Article I is a continuing requirement for doing business with the City. NOTE: If MCC Chapter 1-23, Article I applies to the Applicant, that Article's permanent compliance timeframe supersedes 5-year compliance timeframes in this Section V.

9. [FOR APPLICANT ONLY] The Applicant and its Affiliated Entities will not use, nor permit their subcontractors to use, any facility listed as having an active exclusion by the U.S. EPA on the federal System for Award Management ("SAM").

10. [FOR APPLICANT ONLY] The Applicant will obtain from any contractors/subcontractors hired or to be hired in connection with the Matter certifications equal in form and substance to those in Certifications (2) and (9) above and will not, without the prior written consent of the City, use any such

contractor/subcontractor that does not provide such certifications or that the Applicant has reason to believe has not provided or cannot provide truthful certifications.

11. If the Disclosing Party is unable to certify to any of the above statements in this Part B (Further Certifications), the Disclosing Party must explain below:

None

If the letters "NA," the word "None," or no response appears on the lines above, it will be conclusively presumed that the Disclosing Party certified to the above statements.

12. To the best of the Disclosing Party's knowledge after reasonable inquiry, the following is a complete list of all current employees of the Disclosing Party who were, at any time during the 12-month period preceding the date of this EDS, an employee, or elected or appointed official, of the City of Chicago (if none, indicate with "N/A" or "none").

None

13. To the best of the Disclosing Party's knowledge after reasonable inquiry, the following is a complete list of all gifts that the Disclosing Party has given or caused to be given, at any time during the 12-month period preceding the execution date of this EDS, to an employee, or elected or appointed official, of the City of Chicago. For purposes of this statement, a "gift" does not include: (i) anything made generally available to City employees or to the general public, or (ii) food or drink provided in the course of official City business and having a retail value of less than \$25 per recipient, or (iii) a political contribution otherwise duly reported as required by law (if none, indicate with "N/A" or "none"). As to any gift listed below, please also list the name of the City recipient.

None

C. CERTIFICATION OF STATUS AS FINANCIAL INSTITUTION

1. The Disclosing Party certifies that the Disclosing Party (check one)



is

[]

is not

a "financial institution" as defined in MCC Section 2-32-455(b).

2. If the Disclosing Party IS a financial institution, then the Disclosing Party pledges:

"We are not and will not become a predatory lender as defined in MCC Chapter 2-32. We further pledge that none of our affiliates is, and none of them will become, a predatory lender as defined in MCC Chapter 2-32. We understand that becoming a predatory lender or becoming an affiliate of a predatory lender may result in the loss of the privilege of doing business with the City."

If the Disclosing Party is unable to make this pledge because it or any of its affiliates (as defined in MCC Section 2-32-455(b)) is a predatory lender within the meaning of MCC Chapter 2-32, explain here (attach additional pages if necessary):

None

If the letters "NA," the word "None," or no response appears on the lines above, it will be conclusively presumed that the Disclosing Party certified to the above statements.

D. CERTIFICATION REGARDING FINANCIAL INTEREST IN CITY BUSINESS

Any words or terms defined in MCC Chapter 2-156 have the same meanings if used in this Part D.

1. In accordance with MCC Section 2-156-110: To the best of the Disclosing Party's knowledge after reasonable inquiry, does any official or employee of the City have a financial interest in his or her own name or in the name of any other person or entity in the Matter?

☐ Yes

☒ No

NOTE: If you checked "Yes" to Item D(1), proceed to Items D(2) and D(3). If you checked "No" to Item D(1), skip Items D(2) and D(3) and proceed to Part E.

2. Unless sold pursuant to a process of competitive bidding, or otherwise permitted, no City elected official or employee shall have a financial interest in his or her own name or in the name of any other person or entity in the purchase of any property that (i) belongs to the City, or (ii) is sold for taxes or assessments, or (iii) is sold by virtue of legal process at the suit of the City (collectively, "City Property Sale"). Compensation for property taken pursuant to the City's eminent domain power does not constitute a financial interest within the meaning of this Part D.

Does the Matter involve a City Property Sale?

☐ Yes

☒ No

3. If you checked "Yes" to Item D(1), provide the names and business addresses of the City officials or employees having such financial interest and identify the nature of the financial interest:

Name

Business Address

Nature of Financial Interest

4. The Disclosing Party further certifies that no prohibited financial interest in the Matter will be acquired by any City official or employee.

E. CERTIFICATION REGARDING SLAVERY ERA BUSINESS

Please check either (1) or (2) below. If the Disclosing Party checks (2), the Disclosing Party must disclose below or in an attachment to this EDS all information required by (2). Failure to comply with these disclosure requirements may make any contract entered into with the City in connection with the Matter voidable by the City.

☒ 1. The Disclosing Party verifies that the Disclosing Party has searched any and all records of the Disclosing Party and any and all predecessor entities regarding records of investments or profits from slavery or slaveholder insurance policies during the slavery era (including insurance policies issued to slaveholders that provided coverage for damage to or injury or death of their slaves), and the Disclosing Party has found no such records.

____ 2. The Disclosing Party verifies that, as a result of conducting the search in step (1) above, the Disclosing Party has found records of investments or profits from slavery or slaveholder insurance policies. The Disclosing Party verifies that the following constitutes full disclosure of all such records, including the names of any and all slaves or slaveholders described in those records:

SECTION VI -- CERTIFICATIONS FOR FEDERALLY FUNDED MATTERS

NOTE: If the Matter is federally funded, complete this Section VI. If the Matter is not federally funded, proceed to Section VII. For purposes of this Section VI, tax credits allocated by the City and proceeds of debt obligations of the City are not federal funding.

A. CERTIFICATION REGARDING LOBBYING

1. List below the names of all persons or entities registered under the federal Lobbying Disclosure Act of 1995, as amended, who have made lobbying contacts on behalf of the Disclosing Party with respect to the Matter: (Add sheets if necessary):

(If no explanation appears or begins on the lines above, or if the letters "NA" or if the word "None" appear, it will be conclusively presumed that the Disclosing Party means that NO persons or entities registered under the Lobbying Disclosure Act of 1995, as amended, have made lobbying contacts on behalf of the Disclosing Party with respect to the Matter.)

2. The Disclosing Party has not spent and will not expend any federally appropriated funds to pay any person or entity listed in paragraph A(1) above for his or her lobbying activities or to pay any person or entity to influence or attempt to influence an officer or employee of any agency, as defined by applicable federal law, a member of Congress, an officer or employee of Congress, or an employee

of a member of Congress, in connection with the award of any federally funded contract, making any federally funded grant or loan, entering into any cooperative agreement, or to extend, continue, renew, amend, or modify any federally funded contract, grant, loan, or cooperative agreement.

3. The Disclosing Party will submit an updated certification at the end of each calendar quarter in which there occurs any event that materially affects the accuracy of the statements and information set forth in paragraphs A(1) and A(2) above.

4. The Disclosing Party certifies that either: (i) it is not an organization described in section 501(c)(4) of the Internal Revenue Code of 1986; or (ii) it is an organization described in section 501(c)(4) of the Internal Revenue Code of 1986 but has not engaged and will not engage in "Lobbying Activities," as that term is defined in the Lobbying Disclosure Act of 1995, as amended.

5. If the Disclosing Party is the Applicant, the Disclosing Party must obtain certifications equal in form and substance to paragraphs A(1) through A(4) above from all subcontractors before it awards any subcontract and the Disclosing Party must maintain all such subcontractors' certifications for the duration of the Matter and must make such certifications promptly available to the City upon request.

B. CERTIFICATION REGARDING EQUAL EMPLOYMENT OPPORTUNITY

If the Matter is federally funded, federal regulations require the Applicant and all proposed subcontractors to submit the following information with their bids or in writing at the outset of negotiations.

Is the Disclosing Party the Applicant?

☐ Yes

☒ No

If "Yes," answer the three questions below:

1. Have you developed and do you have on file affirmative action programs pursuant to applicable federal regulations? (See 41 CFR Part 60-2.)

☐ Yes

☐ No

2. Have you filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance Programs, or the Equal Employment Opportunity Commission all reports due under the applicable filing requirements?

☐ Yes

☐ No

☐ Reports not required

3. Have you participated in any previous contracts or subcontracts subject to the equal opportunity clause?

☐ Yes

☐ No

If you checked "No" to question (1) or (2) above, please provide an explanation:

SECTION VII -- FURTHER ACKNOWLEDGMENTS AND CERTIFICATION

The Disclosing Party understands and agrees that:

A. The certifications, disclosures, and acknowledgments contained in this EDS will become part of any contract or other agreement between the Applicant and the City in connection with the Matter, whether procurement, City assistance, or other City action, and are material inducements to the City's execution of any contract or taking other action with respect to the Matter. The Disclosing Party understands that it must comply with all statutes, ordinances, and regulations on which this EDS is based.

B. The City's Governmental Ethics Ordinance, MCC Chapter 2-156, imposes certain duties and obligations on persons or entities seeking City contracts, work, business, or transactions. The full text of this ordinance and a training program is available on line at www.cityofchicago.org/Ethics, and may also be obtained from the City's Board of Ethics, 740 N. Sedgwick St., Suite 500, Chicago, IL 60610, (312) 744-9660. The Disclosing Party must comply fully with this ordinance.

C. If the City determines that any information provided in this EDS is false, incomplete or inaccurate, any contract or other agreement in connection with which it is submitted may be rescinded or be void or voidable, and the City may pursue any remedies under the contract or agreement (if not rescinded or void), at law, or in equity, including terminating the Disclosing Party's participation in the Matter and/or declining to allow the Disclosing Party to participate in other City transactions. Remedies at law for a false statement of material fact may include incarceration and an award to the City of treble damages.

D. It is the City's policy to make this document available to the public on its Internet site and/or upon request. Some or all of the information provided in, and appended to, this EDS may be made publicly available on the Internet, in response to a Freedom of Information Act request, or otherwise. By completing and signing this EDS, the Disclosing Party waives and releases any possible rights or claims which it may have against the City in connection with the public release of information contained in this EDS and also authorizes the City to verify the accuracy of any information submitted in this EDS.

E. The information provided in this EDS must be kept current. In the event of changes, the Disclosing Party must supplement this EDS up to the time the City takes action on the Matter. If the Matter is a contract being handled by the City's Department of Procurement Services, the Disclosing Party must update this EDS as the contract requires. **NOTE:** With respect to Matters subject to MCC Chapter 1-23, Article I (imposing **PERMANENT INELIGIBILITY** for certain specified offenses), the information provided herein regarding eligibility must be kept current for a longer period, as required by MCC Chapter 1-23 and Section 2-154-020.

CERTIFICATION

Under penalty of perjury, the person signing below: (1) warrants that he/she is authorized to execute this EDS, and all applicable Appendices, on behalf of the Disclosing Party, and (2) warrants that all certifications and statements contained in this EDS, and all applicable Appendices, are true, accurate and complete as of the date furnished to the City.

Associated Bank, N.A.

(Print or type exact legal name of Disclosing Party)

By: Carl Abrahamson
(Sign here)

Carl Abrahamson

(Print or type name of person signing)

Senior Vice President - Relationship Manager - Government Banking

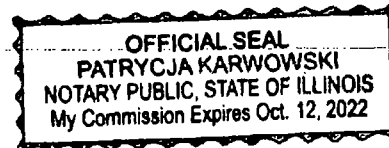
(Print or type title of person signing)

Signed and sworn to before me on (date) 10/11/2019

at KANE County, IL (state).

Patrycja Karwowski
Notary Public

Commission expires: OCT 12, 2022



**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
APPENDIX A**

**FAMILIAL RELATIONSHIPS WITH ELECTED CITY OFFICIALS
AND DEPARTMENT HEADS**

This Appendix is to be completed only by (a) the Applicant, and (b) any legal entity which has a direct ownership interest in the Applicant exceeding 7.5%. It is not to be completed by any legal entity which has only an indirect ownership interest in the Applicant.

Under MCC Section 2-154-015, the Disclosing Party must disclose whether such Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof currently has a "familial relationship" with any elected city official or department head. A "familial relationship" exists if, as of the date this EDS is signed, the Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof is related to the mayor, any alderman, the city clerk, the city treasurer or any city department head as spouse or domestic partner or as any of the following, whether by blood or adoption: parent, child, brother or sister, aunt or uncle, niece or nephew, grandparent, grandchild, father-in-law, mother-in-law, son-in-law, daughter-in-law, stepfather or stepmother, stepson or stepdaughter, stepbrother or stepsister or half-brother or half-sister.

"Applicable Party" means (1) all executive officers of the Disclosing Party listed in Section II.B.1.a., if the Disclosing Party is a corporation; all partners of the Disclosing Party, if the Disclosing Party is a general partnership; all general partners and limited partners of the Disclosing Party, if the Disclosing Party is a limited partnership; all managers, managing members and members of the Disclosing Party, if the Disclosing Party is a limited liability company; (2) all principal officers of the Disclosing Party; and (3) any person having more than a 7.5% ownership interest in the Disclosing Party. "Principal officers" means the president, chief operating officer, executive director, chief financial officer, treasurer or secretary of a legal entity or any person exercising similar authority.

Does the Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof currently have a "familial relationship" with an elected city official or department head?

[] Yes

☒ No

If yes, please identify below (1) the name and title of such person, (2) the name of the legal entity to which such person is connected; (3) the name and title of the elected city official or department head to whom such person has a familial relationship, and (4) the precise nature of such familial relationship.

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
APPENDIX B**

BUILDING CODE SCOFFLAW/PROBLEM LANDLORD CERTIFICATION

This Appendix is to be completed only by (a) the Applicant, and (b) any legal entity which has a direct ownership interest in the Applicant exceeding 7.5% (an "Owner"). It is not to be completed by any legal entity which has only an indirect ownership interest in the Applicant.

1. Pursuant to MCC Section 2-154-010, is the Applicant or any Owner identified as a building code scofflaw or problem landlord pursuant to MCC Section 2-92-416?

☐ Yes ☒ No

2. If the Applicant is a legal entity publicly traded on any exchange, is any officer or director of the Applicant identified as a building code scofflaw or problem landlord pursuant to MCC Section 2-92-416?

☐ Yes ☒ No ☐ The Applicant is not publicly traded on any exchange.

3. If yes to (1) or (2) above, please identify below the name of each person or legal entity identified as a building code scofflaw or problem landlord and the address of each building or buildings to which the pertinent code violations apply.

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
APPENDIX C**

PROHIBITION ON WAGE & SALARY HISTORY SCREENING - CERTIFICATION

This Appendix is to be completed only by an Applicant that is completing this EDS as a "contractor" as defined in MCC Section 2-92-385. That section, which should be consulted (www.amlegal.com), generally covers a party to any agreement pursuant to which they: (i) receive City of Chicago funds in consideration for services, work or goods provided (including for legal or other professional services), or (ii) pay the City money for a license, grant or concession allowing them to conduct a business on City premises.

On behalf of an Applicant that is a contractor pursuant to MCC Section 2-92-385, I hereby certify that the Applicant is in compliance with MCC Section 2-92-385(b)(1) and (2), which prohibit: (i) screening job applicants based on their wage or salary history, or (ii) seeking job applicants' wage or salary history from current or former employers. I also certify that the Applicant has adopted a policy that includes those prohibitions.

☒ Yes

☐ No

☐ N/A – I am not an Applicant that is a "contractor" as defined in MCC Section 2-92-385.

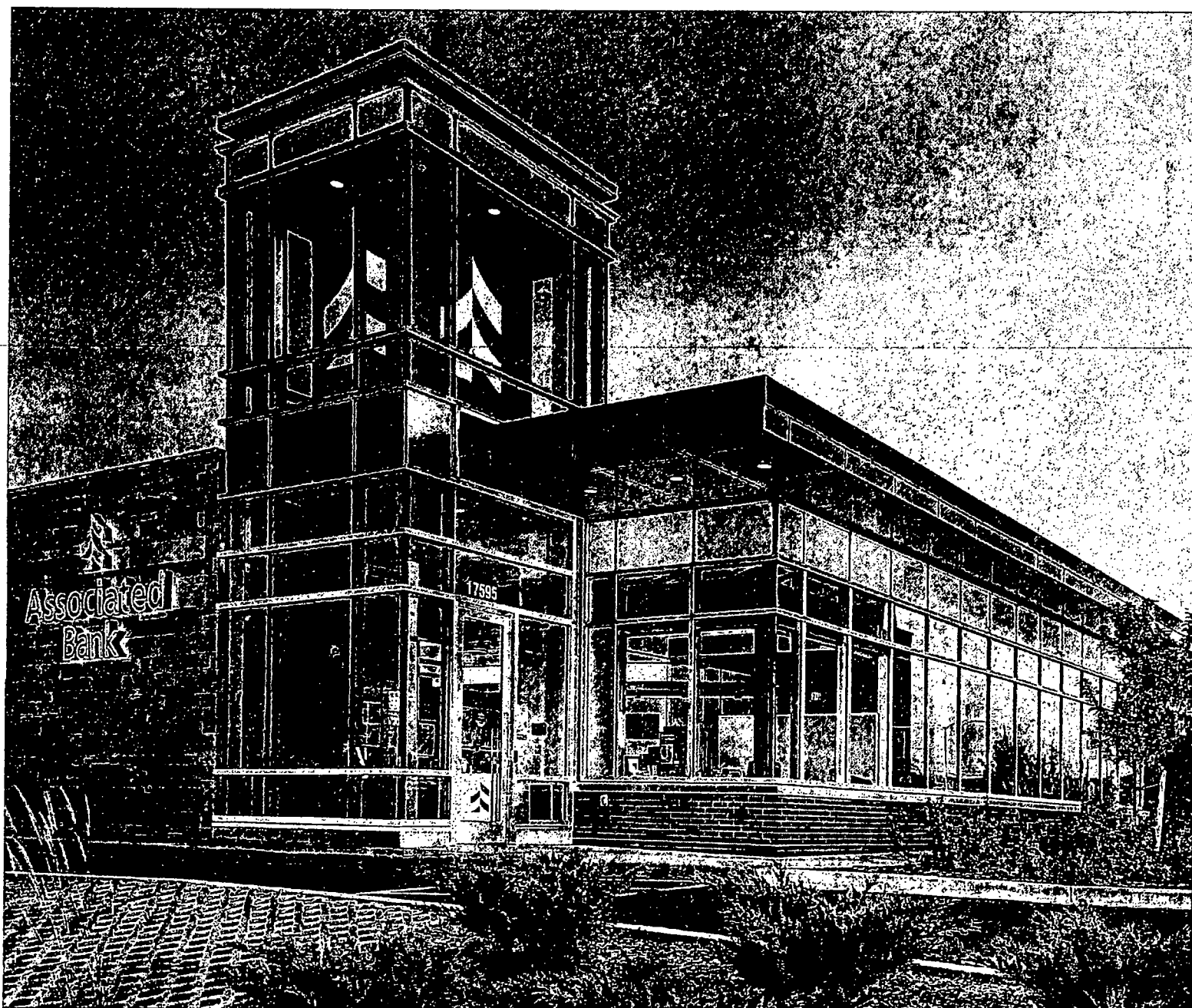
This certification shall serve as the affidavit required by MCC Section 2-92-385(c)(1).

If you checked "no" to the above, please explain.



2018 SUMMARY ANNUAL REPORT

Associated Banc-Corp



Top 50

publicly traded (NYSE: ASB)
U.S. bank holding companies⁽¹⁾

Largest

Wisconsin-based bank, by assets⁽²⁾

More than
1 million
customers

Top 50

U.S. insurance brokerage firms⁽³⁾

#1 Mortgage Lender

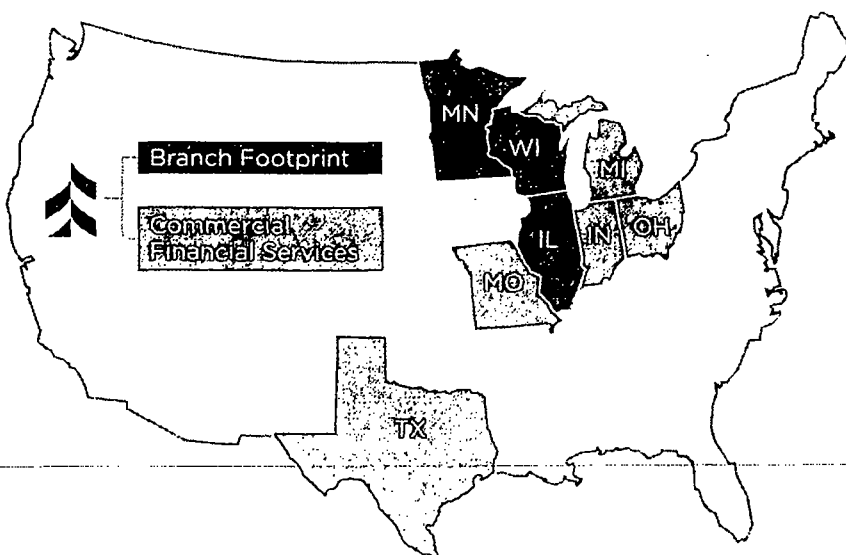
in Wisconsin⁽⁴⁾

Our Vision

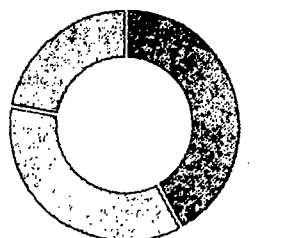
Associated Bank will be the Midwest's premier financial services company, distinguished by consistent, quality customer experiences, built upon a strong commitment to our colleagues and the communities we serve, resulting in exceptional value to our shareholders through economic cycles.

OUR FOOTPRINT

Associated currently has over 230 branches serving more than 110 communities throughout Wisconsin, Illinois and Minnesota, with commercial financial services in Indiana, Michigan, Missouri, Ohio and Texas, and select national specialty businesses.

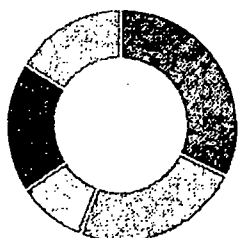


Loans by Type⁽¹⁾



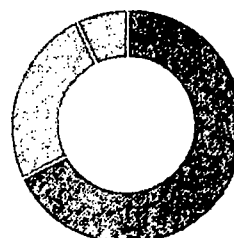
42% Consumer
36% Commercial and business
22% Commercial real estate

Loans by State⁽²⁾



32% WI
24% IL
10% MN
18% MO, IN, OH, MI, TX, IA
15% Other

Deposits by State⁽³⁾



67% WI
26% IL
7% MN

⁽¹⁾ S&P Global Market Intelligence. Rank by based on total assets as of December 31, 2018.

⁽²⁾ Based on assets as of December 31, 2018.

⁽³⁾ Business Insurance magazine. Rankings based on 2017 brokerage revenue generated by U.S.-based firms.

⁽⁴⁾ The Wisconsin's #1 Mortgage Lender designation is based on information gathered from the Home Mortgage Disclosure Act data compiled annually by the Bureau of Consumer Financial Protection. The results of this data were published through the Bureau of Consumer Financial Protection Mortgage Lender Disclosure (MLDA), June 2018.

⁽⁵⁾ As of December 31, 2018.

⁽⁶⁾ As of December 31, 2018. Excludes \$0.4 billion other consumer portfolio. Numbers may not sum due to rounding.

Dear Shareholders,

2018 was a historic and momentous year for Associated Banc-Corp.

We strengthened our company through organic growth and with the acquisitions and successful integrations of Bank Mutual, Diversified Insurance Solutions and Anderson Insurance Agency. We sharpened our focus around the customer experience—prioritizing investments, products and services to meet changing needs and expectations. We extended our outreach, defining new opportunities to stimulate economic development and promote stronger communities.

Our financial performance was strong. We grew both our loan portfolio and fee businesses. We finished the year with record deposit levels and nearly \$34 billion in assets.

Our operational efficiency improved for the seventh consecutive year, demonstrating our acquisition discipline and commitment to controlling costs. We were effective in our credit and risk management practices, finishing the year with zero provision for credit losses.

Collectively, these improvements drove earnings per common share to \$1.89, a 33% increase from 2017 and a 50% increase from two years ago.

Our plans call for considered and thoughtful growth of our company. This comes in two ways: 1) we continue to cultivate traditional sales growth through our relationships with customers, the expansion of our salesforce and investments in technology; and 2) we pursue targeted acquisition opportunities where they make sense.

2018 Highlights

Average loans of approximately

\$23 billion

and record average deposits of more than

\$24 billion

were up

10%

from 2017,

benefiting from organic and acquired activity during the year.

We've lowered our adjusted efficiency ratio⁽¹⁾

7 consecutive years

and were able to improve our adjusted efficiency ratio more than

200 basis points

from 2017.

Our net income available to common equity was

\$323 million,

and earnings per common equity share increased

33% to \$1.89.

The company repurchased \$240 million of common stock and increased dividends per common share by

24%

⁽¹⁾ The adjusted efficiency ratio is a non-GAAP measure. See Table 26 in Part II, Item 7 of the Annual Report on Form 10-K for the fiscal year ended December 31, 2019, and page 16 of the financial tables in the 2018 earnings press release published January 24, 2019, for a reconciliation of non-GAAP financial measures to the most comparable GAAP financial measures. The efficiency ratio as defined by the Federal Reserve guidance is net operating expense, which includes the provision for unearned income, divided by the sum of net interest income plus non-interest income, excluding investments, securities gains / losses, net. The adjusted efficiency ratio is noninterest expense (which includes the provision for unearned income) excluding other intangible amortization and acquisition-related costs, divided by the sum of fully tax equivalent net interest income plus non-interest income, excluding investment securities gains / losses, net, and securities income. Management believes the adjusted efficiency ratio is meaningful because the adjustments commonly made by management, investors, and analysts provide greater understanding of ongoing operations and enhance comparability of results with prior periods.

GROWING OUR CORE BUSINESS

Associated proudly serves more than 1 million customers—individuals, families and businesses—providing a comprehensive mix of products and services to help them manage their finances, conveniently conduct transactions, and protect and promote personal wealth and business growth. Our commitment to the customer experience and the diversity of our portfolio has enabled us to increase our value to customers and shareholders, while maintaining a conservative credit culture.

Over the past several years, Associated has invested in the expansion of our commercial banking presence. Commercial and business average loans increased 7% in 2018 from 2017, and have nearly doubled over the past decade. While the majority of that growth was driven by our specialty lending verticals, manufacturing and wholesale trade remain our largest industry exposure.

Most of our commercial relationships are initiated through credit, then deepened with additional financial and risk management solutions over time. In 2018, we expanded our commercial banking team with experienced relationship managers in key markets. We expect these new colleagues to bring increasing value to existing and new customers in the Upper Midwest and through select national businesses.

To meet the complex needs of these customers, we plan to make significant improvements to our digital services in 2019. Expected features include an enhanced suite of online and mobile services for account reporting, funds transfer, positive pay and user administration.

Commercial Real Estate (CRE) average loans increased approximately 10% in 2018 from 2017. CRE accounts for a fifth of our total loans. Serving customers from 12 offices in eight states, our CRE model remains focused on working with proven developers. This has allowed us to successfully grow the business while remaining well diversified by geography, property type and borrower.

Over the past three years, our wealth management team, which focuses primarily on commercial, executive and professional customers, has undergone a series of organizational changes to better align its business units enhance capabilities and deepen customer relationships.

Growth in 2018 was primarily driven by investment management and advisory fee revenues, reflecting the strength of the underlying equity markets and the full-year contribution of Whitnell & Co., the high net worth family office services firm we acquired in late 2017. In addition,

Our Products and Services

Corporate and Commercial Specialty

- Commercial and specialty lending
- Commercial real estate lending
- Deposit and cash management
- Specialized financial services such as interest rate risk management, foreign exchange solutions and commodity hedging

Community, Consumer and Business

- Business lending
- Deposits and transactional solutions
- Insurance and benefits-related products and services
- Fiduciary, investment and financial planning services
- Residential mortgage, home equity loans and lines of credit, and other lending solutions
- Debit, credit and digital payment solutions

Our Select Affiliates

- Associated Bank, N.A.
- Associated Trust Company, N.A.
- Associated Financial Group, LLC DBA Associated Benefits and Risk Consulting
- Associated Investment Services, Inc.
- Kellogg Asset Management, LLC
- Whitnell & Co.

our insurance activity was boosted by our 2018 acquisitions of Diversified Insurance Solutions and Anderson Insurance Agency, which added to our revenues.

Consumer deposits remained strong as we successfully retained and grew lower-cost balances. Our sports affinity programs continue to be effective in adding new customers. By the end of last year, more than 40% of active personal checking accounts had affinity debit cards.

The majority of that group is tied to our long relationship with the Green Bay Packers. We have been the Bank of the Packers since their founding in 1919. We also have affinity programs with the Milwaukee Brewers™, Minnesota Wild® and Wisconsin Badgers™.

Our company was once again recognized as Wisconsin's #1 Mortgage Lender and continues to gain market share in Illinois and Minnesota. Residential mortgages, which represent approximately 36% of our average total loans, benefited from organic growth and the acquisition of Bank Mutual.

We continue to improve our market position and drive profitability through our community markets strategy.

launched five years ago. Based in select midsize markets, this banking model combines the localized approach of traditional community banks with the efficiencies and full services of our larger organization.

Benefiting from both organic and acquired activity, our 'community markets' deposit balance has increased approximately 34% since 2014. We expect continued investment in these markets will improve our ability to grow organically while helping to successfully integrate customers joining us through acquisitions.

We've invested significant time and effort to ensure regulatory compliance and manage risk. Our current regulatory and risk management position is positive, and we will remain focused on our compliance efforts as we continue to grow the company.

GROWING THROUGH TARGETED ACQUISITIONS

Our acquisition strategy is driven in large part by current industry dynamics. There is an imperative for Associated to build scale to facilitate investment in services and technology that enhance the customer experience. Doing so helps us remain competitive with the largest banks with which we compete.

The 2018 acquisition and successful integration of Bank Mutual provided an opportunity to increase our Wisconsin presence and improve the scale of our operations. There was a significant amount of physical overlap, with approximately 50% of Bank Mutual branches being located within one mile of an Associated Bank location. In line with our expectations, we realized approximately 45% cost savings after converting systems, products, services and branches last June

The cultural synergies of our two companies, coupled with the dedication of our colleagues, also helped ensure a smooth transition for customers. Even with the rationalization of branches, customers now have access to a broader network of locations, including branches in nearly a dozen additional communities

Central to this acquisition we proved our ability to acquire a bank and integrate it successfully, without disrupting the customer experience or taking on significant additional staff. We continue to be pleased with our deposit retention rates, which stood at approximately 90% at the end of 2018

We learned much from our Bank Mutual approach and see the acquisition of the Wisconsin branch banking operations of The Huntington National Bank, announced in December

2018, as an opportunity to both capitalize on our experience and replay our success. This similar, although smaller, transaction will strengthen our Wisconsin presence, and is expected to add more than 60,000 deposit accounts and 33,000 households to Associated.

We expect to add 14 branches to the combined companies' network and expand into 13 new communities during the second quarter of 2019. With this change, Huntington's Wisconsin customers will benefit from our broader branch network and 24/7/365 assistance from our Customer Care team. We expect opportunities to deepen these customer relationships over time.

In 2018, Associated also acquired Anderson Insurance Agency, an independent firm based in Minneapolis, and Diversified Insurance Solutions, one of Wisconsin's leading insurance brokers. Along with providing a lift in noninterest income, the addition of these established firms helps expand our insurance and risk management services in some of our largest metropolitan markets, and furthers our strategy to drive shareholder value through a diverse set of specialty businesses.

Our Acquisitions



Huntington Wisconsin
Branch Acquisition

Expected June 2019



Anderson
INSURANCE & INVESTMENT
AGENCY, INC.

Completed June 2018



Diversified
Insurance Solutions
Property & Casualty - Benefits

Completed March 2018



Bank Mutual

Completed February 2018



ENHANCING THE CUSTOMER EXPERIENCE

Our colleagues view the opportunity to serve our customers as their top priority. They know that behind every relationship is an individual, family or business owner who is looking to Associated to provide the right solutions for their financial and risk management needs. Our teams focus on getting to know our customers, their unique situations and how they want to interact with us.

While banking continues to be a relationship business, our customers expect advanced online and mobile banking services to conduct their business.

Our investments in digital services and our branch network continue to benefit our consumer and business banking customers. Since upgrading our consumer online and mobile banking services in February 2018, we've seen more than a 30% increase in mobile banking customer satisfaction through our customer experience surveys. Nearly half of all Associated customer transactions are now done online, and mobile banking is our fastest growing service channel.

Customers appreciate features such as facial recognition and fingerprint authentication for mobile sign-in, personal financial management tools and a more user-friendly design. Beyond these enhancements, the 2018 upgrade includes advanced security features and improves our company's ability to regularly roll out new features in a time- and cost-efficient manner.

In early 2019, these online and mobile services were also rolled out to small business customers whose business

needs aligned with the platform's services. Business and commercial customers with more complex needs will receive a more advanced suite of online and mobile services later this year.

Across our industry, digitally based person-to-person transactions are increasing. Consumer adoption is expected to be above 50% in 2019. To meet this growing demand, Associated expects to upgrade its service to the Zelle platform during the first half of the year.

We are investing heavily to enhance our digital sales platforms and improve the overall customer experience. Upgrades to our online and mobile "uOpen" platform launched in early 2019. These updates speed up the consumer deposit application process by approximately 30% and reduce the chance for input errors. Additional digital upgrades for enhancing small business and mortgage loan applications are also planned for 2019.

Recognizing the importance of all our customer touchpoints, we regularly measure the customer experience across our digital, branch and telephone channels. Our branch customer experience scores reached a new high in October as our colleagues worked to deliver superior service. The addition of our third 24/7/365 customer call center extended our ability to respond to customers' needs real-time, often in one call.



STRENGTHENING OUR COMMUNITIES

One of the most important things we do to keep our company healthy and vibrant is to proactively support economic development within our communities. We pride ourselves on being a strong community partner, actively coordinating resources for the benefit of the communities we serve

In 2018, Associated announced a \$2.4 billion Community Commitment Plan, covering three years from 2018 through 2020. The plan, which is an extension of a similar plan adopted in 2016, sets forth our company's commitments to minority communities, low- to moderate-income communities and small businesses in our three-state branch footprint of Wisconsin, Illinois and Minnesota

Highlights of our financial commitments include \$1.4 billion for residential mortgages, \$600 million for community development loans, \$425 million for small business loans and \$8 million in donations.

Our colleagues work in tandem with community leaders, nonprofit organizations, governmental entities and other community representatives to extend our reach into underserved markets and to ensure our coordinated efforts support the most important economic development issues in the markets we serve.

Associated's Colleague Resource Groups also help enhance engagement with our customers and communities. Each of these six groups works to create greater organizational awareness of and takes specific actions to address the

unique needs of diverse populations within our company and our markets. Their efforts have resulted in initiatives that influence workforce development; workplace culture, policies and programs; and marketplace practices.

This work is extended by our colleagues who volunteer their time and expertise. In 2018, colleagues logged more than 73,000 hours of volunteer time, worth \$1.7 million. Since 2012, our recorded volunteer hours were valued at more than \$10 million in donated time. In addition, for the eighth consecutive year our colleagues joined together to raise more than \$1 million for the United Way.

"One of the most important things we do to keep our company healthy and vibrant is to proactively support economic development within our communities."

DEVELOPING FUTURE LEADERS

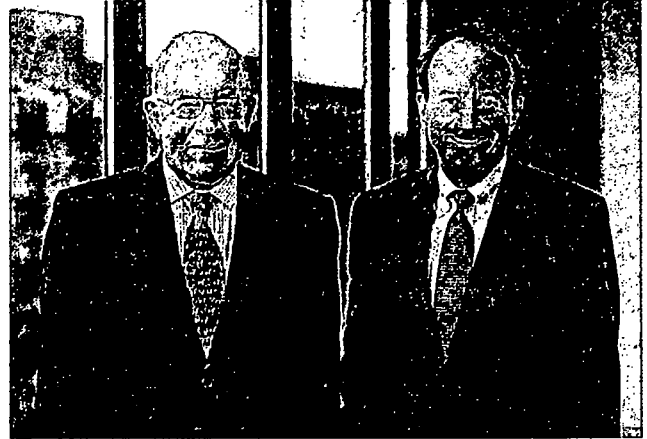
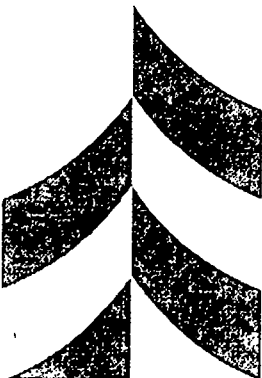
Ultimately, our momentum and success is driven by the passion of our people who strive to make our customers' experiences and our communities even better. Through a variety of programs, we work to ensure colleagues have the necessary tools and resources to achieve career and personal goals.

We make substantial investments in colleague education and have specialized and leadership development programs designed to help colleagues advance their careers. In 2018, 21% of colleagues advanced their careers within Associated, including more than 570 internal promotions.

We have been very strategic about succession planning, and strive to fill positions from within the company, whenever possible. It gives us great pride to say that 12 of our executive committee members have been promoted from within our company. This is a testament to the high caliber of our colleagues and talent development resources.

In September 2018, Associated announced the promotion of Michael Meinolf to Associated's executive team as Chief Information Officer. Mike joined Associated in 2015 at which time he was responsible for the development and support of application systems for all major business units and significant third-party vendor relationships.

Judith Docter retired from her role as Chief Human Resources Officer in March of this year. During her 27 years with the company, Judy has been instrumental in developing the company's talent programs, many of which have helped Associated be recognized as an employer of choice within our markets and by special interest groups. Judy is succeeded by Angie DeWitt. Angie joined Associated in 2008 and has more than 26 years experience, including multiple leadership roles in finance and human resources.



DELIVERING VALUE

We feel very fortunate to be a part of Associated's 157-year journey. The work of our colleagues and management team continues to transform our company and deliver increasing value to all of our stakeholders—customers, colleagues, communities and shareholders. We love to share our story, and have included additional highlights on the pages that follow.

Thank you for your continued support and confidence in Associated. We enter 2019 with momentum and opportunity. Our capital management priorities remain consistent—support organic growth, pay a competitive dividend, pursue in-market, cost takeout acquisitions and deploy capital through share repurchases.

We will continue investing in the future of our company—improving our ability to serve our customers, grow our talent and strengthen our communities. Doing so positions us to deliver long-term value to our shareholders.

Sincerely,

Philip B. Flynn
President & Chief Executive Officer

William R. Hutchinson
Chairman

March 15, 2019

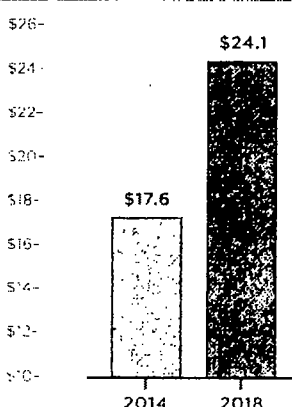
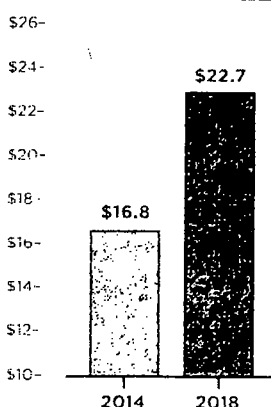
Financial Highlights

In thousands (except per common share data and performance ratios)	2014	2015	2016	2017	2018
Annual Averages					
Assets	\$ 25,109,997	\$ 27,019,216	\$ 28,506,112	\$ 29,485,733	\$ 33,053,405
Loans	16,838,994	18,252,264	19,650,667	20,592,383	22,718,297
Investment securities	5,594,232	5,912,849	6,048,563	6,028,262	6,912,921
Deposits	17,647,084	19,903,087	21,005,772	21,923,602	24,072,049
Operating Results					
Net interest income	\$ 680,967	\$ 676,278	\$ 707,273	\$ 741,220	\$ 879,580
Noninterest income	290,861	329,357	352,883	332,680	355,568
Total	971,828	1,005,635	1,060,156	1,073,900	1,235,148
Noninterest expense	679,783	698,347	702,560	709,133	821,799
Net income available to common equity	185,507	181,146	191,371	219,917	322,779
Performance Ratios					
Net interest margin	3.08 %	2.84 %	2.80 %	2.82 %	2.97 %
Return on average equity	6.63	6.50	6.63	7.23	9.03
Return on average common equity Tier 1 ^{(1), (2)}	9.92	9.88	9.86	10.43	13.15
Return on average tangible common equity ^{(1), (3)}	9.91	9.97	10.07	10.86	14.06
Dividend payout ratio ⁽⁴⁾	31.62	34.17	35.43	34.48	32.29
Period End					
Common equity Tier 1 ⁽²⁾	\$ 1,808,332	\$ 1,897,944	\$ 2,032,587	\$ 2,171,508	\$ 2,449,721
Common equity Tier 1 ratio ⁽²⁾	9.74%	9.52%	9.52%	10.08%	10.26%
Allowance for loan losses/nonaccrual loans	150%	154%	101%	127%	186%
Nonperforming assets/total assets	0.72%	0.70%	1.01%	0.75%	0.42%
Associated Bank, N.A. Senior Credit Rating (Moody's)	A3	A1	A1	A1	A1
Per Common Share Data					
Common shares outstanding	151,542	151,239	151,121	152,846	164,440
Diluted earnings per share	\$ 1.16	\$ 1.19	\$ 1.26	\$ 1.42	\$ 1.89
Dividends per share	0.37	0.41	0.45	0.50	0.62
Book value per share	18.32	18.62	19.27	20.13	21.43
Tangible book value per share ^{(1), (5)}	12.06	12.10	12.78	13.65	13.86

Growing Loans and Deposits

Average Loans \$ in billions

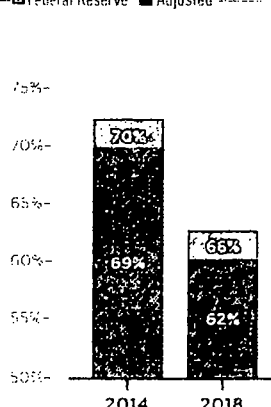
Average Deposits \$ in billions



Improving Efficiency

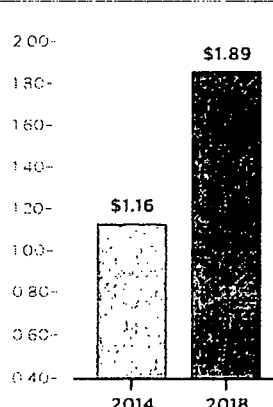
Efficiency Ratio⁽⁶⁾

■ Federal Reserve ■ Adjusted



Expanding Bottom Line

Diluted Earnings Per Share



- Non-GAAP measure - See table 26 in Part II, item 7 of the Annual Report on Form 10-K for the fiscal year ended December 31, 2018, and page 19 of the financial tables in the 2018 earnings press release published January 24, 2019, for a reconciliation of non-GAAP financial measures to the most comparable GAAP financial measures.
- ⁽¹⁾ The Federal Reserve establishes regulatory capital requirements, including well-capitalized standards, for the Corporation. Prior to 2015, the regulatory capital requirements effective for the Corporation followed the Capital Accord of the Basel Committee on Banking Supervision ("Basel I"). Beginning January 1, 2015, the regulatory capital requirements effective for the Corporation follow Basel III, subject to certain transition provisions. These regulatory capital measurements are used by management, regulators, investors, and analysts to assess, monitor and compare the quality and composition of our capital with the capital of other financial services companies. Common equity Tier 1 prior to Basel III requirements was calculated as Tier 1 capital excluding qualifying potential preferred stock and qualifying trust preferred securities.
- ⁽²⁾ The return on average tangible common equity ratio excludes goodwill and other intangible assets, a non-GAAP financial measure. This financial measure has been included as a disclosure to be a credit metric with which to analyze and evaluate financial condition and capital strength.
- ⁽³⁾ Ratios calculated by dividing dividends paid for the period by book earnings per share for the same period.
- ⁽⁴⁾ Tangible book value per share, a non-GAAP financial measure, excludes intangible assets and goodwill. This measure provides additional useful information about the level of tangible assets in relation to outstanding shares of common stock.
- ⁽⁵⁾ The efficiency ratio as defined by the Federal Reserve guideline: noninterest expense (which includes the impact of unfunded commitments) divided by the sum of net interest and noninterest income, excluding investment securities gains/losses, net. The adjusted efficiency ratio, which is a non-GAAP financial measure, shows noninterest expense (which includes the provision for loaned commitments) excluding other intangible amortization and acquisition-related costs divided by the sum of fully taxable interest income, net of plus noninterest income, excluding investment securities gains/losses and acquisition-related costs. Management believes the adjusted efficiency ratio is meaningful because it reflects adjustments commonly made by management, investors, and analysts to ensure greater understanding of ongoing operations and enhance comparability of results with peers.

Strengthening Our Roots

2018 Community Commitments⁽¹⁾

28% of branches

in low- to moderate-income (LMI) census tracts.

5,504

residential mortgages or nearly

\$797 million in loans

helping LMI and minority families attain home ownership.

\$112 million

in small business loans, encouraging business expansion in emerging communities.

73,920 or

\$1.7 million value

of volunteer hours logged.

\$165 million

in investments

to provide additional resources to minority and LMI communities.

2,500

colleague volunteers

with more than 470 volunteering 50 hours or more.

\$3.6 million in grants

to support Community Reinvestment Act programming at various nonprofit organizations.

Throughout our history, Associated has been proud to play an active role in helping our communities grow and prosper. Ultimately, we believe this positions us to better serve our customers, creates opportunity for our colleagues and provides greater value for our shareholders.

We focus on where we can best align our resources. This includes leveraging our expertise and financial support to promote affordable housing, provide small business lending and advance neighborhood development. To extend our reach, we collaborate with local leaders, various nonprofit organizations, governmental entities and other community representatives. These efforts are complemented by our colleagues who volunteer their time to help strengthen our communities.

Core to our efforts is the promotion of homeownership and the revitalization of neighborhoods. We offer mortgage products focused on first-time homebuyers and low- to moderate-income borrowers. Some products also provide significant value to qualifying borrowers through direct closing-cost and down-payment subsidies.

DEVELOPING STRONGER COMMUNITIES

Associated and members of its Chicago-based Community Advisory Council are bringing together resources in a special, coordinated way to advance economic development in the Bronzeville neighborhood.

Located along Lake Michigan about four miles from downtown Chicago, this neighborhood began as home to many of the millions who fled the South during the Great Migration of the early 1900s. Today it is a growing center of African American history and culture.

As part of this effort, Associated is providing investments and grants and is working with local community organizations to stimulate business growth, promote homeownership, and provide financial education programming and outreach.



⁽¹⁾ Figures are as of and for the year ended December 31, 2018.

Making Community a Team Sport

Our sports affinity programs, and our long-term relationships with the Green Bay Packers, Milwaukee Brewers™ and Minnesota Wild®, have proven to be effective in adding new customers and creating new connections with our communities.

We have been the Bank of the Packers since their founding in 1919. In 2018, to celebrate our 100-year relationship, Associated sponsored Lambeau Field Live. This traveling exhibit took the Packers and Associated on the road, stopping at major venues across the state of Wisconsin.

Closer to the home field, Associated and the Packers, in partnership with the Green Bay Area Public School District, hosted an annual Stock the Box™ pep rally to benefit Feeding America Eastern Wisconsin. Each school's band competed to collect the largest food donation. All were awarded with grants to benefit their music program. Now in its third year, the program has inspired hundreds of students to do goodwill in their communities and helped secure 22,000 pounds of food.

For the fourth consecutive year, Associated and the Milwaukee Brewers Community Foundation teamed up to sponsor Hits for Homes at Miller Park. This program has helped provide more than \$400,000 of financial support to low- to moderate-income homeowners through Housing Resources, Inc. (HRI). In addition to monetary contributions, Associated volunteers hosted Stock the Box Tool Drives at Miller Park and with local business clients to benefit HRI's Tool Loan Program. This program gives homeowners low-cost access to tools to maintain their homes and sustain their neighborhoods.

To help families dealing with Autism, the Associated Forward Abilities Network, a colleague resource group focused on supporting individuals with disabilities, teamed up with the Autism Society of Minnesota (AuSM) and the Minnesota Wild to host "Into the Wild." The unique event was designed to celebrate the fan experience and the students participating. Each sponsor brought something different to the day, including the Minnesota Wild practice and tour, personal finance activities with Associated volunteers and "I am Awesome" activities with AuSM staff members.

Our partnerships with some of America's most recognizable sports teams is just one way that Associated captures the interests of fans through interactive game-day experiences, multifaceted campaigns and client and community events.

More than 40% of active personal checking accounts are now tied to our affinity accounts. These fans receive exclusive checking accounts and unique fan benefits.



PACKERS Debit Mastercard®
Packers Checking



"LET'S GO RED" Debit Mastercard®
Bengals Checking

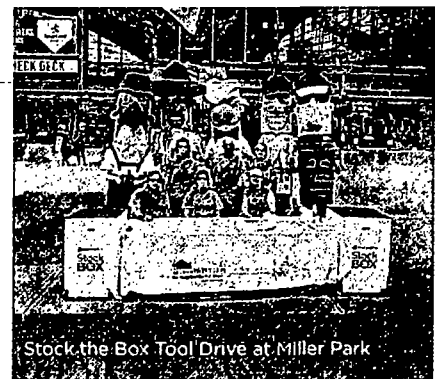
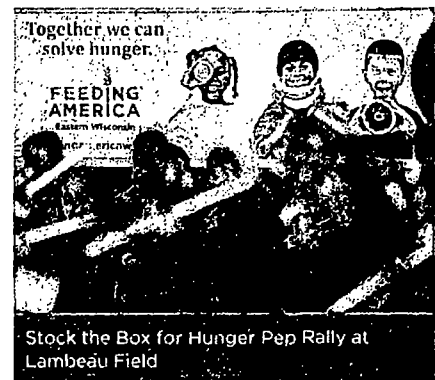
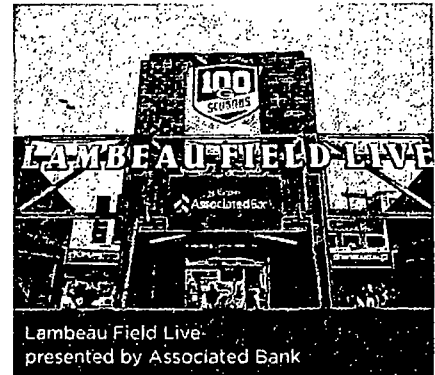
Affinity debit cards as a percentage of active personal checking accounts as of Dec. 2018



BREWERS™ Debit Mastercard®
Brewers Checking



WILD™ Debit Mastercard®
Wild Checking



The Power of Inclusion

Supporting Service



“Having such strong support allowed me the mentality to focus on the tasks at hand when I was overseas.”

-Tom Irizarry

Associated supports veterans, military personnel and their families through programs including leave time, retention of benefits and full pay for colleagues on training and active military duty. In addition the Deployment Trip Program provides financial assistance to colleagues visiting a loved one prior to deployment.

It was for these reasons that 17-year colleague and U.S. Army Reserve Sergeant First Class Tom Irizarry knew that work was one less thing he had to worry about when he deployed to the Baltic States last year. Not only was his job secure, his fellow colleagues made every effort to stay in touch with emails, cards and care packages.

We are very fortunate to have diverse, committed teams of colleagues who are capable, determined and empowered to drive our company forward. We view the act of building and advancing an inclusive culture as a business imperative, critical to our success. Our results show in the words of our colleagues who have described our culture as diverse, inclusive and transparent in our past three annual workplace surveys. Eighty-three percent of all colleagues participated in the survey in 2018.

In 2018, we advanced our Diversity & Inclusion (D&I) efforts by providing general D&I training for all colleagues and specialized management training that focused on unconscious bias and leading diverse teams. More than 240 leaders completed the specialized training during the year.

We expanded our partnerships with organizations like Tempo Milwaukee and FUEL Milwaukee to build a diverse talent pool for middle- and senior-level positions. Our focused efforts resulted in a 37% increase in minority applicants for professional level positions and 40% of jobs being filled with minority candidates in Milwaukee. We also enhanced career path planning and training to help colleagues advance their careers at Associated.

We exceeded the OFCCP-established 7% individuals with disability workforce requirement.⁽¹⁾ We also partnered with various community organizations to gain knowledge on workforce programs that will help connect future talent with Associated.

A shining strength of our D&I culture continues to be our six-Colleague Resource Groups. Each group works to create greater organizational awareness of and takes specific actions to address the unique needs of diverse populations within our company and our markets.

With more than 43% of colleagues participating, these groups' efforts have resulted in initiatives that influence workforce development; workplace culture, policies and programs; and marketplace practices. In addition, the groups engage with nonprofit community partners, other businesses and organizations to help ensure we are building an inclusive environment for our colleagues, customers and the communities we serve.

Office of Federal Contract Compliance Programs (OFCCP) has defined a disability as a physical or mental impairment or condition that substantially limits one or more activities.

Managing Our Carbon Footprint



We closely consider our environmental impact in many aspects of our company's operations.

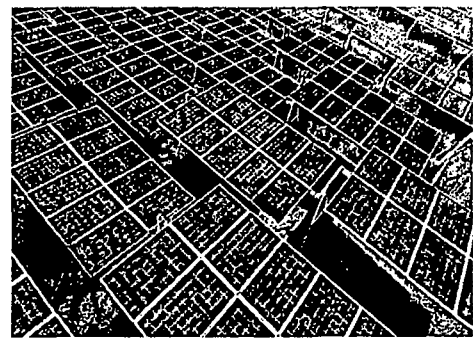
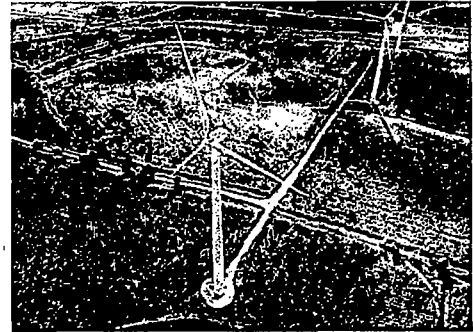
We believe creating energy efficient buildings is the most effective method for reducing our branch network's carbon footprint. Our newly constructed branches exceed the code required energy performance standards by providing an R-value of 13.5 in excess of what is required under the current energy code, and the HVAC systems are selected to be high efficiency units.

In addition, we strive to use "green" materials wherever possible. For example, our flooring, wall, ceiling and countertop materials are made with either recyclable content or high life-cycle content. We also use occupancy sensors; have implemented power management processes on all personal computers, monitors and printers, and use Energy Star compliant appliances to manage energy use.

We have an aggressive LED lighting program, and have been retrofitting our branch locations where necessary. We've complemented this effort with the testing of HVAC equipment in some of our larger facilities. Using our 2015 expenses as a baseline, we expect approximately \$500 thousand in annual savings across all locations updated in the past three years.

Finally, through our shredding efforts that protect the environment and our customers' information security, 1,000 tons of materials were recycled during the year.

Investing in Renewable Energy



Associated's Power & Utilities team supports clients' renewable energy projects.

Associated leverages its financial resources, insights and expertise to support renewable energy projects throughout the United States. Since 2012, our Power and Utilities specialized lending group has made over \$900 million in total credit commitments to support more than 30 wind, solar and hydroelectric projects, representing cumulative generating capacity in excess of 6,500 megawatts.

These projects, spanning across 15 states, generate a significant number of jobs in their surrounding communities while providing clean, sustainable power.

Awards and Accolades

#1 Mortgage Lender in Wisconsin⁽¹⁾

2010 – 2017 | Home Mortgage Disclosure Act

46th Largest Broker of U.S. Business⁽²⁾

2018 | Business Insurance

2020 Women on Boards

2014 – 2018 | Winning 'W' Company

Best Banks in America – Wisconsin

2017 | MONEY

Best for Vets: Employers

2017 – 2018 | Military Times

Best of the Best

2014 – 2016, 2018 | Midwest Real Estate News

Best of the Best Large Business Elite Award⁽³⁾

2017 – 2018 | National Association for Business Resources

Best Practices Agency

2016 – 2018 | IIABA

Circle of Excellence Agency⁽⁴⁾

2017 | Western National Insurance Group

Corporate Social Responsibility Leadership Award

2016 – 2017 | Financial Services Roundtable

CX Elite Award⁽⁵⁾

2017 | MaritzCX

Diversity in Business Award

2018 | Daily Reporter; WI Law Journal

Excellence in Financial Literacy

2018 | Wisconsin Bankers Foundation

Fannie Mae STARTM Performer⁽⁶⁾

2012 – 2017

Five Star Mortgage Professional⁽⁷⁾

2010 – 2018 | Milwaukee Magazine

Largest Corporate Charitable Contributor in Wisconsin

2016, 2018 | Milwaukee Business Journal

Mary Ellen Stanek Award for Diversity

& Corporate Governance

2018 | The Greater Milwaukee Committee and Milwaukee Women Inc

Milwaukee's Best and Brightest Companies to Work For

2017 – 2019 | National Association for Business Resources

Patriot Award

2018 | Employer Support of the Guard & Reserve

Platinum Million Dollar Lender⁽⁸⁾

2016 | USDA Rural Development

Reflecting Excellence Award

2017 | Reflejos

Technology Experience and Design Technology Award⁽⁹⁾

2017 | Event Marketers

Top 50 Employer

2018 | CAREERS & the disABLED Magazine

Top 100 Innovators in Diversity & Inclusion

2018 | Mogul

Top 100 Retirement Plan Advisors⁽¹⁰⁾

2017 | PLANADVISOR

Top Defined Contribution Advisor Firm

2017 | National Association of Plan Advisors

Top Ranking Best Banks in Minnesota⁽¹¹⁾

2017 | AdvisoryHQ

Top Veteran-Friendly Company

2016 – 2018 | U.S. Veterans Magazine

Top Workplaces Milwaukee

2012-2015, 2018 | Milwaukee Journal Sentinel

Top Workplaces St. Louis

2018 | St. Louis Post Dispatch

Veteran Friendly Workplaces

2016 – 2017 | USO Wisconsin

Workplace Health Achievement

2018 | American Heart Association

World's Best Banks of 2019

2019 | Forbes

⁽¹⁾ The Wisconsin's #1 Mortgage Lender designation is based on information gathered from the Home Mortgage Disclosure Act data compiled annually by the Bureau of Consumer Financial Protection. The results of the data were obtained through the Bureau of Consumer Financial Protection Mortgage Database (HMDA), June 2018.

⁽²⁾ Rankings based on 2017 brokerage revenue generated by U.S.-based clients.

⁽³⁾ Best of the Best Large Business Elite award is part of Milwaukee's Best and Brightest Companies to Work For program. Associated Bank scored in the top 10% in seven categories, and ranked in the top 1% for compensation, benefits and employee solutions, recruitment, selection and orientation, and diversity and inclusion.

⁽⁴⁾ Based on performance and growth, Associated Benefits & Risk Consulting placed in the 95th percentile of all Western National partners for overall performance, growth, and participation over the past six years.

⁽⁵⁾ The CX Elite Award recognizes excellence in customer experience strategy, execution, and results.

⁽⁶⁾ Fannie Mae recognized Associated for outstanding mortgage "general servicing" as part of its Service-Touch Achievement and RewardsTM (STARTM) Program. General servicing encompasses customer service, loan administration and other areas.

⁽⁷⁾ The Five Star Mortgage Professional Program is designed to identify mortgage professionals in a given market who satisty objective criteria and that are associated with providing quality services to clients.

⁽⁸⁾ Presented each year to lenders who have partnered with and made a significant contribution to supporting Wisconsin rural residents looking to become homeowners through the USDA Guaranteed Rural Housing (GRH) Program.

⁽⁹⁾ Associated's Interact with the Packard Institute on innovation received a silver award in the business-to-consumer category for best use of a single technology.

⁽¹⁰⁾ Based on dollar value of qualified non-asset-backed securities under administration (AUA), as well as the number of plans under advisement.

⁽¹¹⁾ AdvisoryHQ recognizes banks that are financially sound, with strong values and cost-effective financial solutions for their customers. Associated Bank was recognized for its strong commitment to mortgage products.

Our Leadership

Board of Directors



WILLIAM R. HUTCHINSON
*Chairman,
Associated
Banc-Corp
President,
W R Hutchinson
& Associates, Inc*



EILEEN A. KAMERICK
*Adjunct Professor
of Law &
Consultant*



JOHN F. BERGSTROM
*Chairman &
Chief Executive
Officer, Bergstrom
Corporation*



GALE E. KLAPPA
*Executive
Chairman of WEC
Energy Group*



MICHAEL T. CROWLEY, JR.
*Past Chairman,
Bank Mutual
Corporation*



RICHARD T. LOMMEN
*Chairman,
Courtesy
Corporation*



PHILIP B. FLYNN
*President &
Chief Executive
Officer,
Associated
Banc-Corp*



CORY L. NETTLES
*Founder &
Managing Director,
Generation Growth
Capital, Inc*



R. JAY GERKEN
*Director of 19
mutual funds
associated
with Sanford C
Bernstein Fund,
Inc*



KAREN T. VAN LITH
Consultant



JUDITH P. GREFFIN
*Past Chief
Investment
Officer, Allstate
Corporation*



JOHN (JAY) B. WILLIAMS
*Chairman, Church
Mutual Insurance
Company*



ROBERT A. JEFFE
*Chairman of
OAG Analytics, Inc*



PHILIP B. FLYNN
*President &
Chief Executive
Officer*



WILLIAM M. BOHN
*Head of Wealth
Management
& Institutional
Services*



MATTHEW R. BRAEGER
*Chief Audit
Executive*



**CHRISTOPHER
J. DEL MORAL-
NILES**
*Chief Financial
Officer*



ANGIE M. DEWITT
*Chief Human
Resources Officer*



JUDITH M. DOCTER
*Executive
Vice President*



RANDALL J. ERICKSON
*General Counsel
& Corporate
Secretary*



JOHN P. HANKERD
*Chief Credit
Officer*



NICOLE M. KITOWSKI
*Chief Risk
Officer*



TIMOTHY J. LAU
*Head of
Community Markets
& Facilities*



MICHAEL O. MEINOLF
*Chief Information
Officer*



**CHRISTOPHER
C. PIOTROWSKI**
*Chief Marketing
Officer*



PAUL G. SCHMIDT
*Head of
Commercial
Real Estate*



DAVID L. STEIN
*Head of Consumer
& Business Banking
and Madison
Market President*



JOHN A. UTZ
*Head of
Corporate
Banking &
Milwaukee
Market
President*

ANNUAL MEETING OF SHAREHOLDERS

April 30, 2019 | 11 a.m. (CT)

KI Convention Center, 333 Main St., Green Bay, WI 54301

Proxy materials for the 2018 Annual Meeting of Shareholders are available via the internet. Shareholders as of the March 4, 2019, record date have been mailed a notice regarding the availability of proxy materials, which includes the internet website address where the proxy materials can be viewed and shares voted. It also includes instructions for requesting a paper copy of the proxy materials via telephone, internet website or email.

ANNUAL REPORT ON FORM 10-K

Shareholders and other interested persons may obtain a copy of Associated Banc-Corp's 2018 Annual Report on Form 10-K on the Investor Relations section of our website at Investor.AssociatedBank.com or by calling or writing Investor Relations.

SHAREOWNER INQUIRIES

800-468-9716 or 651-450-4064

24/7 automated system or representative from 7 a.m. – 7 p.m. (CT), Monday through Friday

Additional information is available at Investor.AssociatedBank.com

TRANSFER AGENT AND REGISTRAR CORRESPONDENCE

EQ Shareowner Services

1110 Centre Pointe Curve

Suite 101

Mendota Heights, MN 55120

800-468-9716 or 651-450-4064

www.shareowneronline.com

INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM KPMG LLP

COMMON STOCK LISTING & TRADING

Traded: NYSE | Stock Market Symbol: ASB



CORPORATE HEADQUARTERS

433 Main St., Green Bay, WI 54301

AssociatedBank.com | 920-491-7500



IMPORTANT NOTE REGARDING FORWARD-LOOKING STATEMENTS: Statements made in this Summary Annual Report which are not purely historical are forward-looking statements, as defined in the Private Securities Litigation Reform Act of 1995. This includes any statements regarding management's strategy, objectives, or goals for future operations, products or services, and prospects of its revenues, earnings, or other measures of performance. Such forward-looking statements may be identified by the use of words such as "believe," "expect," "anticipate," "plan," "estimate," "should," "will," "intend," "outlook," "target," or similar expressions. Forward-looking statements are based on current management expectations and, by their nature, are subject to risks and uncertainties. Actual results may differ materially from those contained in the forward-looking statements. Factors which may cause actual results to differ materially from those contained in such forward-looking statements include those identified in Associated Bank's most recent Form 10-K and subsequent SEC filings. Such factors are incorporated hereby by reference.

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MKT 0002

FIRMWIDE
PLEASE POPULATE THE HIGHLIGHTED PORTIONS ONLY

Firm Name:	Associated Bank, N.A.
Primary Representative:	Carl Abrahamson
Primary Representative Email and Telephone:	Carl.Abrahamson@associatedbank.com ; 847-641-9655
Headquarters Address:	433 Main Street, Green Bay, WI 54301
Chicago Public Finance Office Address:	525 West Monroe Street, Chicago, IL 60661
Total Number of Employees:	4819 (as of 10.30.19)
Number of Employees in Illinois:	492
Number of Employees in Chicago:	202
Capital Position:	
Minority Designation:	

Job Categories	Male 1,674										Female 3,145					
	Overall Totals	White (Not Hispanic)	Black (Not Hispanic)	Hispanic	Asian	Two or More Races	Native Hawaiian or Other Pacific Islander	Native American	White (Not Hispanic)	Black (Not Hispanic)	Hispanic	Asian	Two or More Races	Native Hawaiian or Other Pacific Islander	Native American	
Officials and Managers	1,127	417	14	21	6	12	3	1	576	26	28	18	11	1		
Professionals	1,207	465	8	12	19	6	3	1	605	23	18	19	20			
Technicians	0															
Sales Workers	991	397	21	24	6	18		1	423	25	40	14	15	1	6	
Office and Clerical	1,475	176	10	8	6	7		1	1,076	47	66	42	32		4	
Craft Workers (Skilled)	0															
Operatives (Semi-Skilled)	0															
Laborers	0															
Service Workers	19	8	5	1					4	1						
Total	4,819	1,663	58	66	37	43	3	4	2,684	122	152	93	78	2	14	

*Totals in above chart include employees who identified as Two or More or Native Hawaiian or other Pacific Islander

Job Categories	Overall Totals	White (Not Hispanic)	Black (Not Hispanic)	Hispanic	Asian	Two or More Races	Native Hawaiian or Other Pacific Islander	Native American	Male 35%			Female 65%			Total 100%
Officials and Managers	23%	21%	1%	1%	0%	0%	0%	0%							
Professionals	25%	22%	1%	1%	1%	1%	0%	0%							
Technicians	0%	0%	0%	0%	0%	0%	0%	0%							
Sales Workers	21%	17%	1%	1%	0%	1%	0%	0%							
Office and Clerical	31%	26%	1%	2%	1%	1%	0%	0%							
Craft Workers (Skilled)	0%	0%	0%	0%	0%	0%	0%	0%							
Operatives (Semi-Skilled)	0%	0%	0%	0%	0%	0%	0%	0%							
Laborers	0%	0%	0%	0%	0%	0%	0%	0%							
Service Workers	0%	0%	0%	0%	0%	0%	0%	0%							
Total	100%	86%	4%	5%	3%	3%	0%	0%							

FIRMWIDE

PLEASE POPULATE THE HIGHLIGHTED PORTIONS ONLY

Firm Name:	Associated Bank, N.A.
Primary Representative:	Sarah Neville
Primary Representative Email and Telephone:	Carl.Abrahamson@associatedbank.com ; 847-641-9655
Headquarters Address:	433 Main Street, Green Bay, WI 54301
Chicago Public Finance Office Address:	525 West Monroe Street, Chicago, IL 60661
Total Number of Employees:	4819 (as of 10.30.19)
Number of Employees in Illinois:	492
Number of Employees in Chicago:	202
Capital Position:	-
Minority Designation:	-

	1,628					3,065				
	Male					Female				
Overall Totals	White (Not Hispanic)	Black (Not Hispanic)	Hispanic	Asian	Native American	White (Not Hispanic)	Black (Not Hispanic)	Hispanic	Asian	Native American
1,109	417	14	21	6	1	576	26	28	18	2
1,172	465	8	12	19	1	605	23	18	19	2
0										
957	397	21	24	6	1	423	25	40	14	6
1,436	176	10	8	6	1	1,076	47	66	42	4
0										
0										
0										
19	8	5	1			4	1			
4,693	1,463	58	66	37	4	2,684	122	152	93	14

Job Categories
 Officials and Managers
 Professionals
 Technicians
 Sales Workers
 Office and Clerical
 Craft Workers (Skilled)
 Operatives (Semi-Skilled)
 Laborers
 Service Workers
 Total

*Totals in above chart exclude employees who identified as Two or More or Native Hawaiian or other Pacific Islander

Overall Totals	White (Not Hispanic)	Black (Not Hispanic)	Hispanic	Asian	Native American
24%	21%	1%	1%	1%	0%
25%	23%	1%	1%	1%	0%
0%	0%	0%	0%	0%	0%
20%	17%	1%	1%	0%	0%
31%	27%	1%	2%	1%	0%
0%	0%	0%	0%	0%	0%
0%	0%	0%	0%	0%	0%
0%	0%	0%	0%	0%	0%
0%	0%	0%	0%	0%	0%
100%	88%	4%	5%	3%	0%

Job Categories
 Officials and Managers
 Professionals
 Technicians
 Sales Workers
 Office and Clerical
 Craft Workers (Skilled)
 Operatives (Semi-Skilled)
 Laborers
 Service Workers
 Total

Male	Female	Total
35%	65%	100%

BANK OF AMERICA,
NATIONAL
ASSOCIATION

O2019-9946

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT
AND AFFIDAVIT**

SECTION I -- GENERAL INFORMATION

A. Legal name of the Disclosing Party submitting this EDS. Include d/b/a/ if applicable:

Bank of America, National Association

Check ONE of the following three boxes:

Indicate whether the Disclosing Party submitting this EDS is:

1. ☒ the Applicant

OR

2. ☐ a legal entity currently holding, or anticipated to hold within six months after City action on the contract, transaction or other undertaking to which this EDS pertains (referred to below as the "Matter"), a direct or indirect interest in excess of 7.5% in the Applicant. State the Applicant's legal name: _____

OR

3. ☐ a legal entity with a direct or indirect right of control of the Applicant (see Section II(B)(1))
State the legal name of the entity in which the Disclosing Party holds a right of control: _____

B. Business address of the Disclosing Party: 100 North Tryon Street

Charlotte NC 28255

C. Telephone: (312) 904-8357 Fax: (312) 453-4568 Email: julie.conenna@bofa.com

D. Name of contact person: Julie Conenna

E. Federal Employer Identification No. (if you have one): _____

F. Brief description of the Matter to which this EDS pertains. (Include project number and location of property, if applicable):

Request for Proposal for Payment of Interest on the Monies of the City of Chicago and the Chicago Board of Education

G. Which City agency or department is requesting this EDS? Department of Finance

If the Matter is a contract being handled by the City's Department of Procurement Services, please complete the following:

Specification # _____ and Contract # _____

SECTION II -- DISCLOSURE OF OWNERSHIP INTERESTS

A. NATURE OF THE DISCLOSING PARTY

1. Indicate the nature of the Disclosing Party:

- | | |
|---|--|
| <input type="checkbox"/> Person | <input type="checkbox"/> Limited liability company |
| <input type="checkbox"/> Publicly registered business corporation | <input type="checkbox"/> Limited liability partnership |
| <input type="checkbox"/> Privately held business corporation | <input type="checkbox"/> Joint venture |
| <input type="checkbox"/> Sole proprietorship | <input type="checkbox"/> Not-for-profit corporation |
| <input type="checkbox"/> General partnership | (Is the not-for-profit corporation also a 501(c)(3))? |
| <input type="checkbox"/> Limited partnership | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| <input type="checkbox"/> Trust | <input checked="" type="checkbox"/> Other (please specify) |
| | <u>National Association</u> |

2. For legal entities, the state (or foreign country) of incorporation or organization, if applicable:

National Banking Association organized under the laws of the United States of America

3. For legal entities not organized in the State of Illinois: Has the organization registered to do business in the State of Illinois as a foreign entity?

☐ Yes ☒ No ☐ Organized in Illinois

B. IF THE DISCLOSING PARTY IS A LEGAL ENTITY:

1. List below the full names and titles, if applicable, of: (i) all executive officers and all directors of the entity; (ii) **for not-for-profit corporations**, all members, if any, which are legal entities (if there are no such members, write "no members which are legal entities"); (iii) **for trusts, estates or other similar entities**, the trustee, executor, administrator, or similarly situated party; (iv) **for general or limited partnerships, limited liability companies, limited liability partnerships or joint ventures**, each general partner, managing member, manager or any other person or legal entity that directly or indirectly controls the day-to-day management of the Applicant.

NOTE: Each legal entity listed below must submit an EDS on its own behalf.

Name

Title

See Exhibit "E"

2. Please provide the following information concerning each person or legal entity having a direct or indirect, current or prospective (i.e. within 6 months after City action) beneficial interest (including ownership) in excess of 7.5% of the Applicant. Examples of such an interest include shares in a corporation, partnership interest in a partnership or joint venture, interest of a member or manager in a

limited liability company, or interest of a beneficiary of a trust, estate or other similar entity. If none, state "None."

NOTE: Each legal entity listed below may be required to submit an EDS on its own behalf.

Name	Business Address	Percentage Interest in the Applicant
BAC North America Holding Company	100 N. Tryon St, Charlotte NC 28255	100%

SECTION III -- INCOME OR COMPENSATION TO, OR OWNERSHIP BY, CITY ELECTED OFFICIALS

Has the Disclosing Party provided any income or compensation to any City elected official during the 12-month period preceding the date of this EDS? ☐ Yes ☒ No

Does the Disclosing Party reasonably expect to provide any income or compensation to any City elected official during the 12-month period following the date of this EDS? ☐ Yes ☒ No

If "yes" to either of the above, please identify below the name(s) of such City elected official(s) and describe such income or compensation:

Does any City elected official or, to the best of the Disclosing Party's knowledge after reasonable inquiry, any City elected official's spouse or domestic partner, have a financial interest (as defined in Chapter 2-156 of the Municipal Code of Chicago ("MCC")) in the Disclosing Party? ☐ Yes ☒ No

If "yes," please identify below the name(s) of such City elected official(s) and/or spouse(s)/domestic partner(s) and describe the financial interest(s).

SECTION IV -- DISCLOSURE OF SUBCONTRACTORS AND OTHER RETAINED PARTIES

The Disclosing Party must disclose the name and business address of each subcontractor, attorney, lobbyist (as defined in MCC Chapter 2-156), accountant, consultant and any other person or entity whom the Disclosing Party has retained or expects to retain in connection with the Matter, as well as the nature of the relationship, and the total amount of the fees paid or estimated to be paid. The Disclosing Party is not required to disclose employees who are paid solely through the Disclosing Party's regular payroll. If the Disclosing Party is uncertain whether a disclosure is required under this Section, the Disclosing Party must either ask the City whether disclosure is required or make the disclosure.

Name (indicate whether retained or anticipated to be retained)	Business Address	Relationship to Disclosing Party (subcontractor, attorney, lobbyist, etc.)	Fees (<u>indicate whether paid or estimated.</u>) NOTE: "hourly rate" or "t.b.d." is not an acceptable response.
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(Add sheets if necessary)

☒ Check here if the Disclosing Party has not retained, nor expects to retain, any such persons or entities.

SECTION V -- CERTIFICATIONS

A. COURT-ORDERED CHILD SUPPORT COMPLIANCE

Under MCC Section 2-92-415, substantial owners of business entities that contract with the City must remain in compliance with their child support obligations throughout the contract's term.

Has any person who directly or indirectly owns 10% or more of the Disclosing Party been declared in arrearage on any child support obligations by any Illinois court of competent jurisdiction?

☐ Yes ☐ No ☒ No person directly or indirectly owns 10% or more of the Disclosing Party.

If "Yes," has the person entered into a court-approved agreement for payment of all support owed and is the person in compliance with that agreement?

☐ Yes ☐ No

B. FURTHER CERTIFICATIONS

1. [This paragraph 1 applies only if the Matter is a contract being handled by the City's Department of Procurement Services.] In the 5-year period preceding the date of this EDS, neither the Disclosing Party nor any Affiliated Entity [see definition in (5) below] has engaged, in connection with the performance of any public contract, the services of an integrity monitor, independent private sector inspector general, or integrity compliance consultant (i.e., an individual or entity with legal, auditing, investigative, or other similar skills, designated by a public agency to help the agency monitor the activity of specified agency vendors as well as help the vendors reform their business practices so they can be considered for agency contracts in the future, or continue with a contract in progress).

2. The Disclosing Party and its Affiliated Entities are not delinquent in the payment of any fine, fee, tax or other source of indebtedness owed to the City of Chicago, including, but not limited to, water and sewer charges, license fees, parking tickets, property taxes and sales taxes, nor is the Disclosing Party delinquent in the payment of any tax administered by the Illinois Department of Revenue.

3. The Disclosing Party and, if the Disclosing Party is a legal entity, all of those persons or entities identified in Section II(B)(1) of this EDS:

a. are not presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from any transactions by any federal, state or local unit of government;

b. have not, during the 5 years before the date of this EDS, been convicted of a criminal offense, adjudged guilty, or had a civil judgment rendered against them in connection with: obtaining, attempting to obtain, or performing a public (federal, state or local) transaction or contract under a public transaction; a violation of federal or state antitrust statutes; fraud; embezzlement; theft; forgery; bribery; falsification or destruction of records; making false statements; or receiving stolen property;

c. are not presently indicted for, or criminally or civilly charged by, a governmental entity (federal, state or local) with committing any of the offenses set forth in subparagraph (b) above;

d. have not, during the 5 years before the date of this EDS, had one or more public transactions (federal, state or local) terminated for cause or default; and

e. have not, during the 5 years before the date of this EDS, been convicted, adjudged guilty, or found liable in a civil proceeding, or in any criminal or civil action, including actions concerning environmental violations, instituted by the City or by the federal government, any state, or any other unit of local government.

4. The Disclosing Party understands and shall comply with the applicable requirements of MCC Chapters 2-56 (Inspector General) and 2-156 (Governmental Ethics).

5. Certifications (5), (6) and (7) concern:

- the Disclosing Party;
- any "Contractor" (meaning any contractor or subcontractor used by the Disclosing Party in connection with the Matter, including but not limited to all persons or legal entities disclosed under Section IV, "Disclosure of Subcontractors and Other Retained Parties");
- any "Affiliated Entity" (meaning a person or entity that, directly or indirectly: controls the Disclosing Party, is controlled by the Disclosing Party, or is, with the Disclosing Party, under common control of another person or entity). Indicia of control include, without limitation: interlocking management or ownership; identity of interests among family members, shared facilities and equipment; common use of employees; or organization of a business entity following the ineligibility of a business entity to do business with federal or state or local government, including the City, using substantially the same management, ownership, or principals as the ineligible entity. With respect to Contractors, the term Affiliated Entity means a person or entity that directly or indirectly controls the Contractor, is controlled by it, or, with the Contractor, is under common control of another person or entity;
- any responsible official of the Disclosing Party, any Contractor or any Affiliated Entity or any other official, agent or employee of the Disclosing Party, any Contractor or any Affiliated Entity, acting pursuant to the direction or authorization of a responsible official of the Disclosing Party, any Contractor or any Affiliated Entity (collectively "Agents").

Neither the Disclosing Party, nor any Contractor, nor any Affiliated Entity of either the Disclosing Party or any Contractor, nor any Agents have, during the 5 years before the date of this EDS, or, with respect to a Contractor, an Affiliated Entity, or an Affiliated Entity of a Contractor during the 5 years before the date of such Contractor's or Affiliated Entity's contract or engagement in connection with the Matter:

- a. bribed or attempted to bribe, or been convicted or adjudged guilty of bribery or attempting to bribe, a public officer or employee of the City, the State of Illinois, or any agency of the federal government or of any state or local government in the United States of America, in that officer's or employee's official capacity;
- b. agreed or colluded with other bidders or prospective bidders, or been a party to any such agreement, or been convicted or adjudged guilty of agreement or collusion among bidders or prospective bidders, in restraint of freedom of competition by agreement to bid a fixed price or otherwise; or
- c. made an admission of such conduct described in subparagraph (a) or (b) above that is a matter of record, but have not been prosecuted for such conduct; or
- d. violated the provisions referenced in MCC Subsection 2-92-320(a)(4)(Contracts Requiring a Base Wage); (a)(5)(Debarment Regulations); or (a)(6)(Minimum Wage Ordinance).

6. Neither the Disclosing Party, nor any Affiliated Entity or Contractor, or any of their employees, officials, agents or partners, is barred from contracting with any unit of state or local government as a result of engaging in or being convicted of (1) bid-rigging in violation of 720 ILCS 5/33E-3; (2) bid-rotating in violation of 720 ILCS 5/33E-4; or (3) any similar offense of any state or of the United States of America that contains the same elements as the offense of bid-rigging or bid-rotating.

7. Neither the Disclosing Party nor any Affiliated Entity is listed on a Sanctions List maintained by the United States Department of Commerce, State, or Treasury, or any successor federal agency.

8. [FOR APPLICANT ONLY] (i) Neither the Applicant nor any "controlling person" [see MCC Chapter 1-23, Article I for applicability and defined terms] of the Applicant is currently indicted or charged with, or has admitted guilt of, or has ever been convicted of, or placed under supervision for, any criminal offense involving actual, attempted, or conspiracy to commit bribery, theft, fraud, forgery, perjury, dishonesty or deceit against an officer or employee of the City or any "sister agency"; and (ii) the Applicant understands and acknowledges that compliance with Article I is a continuing requirement for doing business with the City. NOTE: If MCC Chapter 1-23, Article I applies to the Applicant, that Article's permanent compliance timeframe supersedes 5-year compliance timeframes in this Section V.

9. [FOR APPLICANT ONLY] The Applicant and its Affiliated Entities will not use, nor permit their subcontractors to use, any facility listed as having an active exclusion by the U.S. EPA on the federal System for Award Management ("SAM").

10. [FOR APPLICANT ONLY] The Applicant will obtain from any contractors/subcontractors hired or to be hired in connection with the Matter certifications equal in form and substance to those in Certifications (2) and (9) above and will not, without the prior written consent of the City, use any such

contractor/subcontractor that does not provide such certifications or that the Applicant has reason to believe has not provided or cannot provide truthful certifications.

11. If the Disclosing Party is unable to certify to any of the above statements in this Part B (Further Certifications), the Disclosing Party must explain below:

See attached Addendum "A" for additional information related to certifications.

If the letters "NA," the word "None," or no response appears on the lines above, it will be conclusively presumed that the Disclosing Party certified to the above statements.

12. To the best of the Disclosing Party's knowledge after reasonable inquiry, the following is a complete list of all current employees of the Disclosing Party who were, at any time during the 12-month period preceding the date of this EDS, an employee, or elected or appointed official, of the City of Chicago (if none, indicate with "N/A" or "none").

None

13. To the best of the Disclosing Party's knowledge after reasonable inquiry, the following is a complete list of all gifts that the Disclosing Party has given or caused to be given, at any time during the 12-month period preceding the execution date of this EDS, to an employee, or elected or appointed official, of the City of Chicago. For purposes of this statement, a "gift" does not include: (i) anything made generally available to City employees or to the general public, or (ii) food or drink provided in the course of official City business and having a retail value of less than \$25 per recipient, or (iii) a political contribution otherwise duly reported as required by law (if none, indicate with "N/A" or "none"). As to any gift listed below, please also list the name of the City recipient.

None

C. CERTIFICATION OF STATUS AS FINANCIAL INSTITUTION

1. The Disclosing Party certifies that the Disclosing Party (check one)

☒ is ☐ is not

a "financial institution" as defined in MCC Section 2-32-455(b).

2. If the Disclosing Party IS a financial institution, then the Disclosing Party pledges:

"We are not and will not become a predatory lender as defined in MCC Chapter 2-32. We further pledge that none of our affiliates is, and none of them will become, a predatory lender as defined in MCC Chapter 2-32. We understand that becoming a predatory lender or becoming an affiliate of a predatory lender may result in the loss of the privilege of doing business with the City."

If the Disclosing Party is unable to make this pledge because it or any of its affiliates (as defined in MCC Section 2-32-455(b)) is a predatory lender within the meaning of MCC Chapter 2-32, explain here (attach additional pages if necessary):

Makes the above pledge.

If the letters "NA," the word "None," or no response appears on the lines above, it will be conclusively presumed that the Disclosing Party certified to the above statements.

D. CERTIFICATION REGARDING FINANCIAL INTEREST IN CITY BUSINESS

Any words or terms defined in MCC Chapter 2-156 have the same meanings if used in this Part D.

1. In accordance with MCC Section 2-156-110: To the best of the Disclosing Party's knowledge after reasonable inquiry, does any official or employee of the City have a financial interest in his or her own name or in the name of any other person or entity in the Matter?

☐ Yes

☒ No

NOTE: If you checked "Yes" to Item D(1), proceed to Items D(2) and D(3). If you checked "No" to Item D(1), skip Items D(2) and D(3) and proceed to Part E.

2. Unless sold pursuant to a process of competitive bidding, or otherwise permitted, no City elected official or employee shall have a financial interest in his or her own name or in the name of any other person or entity in the purchase of any property that (i) belongs to the City, or (ii) is sold for taxes or assessments, or (iii) is sold by virtue of legal process at the suit of the City (collectively, "City Property Sale"). Compensation for property taken pursuant to the City's eminent domain power does not constitute a financial interest within the meaning of this Part D.

Does the Matter involve a City Property Sale?

☐ Yes

☒ No

3. If you checked "Yes" to Item D(1), provide the names and business addresses of the City officials or employees having such financial interest and identify the nature of the financial interest:

Name

Business Address

Nature of Financial Interest

4. The Disclosing Party further certifies that no prohibited financial interest in the Matter will be acquired by any City official or employee.

E. CERTIFICATION REGARDING SLAVERY ERA BUSINESS

Please check either (1) or (2) below. If the Disclosing Party checks (2), the Disclosing Party must disclose below or in an attachment to this EDS all information required by (2). Failure to comply with these disclosure requirements may make any contract entered into with the City in connection with the Matter voidable by the City.

 X 1. The Disclosing Party verifies that the Disclosing Party has searched any and all records of the Disclosing Party and any and all predecessor entities regarding records of investments or profits from slavery or slaveholder insurance policies during the slavery era (including insurance policies issued to slaveholders that provided coverage for damage to or injury or death of their slaves), and the Disclosing Party has found no such records.

 2. The Disclosing Party verifies that, as a result of conducting the search in step (1) above, the Disclosing Party has found records of investments or profits from slavery or slaveholder insurance policies. The Disclosing Party verifies that the following constitutes full disclosure of all such records, including the names of any and all slaves or slaveholders described in those records:

SECTION VI -- CERTIFICATIONS FOR FEDERALLY FUNDED MATTERS

NOTE: If the Matter is federally funded, complete this Section VI. If the Matter is not federally funded, proceed to Section VII. For purposes of this Section VI, tax credits allocated by the City and proceeds of debt obligations of the City are not federal funding.

A. CERTIFICATION REGARDING LOBBYING

1. List below the names of all persons or entities registered under the federal Lobbying Disclosure Act of 1995, as amended, who have made lobbying contacts on behalf of the Disclosing Party with respect to the Matter: (Add sheets if necessary):

N/A

(If no explanation appears or begins on the lines above, or if the letters "NA" or if the word "None" appear, it will be conclusively presumed that the Disclosing Party means that NO persons or entities registered under the Lobbying Disclosure Act of 1995, as amended, have made lobbying contacts on behalf of the Disclosing Party with respect to the Matter.)

2. The Disclosing Party has not spent and will not expend any federally appropriated funds to pay any person or entity listed in paragraph A(1) above for his or her lobbying activities or to pay any person or entity to influence or attempt to influence an officer or employee of any agency, as defined by applicable federal law, a member of Congress, an officer or employee of Congress, or an employee

of a member of Congress, in connection with the award of any federally funded contract, making any federally funded grant or loan, entering into any cooperative agreement, or to extend, continue, renew, amend, or modify any federally funded contract, grant, loan, or cooperative agreement.

3. The Disclosing Party will submit an updated certification at the end of each calendar quarter in which there occurs any event that materially affects the accuracy of the statements and information set forth in paragraphs A(1) and A(2) above.

4. The Disclosing Party certifies that either: (i) it is not an organization described in section 501(c)(4) of the Internal Revenue Code of 1986; or (ii) it is an organization described in section 501(c)(4) of the Internal Revenue Code of 1986 but has not engaged and will not engage in "Lobbying Activities," as that term is defined in the Lobbying Disclosure Act of 1995, as amended.

5. If the Disclosing Party is the Applicant, the Disclosing Party must obtain certifications equal in form and substance to paragraphs A(1) through A(4) above from all subcontractors before it awards any subcontract and the Disclosing Party must maintain all such subcontractors' certifications for the duration of the Matter and must make such certifications promptly available to the City upon request.

B. CERTIFICATION REGARDING EQUAL EMPLOYMENT OPPORTUNITY

If the Matter is federally funded, federal regulations require the Applicant and all proposed subcontractors to submit the following information with their bids or in writing at the outset of negotiations.

Is the Disclosing Party the Applicant?

☐ Yes

☐ No

If "Yes," answer the three questions below:

1. Have you developed and do you have on file affirmative action programs pursuant to applicable federal regulations? (See 41 CFR Part 60-2.)

☐ Yes

☐ No

2. Have you filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance Programs, or the Equal Employment Opportunity Commission all reports due under the applicable filing requirements?

☐ Yes

☐ No

☐ Reports not required

3. Have you participated in any previous contracts or subcontracts subject to the equal opportunity clause?

☐ Yes

☐ No

If you checked "No" to question (1) or (2) above, please provide an explanation:

SECTION VII -- FURTHER ACKNOWLEDGMENTS AND CERTIFICATION

The Disclosing Party understands and agrees that:

- A. The certifications, disclosures, and acknowledgments contained in this EDS will become part of any contract or other agreement between the Applicant and the City in connection with the Matter, whether procurement, City assistance, or other City action, and are material inducements to the City's execution of any contract or taking other action with respect to the Matter. The Disclosing Party understands that it must comply with all statutes, ordinances, and regulations on which this EDS is based.
- B. The City's Governmental Ethics Ordinance, MCC Chapter 2-156, imposes certain duties and obligations on persons or entities seeking City contracts, work, business, or transactions. The full text of this ordinance and a training program is available on line at www.cityofchicago.org/Ethics, and may also be obtained from the City's Board of Ethics, 740 N. Sedgwick St., Suite 500, Chicago, IL 60610, (312) 744-9660. The Disclosing Party must comply fully with this ordinance.
- C. If the City determines that any information provided in this EDS is false, incomplete or inaccurate, any contract or other agreement in connection with which it is submitted may be rescinded or be void or voidable, and the City may pursue any remedies under the contract or agreement (if not rescinded or void), at law, or in equity, including terminating the Disclosing Party's participation in the Matter and/or declining to allow the Disclosing Party to participate in other City transactions. Remedies at law for a false statement of material fact may include incarceration and an award to the City of treble damages.
- D. It is the City's policy to make this document available to the public on its Internet site and/or upon request. Some or all of the information provided in, and appended to, this EDS may be made publicly available on the Internet, in response to a Freedom of Information Act request, or otherwise. By completing and signing this EDS, the Disclosing Party waives and releases any possible rights or claims which it may have against the City in connection with the public release of information contained in this EDS and also authorizes the City to verify the accuracy of any information submitted in this EDS.
- E. The information provided in this EDS must be kept current. In the event of changes, the Disclosing Party must supplement this EDS up to the time the City takes action on the Matter. If the Matter is a contract being handled by the City's Department of Procurement Services, the Disclosing Party must update this EDS as the contract requires. **NOTE:** With respect to Matters subject to MCC Chapter 1-23, Article I (imposing **PERMANENT INELIGIBILITY** for certain specified offenses), the information provided herein regarding eligibility must be kept current for a longer period, as required by MCC Chapter 1-23 and Section 2-154-020.

CERTIFICATION

Under penalty of perjury, the person signing below: (1) warrants that he/she is authorized to execute this EDS, and all applicable Appendices, on behalf of the Disclosing Party, and (2) warrants that all certifications and statements contained in this EDS, and all applicable Appendices, are true, accurate and complete as of the date furnished to the City.

Bank of America, National Association

(Print or type exact legal name of Disclosing Party)

By: Julie Conenna

(Sign here)

Julie Conenna

(Print or type name of person signing)

Authorized Signatory

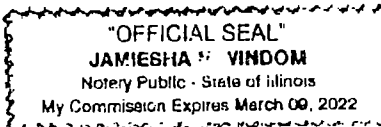
(Print or type title of person signing)

Signed and sworn to before me on (date) November 18th, 2019.

at Cook County, Illinois (state).

Jamiesha M. Windom
Notary Public

Commission expires: 03/09/2022



**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
APPENDIX A**

**FAMILIAL RELATIONSHIPS WITH ELECTED CITY OFFICIALS
AND DEPARTMENT HEADS**

This Appendix is to be completed only by (a) the Applicant, and (b) any legal entity which has a direct ownership interest in the Applicant exceeding 7.5%. It is not to be completed by any legal entity which has only an indirect ownership interest in the Applicant.

Under MCC Section 2-154-015, the Disclosing Party must disclose whether such Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof currently has a "familial relationship" with any elected city official or department head. A "familial relationship" exists if, as of the date this EDS is signed, the Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof is related to the mayor, any alderman, the city clerk, the city treasurer or any city department head as spouse or domestic partner or as any of the following, whether by blood or adoption: parent, child, brother or sister, aunt or uncle, niece or nephew, grandparent, grandchild, father-in-law, mother-in-law, son-in-law, daughter-in-law, stepfather or stepmother, stepson or stepdaughter, stepbrother or stepsister or half-brother or half-sister.

"Applicable Party" means (1) all executive officers of the Disclosing Party listed in Section II.B.1.a., if the Disclosing Party is a corporation; all partners of the Disclosing Party, if the Disclosing Party is a general partnership; all general partners and limited partners of the Disclosing Party, if the Disclosing Party is a limited partnership; all managers, managing members and members of the Disclosing Party, if the Disclosing Party is a limited liability company; (2) all principal officers of the Disclosing Party; and (3) any person having more than a 7.5% ownership interest in the Disclosing Party. "Principal officers" means the president, chief operating officer, executive director, chief financial officer, treasurer or secretary of a legal entity or any person exercising similar authority.

Does the Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof currently have a "familial relationship" with an elected city official or department head?

☐ Yes

☒ No

If yes, please identify below (1) the name and title of such person, (2) the name of the legal entity to which such person is connected; (3) the name and title of the elected city official or department head to whom such person has a familial relationship, and (4) the precise nature of such familial relationship.

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
APPENDIX B**

BUILDING CODE SCOFFLAW/PROBLEM LANDLORD CERTIFICATION

This Appendix is to be completed only by (a) the Applicant, and (b) any legal entity which has a direct ownership interest in the Applicant exceeding 7.5% (an "Owner"). It is not to be completed by any legal entity which has only an indirect ownership interest in the Applicant.

1. Pursuant to MCC Section 2-154-010, is the Applicant or any Owner identified as a building code scofflaw or problem landlord pursuant to MCC Section 2-92-416?

☐ Yes

☒ No

2. If the Applicant is a legal entity publicly traded on any exchange, is any officer or director of the Applicant identified as a building code scofflaw or problem landlord pursuant to MCC Section 2-92-416?

☐ Yes

☒ No

☐ The Applicant is not publicly traded on any exchange.

3. If yes to (1) or (2) above, please identify below the name of each person or legal entity identified as a building code scofflaw or problem landlord and the address of each building or buildings to which the pertinent code violations apply.

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
APPENDIX C**

PROHIBITION ON WAGE & SALARY HISTORY SCREENING - CERTIFICATION

This Appendix is to be completed only by an Applicant that is completing this EDS as a “contractor” as defined in MCC Section 2-92-385. That section, which should be consulted (www.amlegal.com), generally covers a party to any agreement pursuant to which they: (i) receive City of Chicago funds in consideration for services, work or goods provided (including for legal or other professional services), or (ii) pay the City money for a license, grant or concession allowing them to conduct a business on City premises.

On behalf of an Applicant that is a contractor pursuant to MCC Section 2-92-385, I hereby certify that the Applicant is in compliance with MCC Section 2-92-385(b)(1) and (2), which prohibit: (i) screening job applicants based on their wage or salary history, or (ii) seeking job applicants’ wage or salary history from current or former employers. I also certify that the Applicant has adopted a policy that includes those prohibitions.

☐ Yes

☐ No

☒ N/A – I am not an Applicant that is a “contractor” as defined in MCC Section 2-92-385.

This certification shall serve as the affidavit required by MCC Section 2-92-385(c)(1).

If you checked “no” to the above, please explain.



EXHIBIT E

BOARD OF DIRECTORS and OFFICERS Bank of America Corporation and Bank of America National Association

Brian Moynihan

Chairman of the Board and Chief
Executive Officer, Bank of America
Corporation

Sharon L. Allen

Former Chairman, Deloitte

Susan S. Bies

Former Member, Federal Reserve Board

Jack O. Bovender, Jr.

Lead Independent Director, Bank of
America Corporation; Former Chairman
and Chief Executive Officer, HCA

Frank P. Bramble, Sr

Former Executive Vice Chairman,
MBNA Corporation

Pierre J. P. de Weck

Former Chairman and Global Head of
Private Wealth Management,
Deutsche Bank

Arnold W. Donald

President and Chief Executive Officer,
Carnival

Linda P. Hudson

Executive Officer, The Cardea Group,
LLC; Former President and Chief
Executive Officer, BAE



Monica C. Lozano

Chief Executive Officer, College Futures
Foundation; Former Chairman, US
Hispanic Media Inc.

Thomas J. May

Chairman, Viacom Inc.; Former
Chairman, President and Chief Executive
Officer of Eversource Energy

Lionel L. Nowell, III

Former Senior Vice President
and Treasurer, PepsiCo, Inc

Denise L. Ramos

Former Chief Executive Officer and
President, ITT Inc.

Clayton S. Rose

President Bowdoin College

Michael D. White

Former Chairman, President, and Chief
Executive Officer of DIRECTV

Thomas D. Woods

Former Vice Chairman and Senior
Executive Vice President of CIBC

R. David Yost

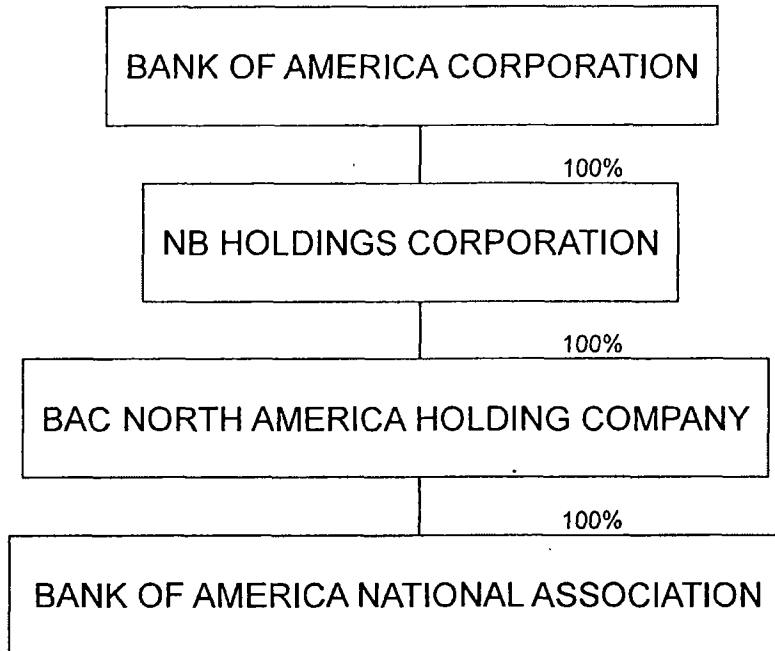
Former Chief Executive Officer,
AmerisourceBergen

Maria T. Zuber

Vice President for Research and E. A.
Griswold Professor of Geophysics, MIT

EXHIBIT "E"

Bank of America Corporation Organization Chart



CITY OF CHICAGO and CHICAGO BOARD OF EDUCATION
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
ADDENDUM A SECTION V –B 1, 2, 3 AND 4

INTRODUCTION

Bank of America, N.A. (“BANA”) is a wholly owned subsidiary of BAC North America Holding Company (“BACNA”). BANA Holding Corporation merged into BACNA effective November 1, 2019. BANA Holding is a direct, wholly owned subsidiary of BAC North America Holding Company (“BACNAH”). BACNAH is a direct, wholly owned subsidiary of NB Holdings Corporation (“NB Holdings”). NB Holdings is a direct, wholly owned subsidiary of Bank of America Corporation. Bank of America Corporation (the “Corporation”) is a publicly held company whose shares are traded on the New York Stock Exchange and has no parent corporation. Based on the U.S. Securities and Exchange Commission Rules regarding beneficial ownership, Berkshire Hathaway Inc., 3555 Farnam Street, Omaha, Nebraska 68131, beneficially owns greater than 10% of Bank of America Corporation’s outstanding common stock.

Bank of America, N.A. (“BANA”) is an indirect, wholly-owned subsidiary of Bank of America Corporation (the “Corporation”), which is a large and diversified, publicly-traded institution. The Corporation and its subsidiaries, is a global franchise, serving customers and clients around the world with operations in all 50 U.S. states, the District of Columbia, and more than 40 foreign countries. Accordingly, it is not reasonably possible to perform definitive due diligence, extending back indefinitely in time, across the full panoply of employees, officers and predecessor banks, with respect to all federal, state or local government contracts. The Corporation makes all disclosures required by its regulators, including all required disclosures in its Annual Report on Form 10-K and Quarterly Reports on Form 10-Q, which are updated in Reports on Form 8-K (collectively, the “Reports”), all of which are filed with the U.S. Securities and Exchange Commission. These Reports include disclosures of investigations and other matters as required by federal law and are publicly available. These Reports can also be accessed at the following website:
<http://investor.bankofamerica.com/phoenix.zhtml?c=71595&p=irol-irhome>. These Reports may contain further information responsive to this certification.

The bank is a large and diversified institution and is routinely involved in litigation in various state and federal courts. The bank makes all disclosures required by its regulators, including all required disclosures in its Annual Reports of Form 10K and Quarterly Reports on Form 10Q, which are updated in Reports on Form 8K, all of which are filed with the Securities and Exchange Commission. Those reports include disclosures of investigations and other matters as required by federal law and are publicly available. The bank cannot confirm or deny the existence of any other, non-public investigation conducted by any government investigator unless required to do so by law. These Reports can be provided upon request or can be accessed at the following website:

<http://investor.bankofamerica.com/phoenix.zhtml?c=71595&p=irol-irhome>

Subject to and as set forth in the introductory paragraph directly above, to the best knowledge of the individual signatory signing this questionnaire, without independent inquiry, BANA further clarifies its response to this statement, as follows:

B. FURTHER CERTIFICATIONS

The Corporation, for itself and its affiliates and subsidiaries including BANA, makes all disclosures required by its regulators in its Annual Reports on Form 10-K and Quarterly Reports on Form 10-Q, which are updated in Reports on Form 8-K, all of which are filed with the U.S. Securities and Exchange Commission (collectively, the "Reports"). These Reports include all disclosures as required by federal law including those pertaining to material business matters such as litigation, criminal convictions, and other legal actions, and may contain information which is further responsive to items addressed in the FIES FORM and this Addendum. These Reports are publicly available at the following website: <http://investor.bankofamerica.com/phoenix.zhtml?c=71595&p=irol-sec>. Further, BANA has been the subject of certain formal enforcement actions by the Office of the Comptroller of the Currency (the "OCC"), and information which can be publicly disclosed regarding these formal enforcement actions may be found on the Legal and Regulatory: Enforcement Actions page on the OCC's website at: <http://apps.occ.gov/EnforcementActions/>. In addition, BANA's registered brokerdealer and investment adviser subsidiaries make all required disclosures on their Form BDs as filed with FINRA (formerly the NASD) and their Form ADVs as filed with the SEC. These filings include disclosures of investigations and litigation as required by the SRO's and federal law, and are also publicly available. Outside of such Reports and the publicly available filings as noted above, BANA and the Corporation cannot otherwise disclose such information of material non-public nature except where required by applicable law or legal process.

Bank of America, National Association has been the subject of certain formal enforcement actions by the Office of the Comptroller of the Currency (the "OCC"). Information regarding these formal enforcement actions may be found on the Legal and Regulatory: Enforcement Actions page on the OCC's website at: <http://www.occ.treas.gov/EnforcementActions/>

In addition, Bank of America, National Association's registered broker-dealer and investment adviser subsidiaries make all required disclosures on their Form BDs as filed with FINRA (formerly the NASD) and their Form ADVs as filed with the SEC. These filings include disclosures of investigations and litigation as required by the SRO's and federal law, and are publicly available. Bank of America, National Association cannot confirm or deny the existence of any other non-public investigation conducted by any governmental agency unless required to do so by law.

Bank of America, National Association's indirect parent, Bank of America Corporation, also makes all required disclosures in its Form 10-K as filed with the Securities and Exchange Commission and its Annual Report as posted on its website at <http://investor.bankofamerica.com/phoenix.zhtml?c=71595&p=irol-reportsannual>.

On December 7, 2010, Bank of America entered into agreements with the Internal Revenue Service (IRS), the Office of the Comptroller of Currency (OCC), a Working Group of 28 State Attorneys General and the Federal Reserve Board, and was also subject to an administrative cease and desist order from the U.S. Securities and Exchange Commission (SEC). The global resolution with these federal and state entities provided for payment of restitution to the IRS and to municipal derivative counterparties allegedly harmed by Bank of America's alleged anticompetitive conduct (including bid rigging) in connection with the marketing and sale of municipal bond derivatives from 1998 to 2003, as well as requiring the Bank to take certain remedial measures.

Importantly, Bank of America was the first and only entity to self-report evidence of the bid-rigging to the Department of Justice (“DOJ”). The Bank’s self-report enabled the various government agencies (including numerous state attorneys general described above) to identify and pursue industry-wide misconduct that may have affected municipalities and others on a nationwide scale, as well as pursue numerous potential violators. In January 2007, as a result of the Bank’s self-reporting and cooperation, DOJ conditionally accepted the Bank into Part A of its Corporate Leniency Program—the highest level of leniency DOJ can provide. Pursuant to Part A of the Leniency Program, subject to the Bank’s continuing cooperation, DOJ will not bring any criminal antitrust prosecution against the Bank in connection with the matters that the Bank reported to DOJ. DOJ has acknowledged that through the agreements outlined above, Bank of America met its obligation, under the Leniency Program, to pay full restitution to the IRS and municipalities. Bank of America paid restitution to the IRS on December 8, 2010.

The Bank also promptly agreed to cooperate with the State Attorneys General (including the New York Attorney General) in their industry-wide investigation. As noted above, the Bank reached a settlement agreement with numerous State Attorneys General (including the New York Attorney General). In recognition of the Bank’s self-reporting and substantial cooperation, the Attorneys General added an exhibit (Exhibit 3) to the end of that settlement agreement. This exhibit describes, in detail, the Bank’s extensive cooperation with the investigations in this matter. In addition, this exhibit describes the importance of the Bank’s cooperation to the Attorneys General investigation. In recognition of the Bank’s agreement to make restitution and its truthful cooperation, the exhibit affirmatively states that “no provision contained in the settlement agreement is intended to be construed as a mandate or recommendation to any independent suspension and/or debarment authority regarding a decision to disqualify, suspend or debar Bank of America . . . from engaging in the provision of any financial services including, but not limited to, the marketing sale or placement of municipal bond derivatives or any other state business”

On or about March 18, 2008, the Office of the Comptroller of the Currency entered a Consent Order against Douglas L. Campbell related to improper payments made to brokers on municipal derivative transactions in 2001 and 2002 while Mr. Campbell was a member of Bank of America’s Municipal Derivatives Desk. Pursuant to the Order, Mr. Campbell was prohibited from a number of activities, including participating in any manner in the conduct of the affairs of various depository and other institutions identified in the Order. The Order also imposed a \$25,000 civil monetary penalty on Mr. Campbell. On or about September 9, 2010, Mr. Campbell pled guilty to (i) conspiracy to restrain trade in violation of 15 U.S.C. § 1, (ii) conspiracy to commit wire fraud in violation of 18 U.S.C. § 371 and § 1343, and (iii) wire fraud in violation of 18 U.S.C. § 1343 in the United States District Court for the Southern District of New York. This conduct related to improper bidding practices on Bank of America’s Municipal Derivatives Desk. Mr. Campbell was sentenced on April 22, 2014. On or about December 7, 2010, the Securities and Exchange Commission entered an Administrative Order against Mr. Campbell, related to alleged improper bidding practices on Bank of America’s Municipal Derivatives Desk. The Order barred Mr. Campbell from association with any broker, dealer, or investment adviser. Mr. Campbell was suspended by Bank of America on or about July 24, 2002 and was terminated by Bank of America on or about August 16, 2002.

On or about March 30, 2011, Brian Zwerner pled guilty to conspiracy to make false entries in bank records in violation of 18 U.S.C. § 371 and § 1005 in the United States District Court for the Southern District of New York. This conduct related to improper bidding practices on Bank of America’s Municipal Derivatives Desk. Mr. Zwerner was sentenced on July 25, 2014.

On or about December 8, 2011, the Securities and Exchange Commission entered a Cease and Desist Order against Dean Z. Pinard related to alleged improper bidding practices on Bank of America's Municipal Derivatives Desk. Among other things, the Order barred Mr. Pinard from association with any broker, dealer, investment adviser, municipal securities dealer, or municipal advisor and required him to pay approximately \$41,500 in disgorgement and prejudgment interest. In April 2013, Mr. Pinard entered into a Consent Order with the Office of the Comptroller of the Currency pursuant to which the OCC found that, among other things, Mr. Pinard engaged in improper anticompetitive bidding practices while part of Bank of America's Municipal Derivatives Desk. Pursuant to the Order, Mr. Pinard was prohibited from, among other things, participating in any manner in the conduct of the affairs of various depository and other institutions identified in the Order. Mr. Pinard was suspended by Bank of America on or about November 15, 2006 and was terminated by Bank of America on or about April 26, 2007.

On or about February 10, 2014, Phillip D. Murphy pled guilty to (i) conspiracy to commit wire fraud in violation of 18 U.S.C. § 371 and § 1343, (ii) wire fraud in violation of 18 U.S.C. § 1343, and (iii) conspiracy to make false entries in bank records in violation of 18 U.S.C. § 371 and § 1005 in the United States District Court for the Western District of North Carolina. This conduct related to improper bidding practices on Bank of America's Municipal Derivatives Desk. Mr. Murphy is awaiting sentencing. Mr. Murphy was suspended by Bank of America on or about July 25, 2002, and resigned from Bank of America on or about September 4, 2002.

ASSISTANT SECRETARY'S CERTIFICATE
OF
BANK OF AMERICA, NATIONAL ASSOCIATION

The undersigned, Carlese E. Linker, an Assistant Secretary of Bank of America, National Association (the "Association"), a national banking association organized and existing under the laws of the United States of America and having its principal place of business in the City of Charlotte, County of Mecklenburg, State of North Carolina, does hereby certify that:

1. The following person has been duly elected or appointed to the office in the Association as indicated; and that such person holds such office at this time.

Name

Title

Julie Conenna

Vice President

2. The following is a true and complete copy of an excerpt from the Bylaws of said Association, and the same is in full force and effect as of the date hereof.

Section 5.2. Execution of Instruments. All indentures, mortgages, deeds, conveyances, contracts, notes, loan documents, letters of credit, master agreements, swap agreements, guarantees, discharges, releases, satisfactions, settlements, affidavits, bonds, undertakings, powers of attorney, and other instruments or contracts may be signed, executed, acknowledged, verified, attested, delivered or accepted on behalf of the Association by the Chairman of the Board, the Chief Executive Officer, the President, any Vice Chairman of the Board, any Division President, any Managing Director, any Director (as described in Section 4.7 of these Bylaws), any Principal, any Executive Vice President, any Senior Vice President, any Vice President, any Assistant Vice President, any Officer, or any individual who is listed on the Association's personnel records in a position equal to any of the aforementioned officer positions, or such other officers, employees or agents as the Board of Directors, the Chief Executive Officer or any officer reporting directly to the Chief Executive Officer may direct in a written delegation kept in the minute book of the Association. The provisions of this Section 5.2 are supplementary to any other provision of these Bylaws and shall not be construed to authorize execution of instruments otherwise dictated by law.

IN WITNESS WHEREOF, I have hereupon set my hand and affixed the seal of said Association this 7th day of December, 2017.

(SEAL)



Carlese E. Linker
Assistant Secretary

FIRMWIDE
PLEASE POPULATE THE HIGHLIGHTED PORTIONS ONLY

Firm Name:	Bank of America
Primary Representative:	
Primary Representative Email and Telephone:	
Headquarters Address:	100 N Tryon Street, Charlotte, NC 28255
Chicago Public Finance Office Address:	
Total Number of Employees:	171,713
Number of Employees in Illinois:	5,647
Number of Employees in Chicago:	3,678
Capital Position:	
Minority Designation:	

Job Categories	80,064						91,599					
	Male			Female			Male			Female		
	White (Not Hispanic)	Black (Not Hispanic)	Hispanic	Asian	Native American		White (Not Hispanic)	Black (Not Hispanic)	Hispanic	Asian	Native American	
Overall Totals	27,403	9,981	943	1,491	1,999	37	8,490	1,449	1,727	1,227	41	
Officials and Managers	61,011	26,942	2,283	2,730	6,520	108	13,762	2,341	1,804	4,409	84	
Professionals	2,933	795	175	159	738	8	344	114	63	536	2	
Technicians	762	471	10	34	109	1	93	5	6	31		
Sales Workers	79,215	10,919	3,908	7,193	2,159	83	23,212	11,167	15,515	4,814	243	
Office and Clerical	0											
Craft Workers (Skilled)	357	79	90	29	44		30	43	27	14		
Operatives (Semi-Skilled)	0											
Laborers	32	20	4	2			5		1			
Service Workers	171,713	49,207	7,413	11,638	11,569	237	45,936	15,119	19,143	11,031	370	

Job Categories	80,064					91,599		
	White (Not Hispanic)	Black (Not Hispanic)	Hispanic	Asian	Native American	Male	Female	Total
	16%	11%	1%	2%	2%	47%	53%	100%
Officials and Managers	36%	24%	3%	3%	6%			
Professionals	2%	1%	0%	0%	1%			
Technicians	0%	0%	0%	0%	0%			
Sales Workers	46%	20%	9%	13%	4%			
Office and Clerical	0%	0%	0%	0%	0%			
Craft Workers (Skilled)	0%	0%	0%	0%	0%			
Operatives (Semi-Skilled)	0%	0%	0%	0%	0%			
Laborers	0%	0%	0%	0%	0%			
Service Workers	0%	0%	0%	0%	0%			
Total	100%	55%	13%	18%	13%			

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT
AND AFFIDAVIT**

SECTION I -- GENERAL INFORMATION

A. Legal name of the Disclosing Party submitting this EDS. Include d/b/a/ if applicable:

BAC North America Holding Company

Check ONE of the following three boxes:

Indicate whether the Disclosing Party submitting this EDS is:

1. ☐ the Applicant
OR

2. ☒ a legal entity currently holding, or anticipated to hold within six months after City action on the contract, transaction or other undertaking to which this EDS pertains (referred to below as the "Matter"), a direct or indirect interest in excess of 7.5% in the Applicant. State the Applicant's legal name: _____

OR

3. ☐ a legal entity with a direct or indirect right of control of the Applicant (see Section II(B)(1))
State the legal name of the entity in which the Disclosing Party holds a right of control: _____

B. Business address of the Disclosing Party: 100 North Tryon Street

Charlotte NC 28255

C. Telephone: (312) 904-8357 Fax: (312) 453-4568 Email: julie.conenna@bofa.com

D. Name of contact person: Julie Conenna

E. Federal Employer Identification No. (if you have one): _____

F. Brief description of the Matter to which this EDS pertains. (Include project number and location of property, if applicable):

Request for Proposal for Payment of Interest on the Monies of the City of Chicago and the Chicago Board of Education

G. Which City agency or department is requesting this EDS? Department of Finance

If the Matter is a contract being handled by the City's Department of Procurement Services, please complete the following:

Specification # _____ and Contract # _____

SECTION II -- DISCLOSURE OF OWNERSHIP INTERESTS

A. NATURE OF THE DISCLOSING PARTY

1. Indicate the nature of the Disclosing Party:

- | | |
|--|--|
| <input type="checkbox"/> Person | <input type="checkbox"/> Limited liability company |
| <input checked="" type="checkbox"/> Publicly registered business corporation | <input type="checkbox"/> Limited liability partnership |
| <input type="checkbox"/> Privately held business corporation | <input type="checkbox"/> Joint venture |
| <input type="checkbox"/> Sole proprietorship | <input type="checkbox"/> Not-for-profit corporation |
| <input type="checkbox"/> General partnership | (Is the not-for-profit corporation also a 501(c)(3))? |
| <input type="checkbox"/> Limited partnership | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| <input type="checkbox"/> Trust | <input type="checkbox"/> Other (please specify) |
-

2. For legal entities, the state (or foreign country) of incorporation or organization, if applicable:

Delaware

3. For legal entities not organized in the State of Illinois: Has the organization registered to do business in the State of Illinois as a foreign entity?

☐ Yes

☒ No

☐ Organized in Illinois

B. IF THE DISCLOSING PARTY IS A LEGAL ENTITY:

1. List below the full names and titles, if applicable, of: (i) all executive officers and all directors of the entity; (ii) **for not-for-profit corporations**, all members, if any, which are legal entities (if there are no such members, write "no members which are legal entities"); (iii) **for trusts, estates or other similar entities**, the trustee, executor, administrator, or similarly situated party; (iv) **for general or limited partnerships, limited liability companies, limited liability partnerships or joint ventures**, each general partner, managing member, manager or any other person or legal entity that directly or indirectly controls the day-to-day management of the Applicant.

NOTE: Each legal entity listed below must submit an EDS on its own behalf.

Name

Title

See Exhibit "E"

2. Please provide the following information concerning each person or legal entity having a direct or indirect, current or prospective (i.e. within 6 months after City action) beneficial interest (including ownership) in excess of 7.5% of the Applicant. Examples of such an interest include shares in a corporation, partnership interest in a partnership or joint venture, interest of a member or manager in a

limited liability company, or interest of a beneficiary of a trust, estate or other similar entity. If none, state "None."

NOTE: Each legal entity listed below may be required to submit an EDS on its own behalf.

Name	Business Address	Percentage Interest in the Applicant
NB Holdings Corporation	100 N. Tryon St, Charlotte NC 28255	100%

SECTION III -- INCOME OR COMPENSATION TO, OR OWNERSHIP BY, CITY ELECTED OFFICIALS

Has the Disclosing Party provided any income or compensation to any City elected official during the 12-month period preceding the date of this EDS? ☐ Yes ☒ No

Does the Disclosing Party reasonably expect to provide any income or compensation to any City elected official during the 12-month period following the date of this EDS? ☐ Yes ☒ No

If "yes" to either of the above, please identify below the name(s) of such City elected official(s) and describe such income or compensation:

Does any City elected official or, to the best of the Disclosing Party's knowledge after reasonable inquiry, any City elected official's spouse or domestic partner, have a financial interest (as defined in Chapter 2-156 of the Municipal Code of Chicago ("MCC")) in the Disclosing Party?

☐ Yes ☒ No

If "yes," please identify below the name(s) of such City elected official(s) and/or spouse(s)/domestic partner(s) and describe the financial interest(s).

SECTION IV -- DISCLOSURE OF SUBCONTRACTORS AND OTHER RETAINED PARTIES

The Disclosing Party must disclose the name and business address of each subcontractor, attorney, lobbyist (as defined in MCC Chapter 2-156), accountant, consultant and any other person or entity whom the Disclosing Party has retained or expects to retain in connection with the Matter, as well as the nature of the relationship, and the total amount of the fees paid or estimated to be paid. The Disclosing Party is not required to disclose employees who are paid solely through the Disclosing Party's regular payroll. If the Disclosing Party is uncertain whether a disclosure is required under this Section, the Disclosing Party must either ask the City whether disclosure is required or make the disclosure.

Name (indicate whether retained or anticipated to be retained)	Business Address	Relationship to Disclosing Party (subcontractor, attorney, lobbyist, etc.)	Fees (<u>indicate whether paid or estimated.</u>) NOTE: "hourly rate" or "t.b.d." is not an acceptable response.
<hr/>			
<hr/>			
<hr/>			

(Add sheets if necessary)

☒ Check here if the Disclosing Party has not retained, nor expects to retain, any such persons or entities.

SECTION V -- CERTIFICATIONS

A. COURT-ORDERED CHILD SUPPORT COMPLIANCE

Under MCC Section 2-92-415, substantial owners of business entities that contract with the City must remain in compliance with their child support obligations throughout the contract's term.

Has any person who directly or indirectly owns 10% or more of the Disclosing Party been declared in arrearage on any child support obligations by any Illinois court of competent jurisdiction?

☐ Yes ☐ No ☒ No person directly or indirectly owns 10% or more of the Disclosing Party.

If "Yes," has the person entered into a court-approved agreement for payment of all support owed and is the person in compliance with that agreement?

☐ Yes ☐ No

B. FURTHER CERTIFICATIONS

1. [This paragraph 1 applies only if the Matter is a contract being handled by the City's Department of Procurement Services.] In the 5-year period preceding the date of this EDS, neither the Disclosing Party nor any Affiliated Entity [see definition in (5) below] has engaged, in connection with the performance of any public contract, the services of an integrity monitor, independent private sector inspector general, or integrity compliance consultant (i.e., an individual or entity with legal, auditing, investigative, or other similar skills, designated by a public agency to help the agency monitor the activity of specified agency vendors as well as help the vendors reform their business practices so they can be considered for agency contracts in the future, or continue with a contract in progress).

2. The Disclosing Party and its Affiliated Entities are not delinquent in the payment of any fine, fee, tax or other source of indebtedness owed to the City of Chicago, including, but not limited to, water and sewer charges, license fees, parking tickets, property taxes and sales taxes, nor is the Disclosing Party delinquent in the payment of any tax administered by the Illinois Department of Revenue.

3. The Disclosing Party and, if the Disclosing Party is a legal entity, all of those persons or entities identified in Section II(B)(1) of this EDS:

a. are not presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from any transactions by any federal, state or local unit of government;

b. have not, during the 5 years before the date of this EDS, been convicted of a criminal offense, adjudged guilty, or had a civil judgment rendered against them in connection with: obtaining, attempting to obtain, or performing a public (federal, state or local) transaction or contract under a public transaction; a violation of federal or state antitrust statutes; fraud; embezzlement; theft; forgery; bribery; falsification or destruction of records; making false statements; or receiving stolen property;

c. are not presently indicted for, or criminally or civilly charged by, a governmental entity (federal, state or local) with committing any of the offenses set forth in subparagraph (b) above;

d. have not, during the 5 years before the date of this EDS, had one or more public transactions (federal, state or local) terminated for cause or default; and

e. have not, during the 5 years before the date of this EDS, been convicted, adjudged guilty, or found liable in a civil proceeding, or in any criminal or civil action, including actions concerning environmental violations, instituted by the City or by the federal government, any state, or any other unit of local government.

4. The Disclosing Party understands and shall comply with the applicable requirements of MCC Chapters 2-56 (Inspector General) and 2-156 (Governmental Ethics).

5. Certifications (5), (6) and (7) concern:

- the Disclosing Party;
- any "Contractor" (meaning any contractor or subcontractor used by the Disclosing Party in connection with the Matter, including but not limited to all persons or legal entities disclosed under Section IV, "Disclosure of Subcontractors and Other Retained Parties");
- any "Affiliated Entity" (meaning a person or entity that, directly or indirectly: controls the Disclosing Party, is controlled by the Disclosing Party, or is, with the Disclosing Party, under common control of another person or entity). Indicia of control include, without limitation: interlocking management or ownership; identity of interests among family members, shared facilities and equipment; common use of employees; or organization of a business entity following the ineligibility of a business entity to do business with federal or state or local government, including the City, using substantially the same management, ownership, or principals as the ineligible entity. With respect to Contractors, the term Affiliated Entity means a person or entity that directly or indirectly controls the Contractor, is controlled by it, or, with the Contractor, is under common control of another person or entity;
- any responsible official of the Disclosing Party, any Contractor or any Affiliated Entity or any other official, agent or employee of the Disclosing Party, any Contractor or any Affiliated Entity, acting pursuant to the direction or authorization of a responsible official of the Disclosing Party, any Contractor or any Affiliated Entity (collectively "Agents").

Neither the Disclosing Party, nor any Contractor, nor any Affiliated Entity of either the Disclosing Party or any Contractor, nor any Agents have, during the 5 years before the date of this EDS, or, with respect to a Contractor, an Affiliated Entity, or an Affiliated Entity of a Contractor during the 5 years before the date of such Contractor's or Affiliated Entity's contract or engagement in connection with the Matter:

- a. bribed or attempted to bribe, or been convicted or adjudged guilty of bribery or attempting to bribe, a public officer or employee of the City, the State of Illinois, or any agency of the federal government or of any state or local government in the United States of America, in that officer's or employee's official capacity;
- b. agreed or colluded with other bidders or prospective bidders, or been a party to any such agreement, or been convicted or adjudged guilty of agreement or collusion among bidders or prospective bidders, in restraint of freedom of competition by agreement to bid a fixed price or otherwise; or
- c. made an admission of such conduct described in subparagraph (a) or (b) above that is a matter of record, but have not been prosecuted for such conduct; or
- d. violated the provisions referenced in MCC Subsection 2-92-320(a)(4)(Contracts Requiring a Base Wage); (a)(5)(Debarment Regulations); or (a)(6)(Minimum Wage Ordinance).

6. Neither the Disclosing Party, nor any Affiliated Entity or Contractor, or any of their employees, officials, agents or partners, is barred from contracting with any unit of state or local government as a result of engaging in or being convicted of (1) bid-rigging in violation of 720 ILCS 5/33E-3; (2) bid-rotating in violation of 720 ILCS 5/33E-4; or (3) any similar offense of any state or of the United States of America that contains the same elements as the offense of bid-rigging or bid-rotating.

7. Neither the Disclosing Party nor any Affiliated Entity is listed on a Sanctions List maintained by the United States Department of Commerce, State, or Treasury, or any successor federal agency.

8. [FOR APPLICANT ONLY] (i) Neither the Applicant nor any "controlling person" [see MCC Chapter 1-23, Article I for applicability and defined terms] of the Applicant is currently indicted or charged with, or has admitted guilt of, or has ever been convicted of, or placed under supervision for, any criminal offense involving actual, attempted, or conspiracy to commit bribery, theft, fraud, forgery, perjury, dishonesty or deceit against an officer or employee of the City or any "sister agency"; and (ii) the Applicant understands and acknowledges that compliance with Article I is a continuing requirement for doing business with the City. NOTE: If MCC Chapter 1-23, Article I applies to the Applicant, that Article's permanent compliance timeframe supersedes 5-year compliance timeframes in this Section V.

9. [FOR APPLICANT ONLY] The Applicant and its Affiliated Entities will not use, nor permit their subcontractors to use, any facility listed as having an active exclusion by the U.S. EPA on the federal System for Award Management ("SAM").

10. [FOR APPLICANT ONLY] The Applicant will obtain from any contractors/subcontractors hired or to be hired in connection with the Matter certifications equal in form and substance to those in Certifications (2) and (9) above and will not, without the prior written consent of the City, use any such

contractor/subcontractor that does not provide such certifications or that the Applicant has reason to believe has not provided or cannot provide truthful certifications.

11. If the Disclosing Party is unable to certify to any of the above statements in this Part B (Further Certifications), the Disclosing Party must explain below:

See attached Addendum "A" for additional information related to certifications.

If the letters "NA," the word "None," or no response appears on the lines above, it will be conclusively presumed that the Disclosing Party certified to the above statements.

12. To the best of the Disclosing Party's knowledge after reasonable inquiry, the following is a complete list of all current employees of the Disclosing Party who were, at any time during the 12-month period preceding the date of this EDS, an employee, or elected or appointed official, of the City of Chicago (if none, indicate with "N/A" or "none").

None

13. To the best of the Disclosing Party's knowledge after reasonable inquiry, the following is a complete list of all gifts that the Disclosing Party has given or caused to be given, at any time during the 12-month period preceding the execution date of this EDS, to an employee, or elected or appointed official, of the City of Chicago. For purposes of this statement, a "gift" does not include: (i) anything made generally available to City employees or to the general public, or (ii) food or drink provided in the course of official City business and having a retail value of less than \$25 per recipient, or (iii) a political contribution otherwise duly reported as required by law (if none, indicate with "N/A" or "none"). As to any gift listed below, please also list the name of the City recipient.

None

C. CERTIFICATION OF STATUS AS FINANCIAL INSTITUTION

1. The Disclosing Party certifies that the Disclosing Party (check one)

☒ is ☐ is not

a "financial institution" as defined in MCC Section 2-32-455(b).

2. If the Disclosing Party IS a financial institution, then the Disclosing Party pledges:

"We are not and will not become a predatory lender as defined in MCC Chapter 2-32. We further pledge that none of our affiliates is, and none of them will become, a predatory lender as defined in MCC Chapter 2-32. We understand that becoming a predatory lender or becoming an affiliate of a predatory lender may result in the loss of the privilege of doing business with the City."

If the Disclosing Party is unable to make this pledge because it or any of its affiliates (as defined in MCC Section 2-32-455(b)) is a predatory lender within the meaning of MCC Chapter 2-32, explain here (attach additional pages if necessary):

Makes the above pledge.

If the letters "NA," the word "None," or no response appears on the lines above, it will be conclusively presumed that the Disclosing Party certified to the above statements.

D. CERTIFICATION REGARDING FINANCIAL INTEREST IN CITY BUSINESS

Any words or terms defined in MCC Chapter 2-156 have the same meanings if used in this Part D.

1. In accordance with MCC Section 2-156-110: To the best of the Disclosing Party's knowledge after reasonable inquiry, does any official or employee of the City have a financial interest in his or her own name or in the name of any other person or entity in the Matter?

☐ Yes

☒ No

NOTE: If you checked "Yes" to Item D(1), proceed to Items D(2) and D(3). If you checked "No" to Item D(1), skip Items D(2) and D(3) and proceed to Part E.

2. Unless sold pursuant to a process of competitive bidding, or otherwise permitted, no City elected official or employee shall have a financial interest in his or her own name or in the name of any other person or entity in the purchase of any property that (i) belongs to the City, or (ii) is sold for taxes or assessments, or (iii) is sold by virtue of legal process at the suit of the City (collectively, "City Property Sale"). Compensation for property taken pursuant to the City's eminent domain power does not constitute a financial interest within the meaning of this Part D.

Does the Matter involve a City Property Sale?

☐ Yes

☒ No

3. If you checked "Yes" to Item D(1), provide the names and business addresses of the City officials or employees having such financial interest and identify the nature of the financial interest:

Name

Business Address

Nature of Financial Interest

4. The Disclosing Party further certifies that no prohibited financial interest in the Matter will be acquired by any City official or employee.

E. CERTIFICATION REGARDING SLAVERY ERA BUSINESS

Please check either (1) or (2) below. If the Disclosing Party checks (2), the Disclosing Party must disclose below or in an attachment to this EDS all information required by (2). Failure to comply with these disclosure requirements may make any contract entered into with the City in connection with the Matter voidable by the City.

 X 1. The Disclosing Party verifies that the Disclosing Party has searched any and all records of the Disclosing Party and any and all predecessor entities regarding records of investments or profits from slavery or slaveholder insurance policies during the slavery era (including insurance policies issued to slaveholders that provided coverage for damage to or injury or death of their slaves), and the Disclosing Party has found no such records.

 2. The Disclosing Party verifies that, as a result of conducting the search in step (1) above, the Disclosing Party has found records of investments or profits from slavery or slaveholder insurance policies. The Disclosing Party verifies that the following constitutes full disclosure of all such records, including the names of any and all slaves or slaveholders described in those records:

SECTION VI -- CERTIFICATIONS FOR FEDERALLY FUNDED MATTERS

NOTE: If the Matter is federally funded, complete this Section VI. If the Matter is not federally funded, proceed to Section VII. For purposes of this Section VI, tax credits allocated by the City and proceeds of debt obligations of the City are not federal funding.

A. CERTIFICATION REGARDING LOBBYING

1. List below the names of all persons or entities registered under the federal Lobbying Disclosure Act of 1995, as amended, who have made lobbying contacts on behalf of the Disclosing Party with respect to the Matter: (Add sheets if necessary):

N/A

(If no explanation appears or begins on the lines above, or if the letters "NA" or if the word "None" appear, it will be conclusively presumed that the Disclosing Party means that NO persons or entities registered under the Lobbying Disclosure Act of 1995, as amended, have made lobbying contacts on behalf of the Disclosing Party with respect to the Matter.)

2. The Disclosing Party has not spent and will not expend any federally appropriated funds to pay any person or entity listed in paragraph A(1) above for his or her lobbying activities or to pay any person or entity to influence or attempt to influence an officer or employee of any agency, as defined by applicable federal law, a member of Congress, an officer or employee of Congress, or an employee

of a member of Congress, in connection with the award of any federally funded contract, making any federally funded grant or loan, entering into any cooperative agreement, or to extend, continue, renew, amend, or modify any federally funded contract, grant, loan, or cooperative agreement.

3. The Disclosing Party will submit an updated certification at the end of each calendar quarter in which there occurs any event that materially affects the accuracy of the statements and information set forth in paragraphs A(1) and A(2) above.

4. The Disclosing Party certifies that either: (i) it is not an organization described in section 501(c)(4) of the Internal Revenue Code of 1986; or (ii) it is an organization described in section 501(c)(4) of the Internal Revenue Code of 1986 but has not engaged and will not engage in "Lobbying Activities," as that term is defined in the Lobbying Disclosure Act of 1995, as amended.

5. If the Disclosing Party is the Applicant, the Disclosing Party must obtain certifications equal in form and substance to paragraphs A(1) through A(4) above from all subcontractors before it awards any subcontract and the Disclosing Party must maintain all such subcontractors' certifications for the duration of the Matter and must make such certifications promptly available to the City upon request.

B. CERTIFICATION REGARDING EQUAL EMPLOYMENT OPPORTUNITY

If the Matter is federally funded, federal regulations require the Applicant and all proposed subcontractors to submit the following information with their bids or in writing at the outset of negotiations.

Is the Disclosing Party the Applicant?

☐ Yes

☐ No

If "Yes," answer the three questions below:

1. Have you developed and do you have on file affirmative action programs pursuant to applicable federal regulations? (See 41 CFR Part 60-2.)

☐ Yes

☐ No

2. Have you filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance Programs, or the Equal Employment Opportunity Commission all reports due under the applicable filing requirements?

☐ Yes

☐ No

☐ Reports not required

3. Have you participated in any previous contracts or subcontracts subject to the equal opportunity clause?

☐ Yes

☐ No

If you checked "No" to question (1) or (2) above, please provide an explanation:

SECTION VII -- FURTHER ACKNOWLEDGMENTS AND CERTIFICATION

The Disclosing Party understands and agrees that:

A. The certifications, disclosures, and acknowledgments contained in this EDS will become part of any contract or other agreement between the Applicant and the City in connection with the Matter, whether procurement, City assistance, or other City action, and are material inducements to the City's execution of any contract or taking other action with respect to the Matter. The Disclosing Party understands that it must comply with all statutes, ordinances, and regulations on which this EDS is based.

B. The City's Governmental Ethics Ordinance, MCC Chapter 2-156, imposes certain duties and obligations on persons or entities seeking City contracts, work, business, or transactions. The full text of this ordinance and a training program is available on line at www.cityofchicago.org/Ethics, and may also be obtained from the City's Board of Ethics, 740 N. Sedgwick St., Suite 500, Chicago, IL 60610, (312) 744-9660. The Disclosing Party must comply fully with this ordinance.

C. If the City determines that any information provided in this EDS is false, incomplete or inaccurate, any contract or other agreement in connection with which it is submitted may be rescinded or be void or voidable, and the City may pursue any remedies under the contract or agreement (if not rescinded or void), at law, or in equity, including terminating the Disclosing Party's participation in the Matter and/or declining to allow the Disclosing Party to participate in other City transactions. Remedies at law for a false statement of material fact may include incarceration and an award to the City of treble damages.

D. It is the City's policy to make this document available to the public on its Internet site and/or upon request. Some or all of the information provided in, and appended to, this EDS may be made publicly available on the Internet, in response to a Freedom of Information Act request, or otherwise. By completing and signing this EDS, the Disclosing Party waives and releases any possible rights or claims which it may have against the City in connection with the public release of information contained in this EDS and also authorizes the City to verify the accuracy of any information submitted in this EDS.

E. The information provided in this EDS must be kept current. In the event of changes, the Disclosing Party must supplement this EDS up to the time the City takes action on the Matter. If the Matter is a contract being handled by the City's Department of Procurement Services, the Disclosing Party must update this EDS as the contract requires. **NOTE:** With respect to Matters subject to MCC Chapter 1-23, Article I (imposing **PERMANENT INELIGIBILITY** for certain specified offenses), the information provided herein regarding eligibility must be kept current for a longer period, as required by MCC Chapter 1-23 and Section 2-154-020.

CERTIFICATION

Under penalty of perjury, the person signing below: (1) warrants that he/she is authorized to execute this EDS, and all applicable Appendices, on behalf of the Disclosing Party, and (2) warrants that all certifications and statements contained in this EDS, and all applicable Appendices, are true, accurate and complete as of the date furnished to the City.

BAC North America Holding Company

(Print or type exact legal name of Disclosing Party)

By: Julie Conenna

(Sign here)

Julie Conenna

(Print or type name of person signing)

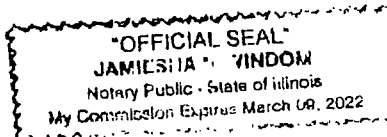
Authorized Signatory

(Print or type title of person signing)

Signed and sworn to before me on (date) November 18th, 2019

at Cook County, Illinois (state).

Jamesha M. Windom
Notary Public



Commission expires: 03/08/2022

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
APPENDIX A**

**FAMILIAL RELATIONSHIPS WITH ELECTED CITY OFFICIALS
AND DEPARTMENT HEADS**

This Appendix is to be completed only by (a) the Applicant, and (b) any legal entity which has a direct ownership interest in the Applicant exceeding 7.5%. It is not to be completed by any legal entity which has only an indirect ownership interest in the Applicant.

Under MCC Section 2-154-015, the Disclosing Party must disclose whether such Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof currently has a "familial relationship" with any elected city official or department head. A "familial relationship" exists if, as of the date this EDS is signed, the Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof is related to the mayor, any alderman, the city clerk, the city treasurer or any city department head as spouse or domestic partner or as any of the following, whether by blood or adoption: parent, child, brother or sister, aunt or uncle, niece or nephew, grandparent, grandchild, father-in-law, mother-in-law, son-in-law, daughter-in-law, stepfather or stepmother, stepson or stepdaughter, stepbrother or stepsister or half-brother or half-sister.

"Applicable Party" means (1) all executive officers of the Disclosing Party listed in Section II.B.1.a., if the Disclosing Party is a corporation; all partners of the Disclosing Party, if the Disclosing Party is a general partnership; all general partners and limited partners of the Disclosing Party, if the Disclosing Party is a limited partnership; all managers, managing members and members of the Disclosing Party, if the Disclosing Party is a limited liability company; (2) all principal officers of the Disclosing Party; and (3) any person having more than a 7.5% ownership interest in the Disclosing Party. "Principal officers" means the president, chief operating officer, executive director, chief financial officer, treasurer or secretary of a legal entity or any person exercising similar authority.

Does the Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof currently have a "familial relationship" with an elected city official or department head?

☐ Yes

☒ No

If yes, please identify below (1) the name and title of such person, (2) the name of the legal entity to which such person is connected; (3) the name and title of the elected city official or department head to whom such person has a familial relationship, and (4) the precise nature of such familial relationship.

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
APPENDIX B**

BUILDING CODE SCOFFLAW/PROBLEM LANDLORD CERTIFICATION

This Appendix is to be completed only by (a) the Applicant, and (b) any legal entity which has a direct ownership interest in the Applicant exceeding 7.5% (an "Owner"). It is not to be completed by any legal entity which has only an indirect ownership interest in the Applicant.

1. Pursuant to MCC Section 2-154-010, is the Applicant or any Owner identified as a building code scofflaw or problem landlord pursuant to MCC Section 2-92-416?

☐ Yes

☒ No

2. If the Applicant is a legal entity publicly traded on any exchange, is any officer or director of the Applicant identified as a building code scofflaw or problem landlord pursuant to MCC Section 2-92-416?

☐ Yes

☒ No

☐ The Applicant is not publicly traded on any exchange.

3. If yes to (1) or (2) above, please identify below the name of each person or legal entity identified as a building code scofflaw or problem landlord and the address of each building or buildings to which the pertinent code violations apply.

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
APPENDIX C**

PROHIBITION ON WAGE & SALARY HISTORY SCREENING - CERTIFICATION

This Appendix is to be completed only by an Applicant that is completing this EDS as a “contractor” as defined in MCC Section 2-92-385. That section, which should be consulted (www.amlegal.com), generally covers a party to any agreement pursuant to which they: (i) receive City of Chicago funds in consideration for services, work or goods provided (including for legal or other professional services), or (ii) pay the City money for a license, grant or concession allowing them to conduct a business on City premises.

On behalf of an Applicant that is a contractor pursuant to MCC Section 2-92-385, I hereby certify that the Applicant is in compliance with MCC Section 2-92-385(b)(1) and (2), which prohibit: (i) screening job applicants based on their wage or salary history, or (ii) seeking job applicants’ wage or salary history from current or former employers. I also certify that the Applicant has adopted a policy that includes those prohibitions.

☐ Yes

☐ No

☒ N/A – I am not an Applicant that is a “contractor” as defined in MCC Section 2-92-385.

This certification shall serve as the affidavit required by MCC Section 2-92-385(c)(1).

If you checked “no” to the above, please explain.

EXHIBIT E

BAC North America Holding Company

Directors

Athanasia, Dean C

Bessant, Catherine P.

Scrivener, Thomas Matthew

Officers

▼ ^

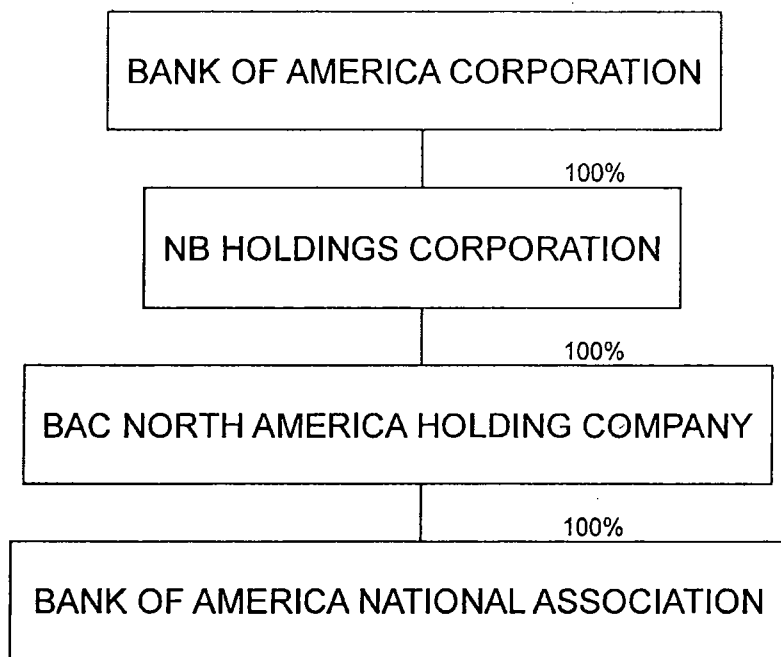
Name	Position
▼ ⊗ Bodien, Elizabeth C.	Assistant General Counsel
▼ ⊗ Perrin, Ellen A.	Assistant General Counsel
▼ ⊗ Bennett, Jennifer E.	Assistant Secretary
▼ ⊗ Chang, Gale	Assistant Secretary
▼ ⊗ Costamagna, Christine M.	Assistant Secretary
▼ ⊗ Gilliam, Allison L.	Assistant Secretary
▼ ⊗ Johnson, Colleen O.	Assistant Secretary
▼ ⊗ Perrin, Ellen A.	Assistant Secretary

✓ Ⓢ	Scrivener, Thomas Matthew	Chief Executive Officer
✓ Ⓢ	James, John M.	Chief Financial Officer
✓ Ⓢ	Bennett, Jennifer E.	Managing Director
✓ Ⓢ	Jeffries, Ross E.	Managing Director
✓ Ⓢ	Standing Resolutions, Vice President - Tax	Officer
✓ Ⓢ	Scrivener, Thomas Matthew	President
✓ Ⓢ	Jeffries, Ross E.	Secretary
✓ Ⓢ	Bodien, Elizabeth C.	Senior Vice President
✓ Ⓢ	Chang, Gale	Senior Vice President
✓ Ⓢ	Fox, William J.	Senior Vice President
✓ Ⓢ	Lilly, Shannon	Senior Vice President
✓ Ⓢ	Lorenz, William Richard	Senior Vice President
✓ Ⓢ	Olson, Mary Ann	Senior Vice President
✓ Ⓢ	Perrin, Ellen A.	Senior Vice President
✓ Ⓢ	Sak, Pamela	Senior Vice President

✓ ⌚	Templeton, William W.	Senior Vice President
✓ ⌚	Wertz, Phillip A.	Senior Vice President
✓ ⌚	Magasiner, Andrei Grischa	Treasurer
✓ ⌚	McNairy, William L.	Senior Vice President, Tax
✓ ⌚	Scrivener, Thomas Matthew	Chairman of the Board
✓ ⌚	James, John M.	Chief Accounting Officer
✓ ⌚	Bennett, Jennifer E.	Associate General Counsel
✓ ⌚	Chang, Gale	Associate General Counsel
✓ ⌚	Sak, Pamela	Associate General Counsel
✓ ⌚	Templeton, William W.	Associate General Counsel
✓ ⌚	Wertz, Phillip A.	Associate General Counsel
✓ ⌚	Jeffries, Ross E.	Deputy General Counsel
✓ ⌚	Ankrom, Michael	Chief Risk Officer

EXHIBIT "E"

Bank of America Corporation Organization Chart



CITY OF CHICAGO and CHICAGO BOARD OF EDUCATION
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
ADDENDUM A SECTION V –B 1, 2, 3 AND 4

INTRODUCTION

Bank of America, N.A. (“BANA”) is a wholly owned subsidiary of BAC North America Holding Company (“BACNA”). BANA Holding Corporation merged into BACNA effective November 1, 2019. BANA Holding is a direct, wholly owned subsidiary of BAC North America Holding Company (“BACNAH”). BACNAH is a direct, wholly owned subsidiary of NB Holdings Corporation (“NB Holdings”). NB Holdings is a direct, wholly owned subsidiary of Bank of America Corporation. Bank of America Corporation (the “Corporation”) is a publicly held company whose shares are traded on the New York Stock Exchange and has no parent corporation. Based on the U.S. Securities and Exchange Commission Rules regarding beneficial ownership, Berkshire Hathaway Inc., 3555 Farnam Street, Omaha, Nebraska 68131, beneficially owns greater than 10% of Bank of America Corporation’s outstanding common stock.

Bank of America, N.A. (“BANA”) is an indirect, wholly-owned subsidiary of Bank of America Corporation (the “Corporation”), which is a large and diversified, publicly-traded institution. The Corporation and its subsidiaries, is a global franchise, serving customers and clients around the world with operations in all 50 U.S. states, the District of Columbia, and more than 40 foreign countries. Accordingly, it is not reasonably possible to perform definitive due diligence, extending back indefinitely in time, across the full panoply of employees, officers and predecessor banks, with respect to all federal, state or local government contracts. The Corporation makes all disclosures required by its regulators, including all required disclosures in its Annual Report on Form 10-K and Quarterly Reports on Form 10-Q, which are updated in Reports on Form 8-K (collectively, the “Reports”), all of which are filed with the U.S. Securities and Exchange Commission. These Reports include disclosures of investigations and other matters as required by federal law and are publicly available. These Reports can also be accessed at the following website:
<http://investor.bankofamerica.com/phoenix.zhtml?c=71595&p=irol-irhome>. These Reports may contain further information responsive to this certification.

The bank is a large and diversified institution and is routinely involved in litigation in various state and federal courts. The bank makes all disclosures required by its regulators, including all required disclosures in its Annual Reports of Form 10K and Quarterly Reports on Form 10Q, which are updated in Reports on Form 8K, all of which are filed with the Securities and Exchange Commission. Those reports include disclosures of investigations and other matters as required by federal law and are publicly available. The bank cannot confirm or deny the existence of any other, non-public investigation conducted by any government investigator unless required to do so by law. These Reports can be provided upon request or can be accessed at the following website:

<http://investor.bankofamerica.com/phoenix.zhtml?c=71595&p=irol-irhome>

Subject to and as set forth in the introductory paragraph directly above, to the best knowledge of the individual signatory signing this questionnaire, without independent inquiry, BANA further clarifies its response to this statement, as follows:

B. FURTHER CERTIFICATIONS

The Corporation, for itself and its affiliates and subsidiaries including BANA, makes all disclosures required by its regulators in its Annual Reports on Form 10-K and Quarterly Reports on Form 10-Q, which are updated in Reports on Form 8-K, all of which are filed with the U.S. Securities and Exchange Commission (collectively, the "Reports"). These Reports include all disclosures as required by federal law including those pertaining to material business matters such as litigation, criminal convictions, and other legal actions, and may contain information which is further responsive to items addressed in the FIES FORM and this Addendum. These Reports are publicly available at the following website: <http://investor.bankofamerica.com/phoenix.zhtml?c=71595&p=irol-sec>. Further, BANA has been the subject of certain formal enforcement actions by the Office of the Comptroller of the Currency (the "OCC"), and information which can be publicly disclosed regarding these formal enforcement actions may be found on the Legal and Regulatory: Enforcement Actions page on the OCC's website at: <http://apps.occ.gov/EnforcementActions/>. In addition, BANA's registered brokerdealer and investment adviser subsidiaries make all required disclosures on their Form BDs as filed with FINRA (formerly the NASD) and their Form ADVs as filed with the SEC. These filings include disclosures of investigations and litigation as required by the SRO's and federal law, and are also publicly available. Outside of such Reports and the publicly available filings as noted above, BANA and the Corporation cannot otherwise disclose such information of material non-public nature except where required by applicable law or legal process.

Bank of America, National Association has been the subject of certain formal enforcement actions by the Office of the Comptroller of the Currency (the "OCC"). Information regarding these formal enforcement actions may be found on the Legal and Regulatory: Enforcement Actions page on the OCC's website at: <http://www.occ.treas.gov/EnforcementActions/>

In addition, Bank of America, National Association's registered broker-dealer and investment adviser subsidiaries make all required disclosures on their Form BDs as filed with FINRA (formerly the NASD) and their Form ADVs as filed with the SEC. These filings include disclosures of investigations and litigation as required by the SRO's and federal law, and are publicly available. Bank of America, National Association cannot confirm or deny the existence of any other non-public investigation conducted by any governmental agency unless required to do so by law.

Bank of America, National Association's indirect parent, Bank of America Corporation, also makes all required disclosures in its Form 10-K as filed with the Securities and Exchange Commission and its Annual Report as posted on its website at <http://investor.bankofamerica.com/phoenix.zhtml?c=71595&p=irol-reportsannual>.

On December 7, 2010, Bank of America entered into agreements with the Internal Revenue Service (IRS), the Office of the Comptroller of Currency (OCC), a Working Group of 28 State Attorneys General and the Federal Reserve Board, and was also subject to an administrative cease and desist order from the U.S. Securities and Exchange Commission (SEC). The global resolution with these federal and state entities provided for payment of restitution to the IRS and to municipal derivative counterparties allegedly harmed by Bank of America's alleged anticompetitive conduct (including bid rigging) in connection with the marketing and sale of municipal bond derivatives from 1998 to 2003, as well as requiring the Bank to take certain remedial measures.

Importantly, Bank of America was the first and only entity to self-report evidence of the bid-rigging to the Department of Justice (“DOJ”). The Bank’s self-report enabled the various government agencies (including numerous state attorneys general described above) to identify and pursue industry-wide misconduct that may have affected municipalities and others on a nationwide scale, as well as pursue numerous potential violators. In January 2007, as a result of the Bank’s self-reporting and cooperation, DOJ conditionally accepted the Bank into Part A of its Corporate Leniency Program—the highest level of leniency DOJ can provide. Pursuant to Part A of the Leniency Program, subject to the Bank’s continuing cooperation, DOJ will not bring any criminal antitrust prosecution against the Bank in connection with the matters that the Bank reported to DOJ. DOJ has acknowledged that through the agreements outlined above, Bank of America met its obligation, under the Leniency Program, to pay full restitution to the IRS and municipalities. Bank of America paid restitution to the IRS on December 8, 2010.

The Bank also promptly agreed to cooperate with the State Attorneys General (including the New York Attorney General) in their industry-wide investigation. As noted above, the Bank reached a settlement agreement with numerous State Attorneys General (including the New York Attorney General). In recognition of the Bank’s self-reporting and substantial cooperation, the Attorneys General added an exhibit (Exhibit 3) to the end of that settlement agreement. This exhibit describes, in detail, the Bank’s extensive cooperation with the investigations in this matter. In addition, this exhibit describes the importance of the Bank’s cooperation to the Attorneys General investigation. In recognition of the Bank’s agreement to make restitution and its truthful cooperation, the exhibit affirmatively states that “no provision contained in the settlement agreement is intended to be construed as a mandate or recommendation to any independent suspension and/or debarment authority regarding a decision to disqualify, suspend or debar Bank of America . . . from engaging in the provision of any financial services including, but not limited to, the marketing sale or placement of municipal bond derivatives or any other state business”

On or about March 18, 2008, the Office of the Comptroller of the Currency entered a Consent Order against Douglas L. Campbell related to improper payments made to brokers on municipal derivative transactions in 2001 and 2002 while Mr. Campbell was a member of Bank of America’s Municipal Derivatives Desk. Pursuant to the Order, Mr. Campbell was prohibited from a number of activities, including participating in any manner in the conduct of the affairs of various depository and other institutions identified in the Order. The Order also imposed a \$25,000 civil monetary penalty on Mr. Campbell. On or about September 9, 2010, Mr. Campbell pled guilty to (i) conspiracy to restrain trade in violation of 15 U.S.C. § 1, (ii) conspiracy to commit wire fraud in violation of 18 U.S.C. § 371 and §1343, and (iii) wire fraud in violation of 18 U.S.C. § 1343 in the United States District Court for the Southern District of New York. This conduct related to improper bidding practices on Bank of America’s Municipal Derivatives Desk. Mr. Campbell was sentenced on April 22, 2014. On or about December 7, 2010, the Securities and Exchange Commission entered an Administrative Order against Mr. Campbell, related to alleged improper bidding practices on Bank of America’s Municipal Derivatives Desk. The Order barred Mr. Campbell from association with any broker, dealer, or investment adviser. Mr. Campbell was suspended by Bank of America on or about July 24, 2002 and was terminated by Bank of America on or about August 16, 2002.

On or about March 30, 2011, Brian Zwerner pled guilty to conspiracy to make false entries in bank records in violation of 18 U.S.C. § 371 and §1005 in the United States District Court for the Southern District of New York. This conduct related to improper bidding practices on Bank of America’s Municipal Derivatives Desk. Mr. Zwerner was sentenced on July 25, 2014.

On or about December 8, 2011, the Securities and Exchange Commission entered a Cease and Desist Order against Dean Z. Pinard related to alleged improper bidding practices on Bank of America's Municipal Derivatives Desk. Among other things, the Order barred Mr. Pinard from association with any broker, dealer, investment adviser, municipal securities dealer, or municipal advisor and required him to pay approximately \$41,500 in disgorgement and prejudgment interest. In April 2013, Mr. Pinard entered into a Consent Order with the Office of the Comptroller of the Currency pursuant to which the OCC found that, among other things, Mr. Pinard engaged in improper anticompetitive bidding practices while part of Bank of America's Municipal Derivatives Desk. Pursuant to the Order, Mr. Pinard was prohibited from, among other things, participating in any manner in the conduct of the affairs of various depository and other institutions identified in the Order. Mr. Pinard was suspended by Bank of America on or about November 15, 2006 and was terminated by Bank of America on or about April 26, 2007.

On or about February 10, 2014, Phillip D. Murphy pled guilty to (i) conspiracy to commit wire fraud in violation of 18 U.S.C. § 371 and § 1343, (ii) wire fraud in violation of 18 U.S.C. § 1343, and (iii) conspiracy to make false entries in bank records in violation of 18 U.S.C. § 371 and § 1005 in the United States District Court for the Western District of North Carolina. This conduct related to improper bidding practices on Bank of America's Municipal Derivatives Desk. Mr. Murphy is awaiting sentencing. Mr. Murphy was suspended by Bank of America on or about July 25, 2002, and resigned from Bank of America on or about September 4, 2002.

BAC NORTH AMERICA HOLDING COMPANY

LIMITED POWER OF ATTORNEY

BAC NORTH AMERICA HOLDING COMPANY, a Delaware corporation (the "Corporation"), does hereby make, constitute, and appoint **Julie Conenna** as Attorney-in-Fact for the Corporation acting for the Corporation and in the Corporation's name, place and stead, for the limited purpose of authorizing, preparing, revising or signing a City of Chicago's Economic Disclosure Statement form ("the Form") related to Bank of America, N.A. ("BANA's") participation in the City of Chicago's qualified firms for Municipal Depositories in connection with the **Request for Proposal for Payment of Interest on the Monies of the City of Chicago and the Chicago Board of Education.**

Any execution by the Attorney-in-Fact of the Form shall fully bind and commit the Corporation and the City of Chicago may rely upon the execution thereof by the Attorney-in-Fact as if executed by the Corporation and as the true and lawful act of the Corporation.

This Limited Power of Attorney shall automatically terminate as to the authority of the named Attorney-in-Fact upon such Attorney-in-Fact's resignation or termination from BANA or her realignment to a role outside of the Public Sector division of BANA; however, such termination or realignment shall have no impact on the Form executed by the above named attorney-in-fact for the Corporation prior to such termination or realignment.

IN WITNESS WHEREOF, this Power of Attorney has been executed and delivered by the Corporation to each Attorney-in-Fact on this 18 day of November, 2019.

BAC NORTH AMERICA HOLDING COMPANY

By:  

Ellen A. Perrin

Associate General Counsel, Senior Vice President and
Assistant Secretary

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT
AND AFFIDAVIT**

SECTION I -- GENERAL INFORMATION

A. Legal name of the Disclosing Party submitting this EDS. Include d/b/a/ if applicable:

NB Holdings Corporation

Check ONE of the following three boxes:

Indicate whether the Disclosing Party submitting this EDS is:

1. ☐ the Applicant

OR

2. ☒ a legal entity currently holding, or anticipated to hold within six months after City action on the contract, transaction or other undertaking to which this EDS pertains (referred to below as the "Matter"), a direct or indirect interest in excess of 7.5% in the Applicant. State the Applicant's legal name: _____

OR

3. ☐ a legal entity with a direct or indirect right of control of the Applicant (see Section II(B)(1)) State the legal name of the entity in which the Disclosing Party holds a right of control: _____

B. Business address of the Disclosing Party: 100 North Tryon Street

Charlotte NC 28255

C. Telephone: (312) 904-8357 Fax: (312) 453-4568 Email: julie.conenna@bofa.com

D. Name of contact person: Julie Conenna

E. Federal Employer Identification No. (if you have one): _____

F. Brief description of the Matter to which this EDS pertains. (Include project number and location of property, if applicable):

Request for Proposal for Payment of Interest on the Monies of the City of Chicago and the Chicago Board of Education

G. Which City agency or department is requesting this EDS? Department of Finance

If the Matter is a contract being handled by the City's Department of Procurement Services, please complete the following:

Specification # _____ and Contract # _____

SECTION II -- DISCLOSURE OF OWNERSHIP INTERESTS

A. NATURE OF THE DISCLOSING PARTY

1. Indicate the nature of the Disclosing Party:

- | | |
|--|--|
| <input type="checkbox"/> Person | <input type="checkbox"/> Limited liability company |
| <input checked="" type="checkbox"/> Publicly registered business corporation | <input type="checkbox"/> Limited liability partnership |
| <input type="checkbox"/> Privately held business corporation | <input type="checkbox"/> Joint venture |
| <input type="checkbox"/> Sole proprietorship | <input type="checkbox"/> Not-for-profit corporation |
| <input type="checkbox"/> General partnership | (Is the not-for-profit corporation also a 501(c)(3))? |
| <input type="checkbox"/> Limited partnership | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| <input type="checkbox"/> Trust | <input type="checkbox"/> Other (please specify) |
-

2. For legal entities, the state (or foreign country) of incorporation or organization, if applicable:

Delaware

3. For legal entities not organized in the State of Illinois: Has the organization registered to do business in the State of Illinois as a foreign entity?

☐ Yes ☒ No ☐ Organized in Illinois

B. IF THE DISCLOSING PARTY IS A LEGAL ENTITY:

1. List below the full names and titles, if applicable, of: (i) all executive officers and all directors of the entity; (ii) **for not-for-profit corporations**, all members, if any, which are legal entities (if there are no such members, write "no members which are legal entities"); (iii) **for trusts, estates or other similar entities**, the trustee, executor, administrator, or similarly situated party; (iv) **for general or limited partnerships, limited liability companies, limited liability partnerships or joint ventures**, each general partner, managing member, manager or any other person or legal entity that directly or indirectly controls the day-to-day management of the Applicant.

NOTE: Each legal entity listed below must submit an EDS on its own behalf.

Name	Title
<u>See Exhibit "E"</u>	
<hr/>	
<hr/>	

2. Please provide the following information concerning each person or legal entity having a direct or indirect, current or prospective (i.e. within 6 months after City action) beneficial interest (including ownership) in excess of 7.5% of the Applicant. Examples of such an interest include shares in a corporation, partnership interest in a partnership or joint venture, interest of a member or manager in a

limited liability company, or interest of a beneficiary of a trust, estate or other similar entity. If none, state "None."

NOTE: Each legal entity listed below may be required to submit an EDS on its own behalf.

Name	Business Address	Percentage Interest in the Applicant
Bank of America Corporation	100 N. Tryon St, Charlotte NC 28255	100%

SECTION III -- INCOME OR COMPENSATION TO, OR OWNERSHIP BY, CITY ELECTED OFFICIALS

Has the Disclosing Party provided any income or compensation to any City elected official during the 12-month period preceding the date of this EDS? ☐ Yes ☒ No

Does the Disclosing Party reasonably expect to provide any income or compensation to any City elected official during the 12-month period following the date of this EDS? ☐ Yes ☒ No

If "yes" to either of the above, please identify below the name(s) of such City elected official(s) and describe such income or compensation:

Does any City elected official or, to the best of the Disclosing Party's knowledge after reasonable inquiry, any City elected official's spouse or domestic partner, have a financial interest (as defined in Chapter 2-156 of the Municipal Code of Chicago ("MCC")) in the Disclosing Party?

☐ Yes ☒ No

If "yes," please identify below the name(s) of such City elected official(s) and/or spouse(s)/domestic partner(s) and describe the financial interest(s).

SECTION IV -- DISCLOSURE OF SUBCONTRACTORS AND OTHER RETAINED PARTIES

The Disclosing Party must disclose the name and business address of each subcontractor, attorney, lobbyist (as defined in MCC Chapter 2-156), accountant, consultant and any other person or entity whom the Disclosing Party has retained or expects to retain in connection with the Matter, as well as the nature of the relationship, and the total amount of the fees paid or estimated to be paid. The Disclosing Party is not required to disclose employees who are paid solely through the Disclosing Party's regular payroll. If the Disclosing Party is uncertain whether a disclosure is required under this Section, the Disclosing Party must either ask the City whether disclosure is required or make the disclosure.

Name (indicate whether retained or anticipated to be retained)	Business Address	Relationship to Disclosing Party (subcontractor, attorney, lobbyist, etc.)	Fees (indicate whether paid or estimated.) NOTE: "hourly rate" or "t.b.d." is not an acceptable response.
--	------------------	--	---

(Add sheets if necessary)

☒ Check here if the Disclosing Party has not retained, nor expects to retain, any such persons or entities.

SECTION V -- CERTIFICATIONS

A. COURT-ORDERED CHILD SUPPORT COMPLIANCE

Under MCC Section 2-92-415, substantial owners of business entities that contract with the City must remain in compliance with their child support obligations throughout the contract's term.

Has any person who directly or indirectly owns 10% or more of the Disclosing Party been declared in arrearage on any child support obligations by any Illinois court of competent jurisdiction?

☐ Yes ☐ No ☒ No person directly or indirectly owns 10% or more of the Disclosing Party.

If "Yes," has the person entered into a court-approved agreement for payment of all support owed and is the person in compliance with that agreement?

☐ Yes ☐ No

B. FURTHER CERTIFICATIONS

1. [This paragraph 1 applies only if the Matter is a contract being handled by the City's Department of Procurement Services.] In the 5-year period preceding the date of this EDS, neither the Disclosing Party nor any Affiliated Entity [see definition in (5) below] has engaged, in connection with the performance of any public contract, the services of an integrity monitor, independent private sector inspector general, or integrity compliance consultant (i.e., an individual or entity with legal, auditing, investigative, or other similar skills, designated by a public agency to help the agency monitor the activity of specified agency vendors as well as help the vendors reform their business practices so they can be considered for agency contracts in the future, or continue with a contract in progress).

2. The Disclosing Party and its Affiliated Entities are not delinquent in the payment of any fine, fee, tax or other source of indebtedness owed to the City of Chicago, including, but not limited to, water and sewer charges, license fees, parking tickets, property taxes and sales taxes, nor is the Disclosing Party delinquent in the payment of any tax administered by the Illinois Department of Revenue.

3. The Disclosing Party and, if the Disclosing Party is a legal entity, all of those persons or entities identified in Section II(B)(1) of this EDS:

- a. are not presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from any transactions by any federal, state or local unit of government;
- b. have not, during the 5 years before the date of this EDS, been convicted of a criminal offense, adjudged guilty, or had a civil judgment rendered against them in connection with: obtaining, attempting to obtain, or performing a public (federal, state or local) transaction or contract under a public transaction; a violation of federal or state antitrust statutes; fraud; embezzlement; theft; forgery; bribery; falsification or destruction of records; making false statements; or receiving stolen property;
- c. are not presently indicted for, or criminally or civilly charged by, a governmental entity (federal, state or local) with committing any of the offenses set forth in subparagraph (b) above;
- d. have not, during the 5 years before the date of this EDS, had one or more public transactions (federal, state or local) terminated for cause or default; and
- e. have not, during the 5 years before the date of this EDS, been convicted, adjudged guilty, or found liable in a civil proceeding, or in any criminal or civil action, including actions concerning environmental violations, instituted by the City or by the federal government, any state, or any other unit of local government.

4. The Disclosing Party understands and shall comply with the applicable requirements of MCC Chapters 2-56 (Inspector General) and 2-156 (Governmental Ethics).

5. Certifications (5), (6) and (7) concern:

- the Disclosing Party;
- any "Contractor" (meaning any contractor or subcontractor used by the Disclosing Party in connection with the Matter, including but not limited to all persons or legal entities disclosed under Section IV, "Disclosure of Subcontractors and Other Retained Parties");
- any "Affiliated Entity" (meaning a person or entity that, directly or indirectly: controls the Disclosing Party, is controlled by the Disclosing Party, or is, with the Disclosing Party, under common control of another person or entity). Indicia of control include, without limitation: interlocking management or ownership; identity of interests among family members, shared facilities and equipment; common use of employees; or organization of a business entity following the ineligibility of a business entity to do business with federal or state or local government, including the City, using substantially the same management, ownership, or principals as the ineligible entity. With respect to Contractors, the term Affiliated Entity means a person or entity that directly or indirectly controls the Contractor, is controlled by it, or, with the Contractor, is under common control of another person or entity;
- any responsible official of the Disclosing Party, any Contractor or any Affiliated Entity or any other official, agent or employee of the Disclosing Party, any Contractor or any Affiliated Entity, acting pursuant to the direction or authorization of a responsible official of the Disclosing Party, any Contractor or any Affiliated Entity (collectively "Agents").

Neither the Disclosing Party, nor any Contractor, nor any Affiliated Entity of either the Disclosing Party or any Contractor, nor any Agents have, during the 5 years before the date of this EDS, or, with respect to a Contractor, an Affiliated Entity, or an Affiliated Entity of a Contractor during the 5 years before the date of such Contractor's or Affiliated Entity's contract or engagement in connection with the Matter:

- a. bribed or attempted to bribe, or been convicted or adjudged guilty of bribery or attempting to bribe, a public officer or employee of the City, the State of Illinois, or any agency of the federal government or of any state or local government in the United States of America, in that officer's or employee's official capacity;
 - b. agreed or colluded with other bidders or prospective bidders, or been a party to any such agreement, or been convicted or adjudged guilty of agreement or collusion among bidders or prospective bidders, in restraint of freedom of competition by agreement to bid a fixed price or otherwise; or
 - c. made an admission of such conduct described in subparagraph (a) or (b) above that is a matter of record, but have not been prosecuted for such conduct; or
 - d. violated the provisions referenced in MCC Subsection 2-92-320(a)(4)(Contracts Requiring a Base Wage); (a)(5)(Debarment Regulations); or (a)(6)(Minimum Wage Ordinance).
6. Neither the Disclosing Party, nor any Affiliated Entity or Contractor, or any of their employees, officials, agents or partners, is barred from contracting with any unit of state or local government as a result of engaging in or being convicted of (1) bid-rigging in violation of 720 ILCS 5/33E-3; (2) bid-rotating in violation of 720 ILCS 5/33E-4; or (3) any similar offense of any state or of the United States of America that contains the same elements as the offense of bid-rigging or bid-rotating.
7. Neither the Disclosing Party nor any Affiliated Entity is listed on a Sanctions List maintained by the United States Department of Commerce, State, or Treasury, or any successor federal agency.
8. [FOR APPLICANT ONLY] (i) Neither the Applicant nor any "controlling person" [see MCC Chapter 1-23, Article I for applicability and defined terms] of the Applicant is currently indicted or charged with, or has admitted guilt of, or has ever been convicted of, or placed under supervision for, any criminal offense involving actual, attempted, or conspiracy to commit bribery, theft, fraud, forgery, perjury, dishonesty or deceit against an officer or employee of the City or any "sister agency"; and (ii) the Applicant understands and acknowledges that compliance with Article I is a continuing requirement for doing business with the City. NOTE: If MCC Chapter 1-23, Article I applies to the Applicant, that Article's permanent compliance timeframe supersedes 5-year compliance timeframes in this Section V.
9. [FOR APPLICANT ONLY] The Applicant and its Affiliated Entities will not use, nor permit their subcontractors to use, any facility listed as having an active exclusion by the U.S. EPA on the federal System for Award Management ("SAM").
10. [FOR APPLICANT ONLY] The Applicant will obtain from any contractors/subcontractors hired or to be hired in connection with the Matter certifications equal in form and substance to those in Certifications (2) and (9) above and will not, without the prior written consent of the City, use any such

contractor/subcontractor that does not provide such certifications or that the Applicant has reason to believe has not provided or cannot provide truthful certifications.

11. If the Disclosing Party is unable to certify to any of the above statements in this Part B (Further Certifications), the Disclosing Party must explain below:

See attached Addendum "A" for additional information related to certifications.

If the letters "NA," the word "None," or no response appears on the lines above, it will be conclusively presumed that the Disclosing Party certified to the above statements.

12. To the best of the Disclosing Party's knowledge after reasonable inquiry, the following is a complete list of all current employees of the Disclosing Party who were, at any time during the 12-month period preceding the date of this EDS, an employee, or elected or appointed official, of the City of Chicago (if none, indicate with "N/A" or "none").

None

13. To the best of the Disclosing Party's knowledge after reasonable inquiry, the following is a complete list of all gifts that the Disclosing Party has given or caused to be given, at any time during the 12-month period preceding the execution date of this EDS, to an employee, or elected or appointed official, of the City of Chicago. For purposes of this statement, a "gift" does not include: (i) anything made generally available to City employees or to the general public, or (ii) food or drink provided in the course of official City business and having a retail value of less than \$25 per recipient, or (iii) a political contribution otherwise duly reported as required by law (if none, indicate with "N/A" or "none"). As to any gift listed below, please also list the name of the City recipient.

None

C. CERTIFICATION OF STATUS AS FINANCIAL INSTITUTION

1. The Disclosing Party certifies that the Disclosing Party (check one)

☒ is ☐ is not

a "financial institution" as defined in MCC Section 2-32-455(b).

2. If the Disclosing Party IS a financial institution, then the Disclosing Party pledges:

"We are not and will not become a predatory lender as defined in MCC Chapter 2-32. We further pledge that none of our affiliates is, and none of them will become, a predatory lender as defined in MCC Chapter 2-32. We understand that becoming a predatory lender or becoming an affiliate of a predatory lender may result in the loss of the privilege of doing business with the City."

If the Disclosing Party is unable to make this pledge because it or any of its affiliates (as defined in MCC Section 2-32-455(b)) is a predatory lender within the meaning of MCC Chapter 2-32, explain here (attach additional pages if necessary):

Makes the above pledge.

If the letters "NA," the word "None," or no response appears on the lines above, it will be conclusively presumed that the Disclosing Party certified to the above statements.

D. CERTIFICATION REGARDING FINANCIAL INTEREST IN CITY BUSINESS

Any words or terms defined in MCC Chapter 2-156 have the same meanings if used in this Part D.

1. In accordance with MCC Section 2-156-110: To the best of the Disclosing Party's knowledge after reasonable inquiry, does any official or employee of the City have a financial interest in his or her own name/or in the name of any other person or entity in the Matter?

☐ Yes

☒ No

NOTE: If you checked "Yes" to Item D(1), proceed to Items D(2) and D(3). If you checked "No" to Item D(1), skip Items D(2) and D(3) and proceed to Part E.

2. Unless sold pursuant to a process of competitive bidding, or otherwise permitted, no City elected official or employee shall have a financial interest in his or her own name or in the name of any other person or entity in the purchase of any property that (i) belongs to the City, or (ii) is sold for taxes or assessments, or (iii) is sold by virtue of legal process at the suit of the City (collectively, "City Property Sale"). Compensation for property taken pursuant to the City's eminent domain power does not constitute a financial interest within the meaning of this Part D.

Does the Matter involve a City Property Sale?

☐ Yes

☒ No

3. If you checked "Yes" to Item D(1), provide the names and business addresses of the City officials or employees having such financial interest and identify the nature of the financial interest:

Name

Business Address

Nature of Financial Interest

4. The Disclosing Party further certifies that no prohibited financial interest in the Matter will be acquired by any City official or employee.

E. CERTIFICATION REGARDING SLAVERY ERA BUSINESS

Please check either (1) or (2) below. If the Disclosing Party checks (2), the Disclosing Party must disclose below or in an attachment to this EDS all information required by (2). Failure to comply with these disclosure requirements may make any contract entered into with the City in connection with the Matter voidable by the City.

 X 1. The Disclosing Party verifies that the Disclosing Party has searched any and all records of the Disclosing Party and any and all predecessor entities regarding records of investments or profits from slavery or slaveholder insurance policies during the slavery era (including insurance policies issued to slaveholders that provided coverage for damage to or injury or death of their slaves), and the Disclosing Party has found no such records.

 2. The Disclosing Party verifies that, as a result of conducting the search in step (1) above, the Disclosing Party has found records of investments or profits from slavery or slaveholder insurance policies. The Disclosing Party verifies that the following constitutes full disclosure of all such records, including the names of any and all slaves or slaveholders described in those records:

SECTION VI -- CERTIFICATIONS FOR FEDERALLY FUNDED MATTERS

NOTE: If the Matter is federally funded, complete this Section VI. If the Matter is not federally funded, proceed to Section VII. For purposes of this Section VI, tax credits allocated by the City and proceeds of debt obligations of the City are not federal funding.

A. CERTIFICATION REGARDING LOBBYING

1. List below the names of all persons or entities registered under the federal Lobbying Disclosure Act of 1995, as amended, who have made lobbying contacts on behalf of the Disclosing Party with respect to the Matter: (Add sheets if necessary):

N/A

(If no explanation appears or begins on the lines above, or if the letters "NA" or if the word "None" appear, it will be conclusively presumed that the Disclosing Party means that NO persons or entities registered under the Lobbying Disclosure Act of 1995, as amended, have made lobbying contacts on behalf of the Disclosing Party with respect to the Matter.)

2. The Disclosing Party has not spent and will not expend any federally appropriated funds to pay any person or entity listed in paragraph A(1) above for his or her lobbying activities or to pay any person or entity to influence or attempt to influence an officer or employee of any agency, as defined by applicable federal law, a member of Congress, an officer or employee of Congress, or an employee

of a member of Congress, in connection with the award of any federally funded contract, making any federally funded grant or loan, entering into any cooperative agreement, or to extend, continue, renew, amend, or modify any federally funded contract, grant, loan, or cooperative agreement.

3. The Disclosing Party will submit an updated certification at the end of each calendar quarter in which there occurs any event that materially affects the accuracy of the statements and information set forth in paragraphs A(1) and A(2) above.

4. The Disclosing Party certifies that either: (i) it is not an organization described in section 501(c)(4) of the Internal Revenue Code of 1986; or (ii) it is an organization described in section 501(c)(4) of the Internal Revenue Code of 1986 but has not engaged and will not engage in "Lobbying Activities," as that term is defined in the Lobbying Disclosure Act of 1995, as amended.

5. If the Disclosing Party is the Applicant, the Disclosing Party must obtain certifications equal in form and substance to paragraphs A(1) through A(4) above from all subcontractors before it awards any subcontract and the Disclosing Party must maintain all such subcontractors' certifications for the duration of the Matter and must make such certifications promptly available to the City upon request.

B. CERTIFICATION REGARDING EQUAL EMPLOYMENT OPPORTUNITY

If the Matter is federally funded, federal regulations require the Applicant and all proposed subcontractors to submit the following information with their bids or in writing at the outset of negotiations.

Is the Disclosing Party the Applicant?

☐ Yes

☐ No

If "Yes," answer the three questions below:

1. Have you developed and do you have on file affirmative action programs pursuant to applicable federal regulations? (See 41 CFR Part 60-2.)

☐ Yes

☐ No

2. Have you filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance Programs, or the Equal Employment Opportunity Commission all reports due under the applicable filing requirements?

☐ Yes

☐ No

☐ Reports not required

3. Have you participated in any previous contracts or subcontracts subject to the equal opportunity clause?

☐ Yes

☐ No

If you checked "No" to question (1) or (2) above, please provide an explanation:

SECTION VII -- FURTHER ACKNOWLEDGMENTS AND CERTIFICATION

The Disclosing Party understands and agrees that:

- A. The certifications, disclosures, and acknowledgments contained in this EDS will become part of any contract or other agreement between the Applicant and the City in connection with the Matter, whether procurement, City assistance, or other City action, and are material inducements to the City's execution of any contract or taking other action with respect to the Matter. The Disclosing Party understands that it must comply with all statutes, ordinances, and regulations on which this EDS is based.
- B. The City's Governmental Ethics Ordinance, MCC Chapter 2-156, imposes certain duties and obligations on persons or entities seeking City contracts, work, business, or transactions. The full text of this ordinance and a training program is available on line at www.cityofchicago.org/Ethics, and may also be obtained from the City's Board of Ethics, 740 N. Sedgwick St., Suite 500, Chicago, IL 60610, (312) 744-9660. The Disclosing Party must comply fully with this ordinance.
- C. If the City determines that any information provided in this EDS is false, incomplete or inaccurate, any contract or other agreement in connection with which it is submitted may be rescinded or be void or voidable, and the City may pursue any remedies under the contract or agreement (if not rescinded or void), at law, or in equity, including terminating the Disclosing Party's participation in the Matter and/or declining to allow the Disclosing Party to participate in other City transactions. Remedies at law for a false statement of material fact may include incarceration and an award to the City of treble damages.
- D. It is the City's policy to make this document available to the public on its Internet site and/or upon request. Some or all of the information provided in, and appended to, this EDS may be made publicly available on the Internet, in response to a Freedom of Information Act request, or otherwise. By completing and signing this EDS, the Disclosing Party waives and releases any possible rights or claims which it may have against the City in connection with the public release of information contained in this EDS and also authorizes the City to verify the accuracy of any information submitted in this EDS.
- E. The information provided in this EDS must be kept current. In the event of changes, the Disclosing Party must supplement this EDS up to the time the City takes action on the Matter. If the Matter is a contract being handled by the City's Department of Procurement Services, the Disclosing Party must update this EDS as the contract requires. **NOTE:** With respect to Matters subject to MCC Chapter 1-23, Article I (imposing **PERMANENT INELIGIBILITY** for certain specified offenses), the information provided herein regarding eligibility must be kept current for a longer period, as required by MCC Chapter 1-23 and Section 2-154-020.

CERTIFICATION

Under penalty of perjury, the person signing below: (1) warrants that he/she is authorized to execute this EDS, and all applicable Appendices, on behalf of the Disclosing Party, and (2) warrants that all certifications and statements contained in this EDS, and all applicable Appendices, are true, accurate and complete as of the date furnished to the City.

NB Holdings Corporation

(Print or type exact legal name of Disclosing Party)

By: Julie Conenna

(Sign here)

Julie Conenna

(Print or type name of person signing)

Authorized Signatory

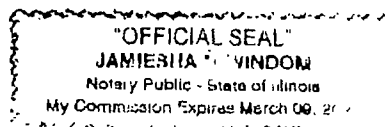
(Print or type title of person signing)

Signed and sworn to before me on (date) November 18th, 2019

at Cook County, Illinois (state).

James M. Windom
Notary Public

Commission expires: 03/09/2022



**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
APPENDIX A**

**FAMILIAL RELATIONSHIPS WITH ELECTED CITY OFFICIALS
AND DEPARTMENT HEADS**

This Appendix is to be completed only by (a) the Applicant, and (b) any legal entity which has a direct ownership interest in the Applicant exceeding 7.5%. It is not to be completed by any legal entity which has only an indirect ownership interest in the Applicant.

Under MCC Section 2-154-015, the Disclosing Party must disclose whether such Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof currently has a "familial relationship" with any elected city official or department head. A "familial relationship" exists if, as of the date this EDS is signed, the Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof is related to the mayor, any alderman, the city clerk, the city treasurer or any city department head as spouse or domestic partner or as any of the following, whether by blood or adoption: parent, child, brother or sister, aunt or uncle, niece or nephew, grandparent, grandchild, father-in-law, mother-in-law, son-in-law, daughter-in-law, stepfather or stepmother, stepson or stepdaughter, stepbrother or stepsister or half-brother or half-sister.

"Applicable Party" means (1) all executive officers of the Disclosing Party listed in Section II.B.1.a., if the Disclosing Party is a corporation; all partners of the Disclosing Party, if the Disclosing Party is a general partnership; all general partners and limited partners of the Disclosing Party, if the Disclosing Party is a limited partnership; all managers, managing members and members of the Disclosing Party, if the Disclosing Party is a limited liability company; (2) all principal officers of the Disclosing Party; and (3) any person having more than a 7.5% ownership interest in the Disclosing Party. "Principal officers" means the president, chief operating officer, executive director, chief financial officer, treasurer or secretary of a legal entity or any person exercising similar authority.

Does the Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof currently have a "familial relationship" with an elected city official or department head?

☐ Yes

☒ No

If yes, please identify below (1) the name and title of such person, (2) the name of the legal entity to which such person is connected; (3) the name and title of the elected city official or department head to whom such person has a familial relationship, and (4) the precise nature of such familial relationship.

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
APPENDIX B**

BUILDING CODE SCOFFLAW/PROBLEM LANDLORD CERTIFICATION

This Appendix is to be completed only by (a) the Applicant, and (b) any legal entity which has a direct ownership interest in the Applicant exceeding 7.5% (an "Owner"). It is not to be completed by any legal entity which has only an indirect ownership interest in the Applicant.

1. Pursuant to MCC Section 2-154-010, is the Applicant or any Owner identified as a building code scofflaw or problem landlord pursuant to MCC Section 2-92-416?

☐ Yes

☒ No

2. If the Applicant is a legal entity publicly traded on any exchange, is any officer or director of the Applicant identified as a building code scofflaw or problem landlord pursuant to MCC Section 2-92-416?

☐ Yes

☒ No

☐ The Applicant is not publicly traded on any exchange.

3. If yes to (1) or (2) above, please identify below the name of each person or legal entity identified as a building code scofflaw or problem landlord and the address of each building or buildings to which the pertinent code violations apply.

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
APPENDIX C**

PROHIBITION ON WAGE & SALARY HISTORY SCREENING - CERTIFICATION

This Appendix is to be completed only by an Applicant that is completing this EDS as a “contractor” as defined in MCC Section 2-92-385. That section, which should be consulted (www.amlegal.com), generally covers a party to any agreement pursuant to which they: (i) receive City of Chicago funds in consideration for services, work or goods provided (including for legal or other professional services), or (ii) pay the City money for a license, grant or concession allowing them to conduct a business on City premises.

On behalf of an Applicant that is a contractor pursuant to MCC Section 2-92-385, I hereby certify that the Applicant is in compliance with MCC Section 2-92-385(b)(1) and (2), which prohibit: (i) screening job applicants based on their wage or salary history, or (ii) seeking job applicants’ wage or salary history from current or former employers. I also certify that the Applicant has adopted a policy that includes those prohibitions.

☐ Yes

☐ No

☒ N/A – I am not an Applicant that is a “contractor” as defined in MCC Section 2-92-385.

This certification shall serve as the affidavit required by MCC Section 2-92-385(c)(1).

If you checked “no” to the above, please explain.

Exhibit E

NB Holdings Corporation

Directors		
✓	Ⓢ	<u>Donofrio, Paul M.</u> Director
✓	Ⓢ	<u>Magasiner, Andrei Grischa</u> Director
✓	Ⓢ	<u>Smith, Andrea B.</u> Director

Officers

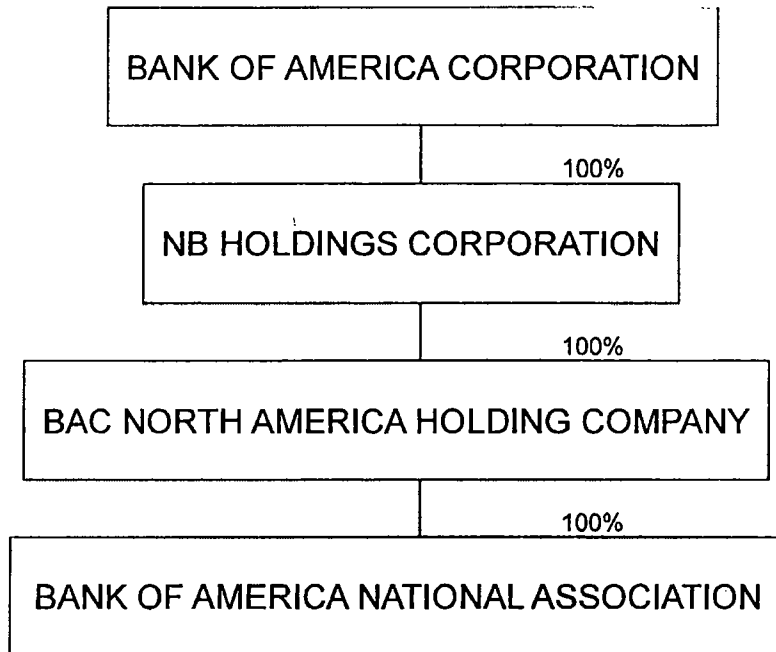
Name		Position
✓	Ⓢ	<u>Bodien, Elizabeth C.</u> Assistant General Counsel
✓	Ⓢ	<u>Perrin, Ellen A.</u> Assistant General Counsel
✓	Ⓢ	<u>Bennett, Jennifer E.</u> Assistant Secretary
✓	Ⓢ	<u>Chang, Gale</u> Assistant Secretary
✓	Ⓢ	<u>Costamagna, Christine M.</u> Assistant Secretary
✓	Ⓢ	<u>Gilliam, Allison L.</u> Assistant Secretary
✓	Ⓢ	<u>Johnson, Colleen O.</u> Assistant Secretary
✓	Ⓢ	<u>Perrin, Ellen A.</u> Assistant Secretary
✓	Ⓢ	<u>Magasiner, Andrei Grischa</u> Chief Executive Officer
✓	Ⓢ	<u>James, John M.</u> Chief Financial Officer
✓	Ⓢ	<u>Bennett, Jennifer E.</u> Managing Director
✓	Ⓢ	<u>Jeffries, Ross E.</u> Managing Director
✓	Ⓢ	<u>Standing Resolutions, Vice President - Tax</u> Officer

✓ ⊙	<u>Magasiner, Andrei Grischa</u>	President
✓ ⊙	<u>Jeffries, Ross E.</u>	Secretary
✓ ⊙	<u>Bodien, Elizabeth C.</u>	Senior Vice President
✓ ⊙	<u>Chang, Gale</u>	Senior Vice President
✓ ⊙	<u>Fox, William J.</u>	Senior Vice President
✓ ⊙	<u>Lilly, Shannon</u>	Senior Vice President
✓ ⊙	<u>Lorenz, William Richard</u>	Senior Vice President
✓ ⊙	<u>Louis, Walter R.</u>	Senior Vice President
✓ ⊙	<u>Olson, Mary Ann</u>	Senior Vice President
✓ ⊙	<u>Perrin, Ellen A.</u>	Senior Vice President
✓ ⊙	<u>Sak, Pamela</u>	Senior Vice President
✓ ⊙	<u>Templeton, William W.</u>	Senior Vice President
✓ ⊙	<u>Watts, David</u>	Senior Vice President
✓ ⊙	<u>Wertz, Phillip A.</u>	Senior Vice President
✓ ⊙	<u>Magasiner, Andrei Grischa</u>	Treasurer
✓ ⊙	<u>McNairy, William L.</u>	Senior Vice President, Tax
✓ ⊙	<u>Magasiner, Andrei Grischa</u>	Chairman of the Board

✓ ②	<u>James, John M.</u>	Chief Accounting Officer
✓ ②	<u>Bennett, Jennifer E.</u>	Associate General Counsel
✓ ②	<u>Chang, Gale</u>	Associate General Counsel
✓ ②	<u>Sak, Pamela</u>	Associate General Counsel
✓ ②	<u>Templeton, William W.</u>	Associate General Counsel
✓ ②	<u>Wertz, Phillip A.</u>	Associate General Counsel
✓ ②	<u>Jeffries, Ross E.</u>	Deputy General Counsel
✓ ②	<u>Ankrom, Michael</u>	Chief Risk Officer

EXHIBIT "E"

Bank of America Corporation Organization Chart



CITY OF CHICAGO and CHICAGO BOARD OF EDUCATION
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
ADDENDUM A SECTION V –B 1, 2, 3 AND 4

INTRODUCTION

Bank of America, N.A. ("BANA") is a wholly owned subsidiary of BAC North America Holding Company ("BACNA"). BANA Holding Corporation merged into BACNA effective November 1, 2019. BANA Holding is a direct, wholly owned subsidiary of BAC North America Holding Company ("BACNAH"). BACNAH is a direct, wholly owned subsidiary of NB Holdings Corporation ("NB Holdings"). NB Holdings is a direct, wholly owned subsidiary of Bank of America Corporation. Bank of America Corporation (the "Corporation") is a publicly held company whose shares are traded on the New York Stock Exchange and has no parent corporation. Based on the U.S. Securities and Exchange Commission Rules regarding beneficial ownership, Berkshire Hathaway Inc., 3555 Farnam Street, Omaha, Nebraska 68131, beneficially owns greater than 10% of Bank of America Corporation's outstanding common stock.

Bank of America, N.A. ("BANA") is an indirect, wholly-owned subsidiary of Bank of America Corporation (the "Corporation"), which is a large and diversified, publicly-traded institution. The Corporation and its subsidiaries, is a global franchise, serving customers and clients around the world with operations in all 50 U.S. states, the District of Columbia, and more than 40 foreign countries. Accordingly, it is not reasonably possible to perform definitive due diligence, extending back indefinitely in time, across the full panoply of employees, officers and predecessor banks, with respect to all federal, state or local government contracts. The Corporation makes all disclosures required by its regulators, including all required disclosures in its Annual Report on Form 10-K and Quarterly Reports on Form 10-Q, which are updated in Reports on Form 8-K (collectively, the "Reports"), all of which are filed with the U.S. Securities and Exchange Commission. These Reports include disclosures of investigations and other matters as required by federal law and are publicly available. These Reports can also be accessed at the following website:
<http://investor.bankofamerica.com/phoenix.zhtml?c=71595&p=irol-irhome>. These Reports may contain further information responsive to this certification.

The bank is a large and diversified institution and is routinely involved in litigation in various state and federal courts. The bank makes all disclosures required by its regulators, including all required disclosures in its Annual Reports of Form 10K and Quarterly Reports on Form 10Q, which are updated in Reports on Form 8K, all of which are filed with the Securities and Exchange Commission. Those reports include disclosures of investigations and other matters as required by federal law and are publicly available. The bank cannot confirm or deny the existence of any other, non-public investigation conducted by any government investigator unless required to do so by law. These Reports can be provided upon request or can be accessed at the following website:

<http://investor.bankofamerica.com/phoenix.zhtml?c=71595&p=irol-irhome>

Subject to and as set forth in the introductory paragraph directly above, to the best knowledge of the individual signatory signing this questionnaire, without independent inquiry, BANA further clarifies its response to this statement, as follows:

B. FURTHER CERTIFICATIONS

The Corporation, for itself and its affiliates and subsidiaries including BANA, makes all disclosures required by its regulators in its Annual Reports on Form 10-K and Quarterly Reports on Form 10-Q, which are updated in Reports on Form 8-K, all of which are filed with the U.S. Securities and Exchange Commission (collectively, the "Reports"). These Reports include all disclosures as required by federal law including those pertaining to material business matters such as litigation, criminal convictions, and other legal actions, and may contain information which is further responsive to items addressed in the FIES FORM and this Addendum. These Reports are publicly available at the following website: <http://investor.bankofamerica.com/phoenix.zhtml?c=71595&p=irol-sec>. Further, BANA has been the subject of certain formal enforcement actions by the Office of the Comptroller of the Currency (the "OCC"), and information which can be publicly disclosed regarding these formal enforcement actions may be found on the Legal and Regulatory: Enforcement Actions page on the OCC's website at: <http://apps.occ.gov/EnforcementActions/>. In addition, BANA's registered brokerdealer and investment adviser subsidiaries make all required disclosures on their Form BDs as filed with FINRA (formerly the NASD) and their Form ADVs as filed with the SEC. These filings include disclosures of investigations and litigation as required by the SRO's and federal law, and are also publicly available. Outside of such Reports and the publicly available filings as noted above, BANA and the Corporation cannot otherwise disclose such information of material non-public nature except where required by applicable law or legal process.

Bank of America, National Association has been the subject of certain formal enforcement actions by the Office of the Comptroller of the Currency (the "OCC"). Information regarding these formal enforcement actions may be found on the Legal and Regulatory: Enforcement Actions page on the OCC's website at: <http://www.occ.treas.gov/EnforcementActions/>

In addition, Bank of America, National Association's registered broker-dealer and investment adviser subsidiaries make all required disclosures on their Form BDs as filed with FINRA (formerly the NASD) and their Form ADVs as filed with the SEC. These filings include disclosures of investigations and litigation as required by the SRO's and federal law, and are publicly available. Bank of America, National Association cannot confirm or deny the existence of any other non-public investigation conducted by any governmental agency unless required to do so by law.

Bank of America, National Association's indirect parent, Bank of America Corporation, also makes all required disclosures in its Form 10-K as filed with the Securities and Exchange Commission and its Annual Report as posted on its website at <http://investor.bankofamerica.com/phoenix.zhtml?c=71595&p=irol-reportsannual>.

On December 7, 2010, Bank of America entered into agreements with the Internal Revenue Service (IRS), the Office of the Comptroller of Currency (OCC), a Working Group of 28 State Attorneys General and the Federal Reserve Board, and was also subject to an administrative cease and desist order from the U.S. Securities and Exchange Commission (SEC). The global resolution with these federal and state entities provided for payment of restitution to the IRS and to municipal derivative counterparties allegedly harmed by Bank of America's alleged anticompetitive conduct (including bid rigging) in connection with the marketing and sale of municipal bond derivatives from 1998 to 2003, as well as requiring the Bank to take certain remedial measures.

Importantly, Bank of America was the first and only entity to self-report evidence of the bid-rigging to the Department of Justice ("DOJ"). The Bank's self-report enabled the various government agencies (including numerous state attorneys general described above) to identify and pursue industry-wide misconduct that may have affected municipalities and others on a nationwide scale, as well as pursue numerous potential violators. In January 2007, as a result of the Bank's self-reporting and cooperation, DOJ conditionally accepted the Bank into Part A of its Corporate Leniency Program—the highest level of leniency DOJ can provide. Pursuant to Part A of the Leniency Program, subject to the Bank's continuing cooperation, DOJ will not bring any criminal antitrust prosecution against the Bank in connection with the matters that the Bank reported to DOJ. DOJ has acknowledged that through the agreements outlined above, Bank of America met its obligation, under the Leniency Program, to pay full restitution to the IRS and municipalities. Bank of America paid restitution to the IRS on December 8, 2010.

The Bank also promptly agreed to cooperate with the State Attorneys General (including the New York Attorney General) in their industry-wide investigation. As noted above, the Bank reached a settlement agreement with numerous State Attorneys General (including the New York Attorney General). In recognition of the Bank's self-reporting and substantial cooperation, the Attorneys General added an exhibit (Exhibit 3) to the end of that settlement agreement. This exhibit describes, in detail, the Bank's extensive cooperation with the investigations in this matter. In addition, this exhibit describes the importance of the Bank's cooperation to the Attorneys General investigation. In recognition of the Bank's agreement to make restitution and its truthful cooperation, the exhibit affirmatively states that "no provision contained in the settlement agreement is intended to be construed as a mandate or recommendation to any independent suspension and/or debarment authority regarding a decision to disqualify, suspend or debar Bank of America . . . from engaging in the provision of any financial services including, but not limited to, the marketing sale or placement of municipal bond derivatives or any other state business"

On or about March 18, 2008, the Office of the Comptroller of the Currency entered a Consent Order against Douglas L. Campbell related to improper payments made to brokers on municipal derivative transactions in 2001 and 2002 while Mr. Campbell was a member of Bank of America's Municipal Derivatives Desk. Pursuant to the Order, Mr. Campbell was prohibited from a number of activities, including participating in any manner in the conduct of the affairs of various depository and other institutions identified in the Order. The Order also imposed a \$25,000 civil monetary penalty on Mr. Campbell. On or about September 9, 2010, Mr. Campbell pled guilty to (i) conspiracy to restrain trade in violation of 15 U.S.C. § 1, (ii) conspiracy to commit wire fraud in violation of 18 U.S.C. § 371 and § 1343, and (iii) wire fraud in violation of 18 U.S.C. § 1343 in the United States District Court for the Southern District of New York. This conduct related to improper bidding practices on Bank of America's Municipal Derivatives Desk. Mr. Campbell was sentenced on April 22, 2014. On or about December 7, 2010, the Securities and Exchange Commission entered an Administrative Order against Mr. Campbell, related to alleged improper bidding practices on Bank of America's Municipal Derivatives Desk. The Order barred Mr. Campbell from association with any broker, dealer, or investment adviser. Mr. Campbell was suspended by Bank of America on or about July 24, 2002 and was terminated by Bank of America on or about August 16, 2002.

On or about March 30, 2011, Brian Zwerner pled guilty to conspiracy to make false entries in bank records in violation of 18 U.S.C. § 371 and § 1005 in the United States District Court for the Southern District of New York. This conduct related to improper bidding practices on Bank of America's Municipal Derivatives Desk. Mr. Zwerner was sentenced on July 25, 2014.

On or about December 8, 2011, the Securities and Exchange Commission entered a Cease and Desist Order against Dean Z. Pinard related to alleged improper bidding practices on Bank of America's Municipal Derivatives Desk. Among other things, the Order barred Mr. Pinard from association with any broker, dealer, investment adviser, municipal securities dealer, or municipal advisor and required him to pay approximately \$41,500 in disgorgement and prejudgment interest. In April 2013, Mr. Pinard entered into a Consent Order with the Office of the Comptroller of the Currency pursuant to which the OCC found that, among other things, Mr. Pinard engaged in improper anticompetitive bidding practices while part of Bank of America's Municipal Derivatives Desk. Pursuant to the Order, Mr. Pinard was prohibited from, among other things, participating in any manner in the conduct of the affairs of various depository and other institutions identified in the Order. Mr. Pinard was suspended by Bank of America on or about November 15, 2006 and was terminated by Bank of America on or about April 26, 2007.

On or about February 10, 2014, Phillip D. Murphy pled guilty to (i) conspiracy to commit wire fraud in violation of 18 U.S.C. § 371 and § 1343, (ii) wire fraud in violation of 18 U.S.C. § 1343, and (iii) conspiracy to make false entries in bank records in violation of 18 U.S.C. § 371 and § 1005 in the United States District Court for the Western District of North Carolina. This conduct related to improper bidding practices on Bank of America's Municipal Derivatives Desk. Mr. Murphy is awaiting sentencing. Mr. Murphy was suspended by Bank of America on or about July 25, 2002, and resigned from Bank of America on or about September 4, 2002.

NB HOLDINGS CORPORATION

LIMITED POWER OF ATTORNEY

NB HOLDINGS CORPORATION, a Delaware corporation (the "Corporation"), does hereby make, constitute, and appoint **Julie Conenna** as Attorney-in-Fact for the Corporation acting for the Corporation and in the Corporation's name, place and stead, for the limited purpose of authorizing, preparing, revising or signing City of Chicago's Economic Disclosure Statement form (the "Form") related to Bank of America, N.A. ("BANA's") participation in the City of Chicago's qualified firms for Banking Services in connection with the **Request for Proposal for Payment of Interest on the Monies of the City of Chicago and the Chicago Board of Education.**

Any execution by the Attorney-in-Fact of the Form shall fully bind and commit the Corporation and the City of Chicago may rely upon the execution thereof by the Attorney-in-Fact as if executed by the Corporation and as the true and lawful act of the Corporation.

This Limited Power of Attorney shall automatically terminate as to the authority of the named Attorney-in-Fact upon such Attorney-in-Fact's resignation or termination from BANA or her realignment to a role outside of the Public Sector division of BANA however; such termination or realignment shall have no impact on the Form executed by the above named attorney-in-fact for the Corporation prior to such termination or realignment.

IN WITNESS WHEREOF, this Power of Attorney has been executed and delivered by the Corporation to each Attorney-in-Fact on this 18 day of November, 2019.

NB HOLDINGS CORPORATION

By: _____


Ellen A. Perrin

Associate General Counsel, Senior Vice President and
Assistant Secretary

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT
AND AFFIDAVIT**

SECTION I -- GENERAL INFORMATION

A. Legal name of the Disclosing Party submitting this EDS. Include d/b/a/ if applicable:

Bank of America Corporation

Check ONE of the following three boxes:

Indicate whether the Disclosing Party submitting this EDS is:

1. ☐ the Applicant
OR

2. ☒ a legal entity currently holding, or anticipated to hold within six months after City action on the contract, transaction or other undertaking to which this EDS pertains (referred to below as the "Matter"), a direct or indirect interest in excess of 7.5% in the Applicant. State the Applicant's legal name: _____

OR

3. ☐ a legal entity with a direct or indirect right of control of the Applicant (see Section II(B)(1))
State the legal name of the entity in which the Disclosing Party holds a right of control: _____

B. Business address of the Disclosing Party: 100 North Tryon Street

Charlotte NC 28255

C. Telephone: (312) 904-8357 Fax: (312) 453-4568 Email: julie.conenna@bofa.com

D. Name of contact person: Julie Conenna

E. Federal Employer Identification No. (if you have one): _____

F. Brief description of the Matter to which this EDS pertains. (Include project number and location of property, if applicable):

Request for Proposal for Payment of Interest on the Monies of the City of Chicago and the Chicago Board of Education

G. Which City agency or department is requesting this EDS? Department of Finance

If the Matter is a contract being handled by the City's Department of Procurement Services, please complete the following:

Specification # _____ and Contract # _____

SECTION II -- DISCLOSURE OF OWNERSHIP INTERESTS

A. NATURE OF THE DISCLOSING PARTY

1. Indicate the nature of the Disclosing Party:

- | | |
|--|--|
| <input type="checkbox"/> Person | <input type="checkbox"/> Limited liability company |
| <input checked="" type="checkbox"/> Publicly registered business corporation | <input type="checkbox"/> Limited liability partnership |
| <input type="checkbox"/> Privately held business corporation | <input type="checkbox"/> Joint venture |
| <input type="checkbox"/> Sole proprietorship | <input type="checkbox"/> Not-for-profit corporation |
| <input type="checkbox"/> General partnership | (Is the not-for-profit corporation also a 501(c)(3))? |
| <input type="checkbox"/> Limited partnership | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| <input type="checkbox"/> Trust | <input type="checkbox"/> Other (please specify) |
-

2. For legal entities, the state (or foreign country) of incorporation or organization, if applicable:

Delaware

3. For legal entities not organized in the State of Illinois: Has the organization registered to do business in the State of Illinois as a foreign entity?

☐ Yes ☒ No ☐ Organized in Illinois

B. IF THE DISCLOSING PARTY IS A LEGAL ENTITY:

1. List below the full names and titles, if applicable, of: (i) all executive officers and all directors of the entity; (ii) **for not-for-profit corporations**, all members, if any, which are legal entities (if there are no such members, write "no members which are legal entities"); (iii) **for trusts, estates or other similar entities**, the trustee, executor, administrator, or similarly situated party; (iv) **for general or limited partnerships, limited liability companies, limited liability partnerships or joint ventures**, each general partner, managing member, manager or any other person or legal entity that directly or indirectly controls the day-to-day management of the Applicant.

NOTE: Each legal entity listed below must submit an EDS on its own behalf.

Name	Title
------	-------

See Exhibit "E"

2. Please provide the following information concerning each person or legal entity having a direct or indirect, current or prospective (i.e. within 6 months after City action) beneficial interest (including ownership) in excess of 7.5% of the Applicant. Examples of such an interest include shares in a corporation, partnership interest in a partnership or joint venture, interest of a member or manager in a

limited liability company, or interest of a beneficiary of a trust, estate or other similar entity. If none, state "None."

NOTE: Each legal entity listed below may be required to submit an EDS on its own behalf.

Name	Business Address	Percentage Interest in the Applicant
------	------------------	--------------------------------------

Please refer to Form 10-K

SECTION III -- INCOME OR COMPENSATION TO, OR OWNERSHIP BY, CITY ELECTED OFFICIALS

Has the Disclosing Party provided any income or compensation to any City elected official during the 12-month period preceding the date of this EDS? ☐ Yes ☒ No

Does the Disclosing Party reasonably expect to provide any income or compensation to any City elected official during the 12-month period following the date of this EDS? ☐ Yes ☒ No

If "yes" to either of the above, please identify below the name(s) of such City elected official(s) and describe such income or compensation:

Does any City elected official or, to the best of the Disclosing Party's knowledge after reasonable inquiry, any City elected official's spouse or domestic partner, have a financial interest (as defined in Chapter 2-156 of the Municipal Code of Chicago ("MCC")) in the Disclosing Party?

☐ Yes

☒ No

If "yes," please identify below the name(s) of such City elected official(s) and/or spouse(s)/domestic partner(s) and describe the financial interest(s).

SECTION IV -- DISCLOSURE OF SUBCONTRACTORS AND OTHER RETAINED PARTIES

The Disclosing Party must disclose the name and business address of each subcontractor, attorney, lobbyist (as defined in MCC Chapter 2-156), accountant, consultant and any other person or entity whom the Disclosing Party has retained or expects to retain in connection with the Matter, as well as the nature of the relationship, and the total amount of the fees paid or estimated to be paid. The Disclosing Party is not required to disclose employees who are paid solely through the Disclosing Party's regular payroll. If the Disclosing Party is uncertain whether a disclosure is required under this Section, the Disclosing Party must either ask the City whether disclosure is required or make the disclosure.

Name (indicate whether retained or anticipated to be retained)	Business Address	Relationship to Disclosing Party (subcontractor, attorney, lobbyist, etc.)	Fees (<u>indicate whether paid or estimated.</u>) NOTE: "hourly rate" or "t.b.d." is not an acceptable response.
--	------------------	--	---

(Add sheets if necessary)

[x] Check here if the Disclosing Party has not retained, nor expects to retain, any such persons or entities.

SECTION V -- CERTIFICATIONS

A. COURT-ORDERED CHILD SUPPORT COMPLIANCE

Under MCC Section 2-92-415, substantial owners of business entities that contract with the City must remain in compliance with their child support obligations throughout the contract's term.

Has any person who directly or indirectly owns 10% or more of the Disclosing Party been declared in arrearage on any child support obligations by any Illinois court of competent jurisdiction?

[] Yes [x] No [] No person directly or indirectly owns 10% or more of the Disclosing Party.

If "Yes," has the person entered into a court-approved agreement for payment of all support owed and is the person in compliance with that agreement?

[] Yes [] No

B. FURTHER CERTIFICATIONS

1. [This paragraph 1 applies only if the Matter is a contract being handled by the City's Department of Procurement Services.] In the 5-year period preceding the date of this EDS, neither the Disclosing Party nor any Affiliated Entity [see definition in (5) below] has engaged, in connection with the performance of any public contract, the services of an integrity monitor, independent private sector inspector general, or integrity compliance consultant (i.e., an individual or entity with legal, auditing, investigative, or other similar skills, designated by a public agency to help the agency monitor the activity of specified agency vendors as well as help the vendors reform their business practices so they can be considered for agency contracts in the future, or continue with a contract in progress).

2. The Disclosing Party and its Affiliated Entities are not delinquent in the payment of any fine, fee, tax or other source of indebtedness owed to the City of Chicago, including, but not limited to, water and sewer charges, license fees, parking tickets, property taxes and sales taxes, nor is the Disclosing Party delinquent in the payment of any tax administered by the Illinois Department of Revenue.

3. The Disclosing Party and, if the Disclosing Party is a legal entity, all of those persons or entities identified in Section II(B)(1) of this EDS:

a. are not presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from any transactions by any federal, state or local unit of government;

b. have not, during the 5 years before the date of this EDS, been convicted of a criminal offense, adjudged guilty, or had a civil judgment rendered against them in connection with: obtaining, attempting to obtain, or performing a public (federal, state or local) transaction or contract under a public transaction; a violation of federal or state antitrust statutes; fraud; embezzlement; theft; forgery; bribery; falsification or destruction of records; making false statements; or receiving stolen property;

c. are not presently indicted for, or criminally or civilly charged by, a governmental entity (federal, state or local) with committing any of the offenses set forth in subparagraph (b) above;

d. have not, during the 5 years before the date of this EDS, had one or more public transactions (federal, state or local) terminated for cause or default; and

e. have not, during the 5 years before the date of this EDS, been convicted, adjudged guilty, or found liable in a civil proceeding, or in any criminal or civil action, including actions concerning environmental violations, instituted by the City or by the federal government, any state, or any other unit of local government.

4. The Disclosing Party understands and shall comply with the applicable requirements of MCC Chapters 2-56 (Inspector General) and 2-156 (Governmental Ethics).

5. Certifications (5), (6) and (7) concern:

- the Disclosing Party;
- any "Contractor" (meaning any contractor or subcontractor used by the Disclosing Party in connection with the Matter, including but not limited to all persons or legal entities disclosed under Section IV, "Disclosure of Subcontractors and Other Retained Parties");
- any "Affiliated Entity" (meaning a person or entity that, directly or indirectly: controls the Disclosing Party, is controlled by the Disclosing Party, or is, with the Disclosing Party, under common control of another person or entity). Indicia of control include, without limitation: interlocking management or ownership; identity of interests among family members, shared facilities and equipment; common use of employees; or organization of a business entity following the ineligibility of a business entity to do business with federal or state or local government, including the City, using substantially the same management, ownership, or principals as the ineligible entity. With respect to Contractors, the term Affiliated Entity means a person or entity that directly or indirectly controls the Contractor, is controlled by it, or, with the Contractor, is under common control of another person or entity;
- any responsible official of the Disclosing Party, any Contractor or any Affiliated Entity or any other official, agent or employee of the Disclosing Party, any Contractor or any Affiliated Entity, acting pursuant to the direction or authorization of a responsible official of the Disclosing Party, any Contractor or any Affiliated Entity (collectively "Agents").

Neither the Disclosing Party, nor any Contractor, nor any Affiliated Entity of either the Disclosing Party or any Contractor, nor any Agents have, during the 5 years before the date of this EDS, or, with respect to a Contractor, an Affiliated Entity, or an Affiliated Entity of a Contractor during the 5 years before the date of such Contractor's or Affiliated Entity's contract or engagement in connection with the Matter:

- a. bribed or attempted to bribe, or been convicted or adjudged guilty of bribery or attempting to bribe, a public officer or employee of the City, the State of Illinois, or any agency of the federal government or of any state or local government in the United States of America, in that officer's or employee's official capacity;
 - b. agreed or colluded with other bidders or prospective bidders, or been a party to any such agreement, or been convicted or adjudged guilty of agreement or collusion among bidders or prospective bidders, in restraint of freedom of competition by agreement to bid a fixed price or otherwise; or
 - c. made an admission of such conduct described in subparagraph (a) or (b) above that is a matter of record, but have not been prosecuted for such conduct; or
 - d. violated the provisions referenced in MCC Subsection 2-92-320(a)(4)(Contracts Requiring a Base Wage); (a)(5)(Debarment Regulations); or (a)(6)(Minimum Wage Ordinance).
6. Neither the Disclosing Party, nor any Affiliated Entity or Contractor, or any of their employees, officials, agents or partners, is barred from contracting with any unit of state or local government as a result of engaging in or being convicted of (1) bid-rigging in violation of 720 ILCS 5/33E-3; (2) bid-rotating in violation of 720 ILCS 5/33E-4; or (3) any similar offense of any state or of the United States of America that contains the same elements as the offense of bid-rigging or bid-rotating.
7. Neither the Disclosing Party nor any Affiliated Entity is listed on a Sanctions List maintained by the United States Department of Commerce, State, or Treasury, or any successor federal agency.
8. [FOR APPLICANT ONLY] (i) Neither the Applicant nor any "controlling person" [see MCC Chapter 1-23, Article I for applicability and defined terms] of the Applicant is currently indicted or charged with, or has admitted guilt of, or has ever been convicted of, or placed under supervision for, any criminal offense involving actual, attempted, or conspiracy to commit bribery, theft, fraud, forgery, perjury, dishonesty or deceit against an officer or employee of the City or any "sister agency"; and (ii) the Applicant understands and acknowledges that compliance with Article I is a continuing requirement for doing business with the City. NOTE: If MCC Chapter 1-23, Article I applies to the Applicant, that Article's permanent compliance timeframe supersedes 5-year compliance timeframes in this Section V.
9. [FOR APPLICANT ONLY] The Applicant and its Affiliated Entities will not use, nor permit their subcontractors to use, any facility listed as having an active exclusion by the U.S. EPA on the federal System for Award Management ("SAM").
10. [FOR APPLICANT ONLY] The Applicant will obtain from any contractors/subcontractors hired or to be hired in connection with the Matter certifications equal in form and substance to those in Certifications (2) and (9) above and will not, without the prior written consent of the City, use any such

contractor/subcontractor that does not provide such certifications or that the Applicant has reason to believe has not provided or cannot provide truthful certifications.

11. If the Disclosing Party is unable to certify to any of the above statements in this Part B (Further Certifications), the Disclosing Party must explain below:

See attached Addendum "A" for additional information related to certifications.

If the letters "NA," the word "None," or no response appears on the lines above, it will be conclusively presumed that the Disclosing Party certified to the above statements.

12. To the best of the Disclosing Party's knowledge after reasonable inquiry, the following is a complete list of all current employees of the Disclosing Party who were, at any time during the 12-month period preceding the date of this EDS, an employee, or elected or appointed official, of the City of Chicago (if none, indicate with "N/A" or "none").

None

13. To the best of the Disclosing Party's knowledge after reasonable inquiry, the following is a complete list of all gifts that the Disclosing Party has given or caused to be given, at any time during the 12-month period preceding the execution date of this EDS, to an employee, or elected or appointed official, of the City of Chicago. For purposes of this statement, a "gift" does not include: (i) anything made generally available to City employees or to the general public, or (ii) food or drink provided in the course of official City business and having a retail value of less than \$25 per recipient, or (iii) a political contribution otherwise duly reported as required by law (if none, indicate with "N/A" or "none"). As to any gift listed below, please also list the name of the City recipient.

None

C. CERTIFICATION OF STATUS AS FINANCIAL INSTITUTION

1. The Disclosing Party certifies that the Disclosing Party (check one)

☒ is ☐ is not

a "financial institution" as defined in MCC Section 2-32-455(b).

2. If the Disclosing Party IS a financial institution, then the Disclosing Party pledges:

"We are not and will not become a predatory lender as defined in MCC Chapter 2-32. We further pledge that none of our affiliates is, and none of them will become, a predatory lender as defined in MCC Chapter 2-32. We understand that becoming a predatory lender or becoming an affiliate of a predatory lender may result in the loss of the privilege of doing business with the City."

If the Disclosing Party is unable to make this pledge because it or any of its affiliates (as defined in MCC Section 2-32-455(b)) is a predatory lender within the meaning of MCC Chapter 2-32, explain here (attach additional pages if necessary):

Makes the above pledge.

If the letters "NA," the word "None," or no response appears on the lines above, it will be conclusively presumed that the Disclosing Party certified to the above statements.

D. CERTIFICATION REGARDING FINANCIAL INTEREST IN CITY BUSINESS

Any words or terms defined in MCC Chapter 2-156 have the same meanings if used in this Part D.

1. In accordance with MCC Section 2-156-110: To the best of the Disclosing Party's knowledge after reasonable inquiry, does any official or employee of the City have a financial interest in his or her own name or in the name of any other person or entity in the Matter?

☐ Yes

☒ No

NOTE: If you checked "Yes" to Item D(1), proceed to Items D(2) and D(3). If you checked "No" to Item D(1), skip Items D(2) and D(3) and proceed to Part E.

2. Unless sold pursuant to a process of competitive bidding, or otherwise permitted, no City elected official or employee shall have a financial interest in his or her own name or in the name of any other person or entity in the purchase of any property that (i) belongs to the City, or (ii) is sold for taxes or assessments, or (iii) is sold by virtue of legal process at the suit of the City (collectively, "City Property Sale"). Compensation for property taken pursuant to the City's eminent domain power does not constitute a financial interest within the meaning of this Part D.

Does the Matter involve a City Property Sale?

☐ Yes

☒ No

3. If you checked "Yes" to Item D(1), provide the names and business addresses of the City officials or employees having such financial interest and identify the nature of the financial interest:

Name

Business Address

Nature of Financial Interest

4. The Disclosing Party further certifies that no prohibited financial interest in the Matter will be acquired by any City official or employee.

E. CERTIFICATION REGARDING SLAVERY ERA BUSINESS

Please check either (1) or (2) below. If the Disclosing Party checks (2), the Disclosing Party must disclose below or in an attachment to this EDS all information required by (2). Failure to comply with these disclosure requirements may make any contract entered into with the City in connection with the Matter voidable by the City.

x 1. The Disclosing Party verifies that the Disclosing Party has searched any and all records of the Disclosing Party and any and all predecessor entities regarding records of investments or profits from slavery or slaveholder insurance policies during the slavery era (including insurance policies issued to slaveholders that provided coverage for damage to or injury or death of their slaves), and the Disclosing Party has found no such records.

____ 2. The Disclosing Party verifies that, as a result of conducting the search in step (1) above, the Disclosing Party has found records of investments or profits from slavery or slaveholder insurance policies. The Disclosing Party verifies that the following constitutes full disclosure of all such records, including the names of any and all slaves or slaveholders described in those records:

SECTION VI -- CERTIFICATIONS FOR FEDERALLY FUNDED MATTERS

NOTE: If the Matter is federally funded, complete this Section VI. If the Matter is not federally funded, proceed to Section VII. For purposes of this Section VI, tax credits allocated by the City and proceeds of debt obligations of the City are not federal funding.

A. CERTIFICATION REGARDING LOBBYING

1. List below the names of all persons or entities registered under the federal Lobbying Disclosure Act of 1995, as amended, who have made lobbying contacts on behalf of the Disclosing Party with respect to the Matter: (Add sheets if necessary):

N/A

(If no explanation appears or begins on the lines above, or if the letters "NA" or if the word "None" appear, it will be conclusively presumed that the Disclosing Party means that NO persons or entities registered under the Lobbying Disclosure Act of 1995, as amended, have made lobbying contacts on behalf of the Disclosing Party with respect to the Matter.)

2. The Disclosing Party has not spent and will not expend any federally appropriated funds to pay any person or entity listed in paragraph A(1) above for his or her lobbying activities or to pay any person or entity to influence or attempt to influence an officer or employee of any agency, as defined by applicable federal law, a member of Congress, an officer or employee of Congress, or an employee

of a member of Congress, in connection with the award of any federally funded contract, making any federally funded grant or loan, entering into any cooperative agreement, or to extend, continue, renew, amend, or modify any federally funded contract, grant, loan, or cooperative agreement.

3. The Disclosing Party will submit an updated certification at the end of each calendar quarter in which there occurs any event that materially affects the accuracy of the statements and information set forth in paragraphs A(1) and A(2) above.

4. The Disclosing Party certifies that either: (i) it is not an organization described in section 501(c)(4) of the Internal Revenue Code of 1986; or (ii) it is an organization described in section 501(c)(4) of the Internal Revenue Code of 1986 but has not engaged and will not engage in "Lobbying Activities," as that term is defined in the Lobbying Disclosure Act of 1995, as amended.

5. If the Disclosing Party is the Applicant, the Disclosing Party must obtain certifications equal in form and substance to paragraphs A(1) through A(4) above from all subcontractors before it awards any subcontract and the Disclosing Party must maintain all such subcontractors' certifications for the duration of the Matter and must make such certifications promptly available to the City upon request.

B. CERTIFICATION REGARDING EQUAL EMPLOYMENT OPPORTUNITY

If the Matter is federally funded, federal regulations require the Applicant and all proposed subcontractors to submit the following information with their bids or in writing at the outset of negotiations.

Is the Disclosing Party the Applicant?

☐ Yes

☐ No

If "Yes," answer the three questions below:

1. Have you developed and do you have on file affirmative action programs pursuant to applicable federal regulations? (See 41 CFR Part 60-2.)

☐ Yes

☐ No

2. Have you filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance Programs, or the Equal Employment Opportunity Commission all reports due under the applicable filing requirements?

☐ Yes

☐ No

☐ Reports not required

3. Have you participated in any previous contracts or subcontracts subject to the equal opportunity clause?

☐ Yes

☐ No

If you checked "No" to question (1) or (2) above, please provide an explanation:

SECTION VII -- FURTHER ACKNOWLEDGMENTS AND CERTIFICATION

The Disclosing Party understands and agrees that:

- A. The certifications, disclosures, and acknowledgments contained in this EDS will become part of any contract or other agreement between the Applicant and the City in connection with the Matter, whether procurement, City assistance, or other City action, and are material inducements to the City's execution of any contract or taking other action with respect to the Matter. The Disclosing Party understands that it must comply with all statutes, ordinances, and regulations on which this EDS is based.
- B. The City's Governmental Ethics Ordinance, MCC Chapter 2-156, imposes certain duties and obligations on persons or entities seeking City contracts, work, business, or transactions. The full text of this ordinance and a training program is available on line at www.cityofchicago.org/Ethics, and may also be obtained from the City's Board of Ethics, 740 N. Sedgwick St., Suite 500, Chicago, IL 60610, (312) 744-9660. The Disclosing Party must comply fully with this ordinance.
- C. If the City determines that any information provided in this EDS is false, incomplete or inaccurate, any contract or other agreement in connection with which it is submitted may be rescinded or be void or voidable, and the City may pursue any remedies under the contract or agreement (if not rescinded or void), at law, or in equity, including terminating the Disclosing Party's participation in the Matter and/or declining to allow the Disclosing Party to participate in other City transactions. Remedies at law for a false statement of material fact may include incarceration and an award to the City of treble damages.
- D. It is the City's policy to make this document available to the public on its Internet site and/or upon request. Some or all of the information provided in, and appended to, this EDS may be made publicly available on the Internet, in response to a Freedom of Information Act request, or otherwise. By completing and signing this EDS, the Disclosing Party waives and releases any possible rights or claims which it may have against the City in connection with the public release of information contained in this EDS and also authorizes the City to verify the accuracy of any information submitted in this EDS.
- E. The information provided in this EDS must be kept current. In the event of changes, the Disclosing Party must supplement this EDS up to the time the City takes action on the Matter. If the Matter is a contract being handled by the City's Department of Procurement Services, the Disclosing Party must update this EDS as the contract requires. **NOTE:** With respect to Matters subject to MCC Chapter 1-23, Article I (imposing **PERMANENT INELIGIBILITY** for certain specified offenses), the information provided herein regarding eligibility must be kept current for a longer period, as required by MCC Chapter 1-23 and Section 2-154-020.

CERTIFICATION

Under penalty of perjury, the person signing below: (1) warrants that he/she is authorized to execute this EDS, and all applicable Appendices, on behalf of the Disclosing Party, and (2) warrants that all certifications and statements contained in this EDS, and all applicable Appendices, are true, accurate and complete as of the date furnished to the City.

Bank of America Corporation

(Print or type exact legal name of Disclosing Party)

By: Julie Conenna

(Sign here)

Julie Conenna

(Print or type name of person signing)

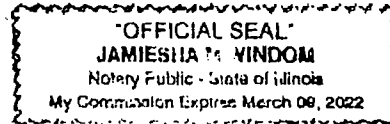
Authorized Signatory

(Print or type title of person signing)

Signed and sworn to before me on (date) November 18th, 2019

at Cook County, Illinois (state).

Jamiesha M. Windom
Notary Public



Commission expires: 03/09/2022

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
APPENDIX A**

**FAMILIAL RELATIONSHIPS WITH ELECTED CITY OFFICIALS
AND DEPARTMENT HEADS**

This Appendix is to be completed only by (a) the Applicant, and (b) any legal entity which has a direct ownership interest in the Applicant exceeding 7.5%. It is not to be completed by any legal entity which has only an indirect ownership interest in the Applicant.

Under MCC Section 2-154-015, the Disclosing Party must disclose whether such Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof currently has a "familial relationship" with any elected city official or department head. A "familial relationship" exists if, as of the date this EDS is signed, the Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof is related to the mayor, any alderman, the city clerk, the city treasurer or any city department head as spouse or domestic partner or as any of the following, whether by blood or adoption: parent, child, brother or sister, aunt or uncle, niece or nephew, grandparent, grandchild, father-in-law, mother-in-law, son-in-law, daughter-in-law, stepfather or stepmother, stepson or stepdaughter, stepbrother or stepsister or half-brother or half-sister.

"Applicable Party" means (1) all executive officers of the Disclosing Party listed in Section II.B.1.a., if the Disclosing Party is a corporation; all partners of the Disclosing Party, if the Disclosing Party is a general partnership; all general partners and limited partners of the Disclosing Party, if the Disclosing Party is a limited partnership; all managers, managing members and members of the Disclosing Party, if the Disclosing Party is a limited liability company; (2) all principal officers of the Disclosing Party; and (3) any person having more than a 7.5% ownership interest in the Disclosing Party. "Principal officers" means the president, chief operating officer, executive director, chief financial officer, treasurer or secretary of a legal entity or any person exercising similar authority.

Does the Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof currently have a "familial relationship" with an elected city official or department head?

☐ Yes

☒ No

If yes, please identify below (1) the name and title of such person, (2) the name of the legal entity to which such person is connected; (3) the name and title of the elected city official or department head to whom such person has a familial relationship, and (4) the precise nature of such familial relationship.

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
APPENDIX B**

BUILDING CODE SCOFFLAW/PROBLEM LANDLORD CERTIFICATION

This Appendix is to be completed only by (a) the Applicant, and (b) any legal entity which has a direct ownership interest in the Applicant exceeding 7.5% (an "Owner"). It is not to be completed by any legal entity which has only an indirect ownership interest in the Applicant.

1. Pursuant to MCC Section 2-154-010, is the Applicant or any Owner identified as a building code scofflaw or problem landlord pursuant to MCC Section 2-92-416?

☐ Yes

☒ No

2. If the Applicant is a legal entity publicly traded on any exchange, is any officer or director of the Applicant identified as a building code scofflaw or problem landlord pursuant to MCC Section 2-92-416?

☐ Yes

☒ No

☐ The Applicant is not publicly traded on any exchange.

3. If yes to (1) or (2) above, please identify below the name of each person or legal entity identified as a building code scofflaw or problem landlord and the address of each building or buildings to which the pertinent code violations apply.

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
APPENDIX C**

PROHIBITION ON WAGE & SALARY HISTORY SCREENING - CERTIFICATION

This Appendix is to be completed only by an Applicant that is completing this EDS as a “contractor” as defined in MCC Section 2-92-385. That section, which should be consulted (www.amlegal.com), generally covers a party to any agreement pursuant to which they: (i) receive City of Chicago funds in consideration for services, work or goods provided (including for legal or other professional services), or (ii) pay the City money for a license, grant or concession allowing them to conduct a business on City premises.

On behalf of an Applicant that is a contractor pursuant to MCC Section 2-92-385, I hereby certify that the Applicant is in compliance with MCC Section 2-92-385(b)(1) and (2), which prohibit: (i) screening job applicants based on their wage or salary history, or (ii) seeking job applicants’ wage or salary history from current or former employers. I also certify that the Applicant has adopted a policy that includes those prohibitions.

☐ Yes

☐ No

☒ N/A – I am not an Applicant that is a “contractor” as defined in MCC Section 2-92-385.

This certification shall serve as the affidavit required by MCC Section 2-92-385(c)(1).

If you checked “no” to the above, please explain.



EXHIBIT E

BOARD OF DIRECTORS and OFFICERS Bank of America Corporation and Bank of America National Association

Brian Moynihan

Chairman of the Board and Chief
Executive Officer, Bank of America
Corporation

Sharon L. Allen

Former Chairman, Deloitte

Susan S. Bies

Former Member, Federal Reserve Board

Jack O. Bovender, Jr.

Lead Independent Director, Bank of
America Corporation; Former Chairman
and Chief Executive Officer, HCA

Frank P. Bramble, Sr

Former Executive Vice Chairman,
MBNA Corporation

Pierre J. P. de Weck

Former Chairman and Global Head of
Private Wealth Management,
Deutsche Bank

Arnold W. Donald

President and Chief Executive Officer,
Carnival

Linda P. Hudson

Executive Officer, The Cardea Group,
LLC; Former President and Chief
Executive Officer, BAE

BANK OF AMERICA



Monica C. Lozano

Chief Executive Officer, College Futures
Foundation; Former Chairman, US
Hispanic Media Inc.

Thomas J. May

Chairman, Viacom Inc.; Former
Chairman, President and Chief Executive
Officer of Eversource Energy

Lionel L. Nowell, III

Former Senior Vice President
and Treasurer, PepsiCo, Inc

Denise L. Ramos

Former Chief Executive Officer and
President, ITT Inc.

Clayton S. Rose

President Bowdoin College

Michael D. White

Former Chairman, President, and Chief
Executive Officer of DIRECTV

Thomas D. Woods

Former Vice Chairman and Senior
Executive Vice President of CIBC

R. David Yost

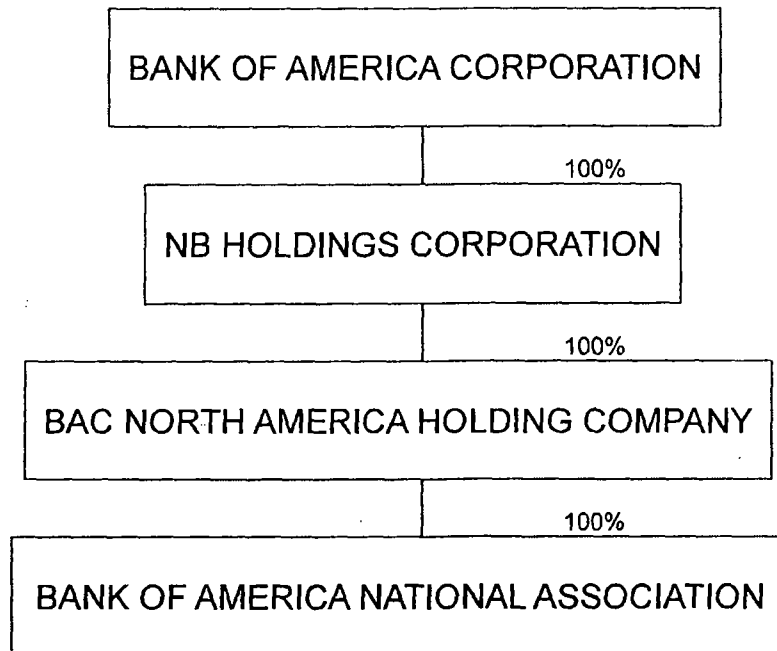
Former Chief Executive Officer,
AmerisourceBergen

Maria T. Zuber

Vice President for Research and E. A.
Griswold Professor of Geophysics, MIT

EXHIBIT "E"

Bank of America Corporation Organization Chart



CITY OF CHICAGO and CHICAGO BOARD OF EDUCATION
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
ADDENDUM A SECTION V –B 1, 2, 3 AND 4

INTRODUCTION

Bank of America, N.A. ("BANA") is a wholly owned subsidiary of BAC North America Holding Company ("BACNA"). BANA Holding Corporation merged into BACNA effective November 1, 2000. BANA Holding is a direct, wholly owned subsidiary of BAC North America Holding Company ("BACNAH"). BACNAH is a direct, wholly owned subsidiary of NB Holdings Corporation ("NB Holdings"). NB Holdings is a direct, wholly owned subsidiary of Bank of America Corporation. Bank of America Corporation (the "Corporation") is a publicly held company whose shares are traded on the New York Stock Exchange and has no parent corporation. Based on the U.S. Securities and Exchange Commission Rules regarding beneficial ownership, Berkshire Hathaway Inc., 3555 Farnam Street, Omaha, Nebraska 68131, beneficially owns greater than 10% of Bank of America Corporation's outstanding common stock.

Bank of America, N.A. ("BANA") is an indirect, wholly-owned subsidiary of Bank of America Corporation (the "Corporation"), which is a large and diversified, publicly-traded institution. The Corporation and its subsidiaries, is a global franchise, serving customers and clients around the world with operations in all 50 U.S. states, the District of Columbia, and more than 40 foreign countries. Accordingly, it is not reasonably possible to perform definitive due diligence, extending back indefinitely in time, across the full panoply of employees, officers and predecessor banks, with respect to all federal, state or local government contracts. The Corporation makes all disclosures required by its regulators, including all required disclosures in its Annual Report on Form 10-K and Quarterly Reports on Form 10-Q, which are updated in Reports on Form 8-K (collectively, the "Reports"), all of which are filed with the U.S. Securities and Exchange Commission. These Reports include disclosures of investigations and other matters as required by federal law and are publicly available. These Reports can also be accessed at the following website:
<http://investor.bankofamerica.com/phoenix.zhtml?c=71595&p=irol-irhome>. These Reports may contain further information responsive to this certification.

The bank is a large and diversified institution and is routinely involved in litigation in various state and federal courts. The bank makes all disclosures required by its regulators, including all required disclosures in its Annual Reports of Form 10K and Quarterly Reports on Form 10Q, which are updated in Reports on Form 8K, all of which are filed with the Securities and Exchange Commission. Those reports include disclosures of investigations and other matters as required by federal law and are publicly available. The bank cannot confirm or deny the existence of any other, non-public investigation conducted by any government investigator unless required to do so by law. These Reports can be provided upon request or can be accessed at the following website:

<http://investor.bankofamerica.com/phoenix.zhtml?c=71595&p=irol-irhome>

Subject to and as set forth in the introductory paragraph directly above, to the best knowledge of the individual signatory signing this questionnaire, without independent inquiry, BANA further clarifies its response to this statement, as follows:

*NOT
responsive
due to
in CSJ*

B. FURTHER CERTIFICATIONS

The Corporation, for itself and its affiliates and subsidiaries including BANA, makes all disclosures required by its regulators in its Annual Reports on Form 10-K and Quarterly Reports on Form 10-Q, which are updated in Reports on Form 8-K, all of which are filed with the U.S. Securities and Exchange Commission (collectively, the "Reports"). These Reports include all disclosures as required by federal law including those pertaining to material business matters such as litigation, criminal convictions, and other legal actions, and may contain information which is further responsive to items addressed in the FIES FORM and this Addendum. These Reports are publicly available at the following website: <http://investor.bankofamerica.com/phoenix.zhtml?c=71595&p=irol-sec>. Further, BANA has been the subject of certain formal enforcement actions by the Office of the Comptroller of the Currency (the "OCC"), and information which can be publicly disclosed regarding these formal enforcement actions may be found on the Legal and Regulatory: Enforcement Actions page on the OCC's website at: <http://apps.occ.gov/EnforcementActions/>. In addition, BANA's registered brokerdealer and investment adviser subsidiaries make all required disclosures on their Form BDs as filed with FINRA (formerly the NASD) and their Form ADVs as filed with the SEC. These filings include disclosures of investigations and litigation as required by the SRO's and federal law, and are also publicly available. Outside of such Reports and the publicly available filings as noted above, BANA and the Corporation cannot otherwise disclose such information of material non-public nature except where required by applicable law or legal process.

Bank of America, National Association has been the subject of certain formal enforcement actions by the Office of the Comptroller of the Currency (the "OCC"). Information regarding these formal enforcement actions may be found on the Legal and Regulatory: Enforcement Actions page on the OCC's website at: <http://www.occ.treas.gov/EnforcementActions/>

In addition, Bank of America, National Association's registered broker-dealer and investment adviser subsidiaries make all required disclosures on their Form BDs as filed with FINRA (formerly the NASD) and their Form ADVs as filed with the SEC. These filings include disclosures of investigations and litigation as required by the SRO's and federal law, and are publicly available. Bank of America, National Association cannot confirm or deny the existence of any other non-public investigation conducted by any governmental agency unless required to do so by law.

Bank of America, National Association's indirect parent, Bank of America Corporation, also makes all required disclosures in its Form 10-K as filed with the Securities and Exchange Commission and its Annual Report as posted on its website at <http://investor.bankofamerica.com/phoenix.zhtml?c=71595&p=irol-reportsannual>.

On December 7, 2010, Bank of America entered into agreements with the Internal Revenue Service (IRS), the Office of the Comptroller of Currency (OCC), a Working Group of 28 State Attorneys General and the Federal Reserve Board, and was also subject to an administrative cease and desist order from the U.S. Securities and Exchange Commission (SEC). The global resolution with these federal and state entities provided for payment of restitution to the IRS and to municipal derivative counterparties allegedly harmed by Bank of America's alleged anticompetitive conduct (including bid rigging) in connection with the marketing and sale of municipal bond derivatives from 1998 to 2003, as well as requiring the Bank to take certain remedial measures.

Importantly, Bank of America was the first and only entity to self-report evidence of the bid-rigging to the Department of Justice (“DOJ”). The Bank’s self-report enabled the various government agencies (including numerous state attorneys general described above) to identify and pursue industry-wide misconduct that may have affected municipalities and others on a nationwide scale, as well as pursue numerous potential violators. In January 2007, as a result of the Bank’s self-reporting and cooperation, DOJ conditionally accepted the Bank into Part A of its Corporate Leniency Program—the highest level of leniency DOJ can provide. Pursuant to Part A of the Leniency Program, subject to the Bank’s continuing cooperation, DOJ will not bring any criminal antitrust prosecution against the Bank in connection with the matters that the Bank reported to DOJ. DOJ has acknowledged that through the agreements outlined above, Bank of America met its obligation, under the Leniency Program, to pay full restitution to the IRS and municipalities. Bank of America paid restitution to the IRS on December 8, 2010.

The Bank also promptly agreed to cooperate with the State Attorneys General (including the New York Attorney General) in their industry-wide investigation. As noted above, the Bank reached a settlement agreement with numerous State Attorneys General (including the New York Attorney General). In recognition of the Bank’s self-reporting and substantial cooperation, the Attorneys General added an exhibit (Exhibit 3) to the end of that settlement agreement. This exhibit describes, in detail, the Bank’s extensive cooperation with the investigations in this matter. In addition, this exhibit describes the importance of the Bank’s cooperation to the Attorneys General investigation. In recognition of the Bank’s agreement to make restitution and its truthful cooperation, the exhibit affirmatively states that “no provision contained in the settlement agreement is intended to be construed as a mandate or recommendation to any independent suspension and/or debarment authority regarding a decision to disqualify, suspend or debar Bank of America . . . from engaging in the provision of any financial services including, but not limited to, the marketing sale or placement of municipal bond derivatives or any other state business”

On or about March 18, 2008, the Office of the Comptroller of the Currency entered a Consent Order against Douglas L. Campbell related to improper payments made to brokers on municipal derivative transactions in 2001 and 2002 while Mr. Campbell was a member of Bank of America’s Municipal Derivatives Desk. Pursuant to the Order, Mr. Campbell was prohibited from a number of activities, including participating in any manner in the conduct of the affairs of various depository and other institutions identified in the Order. The Order also imposed a \$25,000 civil monetary penalty on Mr. Campbell. On or about September 9, 2010, Mr. Campbell pled guilty to (i) conspiracy to restrain trade in violation of 15 U.S.C. § 1, (ii) conspiracy to commit wire fraud in violation of 18 U.S.C. § 371 and § 1343, and (iii) wire fraud in violation of 18 U.S.C. § 1343 in the United States District Court for the Southern District of New York. This conduct related to improper bidding practices on Bank of America’s Municipal Derivatives Desk. Mr. Campbell was sentenced on April 22, 2014. On or about December 7, 2010, the Securities and Exchange Commission entered an Administrative Order against Mr. Campbell, related to alleged improper bidding practices on Bank of America’s Municipal Derivatives Desk. The Order barred Mr. Campbell from association with any broker, dealer, or investment adviser. Mr. Campbell was suspended by Bank of America on or about July 24, 2002 and was terminated by Bank of America on or about August 16, 2002.

On or about March 30, 2011, Brian Zwerner pled guilty to conspiracy to make false entries in bank records in violation of 18 U.S.C. § 371 and § 1005 in the United States District Court for the Southern District of New York. This conduct related to improper bidding practices on Bank of America’s Municipal Derivatives Desk. Mr. Zwerner was sentenced on July 25, 2014.

On or about December 8, 2011, the Securities and Exchange Commission entered a Cease and Desist Order against Dean Z. Pinard related to alleged improper bidding practices on Bank of America's Municipal Derivatives Desk. Among other things, the Order barred Mr. Pinard from association with any broker, dealer, investment adviser, municipal securities dealer, or municipal advisor and required him to pay approximately \$41,500 in disgorgement and prejudgment interest. In April 2013, Mr. Pinard entered into a Consent Order with the Office of the Comptroller of the Currency pursuant to which the OCC found that, among other things, Mr. Pinard engaged in improper anticompetitive bidding practices while part of Bank of America's Municipal Derivatives Desk. Pursuant to the Order, Mr. Pinard was prohibited from, among other things, participating in any manner in the conduct of the affairs of various depository and other institutions identified in the Order. Mr. Pinard was suspended by Bank of America on or about November 15, 2006 and was terminated by Bank of America on or about April 26, 2007.

On or about February 10, 2014, Phillip D. Murphy pled guilty to (i) conspiracy to commit wire fraud in violation of 18 U.S.C. § 371 and § 1343, (ii) wire fraud in violation of 18 U.S.C. § 1343, and (iii) conspiracy to make false entries in bank records in violation of 18 U.S.C. § 371 and § 1005 in the United States District Court for the Western District of North Carolina. This conduct related to improper bidding practices on Bank of America's Municipal Derivatives Desk. Mr. Murphy is awaiting sentencing. Mr. Murphy was suspended by Bank of America on or about July 25, 2002, and resigned from Bank of America on or about September 4, 2002.

BANK OF AMERICA CORPORATION

LIMITED POWER OF ATTORNEY

BANK OF AMERICA CORPORATION, a Delaware corporation (the "Corporation"), hereby appoints **Julie Conenna** as Attorney-in-Fact for the Corporation acting for the Corporation and in the Corporation's name, place and stead, for the limited purpose of authorizing, preparing, revising or signing City of Chicago's Economic Disclosure Statement form (the "Form") related to Bank of America, N.A. ("BANA") participation in the City of Chicago's qualified firms for Municipal Depositories in connection with the **Request for Proposal for Payment of Interest on the Monies of the City of Chicago and the Chicago Board of Education.**

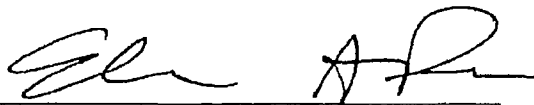
Any execution by the Attorney-in-Fact of the Form shall fully bind and commit the Corporation and the City of Chicago may rely upon the execution thereof by the Attorney-in-Fact as if executed by the Corporation and as the true and lawful act of the Corporation.

This Limited Power of Attorney shall automatically terminate as to the authority of the named Attorney-in-Fact upon such Attorney-in-Fact's resignation or termination from BANA or her realignment to a role outside of the Public Sector division of BANA however; such termination or realignment shall have no impact on the Form executed by the above named attorney-in-fact for the Corporation prior to such termination or realignment.

IN WITNESS WHEREOF, this Limited Power of Attorney has been executed and delivered by the Corporation to the Attorney-in-Fact on this 18 day of November 10, 2019.

BANK OF AMERICA CORPORATION

By:



Ellen A. Perrin

Associate General Counsel, Senior Vice President
and Assistant Secretary

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

FORM 10-K

(Mark One)

☒ ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended December 31, 2018

or

☐ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the transition period from to

Commission file number:

Exact name of registrant as specified in its charter:

Bank of America Corporation

State or other jurisdiction of incorporation or organization:
Delaware

IRS Employer Identification No.:

Address of principal executive offices:

Bank of America Corporate Center
100 N. Tryon Street
Charlotte, North Carolina 28255

Registrant's telephone number, including area code:
(704) 386-5681

Securities registered pursuant to section 12(b) of the Act:

Title of each class	Name of each exchange on which registered
Common Stock, par value \$0.01 per share	New York Stock Exchange
Depository Shares, each representing a 1/1,000th interest in a share of Floating Rate Non-Cumulative Preferred Stock, Series E	New York Stock Exchange
Depository Shares, each representing a 1/1,000th interest in a share of 6.625% Non-Cumulative Preferred Stock, Series W	New York Stock Exchange
Depository Shares, each representing a 1/1,000th interest in a share of 6.500% Non-Cumulative Preferred Stock, Series Y	New York Stock Exchange
Depository Shares, each representing a 1/1,000th interest in a share of 6.200% Non-Cumulative Preferred Stock, Series CC	New York Stock Exchange
Depository Shares, each representing a 1/1,000th interest in a share of 6.000% Non-Cumulative Preferred Stock, Series EE	New York Stock Exchange
Depository Shares, each representing a 1/1,000th interest in a share of 6.000% Non-Cumulative Preferred Stock, Series GG	New York Stock Exchange
Depository Shares, each representing a 1/1,000th interest in a share of 6.000% Non-Cumulative Preferred Stock, Series HH	New York Stock Exchange
7.25% Non-Cumulative Perpetual Convertible Preferred Stock, Series L	New York Stock Exchange
Depository Shares, each representing a 1/1,200th interest in a share of Bank of America Corporation Floating Rate Non-Cumulative Preferred Stock, Series 1	New York Stock Exchange

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Title of each class	Name of each exchange on which registered
Depository Shares, each representing a 1/1,200th interest in a share of Bank of America Corporation Floating Rate Non-Cumulative Preferred Stock, Series 2	New York Stock Exchange
Depository Shares, each representing a 1/1,200th interest in a share of Bank of America Corporation Floating Rate Non-Cumulative Preferred Stock, Series 4	New York Stock Exchange
Depository Shares, each representing a 1/1,200th interest in a share of Bank of America Corporation Floating Rate Non-Cumulative Preferred Stock, Series 5	New York Stock Exchange
Floating Rate Preferred Hybrid Income Term Securities of BAC Capital Trust XIII (and the guarantee related thereto)	New York Stock Exchange
5.63% Fixed to Floating Rate Preferred Hybrid Income Term Securities of BAC Capital Trust XIV (and the guarantee related thereto)	New York Stock Exchange
Income Capital Obligation Notes initially due December 15, 2066 of Bank of America Corporation	New York Stock Exchange
Senior Medium-Term Notes, Series A, Step Up Callable Notes, due November 28, 2031 of BofA Finance LLC (and the guarantee of the Registrant with respect thereto)	New York Stock Exchange

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☐ No ☒

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ☐ No ☒

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☒

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer ☒

Accelerated filer ☐

Non-accelerated filer ☐

Smaller reporting company ☐

Emerging growth company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes ☐ No ☒

The aggregate market value of the registrant's common stock ("Common Stock") held on June 30, 2018 by non-affiliates was approximately \$282,258,554,953 (based on the June 30, 2018 closing price of Common Stock of \$28.19 per share as reported on the New York Stock Exchange). At February 25, 2019, there were 9,658,759,764 shares of Common Stock outstanding.

Documents incorporated by reference: Portions of the definitive proxy statement relating to the registrant's 2019 annual meeting of stockholders are incorporated by reference in this Form 10-K in response to Items 10, 11, 12, 13 and 14 of Part III.

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Part I

Bank of America Corporation and Subsidiaries

Item 1. Business

Bank of America Corporation is a Delaware corporation, a bank holding company (BHC) and a financial holding company. When used in this report, "the Corporation" may refer to Bank of America Corporation individually, Bank of America Corporation and its subsidiaries, or certain of Bank of America Corporation's subsidiaries or affiliates. As part of our efforts to streamline the Corporation's organizational structure and reduce complexity and costs, the Corporation has reduced and intends to continue to reduce the number of its corporate subsidiaries, including through intercompany mergers.

Bank of America is one of the world's largest financial institutions, serving individual consumers, small- and middle-market businesses, institutional investors, large corporations and governments with a full range of banking, investing, asset management and other financial and risk management products and services. Our principal executive offices are located in the

Bank of America Corporate Center, 100 North Tryon Street, Charlotte, North Carolina 28255

Bank of America's website is www.bankofamerica.com and the Investor Relations portion of our website is <http://investor.bankofamerica.com>. We use our website to distribute company information, including as a means of disclosing material, non-public information and for complying with our disclosure obligations under Regulation FD. We routinely post and make accessible financial and other information regarding the Corporation on our website. Accordingly, investors should monitor the Investor Relations portion of our website, in addition to following our press releases, U.S. Securities and Exchange Commission (SEC) filings, public conference calls and webcasts. Our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the

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Securities Exchange Act of 1934 (Exchange Act) are available on the Investor Relations portion of our website under the heading Financial Information (accessible by clicking on the SEC Filings link) as soon as reasonably practicable after we electronically file such reports with, or furnish them to, the SEC and at the SEC's website, www.sec.gov. Notwithstanding the foregoing, the information contained on our website as referenced in this paragraph is not incorporated by reference into this Annual Report on Form 10-K. Also, we make available on the Investor Relations portion of our website under the heading Corporate Governance: (i) our Code of Conduct (including our insider trading policy); (ii) our Corporate Governance Guidelines (accessible by clicking on the Governance Highlights link); and (iii) the charter of each active committee of our Board of Directors (the Board) (accessible by clicking on the committee names under the Committee Composition link). We also intend to disclose any amendments to our Code of Conduct and waivers of our Code of Conduct required to be disclosed by the rules of the SEC and the New York Stock Exchange (NYSE) on the Investor Relations portion of our website. All of these corporate governance materials are also available free of charge in print to shareholders who request them in writing to: Bank of America Corporation, Attention: Office of the Corporate Secretary, Hearst Tower, 214 North Tryon Street, NC1-027-18-05, Charlotte, North Carolina 28255.

Segments

Through our banking and various nonbank subsidiaries throughout the U.S. and in international markets, we provide a diversified range of banking and nonbank financial services and products through four business segments: Consumer Banking, Global Wealth & Investment Management (GWIM), Global Banking and Global Markets, with the remaining operations recorded in *All Other*. Additional information related to our business segments and the products and services they provide is included in the information set forth on pages 30 through 39 of Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations (MD&A) and Note 23 – Business Segment Information to the Consolidated Financial Statements.

Competition

We operate in a highly competitive environment. Our competitors include banks, thrifts, credit unions, investment banking firms, investment advisory firms, brokerage firms, investment companies, insurance companies, mortgage banking companies, credit card issuers, mutual fund companies, hedge funds, private equity firms, and e-commerce and other internet-based companies. We compete with some of these competitors globally and with others on a regional or product specific basis.

Competition is based on a number of factors including, among others, customer service, quality and range of products and services offered, price, reputation, interest rates on loans and deposits, lending limits and customer convenience. Our ability to continue to compete effectively also depends in large part on our ability to attract new employees and retain and motivate our existing employees, while managing compensation and other costs.

Employees

At December 31, 2018, we had approximately 204,000 employees. None of our domestic employees are subject to a collective bargaining agreement. Management considers our employee relations to be good.

Government Supervision and Regulation

The following discussion describes, among other things, elements of an extensive regulatory framework applicable to BHCs, financial holding companies, banks and broker-dealers, including specific information about Bank of America.

We are subject to an extensive regulatory framework applicable to BHCs, financial holding companies and banks and other financial services entities. U.S. federal regulation of banks, BHCs and financial holding companies is intended primarily for the protection of depositors and the Deposit Insurance Fund (DIF) rather than for the protection of shareholders and creditors.

As a registered financial holding company and BHC, the Corporation is subject to the supervision of, and regular inspection by, the Board of Governors of the Federal Reserve System (Federal Reserve). Our U.S. bank subsidiaries (the Banks) organized as national banking associations are subject to regulation, supervision and examination by the Office of the Comptroller of the Currency (OCC), the Federal Deposit Insurance Corporation (FDIC) and the Federal Reserve. U.S. financial holding companies, and the companies under their control, are permitted to engage in activities considered "financial in nature" as defined by the Gramm-Leach-Bliley Act and related Federal Reserve interpretations. Unless otherwise limited by the Federal Reserve, a financial holding company may engage directly or indirectly in activities considered financial in nature provided the financial holding company gives the Federal Reserve after-the-fact notice of the new activities. The Gramm-Leach-Bliley Act also permits national banks to engage in activities considered financial in nature through a financial subsidiary, subject to certain conditions and limitations and with the approval of the OCC.

The scope of the laws and regulations and the intensity of the supervision to which we are subject have increased in recent years in response to the financial crisis, as well as other factors such as technological and market changes. In addition, the banking and financial services sector is subject to substantial regulatory enforcement and fines. Many of these changes have occurred as a result of the 2010 Dodd-Frank Wall Street Reform and Consumer Protection Act (the Financial Reform Act). We cannot assess whether there will be any additional major changes in the regulatory environment and expect that our business will remain subject to extensive regulation and supervision.

We are also subject to various other laws and regulations, as well as supervision and examination by other regulatory agencies, all of which directly or indirectly affect our operations and management and our ability to make distributions to shareholders. For instance, our broker-dealer subsidiaries are subject to both U.S. and international regulation, including supervision by the SEC, New York Stock Exchange and Financial Industry Regulatory Authority, among others; our commodities businesses in the U.S. are subject to regulation by and supervision of the U.S. Commodity Futures Trading Commission (CFTC); our U.S. derivatives activity is subject to regulation and supervision of the CFTC, National Futures Association and SEC, and in the case of the Banks, certain banking regulators; our insurance activities are subject to licensing and regulation by state insurance regulatory agencies; and our consumer financial products and services are regulated by the Consumer Financial Protection Bureau (CFPB).

Our non-U.S. businesses are also subject to extensive regulation by various non-U.S. regulators, including governments, securities exchanges, prudential regulators, central banks and other regulatory bodies, in the jurisdictions in which those businesses operate. For example, our financial services operations in the United Kingdom (U.K.) are subject to regulation by the Prudential Regulatory Authority and Financial Conduct

Authority (FCA) and, in Ireland, the European Central Bank and Central Bank of Ireland.

Source of Strength

Under the Financial Reform Act and Federal Reserve policy, BHCs are expected to act as a source of financial strength to each subsidiary bank and to commit resources to support each such subsidiary. Similarly, under the cross-guarantee provisions of the Federal Deposit Insurance Corporation Improvement Act of 1991 (FDICIA), in the event of a loss suffered or anticipated by the FDIC, either as a result of default of a bank subsidiary or related to FDIC assistance provided to such a subsidiary in danger of default, the affiliate banks of such a subsidiary may be assessed for the FDIC's loss, subject to certain exceptions.

Transactions with Affiliates

Pursuant to Section 23A and 23B of the Federal Reserve Act, as implemented by the Federal Reserve's Regulation W, the Banks are subject to restrictions that limit certain types of transactions between the Banks and their nonbank affiliates. In general, U.S. banks are subject to quantitative and qualitative limits on extensions of credit, purchases of assets and certain other transactions involving its nonbank affiliates. Additionally, transactions between U.S. banks and their nonbank affiliates are required to be on arm's length terms and must be consistent with standards of safety and soundness.

Deposit Insurance

Deposits placed at U.S. domiciled banks are insured by the FDIC, subject to limits and conditions of applicable law and the FDIC's regulations. Pursuant to the Financial Reform Act, FDIC insurance coverage limits are \$250,000 per customer. All insured depository institutions are required to pay assessments to the FDIC in order to fund the DIF.

The FDIC is required to maintain at least a designated minimum ratio of the DIF to insured deposits in the U.S. The Financial Reform Act requires the FDIC to assess insured depository institutions to achieve a DIF ratio of at least 1.35 percent by September 30, 2020. In November 2018, the FDIC announced that the DIF ratio exceeded 1.35 in advance of the deadline and that the related surcharges ceased. Additionally, the FDIC adopted regulations that establish a long-term target DIF ratio of greater than two percent. As of the date of this report, the DIF ratio is below this required target and the FDIC has adopted a restoration plan that may result in increased deposit insurance assessments. Deposit insurance assessment rates are subject to change by the FDIC and will be impacted by the overall economy and the stability of the banking industry as a whole. For more information regarding deposit insurance, see Item 1A. Risk Factors - Regulatory, Compliance and Legal on page 13.

Capital, Liquidity and Operational Requirements

As a financial holding company, we and our bank subsidiaries are subject to the regulatory capital and liquidity guidelines issued by the Federal Reserve and other U.S. banking regulators, including the FDIC and the OCC. These rules are complex and are evolving as U.S. and international regulatory authorities propose and enact enhanced capital and liquidity rules. The Corporation seeks to manage its capital position to maintain sufficient capital to meet these regulatory guidelines and to support our business activities. These evolving rules are likely to influence our planning processes and may require additional regulatory capital and liquidity, as well as impose additional operational and compliance costs on the Corporation. In addition, the Federal Reserve and the OCC have adopted guidelines that establish minimum standards for the design, implementation and board oversight of BHCs' and national

banks' risk governance frameworks. The Federal Reserve also issued a final rule, which became effective January 1, 2019, that includes minimum external total loss-absorbing capacity (TLAC) and long-term debt requirements.

For more information on regulatory capital rules, capital composition and pending or proposed regulatory capital changes, see Capital Management - Regulatory Capital in the MD&A on page 44, and Note 16 - *Regulatory Requirements and Restrictions* to the Consolidated Financial Statements, which are incorporated by reference in this Item 1.

Distributions

We are subject to various regulatory policies and requirements relating to capital actions, including payment of dividends and common stock repurchases. For instance, Federal Reserve regulations require major U.S. BHCs to submit a capital plan as part of an annual Comprehensive Capital Analysis and Review (CCAR). The purpose of the CCAR for the Federal Reserve is to assess the capital planning process of the BHC, including any planned capital actions, such as payment of dividends and common stock repurchases.

Our ability to pay dividends is also affected by the various minimum capital requirements and the capital and non-capital standards established under the FDICIA. The right of the Corporation, our shareholders and our creditors to participate in any distribution of the assets or earnings of our subsidiaries is further subject to the prior claims of creditors of the respective subsidiaries.

If the Federal Reserve finds that any of our Banks are not "well-capitalized" or "well-managed," we would be required to enter into an agreement with the Federal Reserve to comply with all applicable capital and management requirements, which may contain additional limitations or conditions relating to our activities. Additionally, the applicable federal regulatory authority is authorized to determine, under certain circumstances relating to the financial condition of a bank or BHC, that the payment of dividends would be an unsafe or unsound practice and to prohibit payment thereof.

For more information regarding the requirements relating to the payment of dividends, including the minimum capital requirements, see Note 13 - *Shareholders' Equity* and Note 16 - *Regulatory Requirements and Restrictions* to the Consolidated Financial Statements.

Many of our subsidiaries, including our bank and broker-dealer subsidiaries, are subject to laws that restrict dividend payments, or authorize regulatory bodies to block or reduce the flow of funds from those subsidiaries to the parent company or other subsidiaries.

Resolution Planning

As a BHC with greater than \$50 billion of assets, the Corporation is required by the Federal Reserve and the FDIC to periodically submit a plan for a rapid and orderly resolution in the event of material financial distress or failure.

Such resolution plan is intended to be a detailed roadmap for the orderly resolution of the BHC and its material entities pursuant to the U.S. Bankruptcy Code and other applicable resolution regimes under one or more hypothetical scenarios assuming no extraordinary government assistance.

If both the Federal Reserve and the FDIC determine that the BHC's plan is not credible, the Federal Reserve and the FDIC may jointly impose more stringent capital, leverage or liquidity requirements or restrictions on growth, activities or operations. A description of our plan is available on the Federal Reserve and FDIC websites

The FDIC also requires the submission of a resolution plan for Bank of America, N.A. (BANA), which must describe how the insured depository institution would be resolved under the bank resolution provisions of the Federal Deposit Insurance Act. A description of this plan is available on the FDIC's website.

We continue to make substantial progress to enhance our resolvability, including simplifying our legal entity structure and business operations, and increasing our preparedness to implement our resolution plan, both from a financial and operational standpoint.

Across international jurisdictions, resolution planning is the responsibility of national resolution authorities (RA). Of most impact to the Corporation are the requirements associated with subsidiaries in the U.K., Ireland and France, where rules have been issued requiring the submission of significant information about locally-incorporated subsidiaries, as well as the Corporation's affiliated branches located in those jurisdictions (including information on intra-group dependencies, legal entity separation and barriers to resolution) to allow the RA to plan their resolution strategies. As a result of the RA's review of the submitted information, we could be required to take certain actions over the next several years which could increase operating costs and potentially result in the restructuring of certain businesses and subsidiaries.

For more information regarding our resolution plan, see Item 1A. Risk Factors – Liquidity on page 6.

Insolvency and the Orderly Liquidation Authority

Under the Federal Deposit Insurance Act, the FDIC may be appointed receiver of an insured depository institution if it is insolvent or in certain other circumstances. In addition, under the Financial Reform Act, when a systemically important financial institution (SIFI) such as the Corporation is in default or danger of default, the FDIC may be appointed receiver in order to conduct an orderly liquidation of such institution. In the event of such appointment, the FDIC could, among other things, invoke the orderly liquidation authority, instead of the U.S. Bankruptcy Code, if the Secretary of the Treasury makes certain financial distress and systemic risk determinations. The orderly liquidation authority is modeled in part on the Federal Deposit Insurance Act, but also adopts certain concepts from the U.S. Bankruptcy Code.

The orderly liquidation authority contains certain differences from the U.S. Bankruptcy Code. For example, in certain circumstances, the FDIC could permit payment of obligations it determines to be systemically significant (e.g., short-term creditors or operating creditors) in lieu of paying other obligations (e.g., long-term creditors) without the need to obtain creditors' consent or prior court review. The insolvency and resolution process could also lead to a large reduction or total elimination of the value of a BHC's outstanding equity, as well as impairment or elimination of certain debt.

Under the FDIC's "single point of entry" strategy for resolving SIFIs, the FDIC could replace a distressed BHC with a bridge holding company, which could continue operations and result in an orderly resolution of the underlying bank, but whose equity is held solely for the benefit of creditors of the original BHC.

Furthermore, the Federal Reserve requires that BHCs maintain minimum levels of long-term debt required to provide adequate loss absorbing capacity in the event of a resolution.

For more information regarding our resolution, see Item 1A. Risk Factors – Liquidity on page 6.

Limitations on Acquisitions

The Riegle-Neal Interstate Banking and Branching Efficiency Act of 1994 permits a BHC to acquire banks located in states other

than its home state without regard to state law, subject to certain conditions, including the condition that the BHC, after and as a result of the acquisition, controls no more than 10 percent of the total amount of deposits of insured depository institutions in the U.S. and no more than 30 percent or such lesser or greater amount set by state law of such deposits in that state. At June 30, 2018, we held greater than 10 percent of the total amount of deposits of insured depository institutions in the U.S.

In addition, the Financial Reform Act restricts acquisitions by a financial institution if, as a result of the acquisition, the total liabilities of the financial institution would exceed 10 percent of the total liabilities of all financial institutions in the U.S. At June 30, 2018, our liabilities did not exceed 10 percent of the total liabilities of all financial institutions in the U.S.

The Volcker Rule

The Volcker Rule prohibits insured depository institutions and companies affiliated with insured depository institutions (collectively, *banking entities*) from engaging in short-term proprietary trading of certain securities, derivatives, commodity futures and options for their own account. The Volcker Rule also imposes limits on banking entities' investments in, and other relationships with, hedge funds and private equity funds. The Volcker Rule provides exemptions for certain activities, including market-making, underwriting, hedging, trading in government obligations, insurance company activities and organizing and offering hedge funds and private equity funds. The Volcker Rule also clarifies that certain activities are not prohibited, including acting as agent, broker or custodian. A banking entity with significant trading operations, such as the Corporation, is required to maintain a detailed compliance program to comply with the restrictions of the Volcker Rule.

Derivatives

Our derivatives operations are subject to extensive regulation globally. These operations are subject to regulation under the Financial Reform Act, the European Union (EU) Markets in Financial Instruments Directive and Regulation, the European Market Infrastructure Regulation and similar regulatory regimes in other jurisdictions, that regulate or will regulate the derivatives markets in which we operate by, among other things: requiring clearing and exchange trading of certain derivatives; imposing new capital, margin, reporting, registration and business conduct requirements for certain market participants; imposing position limits on certain over-the-counter (OTC) derivatives; and imposing derivatives trading transparency requirements. Regulations of derivatives are already in effect in many markets in which we operate.

In addition, many G-20 jurisdictions, including the U.S., U.K., Germany and Japan, have adopted resolution stay regulations to address concerns that the close-out of derivatives and other financial contracts in resolution could impede orderly resolution of global systemically important banks (G-SIBs), and additional jurisdictions are expected to follow suit. We and 24 other G-SIBs have adhered to a protocol amending certain financial contracts to provide for contractual recognition of stays of termination rights under various statutory resolution regimes and a stay on the exercise of cross-default rights based on an affiliate's entry into U.S. bankruptcy proceedings. As resolution stay regulations of a particular jurisdiction go into effect, we amend financial contracts in compliance with such regulations.

Consumer Regulations

Our consumer businesses are subject to extensive regulation and oversight by federal and state regulators. Certain federal consumer finance laws to which we are subject, including the Equal Credit Opportunity Act, Home Mortgage Disclosure Act, Electronic Fund

Transfer Act, Fair Credit Reporting Act, Real Estate Settlement Procedures Act, Truth in Lending Act and Truth in Savings Act, are enforced by the CFPB. Other federal consumer finance laws, such as the Servicemembers Civil Relief Act, are enforced by the OCC.

Privacy and Information Security

We are subject to many U.S. federal, state and international laws and regulations governing requirements for maintaining policies and procedures to protect the non-public confidential information of our customers and employees. The Gramm-Leach-Bliley Act requires us to periodically disclose Bank of America's privacy policies and practices relating to sharing such information and enables retail customers to opt out of our ability to share information with unaffiliated third parties, under certain circumstances. Other laws and regulations, at the international, federal and state level, impact our ability to share certain information with affiliates and non-affiliates for marketing and/or non-marketing purposes, or to contact customers with marketing offers, including California's consumer privacy law that established basic rights of consumers in connection with their personal information. The Gramm-Leach-Bliley Act also requires us to implement a comprehensive information security program that includes administrative, technical and physical safeguards to provide the security and confidentiality of customer records and information. These security and privacy policies and procedures for the protection of personal and confidential information are in effect across all businesses and geographic locations. In the EU, the General Data Protection Regulation (GDPR) replaced the Data Protection Directive and related implementing national laws in its member states. The GDPR's impact on the Corporation was assessed and addressed through a comprehensive compliance implementation program. Additionally, other legislative and regulatory activity in the U.S. and abroad, as well as court proceedings and bilateral U.S. and EU political developments on the validity of cross-border data transfer mechanisms from the EU, continue to lend uncertainty to privacy compliance globally.

Item 1A. Risk Factors

In the course of conducting our business operations, we are exposed to a variety of risks, some of which are inherent in the financial services industry and others of which are more specific to our own businesses. The discussion below addresses the most significant factors, of which we are currently aware, that could affect our businesses, results of operations and financial condition. Additional factors that could affect our businesses, results of operations and financial condition are discussed in Forward-looking Statements in the MD&A on page 20. However, other factors not discussed below or elsewhere in this Annual Report on Form 10-K could also adversely affect our businesses, results of operations and financial condition. Therefore, the risk factors below should not be considered a complete list of potential risks that we may face. For more information on how we manage risks, see Managing Risk in the MD&A on page 40.

Any risk factor described in this Annual Report on Form 10-K or in any of our other SEC filings could by itself, or together with other factors, materially adversely affect our liquidity, competitive position, business, reputation, results of operations, capital position or financial condition, including by materially increasing our expenses or decreasing our revenues, which could result in material losses.

Market

Our business and results of operations may be adversely affected by the U.S. and international financial markets, U.S. and non-U.S. fiscal and monetary policies and economic conditions generally.

Financial markets and general economic, political and social conditions in the U.S. and in one or more countries abroad, including the level and volatility of interest rates, unexpected changes in market financing conditions, gross domestic product (GDP) growth, inflation, consumer spending, employment levels, wage stagnation, prolonged federal government shutdowns, energy prices, home prices, bankruptcies, fluctuations or other significant changes in both debt and equity capital markets and currencies, liquidity of the global financial markets, the growth of global trade and commerce, trade policies, the availability and cost of capital and credit, terrorism, disruption of communication, transportation or energy infrastructure, investor sentiment and confidence, the sustainability of economic growth and any potential slowdown in economic activity may affect markets in the U.S. and abroad and our businesses. Any market downturn in the U.S. or abroad would likely result in a decline in revenue and adversely affect our results of operations and financial condition, including capital and liquidity levels.

In the U.S. and abroad, uncertainties surrounding fiscal and monetary policies present economic challenges. Actions taken by the Federal Reserve, including potential further increases in its target funds rate and the ongoing reduction in its balance sheet, and other central banks are beyond our control and difficult to predict and can affect interest rates and the value of financial instruments and other assets, such as debt securities and mortgage servicing rights (MSRs) and impact our borrowers, potentially increasing delinquency and default rates as interest rates rise.

Changes to existing U.S. laws and regulatory policies including those related to financial regulation, taxation, international trade, fiscal policy and healthcare may adversely impact us. For example, significant fiscal policy initiatives may increase uncertainty surrounding the formulation and direction of U.S. monetary policy, and volatility of interest rates. Higher U.S. interest rates relative to other major economies could increase the likelihood of a more volatile and appreciating U.S. dollar. Changes, or proposed changes to certain U.S. trade policies, particularly with important trading partners, including China, could upset financial markets, disrupt world trade and commerce and lead to trade retaliation through the use of tariffs, foreign exchange measures or the large-scale sale of U.S. Treasury Bonds.

Any of these developments could adversely affect our consumer and commercial businesses, our securities and derivatives portfolios, our level of charge-offs and provision for credit losses, the carrying value of our deferred tax assets, our capital levels and liquidity and the costs of running our business, and our results of operations. Additionally, events and ongoing uncertainty related to the planned exit of the U.K. from the EU could magnify any negative impact of these developments on our business and results of operations.

Increased market volatility and adverse changes in other financial or capital market conditions may increase our market risk.

Our liquidity, competitive position, business, results of operations and financial condition are affected by market risks such as changes in interest and currency exchange rates, fluctuations in equity and futures prices, lower trading volumes and prices of securitized products, the implied volatility of interest rates and credit spreads and other economic and business factors. These market risks may adversely affect, among other things, (i) the value of our on- and off-balance sheet securities, trading assets, other financial instruments and MSRs, (ii) the cost of debt capital and our access to credit markets, (iii) the value of assets under management (AUM), (iv) fee income relating to AUM, (v) customer allocation of capital among investment alternatives, (vi)

the volume of client activity in our trading operations, (vii) investment banking fees, (viii) the general profitability and risk level of the transactions in which we engage and (ix) our competitiveness with respect to deposit pricing. For example, the value of certain of our assets is sensitive to changes in market interest rates. If the Federal Reserve or a non-U.S. central bank changes or signals a change in monetary policy, market interest rates could be affected, which could adversely impact the value of such assets. In addition, the low but rising interest rate environment and recent flattening of the yield curve could negatively impact our liquidity, financial condition or results of operations, including future revenue and earnings growth.

We use various models and strategies to assess and control our market risk exposures but those are subject to inherent limitations. For more information regarding models and strategies, see Item 1A. Risk Factors – Other on page 16. In times of market stress or other unforeseen circumstances, previously uncorrelated indicators may become correlated and vice versa. These types of market movements may limit the effectiveness of our hedging strategies and cause us to incur significant losses. These changes in correlation can be exacerbated where other market participants are using risk or trading models with assumptions or algorithms similar to ours. In these and other cases, it may be difficult to reduce our risk positions due to activity of other market participants or widespread market dislocations, including circumstances where asset values are declining significantly or no market exists for certain assets. To the extent that we own securities that do not have an established liquid trading market or are otherwise subject to restrictions on sale or hedging, we may not be able to reduce our positions and therefore reduce our risk associated with such positions. In addition, challenging market conditions may also adversely affect our investment banking fees.

For more information about market risk and our market risk management policies and procedures, see Market Risk Management in the MD&A on page 70.

We may incur losses if the value of certain assets declines, including due to changes in interest rates and prepayment speeds.

We have a large portfolio of financial instruments, including certain loans and loan commitments, loans held-for-sale, securities financing agreements, asset-backed secured financings, long-term deposits, long-term debt, trading account assets and liabilities, derivative assets and liabilities, available-for-sale (AFS) debt and marketable equity securities, other debt securities, equity method investments, certain MSRs and certain other assets and liabilities that we measure at fair value and other accounting values, subject to impairment assessments. We determine these values based on applicable accounting guidance, which for financial instruments measured at fair value, requires an entity to base fair value on exit price and to maximize the use of observable inputs and minimize the use of unobservable inputs in fair value measurements. The fair values of these financial instruments include adjustments for market liquidity, credit quality, funding impact on certain derivatives and other transaction-specific factors, where appropriate.

Gains or losses on these instruments can have a direct impact on our results of operations, including higher or lower mortgage banking income and earnings, unless we have effectively hedged our exposures. For example, decreases in interest rates and increases in mortgage prepayment speeds, which are influenced by interest rates and other factors such as reductions in mortgage insurance premiums and origination costs, could adversely impact the value of our MSR asset, and cause a significant acceleration of purchase premium amortization on our mortgage portfolio, because a decline in long-term interest rates shortens the expected lives of the securities, and adversely affects our net

interest margin. Conversely, increases in interest rates may result in a decrease in residential mortgage loan originations. In addition, increases in interest rates may adversely impact the fair value of debt securities and, accordingly, for debt securities classified as AFS, may adversely affect accumulated other comprehensive income and, thus, capital levels.

Fair values may be impacted by declining values of the underlying assets or the prices at which observable market transactions occur and the continued availability of these transactions. The financial strength of counterparties, with whom we have economically hedged some of our exposure to these assets, also will affect the fair value of these assets. Sudden declines and volatility in the prices of assets may curtail or eliminate trading activities in these assets, which may make it difficult to sell, hedge or value these assets. The inability to sell or effectively hedge assets reduces our ability to limit losses in such positions and the difficulty in valuing assets may increase our risk-weighted assets, which requires us to maintain additional capital and increases our funding costs. Asset values also directly impact revenues in our wealth management and related advisory businesses. We receive asset-based management fees based on the value of our clients' portfolios or investments in funds managed by us and, in some cases, we also receive performance fees based on increases in the value of such investments. Declines in asset values can reduce the value of our clients' portfolios or fund assets, which in turn can result in lower fees earned for managing such assets.

For more information on fair value measurements, see Note 20 – Fair Value Measurements to the Consolidated Financial Statements. For more information on our asset management businesses, see GWIM in the MD&A on page 33. For more information on interest rate risk management, see Interest Rate Risk Management for the Banking Book in the MD&A on page 74.

Liquidity

If we are unable to access the capital markets, continue to maintain deposits, or our borrowing costs increase, our liquidity and competitive position will be negatively affected.

Liquidity is essential to our businesses. We fund our assets primarily with globally sourced deposits in our bank entities, as well as secured and unsecured liabilities transacted in the capital markets. We rely on certain secured funding sources, such as repo markets, which are typically short-term and credit-sensitive in nature. We also engage in asset securitization transactions, including with the government-sponsored enterprises (GSEs), to fund consumer lending activities. Our liquidity could be adversely affected by any inability to access the capital markets; illiquidity or volatility in the capital markets; the decrease in value of eligible collateral or increased collateral requirements due to credit concerns for short-term borrowing; changes to our relationships with our funding providers based on real or perceived changes in our risk profile; prolonged federal government shutdowns; changes in regulations, guidance or GSE status that impact our funding avenues or ability to access certain funding sources; the refusal or inability of the Federal Reserve to act as lender of last resort; simultaneous draws on lines of credit; the withdrawal of customer deposits, which could result from customer attrition for higher yields or the desire for more conservative alternatives; increased regulatory liquidity, capital and margin requirements for our U.S. or international banks and their nonbank subsidiaries; failure by a significant market participant or third party, such as a clearing agent or custodian; reputational issues; or negative perceptions about our short- or long-term business prospects, including downgrades of our credit ratings. Several of these factors may arise due to circumstances beyond our control, such as general

market volatility, disruption, shock or stress, fluctuations in interest rates, negative views about the Corporation or financial services industry generally or a specific news event, changes in the regulatory environment, actions by credit rating agencies or an operational problem that affects third parties or us. The impact of these events, whether within our control or not, could include an inability to sell assets or redeem investments, unforeseen outflows of cash, the need to draw on liquidity facilities, debt repurchases to support the secondary market or meet client requests, the need for additional funding for commitments and contingencies, as well as unexpected collateral calls, among other things, the result of which could be a liquidity shortfall and/or impact on our liquidity coverage ratio.

Our cost of obtaining funding is directly related to prevailing market interest rates and to our credit spreads. Credit spreads are the amount in excess of the interest rate of U.S. Treasury securities, or other benchmark securities, of a similar maturity that we need to pay to our funding providers. Increases in interest rates and our credit spreads can increase the cost of our funding and result in mark-to-market or credit valuation adjustment exposures. Changes in our credit spreads are market-driven and may be influenced by market perceptions of our creditworthiness. Changes to interest rates and our credit spreads occur continuously and may be unpredictable and highly volatile. Additionally, concentrations within our funding profile, such as maturities, currencies or counterparties, can reduce our funding efficiency.

For more information about our liquidity position and other liquidity matters, including credit ratings and outlooks and the policies and procedures we use to manage our liquidity risks, see Liquidity Risk in the MD&A on page 47.

Adverse changes to our credit ratings from the major credit rating agencies could significantly limit our access to funding or the capital markets, increase our borrowing costs or trigger additional collateral or funding requirements.

Our borrowing costs and ability to raise funds are directly impacted by our credit ratings. In addition, credit ratings may be important to customers or counterparties when we compete in certain markets and seek to engage in certain transactions, including OTC derivatives. Credit ratings and outlooks are opinions expressed by rating agencies on our creditworthiness and that of our obligations or securities, including long-term debt, short-term borrowings, preferred stock and asset securitizations. Our credit ratings are subject to ongoing review by rating agencies, which consider a number of factors, including our own financial strength, performance, prospects and operations as well as factors not under our control such as the likelihood of the U.S. government providing meaningful support to us or our subsidiaries in a crisis.

Rating agencies could make adjustments to our credit ratings at any time, and there can be no assurance as to when and whether downgrades will occur. A reduction in certain of our credit ratings could result in a wider credit spread and negatively affect our liquidity, access to credit markets, the related cost of funds, our businesses and certain trading revenues, particularly in those businesses where counterparty creditworthiness is critical. If the short-term credit ratings of our parent company, bank or broker-dealer subsidiaries were downgraded by one or more levels, we may suffer the potential loss of access to short-term funding sources such as repo financing, and/or increased cost of funds. Under the terms of certain OTC derivative contracts and other trading agreements, if our or our subsidiaries' credit ratings are downgraded, the counterparties may require additional collateral or terminate these contracts or agreements.

While certain potential impacts are contractual and quantifiable, the full consequences of a credit rating downgrade

to a financial institution are inherently uncertain, as they depend upon numerous dynamic, complex and inter-related factors and assumptions, including whether any downgrade of a firm's long-term credit ratings precipitates downgrades to its short-term credit ratings, and assumptions about the potential behaviors of various customers, investors and counterparties.

For more information on the amount of additional collateral required and derivative liabilities that would be subject to unilateral termination at December 31, 2018, if the rating agencies had downgraded their long-term senior debt ratings for the Corporation or certain subsidiaries by each of two incremental notches, see Credit-related Contingent Features and Collateral in Note 3 – Derivatives to the Consolidated Financial Statements.

For more information about our credit ratings and their potential effects to our liquidity, see Liquidity Risk – Credit Ratings in the MD&A on page 50 and Note 3 – Derivatives to the Consolidated Financial Statements.

Bank of America Corporation is a holding company and we depend upon our subsidiaries for liquidity, including the ability to pay dividends to shareholders and to fund payments on other obligations. Applicable laws and regulations, including capital and liquidity requirements, and actions taken pursuant to our resolution plan could restrict our ability to transfer funds from subsidiaries to Bank of America Corporation or to other subsidiaries, which could adversely affect our cash flow and financial condition.

Bank of America Corporation, as the parent company, is a separate and distinct legal entity from our banking and nonbank subsidiaries. We evaluate and manage liquidity on a legal entity basis. Legal entity liquidity is an important consideration as there are legal, regulatory, contractual and other limitations on our ability to utilize liquidity from one legal entity to satisfy the liquidity requirements of another, including the parent company, which could result in adverse liquidity events. The parent company depends on dividends, distributions, loans, advances and other payments from our banking and nonbank subsidiaries to fund dividend payments on our common stock and preferred stock and to fund all payments on our other obligations, including debt obligations. Many of our subsidiaries, including our bank and broker-dealer subsidiaries, are subject to laws that restrict dividend payments, or authorize regulatory bodies to block or reduce the flow of funds from those subsidiaries to the parent company or other subsidiaries. Our bank and broker-dealer subsidiaries are subject to restrictions on their ability to lend or transact with affiliates and to minimum regulatory capital and liquidity requirements, as well as restrictions on their ability to use funds deposited with them in bank or brokerage accounts to fund their businesses. Intercompany arrangements we entered into in connection with our resolution planning submissions could restrict the amount of funding available to the parent company from our subsidiaries under certain adverse conditions.

Additional restrictions on related party transactions, increased capital and liquidity requirements and additional limitations on the use of funds on deposit in bank or brokerage accounts, as well as lower earnings, can reduce the amount of funds available to meet the obligations of the parent company and even require the parent company to provide additional funding to such subsidiaries. Also, regulatory action that requires additional liquidity at each of our subsidiaries could impede access to funds we need to pay our obligations or pay dividends. In addition, our right to participate in a distribution of assets upon a subsidiary's liquidation or reorganization is subject to prior claims of the subsidiary's creditors. For more information regarding our ability to pay dividends, see Capital Management in the MD&A on page 43 and Note 13 – Shareholders' Equity to the Consolidated Financial Statements.

In the event of a resolution, whether in a bankruptcy proceeding or under the orderly liquidation authority of the FDIC, such resolution could materially adversely affect our liquidity and financial condition and the ability to pay dividends to shareholders and to pay obligations.

Bank of America Corporation, our parent holding company, is required to periodically submit a plan to the FDIC and Federal Reserve describing its resolution strategy under the U.S. Bankruptcy Code in the event of material financial distress or failure. In the current plan, Bank of America Corporation's preferred resolution strategy is a "single point of entry" strategy. This strategy provides that only the parent holding company files for resolution under the U.S. Bankruptcy Code and contemplates providing certain key operating subsidiaries with sufficient capital and liquidity to operate through severe stress and to enable such subsidiaries to continue operating or be wound down in a solvent manner following a bankruptcy of the parent holding company. Bank of America Corporation has entered into intercompany arrangements resulting in the contribution of most of its capital and liquidity to key subsidiaries. Pursuant to these arrangements, if Bank of America Corporation's liquidity resources deteriorate so severely that resolution becomes imminent, Bank of America Corporation will no longer be able to draw liquidity from its key subsidiaries, and will be required to contribute its remaining financial assets to a wholly-owned holding company subsidiary, which could materially and adversely affect our liquidity and financial condition and the ability to pay dividends to shareholders and meet our payment obligations.

In addition, if the FDIC and Federal Reserve jointly determine that Bank of America Corporation's resolution plan is not credible, they could impose more stringent capital, leverage or liquidity requirements or restrictions on our growth, activities or operations. Further, we could be required to take certain actions that could impose operating costs and could potentially result in the divestiture or restructuring of certain businesses and subsidiaries.

Under the Financial Reform Act, when a G-SIB such as Bank of America Corporation is in default or danger of default, the FDIC may be appointed receiver in order to conduct an orderly liquidation of such institution. In the event of such appointment, the FDIC could, among other things, invoke the orderly liquidation authority, instead of the U.S. Bankruptcy Code, if the Secretary of the Treasury makes certain financial distress and systemic risk determinations. In 2013, the FDIC issued a notice describing its preferred "single point of entry" strategy for resolving a G-SIB. Under this approach, the FDIC could replace Bank of America Corporation with a bridge holding company, which could continue operations and result in an orderly resolution of the underlying bank, but whose equity would be held solely for the benefit of our creditors. The FDIC's "single point of entry" strategy may result in our security holders suffering greater losses than would have been the case under a bankruptcy proceeding or a different resolution strategy.

For more information about resolution planning, see Item 1. Business - Resolution Planning on page 3. For more information about the FDIC's orderly liquidation, see Item 1. Business - Insolvency and the Orderly Liquidation Authority on page 4.

Credit

Economic or market disruptions, insufficient credit loss reserves or concentration of credit risk may result in an increase in the provision for credit losses, which could have an adverse effect on our financial condition and results of operations.

A number of our products expose us to credit risk, including loans, letters of credit, derivatives, debt securities, trading account assets and assets held-for-sale. The financial condition of our

consumer and commercial borrowers, counterparties and underlying collateral could adversely affect our financial condition and results of operations.

Global and U.S. economic conditions and macroeconomic events, including a decline in global GDP, consumer spending or real estate prices, as well as increasing leverage, rising unemployment and/or fluctuations in foreign exchange or interest rates, particularly if inflation is rising, may impact our credit portfolios. Economic or market stress or disruptions, including as a result of natural disasters, would likely increase the risk that borrowers or counterparties would default or become delinquent in their obligations to us, resulting in credit loss. Increases in delinquencies and default rates could adversely affect our consumer credit card, home equity, residential mortgage and purchased credit-impaired portfolios through increased charge-offs and provision for credit losses. A deteriorating economic environment could also adversely affect our consumer and commercial loan portfolios with weakened client and collateral positions. Additionally, simultaneous drawdowns on lines of credit or an increase in a borrower's leverage in a weakening economic environment could result in deterioration in our credit portfolio, should borrowers be unable to fulfill competing financial obligations. Specifically, our consumer portfolio could be negatively impacted by drastic reductions in employment, or increases in underemployment, resulting in lower disposable income.

We estimate and establish an allowance for credit losses for losses inherent in our lending activities (including unfunded lending commitments), excluding those measured at fair value, through a charge to earnings. The process for determining the amount of the allowance requires us to make difficult and complex judgments, including loss forecasts on how borrowers will react to changing economic conditions. The ability of our borrowers or counterparties to repay their obligations will likely be impacted by changes in future economic conditions, which in turn could impact the accuracy of our loss forecasts and allowance estimates. There is also the possibility that we will fail to accurately identify the appropriate economic indicators or that we will fail to accurately estimate their impacts.

We may suffer unexpected losses if the models and assumptions we use to establish reserves and make judgments in extending credit to our borrowers or counterparties prove inaccurate in predicting future events. In addition, external factors, such as natural disasters, can influence recognition of credit losses in our portfolios and impact our allowance for credit losses. Although we believe that our allowance for credit losses was in compliance with applicable accounting standards at December 31, 2018, there is no guarantee that it will be sufficient to address credit losses, particularly if economic conditions deteriorate. In such an event, we may increase the size of our allowance which would reduce our earnings.

In the ordinary course of our business, we also may be subject to a concentration of credit risk in a particular industry, geographic location, counterparty, borrower or issuer. A deterioration in the financial condition or prospects of a particular industry or a failure or downgrade of, or default by, any particular entity or group of entities could negatively affect our businesses, and the processes by which we set limits and monitor the level of our credit exposure to individual entities, industries and countries may not function as we have anticipated. While our activities expose us to many different industries and counterparties, we routinely execute a high volume of transactions with counterparties in the financial services industry, including broker-dealers, commercial banks, investment banks, insurers, mutual funds and hedge funds, and other institutional clients. This has resulted in significant credit

concentration with respect to this industry. Financial services institutions and other counterparties are inter-related because of trading, funding, clearing or other relationships. As a result, defaults by, or even market uncertainty about the financial stability of one or more financial services institutions, or the financial services industry generally, could lead to market-wide liquidity disruptions, losses and defaults. Many of these transactions expose us to credit risk and, in some cases, disputes and litigation in the event of default of a counterparty. In addition, our credit risk may be heightened by market risk when the collateral held by us cannot be liquidated or is liquidated at prices not sufficient to recover the full amount of the loan or derivatives exposure due to us. Further, disputes with obligors as to the valuation of collateral could increase in times of significant market stress, volatility or illiquidity, and we could suffer losses during such periods if we are unable to realize the fair value of the collateral or manage declines in the value of collateral.

In the ordinary course of business, we also enter into transactions with sovereign nations, U.S. states and U.S. municipalities. Unfavorable economic or political conditions, disruptions to capital markets, currency fluctuations, changes in oil prices, social instability and changes in government policies could impact the operating budgets or credit ratings of these government entities and expose us to credit risk.

We also have a concentration of credit risk with respect to our consumer real estate, auto, consumer credit card and commercial real estate portfolios, which represent a significant percentage of our overall credit portfolio. Additionally, decreases in home price valuations or commercial real estate valuations in certain markets where we have large concentrations, including as a result of natural disasters, as well as more broadly within the U.S. or globally, could result in increased defaults, delinquencies or credit loss. For more information, see Consumer Portfolio Credit Risk Management in the MD&A on page 51. Furthermore, our commercial portfolios include exposures to certain industries, including the energy sector. For more information, see Commercial Portfolio Credit Risk Management in the MD&A on page 59. Economic weaknesses, adverse business conditions, market disruptions, rising interest or capitalization rates, the collapse of speculative bubbles, greater volatility in areas where we have concentrated credit risk or deterioration in real estate values or household incomes may cause us to experience a decrease in cash flow and higher credit losses in either our consumer or commercial portfolios or cause us to write down the value of certain assets.

Liquidity disruptions in the financial markets may result in our inability to sell, syndicate or realize the value of our positions, leading to increased concentrations, which could increase the credit and market risk associated with our positions, as well as increase our risk-weighted assets.

For more information about our credit risk and credit risk management policies and procedures, see Credit Risk Management in the MD&A on page 51, *Note 1 – Summary of Significant Accounting Principles*, *Note 5 – Outstanding Loans and Leases* and *Note 6 – Allowance for Credit Losses* to the Consolidated Financial Statements.

If the U.S. housing market weakens or home prices decline, our consumer loan portfolios, credit quality, credit losses, representations and warranties exposures and earnings may be adversely affected.

While U.S. home prices continued to generally improve during 2018, declines in future periods may negatively impact the demand for many of our products. Additionally, our mortgage loan production volume is generally influenced by the rate of growth in residential mortgage debt outstanding and the size of the residential mortgage market, both of which may be adversely

affected by rising interest rates. Conditions in the U.S. housing market in prior years resulted in both significant write-downs of asset values in several asset classes, notably mortgage-backed securities, and exposure to monolines. If the U.S. housing market were to weaken, the value of real estate could decline, which could result in increased credit losses and delinquent servicing expenses and negatively affect our representations and warranties exposures, which could have an adverse effect on our financial condition and results of operations.

Our derivatives businesses may expose us to unexpected risks and potential losses.

We are party to a large number of derivatives transactions, including credit derivatives. Our derivatives businesses may expose us to unexpected market, credit and operational risks that could cause us to suffer unexpected losses. Severe declines in asset values, unanticipated credit events or unforeseen circumstances that may cause previously uncorrelated factors to become correlated and vice versa, may create losses resulting from risks not appropriately taken into account or anticipated in the development, structuring or pricing of a derivative instrument. Certain of our OTC derivative contracts and other trading agreements provide that upon the occurrence of certain specified events, such as a change in the credit rating of a particular Bank of America entity or entities, we may be required to provide additional collateral or take other remedial actions, or our counterparties may have the right to terminate or otherwise diminish our rights under these contracts or agreements.

In addition, in the event of a downgrade of our credit ratings, certain derivative and other counterparties may request we substitute BANA (which has generally had equal or higher credit ratings than the parent company) as counterparty for certain contracts. Our ability to substitute or make changes to these agreements may be subject to certain limitations including, counterparty willingness, operational considerations, regulatory limitations on having BANA as a counterparty and collateral constraints. It is possible that such limitations on our ability to substitute or make changes to these agreements, including having BANA as the new counterparty, could adversely affect our results of operations.

Many derivative instruments are individually negotiated and non-standardized, which can make exiting, transferring or settling some positions difficult. Many derivatives require that we deliver to the counterparty the underlying security, loan or other obligation in order to receive payment. In a number of cases, we do not hold, and may not be able to obtain, the underlying security, loan or other obligation.

We are also a member of various central counterparty clearinghouses (CCPs) due to regulatory requirements for mandatory clearing of derivative transactions, which potentially increases our credit risk exposures to CCPs. In the event that one or more members of the CCP defaults on its obligations, we may be required to pay a portion of any losses incurred by the CCP as a result of that default. Also, as a clearing member, we are exposed to the risk of non-performance by our clients for which we clear transactions, which may not be covered by available collateral.

For more information on our derivatives exposure, see *Note 3 – Derivatives* to the Consolidated Financial Statements.

Geopolitical

We are subject to numerous political, economic, market, reputational, operational, legal, regulatory and other risks in the jurisdictions in which we operate.

We do business throughout the world, including in emerging markets. Our businesses and revenues derived from non-U.S. jurisdictions are subject to risk of loss from currency fluctuations,

financial, social or judicial instability, changes in governmental policies or policies of central banks, expropriation, nationalization and/or confiscation of assets, price controls, capital controls, redenomination risk, exchange controls, protectionist trade policies, increasing trade tensions between the U.S. and important trading partners, particularly China, increasing the risk of escalating tariffs and other restrictive actions, unfavorable political and diplomatic developments, oil price fluctuation and changes in legislation. These risks are especially elevated in emerging markets. A number of non-U.S. jurisdictions in which we do business have been or may be negatively impacted by slowing growth or recessionary conditions, market volatility and/or political unrest. The political and economic environment in Europe, including the debt concerns of certain EU countries, remains challenging and the current degree of political and economic uncertainty, including potential recessionary conditions, could increase. For example, the ongoing negotiations of the terms of the U.K.'s planned exit from the EU may create uncertainty and increase risk, which could adversely affect us.

Potential risks of default on or devaluation of sovereign debt in some non-U.S. jurisdictions could expose us to substantial losses. Risks in one nation can limit our opportunities for portfolio growth and negatively affect our operations in other nations, including our U.S. operations. Market and economic disruptions of all types may affect consumer confidence levels and spending, corporate investment and job creation, bankruptcy rates, levels of incurrence and default on consumer and corporate debt, economic growth rates and asset values, among other factors. Any such unfavorable conditions or developments could have an adverse impact on our company.

We also invest or trade in the securities of corporations and governments located in non-U.S. jurisdictions, including emerging markets. Revenues from the trading of non-U.S. securities may be subject to negative fluctuations as a result of the above factors. Furthermore, the impact of these fluctuations could be magnified because non-U.S. trading markets, particularly in emerging markets, are generally smaller, less liquid and more volatile than U.S. trading markets.

Our non-U.S. businesses are also subject to extensive regulation by governments, securities exchanges and regulators, central banks and other regulatory bodies. In many countries, the laws and regulations applicable to the financial services and securities industries are uncertain and evolving, and it may be difficult for us to determine the exact requirements of local laws in every market or manage our relationships with multiple regulators in various jurisdictions. Our potential inability to remain in compliance with local laws in a particular market and manage our relationships with regulators could have an adverse effect not only on our businesses in that market but also on our reputation in general.

In addition to non-U.S. legislation, our international operations are also subject to U.S. legal requirements. For example, our operations are subject to U.S. and non-U.S. laws and regulations relating to bribery and corruption, anti-money laundering, and economic sanctions, which can vary by jurisdiction. The increasing speed and novel ways in which funds circulate could make it more challenging to track the movement of funds. Our ability to comply with these legal requirements depends on our ability to continually improve detection and reporting and analytic capabilities.

In the U.S., debt ceiling and budget deficit concerns, which have increased the possibility of U.S. government defaults on its debt and/or downgrades to its credit ratings, and prolonged government shutdowns could negatively impact the global economy and banking system and adversely affect our financial condition, including our liquidity. Additionally, changes in fiscal,

monetary or regulatory policy could increase our compliance costs and adversely affect our business operations, organizational structure and results of operations. We are also subject to geopolitical risks, including acts or threats of terrorism, and actions taken by the U.S. or other governments in response thereto, and/or military conflicts, which could adversely affect business and economic conditions abroad, as well as in the U.S.

For more information on our non-U.S. credit and trading portfolios, see Non-U.S. Portfolio in the MD&A on page 65.

The U.K. Referendum, and the planned exit of the U.K. from the EU, could adversely affect us.

We conduct business in Europe, the Middle East and Africa primarily through our subsidiaries in the U.K. and Ireland. For the year ended December 31, 2018, our operations in Europe, the Middle East and Africa, including the U.K., represented approximately six percent of our total revenue, net of interest expense.

A referendum was held in the U.K. in 2016, which resulted in a majority vote in favor of exiting the EU on March 29, 2019. Negotiations between the EU and U.K. regarding this exit consist of three phases: a withdrawal agreement, a new trade deal and an arrangement for a transition period. Significant political and economic uncertainty persists regarding the timing, details and viability of each phase. There may be heightened uncertainty if the terms of the U.K.'s exit from the EU are not agreed upon at the time of its exit. The ultimate impact and terms of the U.K.'s planned exit remain unclear, and short- and long-term global economic and market volatility may occur, including as a result of currency fluctuations and trade relations. If uncertainty resulting from the U.K.'s exit negatively impacts economic conditions, financial markets and consumer confidence, our business, results of operations, financial position and/or operational model could be adversely affected.

We are also subject to different laws, regulations and regulatory authorities and may incur additional costs and/or experience negative tax consequences as a result of establishing our principal EU banking and broker-dealer operations outside of the U.K., which could adversely impact our EU business, results of operations and operational model. Additionally, changes to the legal and regulatory framework under which our subsidiaries will continue to provide products and services in the U.K. following an exit by the U.K. from the EU may result in additional compliance costs and have an adverse impact on our results of operations. For more information on our EU operations outside of the U.K., see Executive Summary - Recent Developments - U.K. Exit from the EU in the MD&A on page 21.

Business Operations

A failure in or breach of our operational or security systems or infrastructure, or those of third parties, could disrupt our businesses, and adversely impact our results of operations, liquidity and financial condition, as well as cause legal or reputational harm.

The potential for operational risk exposure exists throughout our organization and, as a result of our interactions with, and reliance on, third parties, is not limited to our own internal operational functions. Our operational and security systems infrastructure, including our computer systems, emerging technologies, data management and internal processes, as well as those of third parties, are integral to our performance. We rely on our employees and third parties in our day-to-day and ongoing operations, who may, as a result of human error, misconduct, malfeasance or failure or breach of systems or infrastructure, expose us to risk. We have taken measures to implement training, procedures, backup systems and other safeguards to support our operations, but our ability to conduct business may be adversely

affected by any significant disruptions to us or to third parties with whom we interact or upon whom we rely. For example, technology project implementation challenges may cause business interruptions. In addition, our ability to implement backup systems and other safeguards with respect to third-party systems is more limited than with respect to our own systems. Our financial, accounting, data processing, backup or other operating or security systems and infrastructure or those of third parties with whom we interact or upon whom we rely may fail to operate properly or become disabled or damaged as a result of a number of factors including events that are wholly or partially beyond our or such third party's control, which could adversely affect our ability to process transactions or provide services. There could be sudden increases in customer transaction volume due to electronic trading platforms and algorithmic trading applications; electrical, telecommunications or other major physical infrastructure outages; newly identified vulnerabilities in key hardware or software; natural disasters such as earthquakes, tornadoes, hurricanes and floods; pandemics; and events arising from local or larger scale political or social matters, including terrorist acts, which could result in prolonged operational outages. In the event that backup systems are utilized, they may not process data as quickly as our primary systems and some data might not have been backed up. We continuously update the systems on which we rely to support our operations and growth and to remain compliant with all applicable laws, rules and regulations globally. This updating entails significant costs and creates risks associated with implementing new systems and integrating them with existing ones, including business interruptions. Operational risk exposures could adversely impact our results of operations, liquidity and financial condition, as well as cause reputational harm.

A cyber-attack, information or security breach, or a technology failure of ours or of a third party could adversely affect our ability to conduct our business, manage our exposure to risk or expand our businesses, result in the disclosure or misuse of confidential or proprietary information, increase our costs to maintain and update our operational and security systems and infrastructure, and adversely impact our results of operations, liquidity and financial condition, as well as cause legal or reputational harm.

Our businesses are highly dependent on the security, controls and efficacy of our infrastructure, computer and data management systems, as well as those of our customers, suppliers, counterparties and other third parties with whom we interact or on whom we rely. Our businesses rely on effective access management and the secure collection, processing, transmission, storage and retrieval of confidential, proprietary, personal and other information in our computer and data management systems and networks, and in the computer and data management systems and networks of third parties. In addition, to access our network, products and services, our employees, customers, suppliers, counterparties and other third parties increasingly use personal mobile devices or computing devices that are outside of our network and control environments and are subject to their own cybersecurity risks.

We, our employees and customers, regulators and other third parties have been subject to, and are likely to continue to be the target of, cyber-attacks. These cyber-attacks include computer viruses, malicious or destructive code (such as ransomware), phishing attacks, denial of service or information or other security breaches that could result in the unauthorized release, gathering, monitoring, misuse, loss or destruction of confidential, proprietary and other information of ours, our employees, our customers or of third parties, damages to systems, or otherwise material disruption to our or our customers' or other third parties' network

access or business operations. As cyber threats continue to evolve, we may be required to expend significant additional resources to continue to modify or enhance our protective measures or to investigate and remediate any information security vulnerabilities or incidents. Cyber threats are rapidly evolving, and despite substantial efforts to protect the integrity of our systems and implement controls, processes, policies and other protective measures, we may not be able to anticipate all cyber-attacks or information or security breaches, nor may we be able to implement effective preventive or defensive measures to address such attacks or breaches.

Cybersecurity risks for financial services organizations have significantly increased in recent years in part because of the proliferation of new and emerging technologies, and the use of the Internet and telecommunications technologies to conduct financial transactions. For example, cybersecurity risks may increase in the future as we continue to increase our mobile-payment and other internet-based product offerings, expand our internal usage of web- or cloud-based products and applications and continue to develop our use of process automation and artificial intelligence. In addition, cybersecurity risks have significantly increased in recent years in part due to the increasingly sophisticated activities of organized crime groups, hackers, terrorist organizations, hostile foreign governments, disgruntled employees or vendors, activists and other external parties, including those involved in corporate espionage. Even the most advanced internal control environment may be vulnerable to compromise. Internal access management failures could result in the compromise or unauthorized exposure of confidential data. Targeted social engineering attacks are becoming more sophisticated and are extremely difficult to prevent. The techniques used by bad actors change frequently and may not be recognized until well after a breach has occurred, at which time the materiality of the breach may be difficult to assess. Additionally, the existence of cyber-attacks or security breaches at third parties with access to our data, such as vendors, may not be disclosed to us in a timely manner.

Although to date we have not experienced any material losses or other material consequences relating to technology failure, cyber-attacks or other information or security breaches, whether directed at us or third parties, there can be no assurance that we will not suffer such material losses or consequences in the future. Our risk and exposure to these matters remain heightened because of, among other things, the evolving nature of these threats, our prominent size and scale, and our role in the financial services industry and the broader economy, our plans to continue to implement our internet banking and mobile banking channel strategies and develop additional remote connectivity solutions to serve our customers when and how they want to be served, our continuous transmission of sensitive information to, and storage of such information by, third parties, including our vendors and regulators, our geographic footprint and international presence, the outsourcing of some of our business operations, threats of cyber terrorism, external extremist parties, including foreign state actors, in some circumstances as a means to promote political ends, and system and customer account updates and conversions. As a result, cybersecurity and the continued development and enhancement of our controls, processes and practices designed to protect our systems, computers, software, data and networks from attack, damage or unauthorized access remain a critical priority.

We also face indirect technology, cybersecurity and operational risks relating to the customers, clients and other third parties with whom we do business or upon whom we rely to facilitate or enable our business activities, including financial counterparties;

financial intermediaries such as clearing agents, exchanges and clearing houses, vendors; regulators; providers of critical infrastructure such as internet access and electrical power; and retailers for whom we process transactions. As a result of increasing consolidation, interdependence and complexity of financial entities and technology systems, a technology failure, cyber-attack or other information or security breach that significantly degrades, deletes or compromises the systems or data of one or more financial entities or third-party or downstream service providers could have a material impact on counterparties or other market participants, including us. This consolidation, interconnectivity and complexity increases the risk of operational failure, on both individual and industry-wide bases, as disparate systems need to be integrated, often on an accelerated basis. Any technology failure, cyber-attack or other information or security breach, termination or constraint of any third party, including downstream service providers, could, among other things, adversely affect our ability to conduct day-to-day business activities, effect transactions, service our clients, manage our exposure to risk, expand our businesses or result in the misappropriation or destruction of the personal, proprietary or confidential information of our employees, customers, suppliers, counterparties and other third parties.

Cyber-attacks or other information or security breaches, whether directed at us or third parties, may result in significant lost revenue, give rise to losses or have other negative consequences. Furthermore, the public perception that a cyber-attack on our systems has been successful, whether or not this perception is correct, may damage our reputation with customers and third parties with whom we do business. Although we maintain cyber insurance, there can be no assurance that liabilities or losses we may incur will be covered under such policies or that the amount of insurance will be adequate. Also, successful penetration or circumvention of system security could result in negative consequences, including loss of customers and business opportunities, the withdrawal of customer deposits, prolonged computer and network outages resulting in disruptions to our critical business operations and customer services, misappropriation or destruction of our confidential information and/or the confidential, proprietary or personal information of certain parties, such as our employees, customers, suppliers, counterparties and other third parties, or damage to their computers or systems. This could result in a violation of applicable privacy and other laws in the U.S. and abroad, litigation exposure, regulatory fines, penalties or intervention, loss of confidence in our security measures, reputational damage, reimbursement or other compensatory costs, additional compliance costs and our internal controls or disclosure controls being rendered ineffective. The occurrence of any of these events could adversely impact our results of operations, liquidity and financial condition.

Our mortgage loan repurchase obligations or claims from third parties could result in additional losses.

We and our legacy companies have sold significant amounts of residential mortgage loans. In connection with these sales, we or certain of our subsidiaries or legacy companies made various representations and warranties, breaches of which may result in a requirement that we repurchase the mortgage loans, or otherwise make whole or provide other remedies to counterparties. At December 31, 2018, we had \$14.4 billion of unresolved repurchase claims, net of duplicate claims and excluding claims where the statute of limitations has expired without litigation being commenced.

At December 31, 2018, our liability for obligations under representations and warranties exposures was \$2.0 billion. We also have an estimated range of possible loss (RPL) for

representations and warranties exposures that is combined with the litigation RPL, which we disclose in *Note 12 – Commitments and Contingencies* to the Consolidated Financial Statements. The recorded liability and estimated RPL are based on currently available information, significant judgment and a number of assumptions that are subject to change. There can be no assurance that the Corporation will reach future settlements or, if it does, that the terms of past settlements can be relied upon to predict the terms of future settlements. Future representations and warranties losses may occur in excess of our recorded liability and estimated RPL, and such losses could have a material adverse effect on our liquidity, financial condition and results of operations.

Additionally, our recorded liability for representations and warranties exposures and the corresponding estimated RPL do not consider certain losses related to servicing, including foreclosure and related costs, fraud, indemnity or claims (including for residential mortgage-backed securities) related to securities law. Losses with respect to one or more of these matters could be material to our results of operations or liquidity.

For more information about our representations and warranties exposure, see *Off-Balance Sheet Arrangements and Contractual Obligations – Representations and Warranties* in the MD&A on page 40, *Complex Accounting Estimates – Representations and Warranties Liability* in the MD&A on page 79 and *Note 12 – Commitments and Contingencies* to the Consolidated Financial Statements.

Failure to satisfy our obligations as servicer for residential mortgage securitizations, along with other losses we could incur in our capacity as servicer, and foreclosure delays and/or investigations into our residential mortgage foreclosure practices could cause losses.

We and our legacy companies have securitized a significant portion of the residential mortgage loans that we originated or acquired. We service a portion of the loans we have securitized and also service loans on behalf of third-party securitization vehicles and other investors. If we commit a material breach of our obligations as servicer or master servicer, we may be subject to termination if the breach is not cured within a specified period of time following notice, which could cause us to lose servicing income. In addition, for loans principally held in private-label securitization trusts, we may have liability for any failure by us, as a servicer or master servicer, for any act or omission on our part that involves willful misfeasance, bad faith, gross negligence or reckless disregard of our duties. If any such breach was found to have occurred, it may harm our reputation, increase our servicing costs or adversely impact our results of operations. Additionally, with respect to foreclosures, we may incur costs or losses due to irregularities in the underlying documentation, or if the validity of a foreclosure action is challenged by a borrower or overturned by a court because of errors or deficiencies in the foreclosure process. We may also incur costs or losses relating to delays or alleged deficiencies in processing documents necessary to comply with state law governing foreclosure.

Changes in the structure of the GSEs and the relationship among the GSEs, the government and the private markets, or the conversion of the current conservatorship of Fannie Mae or Freddie Mac into receivership, could result in significant changes to our business operations and may adversely impact our business.

During 2018, we sold approximately \$3.0 billion of loans to Fannie Mae and Freddie Mac. Each is currently in a conservatorship with its primary regulator, the Federal Housing Finance Agency (FHFA), acting as conservator. We cannot predict whether the conservatorships will end, any associated changes to their business structure that could result or whether the conservatorships will end in receivership, privatization or other

change in business structure. There are several proposed approaches to reform that, if enacted, could change the structure and the relationship among the GSEs, the government and the private markets, including the trading markets for agency conforming mortgage loans and markets for mortgage-related securities in which we participate. Although the FHFA has taken steps to unify underwriting parameters and business practices between GSEs, we cannot predict the prospects for the enactment, timing or content of legislative or rulemaking proposals regarding the future status of any GSEs and/or their impact on the guarantees, demand or price of mortgage-related securities. Accordingly, uncertainty regarding their future continues to exist, including whether the GSEs will continue to exist in their current forms or continue to guarantee mortgages and provide funding for mortgage loans.

Any of these developments could adversely affect the value of our securities portfolios, capital levels and liquidity and results of operations.

Our risk management framework may not be effective in mitigating risk and reducing the potential for losses.

Our risk management framework is designed to minimize risk and loss to us. We seek to effectively identify, measure, monitor, report and control the types of risk to which we are subject, including strategic, credit, market, liquidity, compliance, operational and reputational risks. While we employ a broad and diversified set of controls and risk mitigation techniques, including hedging strategies and techniques that seek to balance our ability to profit from trading positions with our exposure to potential losses, our ability to control and mitigate risks that result in losses is inherently limited by our ability to identify all risks, including emerging and unknown risks, anticipate the timing of risks, apply effective hedging strategies, manage and aggregate data correctly and efficiently, and develop risk management models to assess and control risk.

Our ability to manage risk is limited by our ability to develop and maintain a culture of managing risk well throughout the Corporation and manage risks associated with third parties and vendors, to enable effective risk management and ensure that risks are appropriately considered, evaluated and responded to in a timely manner. Uncertain economic conditions, heightened legislative and regulatory scrutiny of the financial services industry and the overall complexity of our operations, among other developments, may result in a heightened level of risk for us. Accordingly, we could suffer losses as a result of our failure to properly anticipate, manage, control or mitigate risks.

For more information about our risk management policies and procedures, see Managing Risk in the MD&A on page 40.

We may not be successful in reorganizing the current business of Merrill Lynch, Pierce, Fenner & Smith Incorporated (MLPF&S) into two affiliated broker-dealers.

As a result of resolution planning, the current business of MLPF&S is expected to be reorganized, subject to regulatory approval, into two affiliated broker-dealers during 2019, MLPF&S and BofA Securities, Inc. In the event that the broker-dealer reorganization is not fully realized or takes longer to realize than expected, we could experience unexpected expenses, reputational damage, compliance and regulatory issues, and lost revenue. For more information about the broker-dealer reorganization, see Capital Management – Broker-dealer Regulatory Capital and Securities Regulation in the MD&A on page 47.

Regulatory, Compliance and Legal

We are subject to comprehensive government legislation and regulations, both domestically and internationally, which impact our operating costs, and could require us to make changes to our operations and result in an adverse impact on our results of operations. Additionally, these regulations and uncertainty surrounding the scope and requirements of the final rules implementing recently enacted and proposed legislation, as well as certain settlements and consent orders we have entered into, have increased and could continue to increase our compliance and operational risks and costs.

We are subject to comprehensive regulation under federal and state laws in the U.S. and the laws of the various jurisdictions in which we operate. These laws and regulations significantly affect and have the potential to restrict the scope of our existing businesses, limit our ability to pursue certain business opportunities, including the products and services we offer, reduce certain fees and rates or make our products and services more expensive for clients and customers.

In response to the financial crisis as well as other factors such as technological and market changes, the U.S. adopted the Financial Reform Act, which has resulted in significant rulemaking and proposed rulemaking by the U.S. Department of the Treasury, Federal Reserve, OCC, CFPB, Financial Stability Oversight Council, FDIC, Department of Labor, SEC and CFTC. For example, under the provisions of the Financial Reform Act known as the "Volcker Rule," we are prohibited from proprietary trading and limited in our sponsorship of, and investment in, hedge funds, private equity funds and certain other covered private funds. Non-U.S. regulators, such as the U.K. financial regulators and the European Parliament and Commission, have adopted or proposed laws and regulations regarding financial institutions located in their jurisdictions, which have required and could require us to make significant modifications to our non-U.S. businesses, operations and legal entity structure in order to comply with these requirements.

We continue to make adjustments to our business and operations, legal entity structure and capital and liquidity management policies, procedures and controls to comply with these laws and regulations, as well as final rulemaking, guidance and interpretation by regulatory authorities. Further, we could become subject to future regulatory requirements beyond those currently proposed, adopted or contemplated. The cumulative effect of all of the legislation and regulations on our business, operations and profitability remains uncertain. This uncertainty necessitates that in our business planning we make certain assumptions with respect to the scope and requirements of the proposed rules. If these assumptions prove incorrect, we could be subject to increased regulatory and compliance risks and costs as well as potential reputational harm. In addition, U.S. and international regulatory initiatives may overlap, and non-U.S. regulations and initiatives may be inconsistent or may conflict with current or proposed U.S. regulations, which could lead to compliance risks and increased costs.

Our regulators' prudential and supervisory authority gives them broad power and discretion to direct our actions, and they have assumed an active oversight, inspection and investigatory role across the financial services industry. However, regulatory focus is not limited to laws and regulations applicable to the financial services industry specifically, but also extends to other significant laws and regulations that apply across industries and jurisdictions.

including related to anti-money laundering, anti-corruption and economic sanctions. Additionally, we are subject to laws in the U.S. and abroad, including GDPR, regarding personal and confidential information of certain parties, such as our employees, customers, suppliers, counterparties and other third parties.

As part of their enforcement authority, our regulators have the authority to, among other things, assess significant civil or criminal monetary penalties, fines or restitution, issue cease and desist or removal orders and initiate injunctive actions. The amounts paid by us and other financial institutions to settle proceedings or investigations have been substantial and may increase. In some cases, governmental authorities have required criminal pleas or other extraordinary terms as part of such settlements, which could have significant consequences for a financial institution, including reputational harm, loss of customers, restrictions on the ability to access capital markets, and the inability to operate certain businesses or offer certain products for a period of time.

The Corporation and its employees and representatives are subject to regulatory scrutiny across jurisdictions. Additionally, the complexity of the federal and state regulatory and enforcement regimes in the U.S., coupled with the global scope of our operations and the aggressiveness of the regulatory environment worldwide also means that a single event or practice or a series of related events or practices may give rise to a large number of overlapping investigations and regulatory proceedings, either by multiple federal and state agencies in the U.S. or by multiple regulators and other governmental entities in different jurisdictions. Responding to inquiries, investigations, lawsuits and proceedings, regardless of the ultimate outcome of the matter, is time-consuming and expensive and can divert the attention of our senior management from our business. The outcome of such proceedings may be difficult to predict or estimate until late in the proceedings, which may last a number of years.

We are currently subject to the terms of settlements and consent orders that we have entered into with government agencies and regulatory authorities and may become subject to additional settlements or orders in the future. Such settlements and consent orders impose significant operational and compliance costs on us as they typically require us to enhance our procedures and controls, expand our risk and control functions within our lines of business, invest in technology and hire significant numbers of additional risk, control and compliance personnel. Moreover, if we fail to meet the requirements of the regulatory settlements and orders to which we are subject, or more generally, to maintain risk and control procedures and processes that meet the heightened standards established by our regulators and other government agencies, we could be required to enter into further settlements and orders, pay additional fines, penalties or judgments, or accept material regulatory restrictions on our businesses.

While we believe that we have adopted appropriate risk management and compliance programs to identify, assess, monitor and report on applicable laws, policies and procedures, compliance risks will continue to exist, particularly as we adapt to new rules and regulations. Additionally, there is no guarantee that our risk management and compliance programs will be consistently executed to successfully manage compliance risk. We also rely upon third parties who may expose us to compliance and legal risk. Future legislative or regulatory actions, and any required changes to our business or operations, or those of third parties upon whom we rely, resulting from such developments and actions, could result in a significant loss of revenue, impose additional compliance and other costs or otherwise reduce our profitability, limit the products and services that we offer or our ability to pursue certain business opportunities, require us to dispose of or curtail certain businesses, affect the value of assets

that we hold, require us to increase our prices and therefore reduce demand for our products, or otherwise adversely affect our businesses. In addition, legal and regulatory proceedings and other contingencies will arise from time to time that may result in fines, regulatory sanctions, penalties, equitable relief and changes to our business practices. As a result, we are and will continue to be subject to heightened compliance and operating costs that could adversely affect our results of operations.

We are subject to significant financial and reputational risks from potential liability arising from lawsuits and regulatory and government action.

We face significant legal risks in our business, and the volume of claims and amount of damages, penalties and fines claimed in litigation and other disputes, and regulatory and government proceedings against us and other financial institutions continue to be high. Greater than expected litigation and investigation costs, substantial legal liability or significant regulatory or government action against us could have adverse effects on our financial condition, including liquidity, and results of operations or cause significant reputational harm to us. We continue to experience a significant volume of litigation and other disputes, including claims for contractual indemnification with counterparties regarding relative rights and responsibilities. Consumers, clients and other counterparties continue to be litigious. Among other things, financial institutions, including us, continue to be the subject of claims alleging anti-competitive conduct with respect to various products and markets, including U.S. antitrust class actions claiming joint and several liability for treble damages. In addition, regulatory authorities have had a supervisory focus on enforcement, including in connection with alleged violations of law and customer harm. For example, U.S. regulators and government agencies have pursued claims against financial institutions under the Financial Institutions Reform, Recovery, and Enforcement Act, False Claims Act and antitrust laws. Such claims may carry significant and, in certain cases, treble damages. The ongoing environment of extensive regulation, regulatory compliance burdens, litigation and regulatory and government enforcement, combined with uncertainty related to the continually evolving regulatory environment, may affect operational and compliance costs and risks, which may limit our ability to continue providing certain products and services.

Additionally, misconduct by employees, including improper or illegal conduct, can cause significant reputational harm as well as litigation and regulatory action.

For more information on litigation risks, see Note 12 - *Commitments and Contingencies* to the Consolidated Financial Statements.

U.S. federal banking agencies may require us to increase our regulatory capital, TLAC, long-term debt or liquidity requirements, which could result in the need to issue additional qualifying securities or to take other actions, such as to sell company assets.

We are subject to U.S. regulatory capital and liquidity rules. These rules, among other things, establish minimum requirements to qualify as a "well-capitalized" institution. If any of our subsidiary insured depository institutions fails to maintain its status as "well capitalized" under the applicable regulatory capital rules, the Federal Reserve will require us to agree to bring the insured depository institution back to "well-capitalized" status. For the duration of such an agreement, the Federal Reserve may impose restrictions on our activities. If we were to fail to enter into or comply with such an agreement, or fail to comply with the terms of such agreement, the Federal Reserve may impose more severe restrictions on our activities, including requiring us to cease and desist activities permitted under the Bank Holding Company Act of 1956.

In the current regulatory environment, capital and liquidity requirements are frequently introduced and amended. It is possible that regulators may increase regulatory capital requirements including TLAC and long-term debt requirements, change how regulatory capital is calculated or increase liquidity requirements. Our risk-based capital surcharge (G-SIB surcharge) may increase from current estimates, and we are also subject to a countercyclical capital buffer which, while currently set at zero, may be increased by regulators. In 2018, the Federal Reserve issued a proposal to implement a stress capital buffer into its capital requirements, which may increase our regulatory capital requirements, if adopted. A significant component of regulatory capital ratios is calculating our risk-weighted assets and our leverage exposure which may increase. The Basel Committee on Banking Supervision has also revised several key methodologies for measuring risk-weighted assets, including a standardized approach for credit risk, standardized approach for operational risk and constraints on the use of internal models, as well as a capital floor based on the revised standardized approaches. U.S. banking regulators may update the U.S. Basel 3 rules to incorporate the Basel Committee revisions. In 2018, U.S. banking regulators published a proposal outlining a standardized approach for counterparty credit risk, which updates the calculation of the exposure amount for derivative contracts under the regulatory capital rule. Additionally, Net Stable Funding Ratio requirements have been proposed, which would apply to us and our subsidiary depository institutions, and target longer term liquidity risk. While the impact of these proposals remains uncertain, they could have a negative impact on our capital and liquidity positions.

As part of its annual CCAR review, the Federal Reserve conducts stress testing on parts of our business using hypothetical economic scenarios prepared by the Federal Reserve. Those scenarios may affect our CCAR stress test results, which may have an effect on our projected regulatory capital amounts in the annual CCAR submission, including the CCAR capital plan affecting our dividends and stock repurchases.

Changes to and compliance with the regulatory capital and liquidity requirements may impact our operations by requiring us to liquidate assets, increase borrowings, issue additional equity or other securities, cease or alter certain operations, sell company assets, or hold highly liquid assets, which may adversely affect our results of operations. We may be prohibited from taking capital actions such as paying or increasing dividends, or repurchasing securities if the Federal Reserve objects to our CCAR capital plan.

For more information, see Capital Management - Regulatory Capital in the MD&A on page 44 and Note 16 - Regulatory Requirements and Restrictions to the Consolidated Financial Statements.

Changes in accounting standards or assumptions in applying accounting policies could adversely affect us.

Our accounting policies and methods are fundamental to how we record and report our financial condition and results of operations. Some of these policies require use of estimates and assumptions that may affect the reported value of our assets or liabilities and results of operations and are critical because they require management to make difficult, subjective and complex judgments about matters that are inherently uncertain. If those assumptions, estimates or judgments were incorrectly made, we could be required to correct and restate prior-period financial statements. Accounting standard-setters and those who interpret the accounting standards, the SEC, banking regulators and our independent registered public accounting firm may also amend or even reverse their previous interpretations or positions on how various standards should be applied. These changes may be difficult to predict and could impact how we prepare and report

our financial statements. In some cases, we could be required to apply a new or revised standard retrospectively, resulting in us revising prior-period financial statements.

In June 2016, the Financial Accounting Standards Board issued a new accounting standard with respect to accounting for credit losses that will become effective for the Corporation on January 1, 2020. The standard replaces the existing measurement of the allowance for credit losses, which is based on management's best estimate of probable credit losses inherent in the Corporation's lending activities, with management's best estimate of lifetime expected credit losses inherent in the Corporation's financial assets that are recognized at amortized cost. The standard will also expand credit quality disclosures. The impact of this new accounting standard may be an increase in the Corporation's allowance for credit losses at the date of adoption which would result in a negative adjustment to retained earnings. The ultimate impact will depend on the characteristics of the Corporation's portfolio at adoption date as well as the macroeconomic conditions and forecasts as of that date. For more information on some of our critical accounting policies and recent accounting changes, see Complex Accounting Estimates in the MD&A on page 77 and Note 1 - Summary of Significant Accounting Principles to the Consolidated Financial Statements.

We may be adversely affected by changes in U.S. and non-U.S. tax laws and regulations.

On December 22, 2017, the President signed into law the Tax Cuts and Jobs Act (the Tax Act) which made significant changes to federal income tax law including, among other things, reducing the statutory corporate income tax rate to 21 percent from 35 percent and changing the taxation of our non-U.S. business activities.

In addition, we have U.K. net deferred tax assets which consist primarily of net operating losses that are expected to be realized by certain subsidiaries over an extended number of years. Adverse developments with respect to tax laws or to other material factors, such as prolonged worsening of Europe's capital markets or changes in the ability of our U.K. subsidiaries to conduct business in the EU, could lead our management to reassess and/or change its current conclusion that no valuation allowance is necessary with respect to our U.K. net deferred tax assets.

It is possible that governmental authorities in the U.S. and/or other countries could further amend tax laws that would adversely affect us, including the possibility that certain favorable aspects of the Tax Act could be amended in the future.

Reputation

Damage to our reputation could harm our businesses, including our competitive position and business prospects.

Our ability to attract and retain customers, clients, investors and employees is impacted by our reputation. Harm to our reputation can arise from various sources, including officer, director or employee misconduct, security breaches, unethical behavior, litigation or regulatory outcomes, compensation practices, the suitability or reasonableness of recommending particular trading or investment strategies, including the reliability of our research and models, prohibiting clients from engaging in certain transactions and sales practices. Additionally, our reputation may be harmed by failing to deliver products, subpar standards of service and quality expected by our customers, clients and the community, compliance failures, inadequacy of responsiveness to internal controls, unintended disclosure of personal, proprietary or confidential information, perception of our environmental, social and governance practices and disclosures, and the activities of our clients, customers and counterparties, including vendors. Actions by the financial services industry

generally or by certain members or individuals in the industry also can adversely affect our reputation. In addition, adverse publicity or negative information posted on social media, whether or not factually correct, may adversely impact our business prospects or financial results.

We are subject to complex and evolving laws and regulations regarding privacy, know-your-customer requirements, data protection, including the GDPR, cross-border data movement and other matters. Principles concerning the appropriate scope of consumer and commercial privacy vary considerably in different jurisdictions, and regulatory and public expectations regarding the definition and scope of consumer and commercial privacy may remain fluid. It is possible that these laws may be interpreted and applied by various jurisdictions in a manner inconsistent with our current or future practices, or that is inconsistent with one another. If personal, confidential or proprietary information of customers or clients in our possession is mishandled or misused, or if we do not timely or adequately address mishandled or misused information, we may face regulatory, reputational and operational risks which could have an adverse effect on our financial condition and results of operations.

We could suffer reputational harm if we fail to properly identify and manage potential conflicts of interest. Management of potential conflicts of interests has become increasingly complex as we expand our business activities through more numerous transactions, obligations and interests with and among our clients. The failure to adequately address, or the perceived failure to adequately address, conflicts of interest could affect the willingness of clients to use our products and services, or give rise to litigation or enforcement actions, which could adversely affect our businesses.

Our actual or perceived failure to address these and other issues, such as operational risks, gives rise to reputational risk that could harm us and our business prospects. Failure to appropriately address any of these issues could also give rise to additional regulatory restrictions, legal risks and reputational harm, which could, among other consequences, increase the size and number of litigation claims and damages asserted or subject us to enforcement actions, fines and penalties and cause us to incur related costs and expenses. For more information on reputational risk, see Reputational Risk Management in the MD&A on page 77.

Other

We face significant and increasing competition in the financial services industry.

We operate in a highly competitive environment and will continue to experience intense competition from local and global financial institutions as well as new entrants, in both domestic and foreign markets, in which we compete on the basis of a number of factors, including customer service, quality and range of products and services offered, technology, price, reputation, interest rates on loans and deposits, lending limits and customer convenience. Additionally, the changing regulatory environment may create competitive disadvantages for us given geography-driven capital and liquidity requirements. For example, U.S. regulators have in certain instances adopted stricter capital and liquidity requirements than those applicable to non-U.S. institutions. To the extent we expand into new business areas and new geographic regions, we may face competitors with more experience and more established relationships with clients, regulators and industry participants in the relevant market, which could adversely affect our ability to compete. In addition, technological advances and the growth of e-commerce have lowered geographic barriers of other financial institutions, made

it easier for non-depository institutions to offer products and services that traditionally were banking products and allowed non-traditional financial service providers to compete with traditional financial service companies in providing electronic and internet-based financial solutions including electronic securities trading, marketplace lending and payment processing. Further, clients may choose to conduct business with other market participants who engage in business or offer products in areas we deem speculative or risky, such as cryptocurrencies. Increased competition may negatively affect our earnings by creating pressure to lower prices or credit standards on our products and services requiring additional investment to improve the quality and delivery of our technology and/or reducing our market share, or affecting the willingness of our clients to do business with us.

Our inability to adapt our products and services to evolving industry standards and consumer preferences could harm our business.

Our business model is based on a diversified mix of businesses that provide a broad range of financial products and services, delivered through multiple distribution channels. Our success depends on our ability to adapt and develop our products, services and technology to evolving industry standards and consumer preferences. There is increasing pressure by competitors to provide products and services on more attractive terms, including higher interest rates on deposits, which may impact our ability to grow revenue and/or effectively compete. Additionally legislative and regulatory developments may affect the competitive landscape. Further, the competitive landscape may be impacted by the growth of non-depository institutions that offer traditional banking products at higher rates or with no fees, or otherwise offer alternative products. This can reduce our net interest margin and revenues from our fee-based products and services. In addition, the widespread adoption of new technologies, including internet services, cryptocurrencies and payment systems, could require substantial expenditures to modify or adapt our existing products and services as we grow and develop our online and mobile banking channel strategies in addition to remote connectivity solutions. We may not be as timely or successful in developing or introducing new products and services, integrating new products or services into our existing offerings, responding or adapting to changes in consumer behavior, preferences, spending, investing and/or saving habits, achieving market acceptance of our products and services, reducing costs in response to pressures to deliver products and services at lower prices or sufficiently developing and maintaining loyal customers. The inability to adapt our products and services to evolving industry standards and consumer preferences could harm our business and adversely affect our results of operations and reputation.

Our ability to attract and retain qualified employees is critical to the success of our business and failure to do so could hurt our business prospects and competitive position.

Our performance is heavily dependent on the talents and efforts of highly skilled individuals. Competition for qualified personnel within the financial services industry and from businesses outside the financial services industry is intense. Our competitors include non-U.S. based institutions and institutions subject to different compensation and hiring regulations than those imposed on U.S. institutions and financial institutions.

In order to attract and retain qualified personnel, we must provide market-level compensation. As a large financial and banking institution, we may be subject to limitations on compensation practices (which may or may not affect our competitors) by the Federal Reserve, the OCC, the FDIC and other regulators around the world. EU and U.K. rules limit and subject to clawback certain forms of variable compensation for senior

employees. Current and potential future limitations on executive compensation imposed by legislation or regulation could adversely affect our ability to attract and maintain qualified employees. Furthermore, a substantial portion of our annual incentive compensation paid to our senior employees has in recent years taken the form of long-term equity-based awards. Therefore, the ultimate value of this compensation depends on the price of our common stock when the awards vest. If we are unable to continue to attract and retain qualified individuals, our business prospects and competitive position could be adversely affected.

We could suffer losses if our models and strategies fail to properly anticipate and manage risk.

We use proprietary models and strategies extensively to measure and assess capital requirements for credit, country, market, operational and strategic risks and to assess and control our operations and financial condition. These models require oversight and periodic re-validation and are subject to inherent limitations due to the use of historical trends and simplifying assumptions, and uncertainty regarding economic and financial outcomes. Our models may not be sufficiently predictive of future results due to limited historical patterns, extreme or unanticipated market movements or customer behavior and illiquidity, especially during severe market downturns or stress events, and may not be effective if we fail to detect flaws in our models during our review process, our models contain erroneous data, valuations, formulas or algorithms or our applications running the models do not perform as expected. The models that we use to assess and control our market risk exposures also reflect assumptions about the degree of correlation among prices of various asset classes or other market indicators. Market conditions in recent years have involved unprecedented dislocations and highlight the limitations inherent in using historical data to manage risk. We could suffer losses if models and strategies fail to properly anticipate and manage risks.

Failure to properly manage and aggregate data may result in our inability to manage risk and business needs and inaccurate financial, regulatory and operational reporting.

We rely on our ability to manage, aggregate, interpret and use data in an accurate, timely and complete manner for effective risk reporting and management. Our policies, programs, processes and practices govern how data is managed, aggregated, interpreted and used. While we continuously update our policies, programs, processes and practices, and implement emerging technologies, such as artificial intelligence, our data management and aggregation processes are subject to failure, including human error or system failure. Failure to manage data effectively and to aggregate data in an accurate, timely and complete manner may limit our ability to manage current and emerging risk, to produce accurate financial, regulatory and operational reporting as well as to manage changing business needs.

Item 1B. Unresolved Staff Comments

None

Item 2. Properties

As of December 31, 2018, our principal offices and other materially important properties consisted of the following:

Facility Name	Location	General Character of the Physical Property	Primary Business Segment	Property Status	Property Square Feet (1)
Bank of America Corporate Center	Charlotte, NC	60 Story Building	Principal Executive Offices	Owned	1,212,177
Bank of America Tower at One Bryant Park	New York, NY	55 Story Building	GWIM, Global Banking and Global Markets	Leased (2)	1,836,575
Bank of America Merrill Lynch Financial Centre	London, UK	4 Building Campus	Global Banking and Global Markets	Leased	562,595
Cheung Kong Center	Hong Kong	62 Story Building	Global Banking and Global Markets	Leased	149,790

(1) For leased properties, property square feet represents the square footage occupied by the Corporation.

(2) The Corporation has a 49.9 percent joint venture interest in this property.

We own or lease approximately 77.3 million square feet in over 20,000 facility and ATM locations globally, including approximately 72.2 million square feet in the U.S. (all 50 states and the District of Columbia, the U.S. Virgin Islands, Puerto Rico and Guam) and approximately 5.1 million square feet in more than 35 countries.

We believe our owned and leased properties are adequate for our business needs and are well maintained. We continue to evaluate our owned and leased real estate and may determine from time to time that certain of our premises and facilities, or ownership structures, are no longer necessary for our operations. In connection therewith, we are evaluating the sale or sale/

leaseback of certain properties and we may incur costs in connection with any such transactions.

Item 3. Legal Proceedings

See Litigation and Regulatory Matters in Note 12 – Commitments and Contingencies to the Consolidated Financial Statements, which is incorporated herein by reference.

Item 4. Mine Safety Disclosures

None

Part II

Bank of America Corporation and Subsidiaries

Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities

The principal market on which our common stock is traded is the New York Stock Exchange under the symbol "BAC." As of February 25, 2019, there were 170,394 registered shareholders of common stock.

The table below presents share repurchase activity for the three months ended December 31, 2018. The primary source of funds for cash distributions by the Corporation to its shareholders is

dividends received from its bank subsidiaries. Each of the bank subsidiaries is subject to various regulatory policies and requirements relating to the payment of dividends, including requirements to maintain capital above regulatory minimums. All of the Corporation's preferred stock outstanding has preference over the Corporation's common stock with respect to payment of dividends.

(Dollars in millions, except per share information, shares in thousands)				
	Total Common Shares Purchased (1)	Weighted-Average Per Share Price	Total Shares Purchased as Part of Publicly Announced Programs	Remaining Buyback Authority Amounts (2)
October 1 - 31, 2018	54,357	\$ 27.78	54,353	\$ 14,050
November 1 - 30, 2018	68,630	27.77	68,612	12,145
December 1 - 31, 2018	71,404	25.44	71,401	10,328
Three months ended December 31, 2018	194,391	26.92	194,366	

(1) Includes shares of the Corporation's common stock acquired by the Corporation in connection with satisfaction of tax withholding obligations on vested restricted stock or restricted stock units and certain forfeitures and terminations of employment-related awards and for potential re-issuance to certain employees under equity incentive plans.

(2) On June 28, 2018, following the Federal Reserve's non objection to our 2018 CCAR capital plan, the Board authorized the repurchase of approximately \$20.6 billion in common stock from July 1, 2018 through June 30, 2019, including approximately \$600 million to offset the effect of equity-based compensation issuances during the same period. During the three months ended December 31, 2018, pursuant to the Board's authorizations, the Corporation repurchased \$5.2 billion of common stock, which included common stock repurchases to offset equity-based compensation awards. On February 7, 2019, the Corporation announced that the Board authorized the repurchase of an additional \$2.5 billion of common stock during the first and second quarters of 2019. Amounts shown do not include this additional repurchase authority. For more information, see Capital Management – CCAR and Capital Planning on page 43 and Note 13 – Shareholders' Equity to the Consolidated Financial Statements.

The Corporation did not have any unregistered sales of equity securities during the three months ended December 31, 2018.

Item 6. Selected Financial Data

See Tables 8 and 9 in the MD&A beginning on page 26, which are incorporated herein by reference.

Item 7. Bank of America Corporation and Subsidiaries

Management's Discussion and Analysis of Financial Condition and Results of Operations

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Management's Discussion and Analysis of Financial Condition and Results of Operations

Bank of America Corporation (the "Corporation") and its management may make certain statements that constitute "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. These statements can be identified by the fact that they do not relate strictly to historical or current facts. Forward-looking statements often use words such as "anticipates," "targets," "expects," "hopes," "estimates," "intends," "plans," "goals," "believes," "continues" and other similar expressions or future or conditional verbs such as "will," "may," "might," "should," "would" and "could." Forward-looking statements represent the Corporation's current expectations, plans or forecasts of its future results, revenues, expenses, efficiency ratio, capital measures, strategy and future business and economic conditions more generally, and other future matters. These statements are not guarantees of future results or performance and involve certain known and unknown risks, uncertainties and assumptions that are difficult to predict and are often beyond the Corporation's control. Actual outcomes and results may differ materially from those expressed in, or implied by, any of these forward-looking statements.

You should not place undue reliance on any forward-looking statement and should consider the following uncertainties and risks, as well as the risks and uncertainties more fully discussed under Item 1A. Risk Factors of this Annual Report on Form 10-K: the Corporation's potential claims, damages, penalties, fines and reputational damage resulting from pending or future litigation, regulatory proceedings and enforcement actions and the possibility that amounts may be in excess of the Corporation's recorded liability and estimated range of possible loss for litigation and regulatory exposures; the possibility that the Corporation could face increased servicing, securities, fraud, indemnity, contribution or other claims from one or more counterparties, including trustees, purchasers of loans, underwriters, issuers, other parties involved in securitizations, monolines or private-label and other investors; the possibility that future representations and warranties losses may occur in excess of the Corporation's recorded liability and estimated range of possible loss for its representations and warranties exposures; the Corporation's ability to resolve representations and warranties repurchase and related claims, including claims brought by investors or trustees seeking to avoid the statute of limitations for repurchase claims; the risks related to the discontinuation of the London InterBank Offered Rate and other reference rates, including increased expenses and litigation and the effectiveness of hedging strategies; uncertainties about the financial stability and growth rates of non-U.S. jurisdictions, the risk that those jurisdictions may face difficulties servicing their sovereign debt, and related stresses on financial markets, currencies and trade, and the Corporation's exposures to such risks, including direct, indirect and operational; the impact of U.S. and global interest rates, inflation, currency exchange rates, economic conditions, trade policies, including tariffs, and potential geopolitical instability; the impact on the Corporation's business, financial condition and results of operations of a potential higher interest rate environment; the possibility that future credit losses may be higher than currently expected due to changes in economic assumptions, customer behavior, adverse developments with respect to U.S. or global economic conditions and other uncertainties; the Corporation's ability to achieve its expense targets and expectations regarding net interest income, net charge-offs, loan growth or other projections; adverse changes to the Corporation's credit ratings from the major credit rating agencies; an inability to access capital markets or maintain deposits; estimates of the fair value and other accounting values, subject to

impairment assessments, of certain of the Corporation's assets and liabilities; uncertainty regarding the content, timing and impact of regulatory capital and liquidity requirements; the impact of adverse changes to total loss-absorbing capacity requirements and/or global systemically important bank surcharges; the success of our reorganization of Merrill Lynch, Pierce, Fenner & Smith Incorporated; the potential impact of actions of the Board of Governors of the Federal Reserve System on the Corporation's capital plans; the effect of regulations, other guidance or additional information on the impact from the Tax Cuts and Jobs Act; the impact of implementation and compliance with U.S. and international laws, regulations and regulatory interpretations, including, but not limited to, recovery and resolution planning requirements, Federal Deposit Insurance Corporation assessments, the Volcker Rule, fiduciary standards and derivatives regulations; a failure in or breach of the Corporation's operational or security systems or infrastructure, or those of third parties, including as a result of cyber-attacks; the impact on the Corporation's business, financial condition and results of operations from the planned exit of the United Kingdom from the European Union; the impact of a prolonged federal government shutdown and uncertainty regarding the federal government's debt limit; and other similar matters.

Forward-looking statements speak only as of the date they are made, and the Corporation undertakes no obligation to update any forward-looking statement to reflect the impact of circumstances or events that arise after the date the forward-looking statement was made.

Notes to the Consolidated Financial Statements referred to in the Management's Discussion and Analysis of Financial Condition and Results of Operations (MD&A) are incorporated by reference into the MD&A. Certain prior-year amounts have been reclassified to conform to current-year presentation. Throughout the MD&A, the Corporation uses certain acronyms and abbreviations which are defined in the Glossary.

Executive Summary

Business Overview

The Corporation is a Delaware corporation, a bank holding company (BHC) and a financial holding company. When used in this report, "the Corporation" may refer to Bank of America Corporation individually, Bank of America Corporation and its subsidiaries, or certain of Bank of America Corporation's subsidiaries or affiliates. Our principal executive offices are located in Charlotte, North Carolina. Through our banking and various nonbank subsidiaries throughout the U.S. and in international markets, we provide a diversified range of banking and nonbank financial services and products through four business segments: *Consumer Banking*, *Global Wealth & Investment Management (GWIM)*, *Global Banking and Global Markets*, with the remaining operations recorded in *All Other*. We operate our banking activities primarily under the Bank of America, National Association (Bank of America, N.A. or BANA) charter. At December 31, 2018, the Corporation had approximately \$2.4 trillion in assets and a headcount of approximately 204,000 employees.

As of December 31, 2018, we served clients through operations across the U.S., its territories and more than 35 countries. Our retail banking footprint covers approximately 85 percent of the U.S. population, and we serve approximately 66 million consumer and small business clients with approximately 4,300 retail financial centers, approximately 16,300 ATMs, and

leading digital banking platforms (www.bankofamerica.com) with more than 36 million active users, including over 26 million active mobile users. We offer industry-leading support to approximately three million small business owners. Our wealth management businesses, with client balances of approximately \$2.6 trillion, provide tailored solutions to meet client needs through a full set of investment management, brokerage, banking, trust and retirement products. We are a global leader in corporate and investment banking and trading across a broad range of asset classes serving corporations, governments, institutions and individuals around the world.

Recent Developments

Capital Management

During 2018, we repurchased \$20.1 billion of common stock pursuant to the Board of Directors' (the Board) repurchase authorizations under our 2018 and 2017 Comprehensive Capital Analysis and Review (CCAR) plans, including repurchases to offset equity-based compensation awards. Also, in addition to the previously announced repurchases associated with the 2018 CCAR capital plan, on February 7, 2019, we announced a plan to repurchase an additional \$2.5 billion of common stock through June 30, 2019, which was approved by the Board of Governors of the Federal Reserve System (Federal Reserve). For additional information, see Capital Management on page 43.

U.K. Exit from the EU

We conduct business in Europe, the Middle East and Africa primarily through our subsidiaries in the U.K. and Ireland. A referendum held in the U.K. in 2016 resulted in a majority vote in favor of exiting the European Union (EU). In March 2017, the U.K. notified the EU of its intent to withdraw from the EU, which is scheduled to occur on March 29, 2019. Negotiations between the U.K. and the EU regarding the terms, conditions and timing of the withdrawal are ongoing and the outcome remains uncertain. In preparation for the withdrawal, we have implemented changes to our operating model in the region, including establishing our principal EU banking and broker-dealer operations outside the U.K. The changes are expected to enable us to continue to service our clients with minimal disruption, retain operational flexibility, minimize transition risks and maximize legal entity efficiencies, independent of the outcome and timing of the withdrawal.

LIBOR and Other Benchmark Rates

The U.K. Financial Conduct Authority (FCA), which regulates the London InterBank Offered Rate (LIBOR), announced in July 2017 that it will no longer persuade or require banks to submit rates for LIBOR after 2021. This announcement along with financial benchmark reforms more generally and changes in the interbank lending markets have resulted in uncertainty about the future of LIBOR and certain other rates or indices used as interest rate "benchmarks." These actions and uncertainties may trigger future changes in the rules or methodologies used to calculate benchmarks or lead to the discontinuation or unavailability of benchmarks.

The Corporation has established an enterprise-wide initiative to identify, assess and monitor risks associated with the potential discontinuation or unavailability of benchmarks, including LIBOR, and the transition to alternative reference rates. As part of this initiative, the Corporation is actively engaged with global regulators, industry working groups and trade associations to develop strategies for transitions from current benchmarks to alternative reference rates. We are updating our operational processes and models to support new alternative reference rate

activity. In addition, we continue to analyze and evaluate legacy contracts across all products to determine the impact of a discontinuation of LIBOR or other benchmarks and to address consequential changes to those legacy contracts. Certain actions required to mitigate risks associated with the unavailability of benchmarks and implementation of new methodologies and contractual mechanics are dependent on a consensus being reached by the industry or the markets in various jurisdictions around the world. As a result, there is uncertainty as to the solutions that will be developed to address the unavailability of LIBOR or other benchmarks, as well as the overall impact to our businesses, operations and results. Additionally, any transition from current benchmarks may alter the Corporation's risk profiles and models, valuation tools, product design and effectiveness of hedging strategies, as well as increase the costs and risks related to potential regulatory requirements.

Financial Highlights

Table 1 Summary Income Statement and Selected Financial Data

(Dollars in millions, except per share information)	2018	2017
Income statement		
Net interest income	\$ 47,432	\$ 44,667
Noninterest income	43,815	42,685
Total revenue, net of interest expense	91,247	87,352
Provision for credit losses	3,282	3,396
Noninterest expense	53,381	54,743
Income before income taxes	34,584	29,213
Income tax expense	6,437	10,981
Net income	28,147	18,232
Preferred stock dividends	1,451	1,614
Net income applicable to common shareholders	\$ 26,696	\$ 16,618
Per common share information		
Earnings	\$ 2.64	\$ 1.63
Diluted earnings	2.61	1.56
Dividends paid	0.54	0.39
Performance ratios		
Return on average assets	1.21%	0.80%
Return on average common shareholders' equity	11.04	6.72
Return on average tangible common shareholders' equity (1)	15.55	9.41
Efficiency ratio	58.50	62.67
Balance sheet at year end		
Total loans and leases	\$ 946,895	\$ 936,749
Total assets	2,354,507	2,281,234
Total deposits	1,381,476	1,309,545
Total common shareholders' equity	242,999	244,823
Total shareholders' equity	265,325	267,146

(1) Return on average tangible common shareholders' equity is a non-GAAP financial measure. For more information and a corresponding reconciliation to accounting principles generally accepted in the United States of America (GAAP) financial measures, see on page 25.

Net income was \$28.1 billion, or \$2.61 per diluted share in 2018 compared to \$18.2 billion, or \$1.56 per diluted share in 2017. The improvement in net income was driven by a decrease in income tax expense due to the impacts of the Tax Cuts and Jobs Act (the Tax Act), an increase in net interest income, higher noninterest income, lower provision for credit losses and a decline in noninterest expense. Impacts from the Tax Act include a reduction in the federal corporate income tax rate to 21 percent from 35 percent. In addition, results for 2017 included a reduction in net income of \$2.9 billion due to the Tax

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Net Interest Income

Net interest income increased \$2.8 billion to \$47.4 billion in 2018 compared to 2017. Net interest yield on a fully taxable-equivalent (FTE) basis increased five basis points (bps) to 2.42 percent for 2018. These increases were primarily driven by higher interest rates as well as loan and deposit growth, partially offset by tightening spreads, higher *Global Markets* funding costs and the impact of the sale of the non-U.S. consumer credit card business in 2017. For more information on net interest yield and the FTE basis, see Supplemental Financial Data on page 24, and for more information on interest rate risk management, see Interest Rate Risk Management for the Banking Book on page 74.

Noninterest Income

Table 2 Noninterest Income

(Dollars in millions)	2018	2017
Card income	\$ 6,051	\$ 5,902
Service charges	7,767	7,818
Investment and brokerage services	14,160	13,836
Investment banking income	5,327	6,011
Trading account profits	8,540	7,277
Other income	1,970	1,841
Total noninterest income	\$ 43,815	\$ 42,685

Noninterest income increased \$1.1 billion to \$43.8 billion in 2018 compared to 2017. The following highlights the significant changes.

- Card income increased \$149 million primarily driven by an increase in credit and debit card spending, as well as increased late fees and annual fees, partially offset by higher rewards costs, lower cash advance fees, and the impact of the sale of the non-U.S. consumer credit card business in 2017.
- Investment and brokerage services income increased \$324 million primarily due to assets under management (AUM) flows and higher market valuations, partially offset by the impact of changing market dynamics on transactional revenue and AUM pricing.
- Investment banking income decreased \$684 million.
- Trading account profits increased \$1.3 billion primarily due to increased client activity in equity financing and derivatives, higher market interest rates and strong trading performance in equity derivatives, partially offset by weakness in credit products.
- Other income increased \$129 million primarily due to gains on sales of consumer real estate loans, primarily non-core, of \$731 million, offset by a \$729 million charge related to the redemption of certain trust preferred securities in 2018. Other income for 2017 included a downward valuation adjustment of \$946 million on tax-advantaged energy investments in connection with the Tax Act and a \$793 million pretax gain recognized in connection with the sale of the non-U.S. consumer credit card business.

Provision for Credit Losses

The provision for credit losses decreased \$114 million to \$3.3 billion in 2018 compared to 2017, primarily reflecting a 2017 single-name non-U.S. commercial charge-off and improvement in the commercial portfolio. In the consumer portfolio, the impact of the sale of the non-U.S. consumer credit card business in 2017 was more than offset by a slower pace of improvement in the consumer real estate portfolio, and portfolio seasoning and loan growth in the U.S. credit card portfolio. For more information on the provision for credit losses, see Provision for Credit Losses on page 67.

Noninterest Expense

Table 3 Noninterest Expense

(Dollars in millions)	2018	2017
Personnel	\$ 31,880	\$ 31,931
Occupancy	4,066	4,009
Equipment	1,705	1,692
Marketing	1,674	1,746
Professional fees	1,699	1,888
Data processing	3,222	3,139
Telecommunications	699	699
Other general operating	8,436	9,639
Total noninterest expense	\$ 53,381	\$ 54,743

Noninterest expense decreased \$1.4 billion to \$53.4 billion in 2018 compared to 2017. The decrease was primarily due to lower other general operating expense, primarily driven by a decline in litigation and Federal Deposit Insurance Corporation (FDIC) expense as well as a \$316 million impairment charge in 2017 related to certain data centers.

Income Tax Expense

Table 4 Income Tax Expense

(Dollars in millions)	2018	2017
Income before income taxes	\$ 34,584	\$ 29,213
Income tax expense	6,437	10,981
Effective tax rate	18.6%	37.6%

Tax expense for 2018 reflected the new 21 percent federal income tax rate and the other provisions of the Tax Act, as well as our recurring tax preference benefits.

Tax expense for 2017 included a charge of \$1.9 billion reflecting the initial impact of the Tax Act, including a tax charge of \$2.3 billion related primarily to a lower valuation of certain deferred tax assets and liabilities and a \$347 million tax benefit on the pretax loss from the lower valuation of our tax-advantaged energy investments. Other than the impact of the Tax Act, the effective tax rate for 2017 was driven by our recurring tax preference benefits as well as an expense from the sale of the non-U.S. consumer credit card business, largely offset by benefits related to stock-based compensation and the restructuring of certain subsidiaries.

We expect the effective tax rate for 2019 to be approximately 19 percent, absent unusual items.

Balance Sheet Overview

Table
5 Selected Balance Sheet Data

	December 31		
(Dollars in millions)	2018	2017	% Change
Assets			
Cash and cash equivalents	\$ 177,404	\$ 157,434	13 %
Federal funds sold and securities borrowed or purchased under agreements to resell	261,131	212,747	23
Trading account assets	214,348	209,358	2
Debt securities	441,753	440,130	—
Loans and leases	946,895	936,749	1
Allowance for loan and lease losses	(9,601)	(10,393)	(8)
All other assets	322,577	335,209	(4)
Total assets	\$ 2,354,507	\$ 2,281,234	3
Liabilities			
Deposits	\$ 1,381,476	\$ 1,309,545	5
Federal funds purchased and securities loaned or sold under agreements to repurchase	186,988	176,865	6
Trading account liabilities	68,220	81,187	(16)
Short-term borrowings	20,189	32,666	(38)
Long-term debt	229,340	227,402	1
All other liabilities	202,969	186,423	9
Total liabilities	2,089,182	2,014,088	4
Shareholders' equity	265,325	267,146	(1)
Total liabilities and shareholders' equity	\$ 2,354,507	\$ 2,281,234	3

Assets

At December 31, 2018, total assets were approximately \$2.4 trillion, up \$73.3 billion from December 31, 2017. The increase in assets was primarily due to higher securities borrowed or purchased under agreements to resell due to investment of excess cash levels in higher yielding assets and increased client activity, and higher cash and cash equivalents driven by deposit growth.

Cash and Cash Equivalents

Cash and cash equivalents increased \$20.0 billion primarily driven by deposit growth, partially offset by investment of short-term excess cash into securities purchased under agreements to resell, and loan growth.

Federal Funds Sold and Securities Borrowed or Purchased Under Agreements to Resell

Federal funds transactions involve lending reserve balances on a short-term basis. Securities borrowed or purchased under agreements to resell are collateralized lending transactions utilized to accommodate customer transactions, earn interest rate spreads, and obtain securities for settlement and for collateral. Federal funds sold and securities borrowed or purchased under agreements to resell increased \$48.4 billion due to investment of excess cash levels in higher yielding assets and a higher level of customer financing activity.

Trading Account Assets

Trading account assets consist primarily of long positions in equity and fixed-income securities including U.S. government and agency securities, corporate securities and non-U.S. sovereign debt. Trading account assets increased \$5.0 billion primarily driven by additional inventory in fixed-income, currencies and commodities (FICC) to meet expected client demand.

Debt Securities

Debt securities primarily include U.S. Treasury and agency securities, mortgage-backed securities (MBS), principally agency MBS, non-U.S. bonds, corporate bonds and municipal debt. We use the debt securities portfolio primarily to manage interest rate

and liquidity risk and to take advantage of market conditions that create economically attractive returns on these investments. Debt securities increased \$1.6 billion primarily driven by the deployment of deposit inflows. In 2018, the Corporation transferred available-for-sale (AFS) debt securities with an amortized cost of \$64.5 billion to held to maturity. For more information on debt securities, see Note 4 – Securities to the Consolidated Financial Statements.

Loans and Leases

Loans and leases increased \$10.1 billion primarily due to net loan growth driven by client demand for commercial loans and increases in residential mortgage. For more information on the loan portfolio, see Credit Risk Management on page 51.

Allowance for Loan and Lease Losses

The allowance for loan and lease losses decreased \$792 million primarily due to the impact of improvements in credit quality from a stronger economy and continued runoff and sales in the non-core consumer real estate portfolio. For additional information, see Allowance for Credit Losses on page 67.

Liabilities

At December 31, 2018, total liabilities were approximately \$2.1 trillion, up \$75.1 billion from December 31, 2017, primarily due to deposit growth.

Deposits

Deposits increased \$71.9 billion primarily due to an increase in retail deposits.

Federal Funds Purchased and Securities Loaned or Sold Under Agreements to Repurchase

Federal funds transactions involve borrowing reserve balances on a short-term basis. Securities loaned or sold under agreements to repurchase are collateralized borrowing transactions utilized to accommodate customer transactions, earn interest rate spreads and finance assets on the balance sheet. Federal funds purchased and securities loaned or sold under agreements to repurchase increased \$10.1 billion primarily due to an increase in matched book funding within Global Markets.

Trading Account Liabilities

Trading account liabilities consist primarily of short positions in equity and fixed-income securities including U.S. Treasury and agency securities, corporate securities and non-U.S. sovereign debt. Trading account liabilities decreased \$13.0 billion primarily due to lower levels of short positions in government and corporate bonds driven by expected client demand within *Global Markets*.

Short-term Borrowings

Short-term borrowings provide an additional funding source and primarily consist of Federal Home Loan Bank (FHLB) short-term borrowings, notes payable and various other borrowings that generally have maturities of one year or less. Short-term borrowings decreased \$12.5 billion primarily due to a decrease in short-term FHLB advances. For more information on short-term borrowings, see *Note 10 – Federal Funds Sold or Purchased, Securities Financing Agreements, Short-term Borrowings and Restricted Cash* to the Consolidated Financial Statements.

Long-term Debt

Long-term debt increased \$1.9 billion primarily driven by issuances outpacing maturities and redemptions. For more information on long-term debt, see *Note 11 – Long-term Debt* to the Consolidated Financial Statements.

Shareholders' Equity

Shareholders' equity decreased \$1.8 billion driven by returns of capital to shareholders of \$27.0 billion through common and preferred stock dividends and share repurchases and a \$4.0 billion after-tax decrease in the fair value of AFS debt securities recorded in accumulated other comprehensive income (OCI), largely offset by earnings.

Cash Flows Overview

The Corporation's operating assets and liabilities support our global markets and lending activities. We believe that cash flows from operations, available cash balances and our ability to generate cash through short- and long-term debt are sufficient to fund our operating liquidity needs. Our investing activities primarily include the debt securities portfolio and loans and leases. Our financing activities reflect cash flows primarily related to customer deposits, securities financing agreements and long-term debt. For more information on liquidity, see *Liquidity Risk* on page 47.

Supplemental Financial Data

In this Form 10-K, we present certain non-GAAP financial measures. Non-GAAP financial measures exclude certain items or otherwise include components that differ from the most directly comparable measures calculated in accordance with GAAP. Non-GAAP financial measures are provided as additional useful information to assess our financial condition, results of operations (including period-to-period operating performance) or compliance with prospective regulatory requirements. These non-GAAP financial measures are not intended as a substitute for GAAP financial measures and may not be defined or calculated the same way as non-GAAP financial measures used by other companies.

We view net interest income and related ratios and analyses on an FTE basis, which when presented on a consolidated basis, are non-GAAP financial measures. To derive the FTE basis, net interest income is adjusted to reflect tax-exempt income on an equivalent before-tax basis with a corresponding increase in income tax expense. For purposes of this calculation, we used the federal statutory tax rate of 21 percent for 2018 (35 percent for all prior periods) and a representative state tax rate. Net interest yield, which measures the basis points we earn over the cost of funds, utilizes net interest income (and thus total revenue) on an FTE basis. We believe that presentation of these items on an FTE basis allows for comparison of amounts from both taxable and tax-exempt sources and is consistent with industry practices.

We may present certain key performance indicators and ratios excluding certain items (e.g., debit valuation adjustment (DVA) gains (losses)) which result in non-GAAP financial measures. We believe that the presentation of measures that exclude these items is useful because such measures provide additional information to assess the underlying operational performance and trends of our businesses and to allow better comparison of period-to-period operating performance.

We also evaluate our business based on certain ratios that utilize tangible equity, a non-GAAP financial measure. Tangible equity represents an adjusted shareholders' equity or common shareholders' equity amount which has been reduced by goodwill and certain acquired intangible assets (excluding mortgage servicing rights (MSRs)), net of related deferred tax liabilities. These measures are used to evaluate our use of equity. In addition, profitability, relationship and investment models use both return on average tangible common shareholders' equity and return on average tangible shareholders' equity as key measures to support our overall growth goals. These ratios are as follows:

- Return on average tangible common shareholders' equity measures our earnings contribution as a percentage of adjusted common shareholders' equity. The tangible common equity ratio represents adjusted ending common shareholders' equity divided by total assets less goodwill and certain acquired intangible assets (excluding MSRs), net of related deferred tax liabilities.
- Return on average tangible shareholders' equity measures our earnings contribution as a percentage of adjusted average total shareholders' equity. The tangible equity ratio represents adjusted ending shareholders' equity divided by total assets less goodwill and certain acquired intangible assets (excluding MSRs), net of related deferred tax liabilities.
- Tangible book value per common share represents adjusted ending common shareholders' equity divided by ending common shares outstanding.

We believe that the use of ratios that utilize tangible equity provides additional useful information because they present measures of those assets that can generate income. Tangible book value per share provides additional useful information about the level of tangible assets in relation to outstanding shares of common stock.

The aforementioned supplemental data and performance measures are presented in Tables 8 and 9.

Non-GAAP Reconciliations

Tables 6 and 7 provide reconciliations of certain non-GAAP financial measures to GAAP financial measures.

Table 6 Five-year Reconciliations to GAAP Financial Measures (1)

(Dollars in millions, shares in thousands)	2018	2017	2016	2015	2014
Reconciliation of average shareholders' equity to average tangible shareholders' equity and average tangible common shareholders' equity					
Shareholders' equity	\$ 264,748	\$ 271,289	\$ 265,843	\$ 251,384	\$ 238,317
Goodwill	(68,951)	(69,286)	(69,750)	(69,772)	(69,809)
Intangible assets (excluding MSRs)	(2,058)	(2,652)	(3,382)	(4,201)	(5,109)
Related deferred tax liabilities	906	1,463	1,644	1,852	2,090
Tangible shareholders' equity	\$ 194,645	\$ 200,814	\$ 194,355	\$ 179,263	\$ 165,489
Preferred stock	(22,949)	(24,188)	(24,656)	(21,808)	(15,410)
Tangible common shareholders' equity	\$ 171,696	\$ 176,626	\$ 169,699	\$ 157,455	\$ 150,079
Reconciliation of year-end shareholders' equity to year-end tangible shareholders' equity and year-end tangible common shareholders' equity					
Shareholders' equity	\$ 265,325	\$ 267,146	\$ 266,195	\$ 255,615	\$ 243,476
Goodwill	(68,951)	(68,951)	(69,744)	(69,761)	(69,777)
Intangible assets (excluding MSRs)	(1,774)	(2,312)	(2,989)	(3,768)	(4,612)
Related deferred tax liabilities	858	943	1,545	1,716	1,960
Tangible shareholders' equity	\$ 195,458	\$ 196,826	\$ 195,007	\$ 183,802	\$ 171,047
Preferred stock	(22,326)	(22,323)	(25,220)	(22,272)	(19,309)
Tangible common shareholders' equity	\$ 173,132	\$ 174,503	\$ 169,787	\$ 161,530	\$ 151,738
Reconciliation of year-end assets to year-end tangible assets					
Assets	\$2,354,507	\$ 2,281,234	\$ 2,188,067	\$ 2,144,606	\$ 2,104,539
Goodwill	(68,951)	(68,951)	(69,744)	(69,761)	(69,777)
Intangible assets (excluding MSRs)	(1,774)	(2,312)	(2,989)	(3,768)	(4,612)
Related deferred tax liabilities	858	943	1,545	1,716	1,960
Tangible assets	\$ 2,284,640	\$ 2,210,914	\$ 2,116,879	\$ 2,072,793	\$ 2,032,110

(1) Presents reconciliations of non-GAAP financial measures to GAAP financial measures. For more information on non-GAAP financial measures and ratios we use in assessing the results of the Corporation, see Supplemental Financial Data on page 24.

Table 7 Quarterly Reconciliations to GAAP Financial Measures (1)

(Dollars in millions)	2018 Quarters				2017 Quarters			
	Fourth	Third	Second	First	Fourth	Third	Second	First
Reconciliation of average shareholders' equity to average tangible shareholders' equity and average tangible common shareholders' equity								
Shareholders' equity	\$ 263,698	\$ 264,653	\$ 265,181	\$ 265,480	\$ 273,162	\$ 273,238	\$ 270,977	\$ 267,700
Goodwill	(68,951)	(68,951)	(68,951)	(68,951)	(68,954)	(68,969)	(69,489)	(69,744)
Intangible assets (excluding MSRs)	(1,857)	(1,992)	(2,126)	(2,261)	(2,399)	(2,549)	(2,743)	(2,923)
Related deferred tax liabilities	874	896	916	939	1,344	1,465	1,506	1,539
Tangible shareholders' equity	\$ 193,764	\$ 194,606	\$ 195,020	\$ 195,207	\$ 203,153	\$ 203,185	\$ 200,251	\$ 196,572
Preferred stock	(22,326)	(22,841)	(23,868)	(22,767)	(22,324)	(24,024)	(25,221)	(25,220)
Tangible common shareholders' equity	\$ 171,438	\$ 171,765	\$ 171,152	\$ 172,440	\$ 180,829	\$ 179,161	\$ 175,030	\$ 171,352
Reconciliation of period-end shareholders' equity to period-end tangible shareholders' equity and period-end tangible common shareholders' equity								
Shareholders' equity	\$ 265,325	\$ 262,158	\$ 264,216	\$ 266,224	\$ 267,146	\$ 271,969	\$ 270,660	\$ 267,993
Goodwill	(68,951)	(68,951)	(68,951)	(68,951)	(68,951)	(68,968)	(68,969)	(69,744)
Intangible assets (excluding MSRs)	(1,774)	(1,908)	(2,043)	(2,177)	(2,312)	(2,459)	(2,610)	(2,827)
Related deferred tax liabilities	858	878	900	926	943	1,435	1,471	1,513
Tangible shareholders' equity	\$ 195,458	\$ 192,177	\$ 194,122	\$ 196,016	\$ 196,826	\$ 201,977	\$ 200,552	\$ 196,932
Preferred stock	(22,326)	(22,326)	(23,181)	(24,672)	(22,323)	(22,323)	(25,220)	(25,220)
Tangible common shareholders' equity	\$ 173,132	\$ 169,851	\$ 170,941	\$ 171,344	\$ 174,503	\$ 179,654	\$ 175,332	\$ 171,712

Reconciliation of period-end assets to period-end tangible assets

Assets	\$2,354,507	\$2,338,833	\$2,291,670	\$2,328,478	\$2,281,234	\$2,284,174	\$2,254,714	\$2,247,794
Goodwill	(68,951)	(68,951)	(68,951)	(68,951)	(68,951)	(68,968)	(68,969)	(69,744)
Intangible assets (excluding MSRs)	(1,774)	(1,908)	(2,043)	(2,177)	(2,312)	(2,459)	(2,610)	(2,827)
Related deferred tax liabilities	858	876	900	920	943	1,435	1,471	1,513
Tangible assets	\$ 2,284,640	\$ 2,268,852	\$ 2,221,576	\$ 2,258,270	\$ 2,210,914	\$ 2,214,182	\$ 2,184,606	\$ 2,176,736

(1) Presents reconciliations of non GAAP financial measures to GAAP financial measures. For more information on non-GAAP financial measures and ratios we use in assessing the results of the Corporation, see Supplemental Financial Data on page 24

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Table 8 Five-year Summary of Selected Financial Data

(In millions, except per share information)	2018	2017	2016	2015	2014
Income statement					
Net interest income	\$ 47,432	\$ 44,667	\$ 41,096	\$ 38,958	\$ 40,779
Noninterest income	43,815	42,685	42,605	44,007	45,115
Total revenue, net of interest expense	91,247	87,352	83,701	82,965	85,894
Provision for credit losses	3,282	3,396	3,597	3,161	2,275
Noninterest expense	53,381	54,743	55,083	57,617	75,656
Income before income taxes	34,584	29,213	25,021	22,187	7,963
Income tax expense	6,437	10,981	7,199	6,277	2,443
Net income	28,147	18,232	17,822	15,910	5,520
Net income applicable to common shareholders	26,696	16,618	16,140	14,427	4,476
Average common shares issued and outstanding	10,096.6	10,195.6	10,284.1	10,462.3	10,527.8
Average diluted common shares issued and outstanding	10,236.9	10,778.4	11,046.8	11,236.2	10,584.5
Performance ratios					
Return on average assets	1.21%	0.80%	0.81%	0.74%	0.26%
Return on average common shareholders' equity	11.04	6.72	6.69	6.28	2.01
Return on average tangible common shareholders' equity (1)	15.55	9.41	9.51	9.16	2.98
Return on average shareholders' equity	10.63	6.72	6.70	6.33	2.32
Return on average tangible shareholders' equity (1)	14.46	9.08	9.17	8.88	3.34
Total ending equity to total ending assets	11.27	11.71	12.17	11.92	11.57
Total average equity to total average assets	11.39	11.96	12.14	11.84	11.11
Dividend payout	20.31	24.24	15.94	14.49	28.20
Per common share data					
Earnings	\$ 2.64	\$ 1.63	\$ 1.57	\$ 1.38	\$ 0.43
Diluted earnings	2.61	1.56	1.49	1.31	0.42
Dividends paid	0.54	0.39	0.25	0.20	0.12
Book value	25.13	23.80	23.97	22.48	21.32
Tangible book value (1)	17.91	16.96	16.89	15.56	14.43
Market capitalization	\$ 238,251	\$ 303,681	\$ 222,163	\$ 174,700	\$ 188,141
Average balance sheet					
Total loans and leases	\$ 933,049	\$ 918,731	\$ 900,433	\$ 876,787	\$ 898,703
Total assets	2,325,246	2,268,633	2,190,218	2,160,536	2,145,393
Total deposits	1,314,941	1,269,796	1,222,561	1,155,860	1,124,207
Long-term debt	230,693	225,133	228,617	240,059	253,607
Common shareholders' equity	241,799	247,101	241,187	229,576	222,907
Total shareholders' equity	264,748	271,289	265,843	251,384	238,317
Asset quality (2)					
Allowance for credit losses (3)	\$ 10,398	\$ 11,170	\$ 11,999	\$ 12,880	\$ 14,947
Nonperforming loans, leases and foreclosed properties (4)	5,244	6,758	8,084	9,836	12,629
Allowance for loan and lease losses as a percentage of total loans and leases outstanding (4)	1.02%	1.12%	1.26%	1.37%	1.66%
Allowance for loan and lease losses as a percentage of total nonperforming loans and leases (4)	194	161	149	130	121
Net charge-offs (5)	\$ 3,763	\$ 3,979	\$ 3,821	\$ 4,338	\$ 4,363
Net charge-offs as a percentage of average loans and leases outstanding (4-5)	0.41%	0.44%	0.43%	0.50%	0.49%
Capital ratios at year end (6)					
Common equity tier 1 capital	11.6%	11.5%	10.8%	9.8%	9.6%
Tier 1 capital	13.2	13.0	12.4	11.2	11.0
Total capital	15.1	14.8	14.2	12.8	12.7
Tier 1 leverage	8.4	8.6	8.8	8.4	7.8

Supplementary leverage ratio	6.8	n/a	n/a	n/a	n/a
Tangible equity (1)	8.6	8.9	9.2	8.9	8.4
Tangible common equity (1)	7.6	7.9	8.0	7.8	7.5

(1) Tangible equity ratios and tangible book value per share of common stock are non-GAAP financial measures. For more information on these ratios and corresponding reconciliations to GAAP financial measures, see Supplemental Financial Data on page 24.

(2) Asset quality metrics include \$75 million of non-U.S. consumer credit card net charge offs in 2017 and \$243 million of non-U.S. consumer credit card allowance for loan and lease losses, \$9.2 billion of non-U.S. consumer credit card loans and \$175 million of non-U.S. consumer credit card net charge offs in 2016. The Corporation sold its non-U.S. consumer credit card business in 2017.

(3) Includes the allowance for loan and lease losses and the reserve for unfunded lending commitments.

(4) Balances and ratios do not include loans accounted for under the fair value option. For additional exclusions from nonperforming loans, leases and foreclosed properties, see Consumer Portfolio Credit Risk Management - Nonperforming Consumer Loans, Leases and Foreclosed Properties Activity on page 58 and corresponding Table 31 and Commercial Portfolio Credit Risk Management - Nonperforming Commercial Loans, Leases and Foreclosed Properties Activity on page 63 and corresponding Table 38.

(5) Net charge-offs exclude \$273 million, \$207 million, \$340 million, \$808 million and \$810 million of write offs in the purchased credit impaired (PCI) loan portfolio for 2018, 2017, 2016, 2015 and 2014, respectively.

(6) Basel 3 transition provisions for regulatory capital adjustments and deductions were fully phased-in as of January 1, 2018. Prior periods are presented on a fully phased-in basis. For additional information, including which approach is used to assess capital adequacy, see Capital Management on page 43.

n/a = not applicable

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Table 9 Selected Quarterly Financial Data

(In millions, except per share information)	2018 Quarters				2017 Quarters			
	Fourth	Third	Second	First	Fourth	Third	Second	First
Income statement								
Net interest income	\$ 12,304	\$ 11,870	\$ 11,650	\$ 11,608	\$ 11,462	\$ 11,161	\$ 10,986	\$ 11,058
Noninterest income (1)	10,432	10,807	10,959	11,517	8,974	10,678	11,843	11,190
Total revenue, net of interest expense	22,736	22,777	22,609	23,125	20,436	21,839	22,829	22,248
Provision for credit losses	905	716	827	834	1,001	834	726	835
Noninterest expense	13,133	13,067	13,284	13,897	13,274	13,394	13,982	14,093
Income before income taxes	8,698	8,994	8,498	8,394	6,161	7,611	8,121	7,320
Income tax expense (1)	1,420	1,627	1,714	1,476	3,796	2,187	3,015	1,983
Net income (1)	7,278	7,167	6,784	6,918	2,365	5,424	5,106	5,337
Net income applicable to common shareholders	7,039	6,701	6,466	6,490	2,079	4,959	4,745	4,835
Average common shares issued and outstanding	9,855.8	10,031.6	10,181.7	10,322.4	10,470.7	10,197.9	10,013.5	10,099.6
Average diluted common shares issued and outstanding	9,996.0	10,170.8	10,309.4	10,472.7	10,621.8	10,746.7	10,834.8	10,919.7
Performance ratios								
Return on average assets	1.24%	1.23%	1.17%	1.21%	0.41%	0.95%	0.90%	0.97%
Four-quarter trailing return on average assets (2)	1.21	1.00	0.93	0.86	0.80	0.91	0.89	0.88
Return on average common shareholders' equity	11.57	10.99	10.75	10.85	3.29	7.89	7.75	8.09
Return on average tangible common shareholders' equity (3)	16.29	15.48	15.15	15.26	4.56	10.98	10.87	11.44
Return on average shareholders' equity	10.95	10.74	10.26	10.57	3.43	7.88	7.56	8.09
Return on average tangible shareholders' equity (3)	14.90	14.61	13.95	14.37	4.62	10.59	10.23	11.01
Total ending equity to total ending assets	11.27	11.21	11.53	11.43	11.71	11.91	12.00	11.92
Total average equity to total average assets	11.30	11.42	11.42	11.41	11.87	12.03	11.94	12.00
Dividend payout	20.00	22.35	18.83	19.06	60.35	25.59	15.78	15.64
Per common share data								
Earnings	\$ 0.71	\$ 0.67	\$ 0.64	\$ 0.63	\$ 0.20	\$ 0.49	\$ 0.47	\$ 0.48
Diluted earnings	0.70	0.66	0.63	0.62	0.20	0.46	0.44	0.45
Dividends paid	0.15	0.15	0.12	0.12	0.12	0.12	0.075	0.075
Book value	25.13	24.33	24.07	23.74	23.80	23.67	24.85	24.34
Tangible book value (3)	17.91	17.23	17.07	16.84	16.96	17.18	17.75	17.22
Market capitalization	\$ 238,251	\$ 290,424	\$ 282,259	\$ 305,176	\$ 303,681	\$ 264,992	\$ 239,643	\$ 235,291
Average balance sheet								
Total loans and leases	\$ 934,721	\$ 930,736	\$ 934,818	\$ 931,915	\$ 927,790	\$ 918,129	\$ 914,717	\$ 914,144
Total assets	2,334,586	2,317,829	2,322,678	2,325,878	2,301,687	2,271,104	2,269,293	2,231,649
Total deposits	1,344,951	1,316,345	1,300,659	1,297,208	1,293,572	1,271,711	1,256,838	1,256,632
Long-term debt	230,616	233,475	229,037	229,603	227,644	227,309	224,019	221,468
Common shareholders' equity	241,372	241,812	241,313	242,713	250,838	249,214	245,756	242,480
Total shareholders' equity	263,698	264,553	265,181	265,480	273,162	275,238	270,977	267,700
Asset quality (4)								
Allowance for credit losses (5)	\$ 10,398	\$ 10,526	\$ 10,837	\$ 11,042	\$ 11,170	\$ 11,455	\$ 11,632	\$ 11,869
Nonperforming loans, leases and foreclosed properties (6)	5,244	5,449	6,181	6,594	6,758	6,869	7,127	7,037
Allowance for loan and lease losses as a percentage of total loans and leases outstanding (6)	1.02%	1.05%	1.08%	1.11%	1.12%	1.16%	1.20%	1.25%
Allowance for loan and lease losses as a percentage of total nonperforming loans and leases (6)	194	189	170	161	161	163	160	156
Net charge-offs (7)	\$ 924	\$ 922	\$ 996	\$ 911	\$ 1,237	\$ 900	\$ 908	\$ 934
Annualized net charge-offs as a percentage of average loans and leases outstanding (6-7)	0.39%	0.40%	0.43%	0.40%	0.53%	0.39%	0.40%	0.42%
Capital ratios at period end (8)								
Common equity tier 1 capital	11.6%	11.4%	11.4%	11.3%	11.5%	11.9%	11.5%	11.0%
Tier 1 capital	13.2	12.9	13.0	13.0	13.0	13.4	13.2	12.6

Total capital	15.1	14.7	14.8	14.8	14.6	15.1	15.0	14.3
Total leverage	8.4	8.3	8.4	8.4	8.6	8.9	8.8	8.8
Supplementary leverage ratio	6.8	6.7	6.7	6.8	n/a	n/a	n/a	n/a
Tangible equity (2)	8.6	8.5	8.7	8.7	8.9	9.1	9.2	9.1
Tangible common equity (3)	7.6	7.5	7.7	7.6	7.9	8.1	8.0	7.9

(1) Net income for the fourth quarter of 2017 included a charge of \$2.9 billion related to the Tax Act effects which consisted of \$946 million in noninterest income and \$1.9 billion in income tax expense.

(2) Calculated as total net income for four consecutive quarters divided by annualized average assets for four consecutive quarters.

(3) Tangible equity ratios and tangible book value per share of common stock are non GAAP financial measures. For more information on these ratios and corresponding reconciliations to GAAP financial measures, see Supplemental Financial Data on page 24.

(4) Asset quality metrics include \$31 million of non-U.S. consumer credit card net charge-offs for the second quarter of 2017 and \$242 million of non-U.S. consumer credit card allowance for loan and lease losses, \$9.5 billion of non-U.S. consumer credit card loans and \$44 million of non-U.S. consumer credit card net charge-offs for the first quarter of 2017. The Corporation sold its non-U.S. consumer credit card business in the second quarter of 2017.

(5) Includes the allowance for loan and lease losses and the reserve for unfunded lending commitments.

(6) Balances and ratios do not include loans accounted for under the fair value option. For additional exclusions from nonperforming loans, leases and foreclosed properties, see Consumer Portfolio Credit Risk Management - Nonperforming Consumer Loans, Leases and Foreclosed Properties Activity on page 58 and corresponding Table 31 and Commercial Portfolio Credit Risk Management - Nonperforming Commercial Loans, Leases and Foreclosed Properties Activity on page 63 and corresponding Table 38.

(7) Net charge-offs exclude \$107 million, \$95 million, \$36 million and \$35 million of write-offs in the PCI loan portfolio in the fourth, third, second and first quarters of 2018, and \$46 million, \$73 million, \$55 million and \$33 million in the fourth, third, second and first quarters of 2017, respectively.

(8) Basel 3 transition provisions for regulatory capital adjustments and deductions were fully phased in as of January 1, 2018. Prior periods are presented on a fully phased-in basis. For additional information, including which approach is used to assess capital adequacy, see Capital Management on page 43.

n/a = not applicable

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Table 10 Average Balances and Interest Rates - FTE Basis

	Average Balance	Interest Income/ Expense	Yield/ Rate	Average Balance	Interest Income/ Expense	Yield/ Rate	Average Balance	Interest Income/ Expense	Yield/ Rate
(Dollars in millions)									
	2018			2017			2016		
Earning assets									
Interest bearing deposits with the Federal Reserve, non U.S. central banks and other banks	\$ 139,846	\$ 1,926	1.38%	\$ 127,431	\$ 1,122	0.88%	\$ 133,374	\$ 605	0.45%
Time deposits placed and other short-term investments	9,446	216	2.29	12,112	241	1.99	9,026	140	1.55
Federal funds sold and securities borrowed or purchased under agreements to resell (1)	251,328	3,176	1.26	222,818	1,806	0.81	216,161	967	0.45
Trading account assets	132,724	4,901	3.69	129,007	4,618	3.58	129,765	4,563	3.52
Debt securities	437,317	11,837	2.66	435,005	10,626	2.44	418,289	9,263	2.23
Loans and leases (2)									
Residential mortgage	207,523	7,294	3.51	197,766	6,831	3.45	188,250	6,488	3.45
Home equity	53,886	2,573	4.77	62,260	2,638	4.19	71,760	2,713	3.78
U.S. credit card	94,612	9,579	10.12	91,068	8,791	9.65	87,905	8,170	9.29
Non U.S. credit card (3)	—	—	—	3,929	358	9.12	9,527	926	9.72
Direct/Indirect and other consumer (4)	93,036	3,104	3.34	96,002	2,734	2.85	94,148	2,371	2.52
Total consumer	449,057	22,550	5.02	451,025	21,322	4.73	451,590	20,668	4.58
U.S. commercial	304,387	11,937	3.92	292,452	9,765	3.34	276,887	8,101	2.93
Non U.S. commercial	97,664	3,220	3.30	95,005	2,566	2.70	93,263	2,337	2.51
Commercial real estate (5)	60,384	2,618	4.34	58,502	2,116	3.62	57,547	1,773	3.08
Commercial lease financing	21,557	698	3.24	21,747	706	3.25	21,146	627	2.97
Total commercial	483,992	18,473	3.82	467,706	15,153	3.24	448,843	12,838	2.86
Total loans and leases (3)	933,049	41,023	4.40	918,731	36,475	3.97	900,433	33,506	3.72
Other earning assets (1)	76,524	4,300	5.62	76,957	3,224	4.19	59,775	2,496	4.18
Total earning assets (1,5)	1,980,231	67,379	3.40	1,922,061	58,112	3.02	1,866,824	51,540	2.76
Cash and due from banks	25,830			27,995			27,893		
Other assets, less allowance for loan and lease losses	319,185			318,577			295,501		
Total assets	\$ 2,325,246			\$ 2,268,633			\$ 2,190,218		
Interest-bearing liabilities									
U.S. interest-bearing deposits									
Savings	\$ 54,226	\$ 6	0.01%	\$ 53,783	\$ 5	0.01%	\$ 49,495	\$ 5	0.01%
NOW and money market deposit accounts	676,382	2,636	0.39	628,647	873	0.14	569,737	294	0.05
Consumer CDs and IRAs	39,823	157	0.39	44,794	121	0.27	48,594	133	0.27
Negotiable CDs, public funds and other deposits	50,593	991	1.96	36,782	354	0.96	32,889	160	0.49
Total U.S. interest bearing deposits	821,024	2,790	0.46	764,006	1,353	0.18	720,715	592	0.08
Non-U.S. interest bearing deposits									
Banks located in non-U.S. countries	2,312	39	1.69	2,442	21	0.85	3,891	32	0.82
Governments and official institutions	810	—	0.01	1,906	10	0.95	1,437	9	0.64
Time, savings and other	65,097	666	1.02	62,366	547	0.88	59,183	382	0.65
Total non-U.S. interest-bearing deposits	68,219	705	1.03	65,834	578	0.86	64,511	423	0.66
Total interest-bearing deposits	889,243	4,495	0.51	829,840	1,931	0.23	785,226	1,015	0.13
Federal funds purchased, securities loaned or sold under agreements to repurchase, short-term borrowings and other interest bearing liabilities (1)	269,748	5,839	2.17	274,975	3,146	1.14	252,565	1,933	0.77
Trading account liabilities	50,928	1,358	2.67	45,518	1,204	2.64	37,897	1,018	2.69
Long-term debt	230,693	7,645	3.31	225,133	6,239	2.77	228,617	5,578	2.44
Total interest-bearing liabilities (1,5)	1,440,612	19,337	1.34	1,375,466	12,520	0.91	1,304,325	9,544	0.73
Noninterest-bearing sources									
Noninterest bearing deposits	425,698			439,956			437,335		
Other liabilities (1)	194,188			161,922			182,715		

Shareholders' equity	264,748	271,289	265,843
Total liabilities and shareholders' equity	\$ 2,325,246	\$ 2,268,633	\$ 2,190,218
Net interest spread	2.06%	2.11%	2.03%
Impact of noninterest bearing sources	0.36	0.26	0.22
Net interest income/yield on earning assets (7)	\$ 48,042 2.42%	\$ 45,532 2.37%	\$ 41,996 2.25%

(1) Certain prior period amounts have been reclassified to conform to current period presentation.

(2) Nonperforming loans are included in the respective average loan balances. Income on these nonperforming loans is generally recognized on a cost recovery basis.

(3) Includes assets of the Corporation's non-U.S. consumer credit card business, which was sold during the second quarter of 2017.

(4) Includes non-U.S. consumer loans of \$2.8 billion, \$2.9 billion and \$3.4 billion in 2018, 2017 and 2016, respectively.

(5) Includes U.S. commercial real estate loans of \$56.4 billion, \$55.0 billion and \$54.2 billion, and non-U.S. commercial real estate loans of \$4.0 billion, \$3.5 billion and \$3.4 billion in 2018, 2017 and 2016, respectively.

(6) Interest income includes the impact of interest rate risk management contracts, which decreased interest income on the underlying assets by \$171 million, \$44 million and \$176 million in 2018, 2017 and 2016, respectively. Interest expense includes the impact of interest rate risk management contracts, which decreased interest expense on the underlying liabilities by \$130 million, \$1.4 billion and \$2.1 billion in 2018, 2017 and 2016, respectively. For more information, see Interest Rate Risk Management for the Banking Book on page 74.

(7) Net interest income includes FTE adjustments of \$610 million, \$925 million and \$900 million in 2018, 2017 and 2016, respectively.

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Table 11 Analysis of Changes in Net Interest Income - FTE Basis

	Due to Change In (1)			Due to Change in (1)		
	Volume	Rate	Net Change	Volume	Rate	Net Change
	From 2017 to 2018			From 2016 to 2017		
(Dollars in millions)						
Increase (decrease) in Interest Income						
Interest-bearing deposits with the Federal Reserve, non-U.S. central banks and other banks	\$ 109	\$ 695	\$ 804	\$ (32)	\$ 549	\$ 517
Time deposits placed and other short-term investments	(53)	28	(25)	48	53	101
Federal funds sold and securities borrowed or purchased under agreements to resell	230	1,140	1,370	36	803	839
Trading account assets	134	149	283	(22)	77	55
Debt securities	44	1,167	1,211	438	925	1,363
Loans and leases:						
Residential mortgage	329	134	463	335	8	343
Home equity	(350)	315	(35)	(360)	255	(105)
U.S. credit card	339	449	788	290	331	621
Non-U.S. credit card (2)	(358)	—	(358)	(544)	(24)	(568)
Direct/indirect and other consumer	(82)	452	370	48	315	363
Total consumer			1,228			654
U.S. commercial	402	1,770	2,172	468	1,196	1,664
Non-U.S. commercial	71	583	654	48	181	229
Commercial real estate	70	432	502	29	314	343
Commercial lease financing	(5)	(3)	(8)	19	60	79
Total commercial			3,320			2,315
Total loans and leases			4,548			2,969
Other earning assets	(18)	1,094	1,076	721	7	728
Total interest income			\$ 9,267			\$ 6,572
Increase (decrease) in Interest expense						
U.S. interest-bearing deposits:						
Savings	\$ —	\$ 1	\$ 1	\$ —	\$ —	\$ —
NOW and money market deposit accounts	74	1,689	1,763	20	559	579
Consumer CDs and IRAs	(13)	49	36	(12)	—	(12)
Negotiable CDs, public funds and other deposits	132	505	637	20	174	194
Total U.S. interest-bearing deposits			2,437			761
Non-U.S. interest-bearing deposits:						
Banks located in non-U.S. countries	(1)	19	18	(12)	1	(11)
Governments and official institutions	(2)	(8)	(10)	(3)	4	1
Time, savings and other	26	93	119	24	141	165
Total non-U.S. interest-bearing deposits			127			155
Total interest-bearing deposits			2,564			916
Federal funds purchased, securities loaned or sold under agreements to repurchase, short-term borrowings and other interest-bearing liabilities	(71)	2,764	2,693	184	1,029	1,213
Trading account liabilities	140	14	154	206	(20)	186
Long-term debt	151	1,255	1,406	(85)	746	661
Total interest expense			6,817			2,976
Net Increase in net Interest Income (3)			\$ 2,450			\$ 3,596

(1) The changes for each category of interest income and expense are divided between the portion of change attributable to the variance in volume and the portion of change attributable to the variance in rate for that category. The unallocated change in rate or volume variance is allocated between the rate and volume variances.

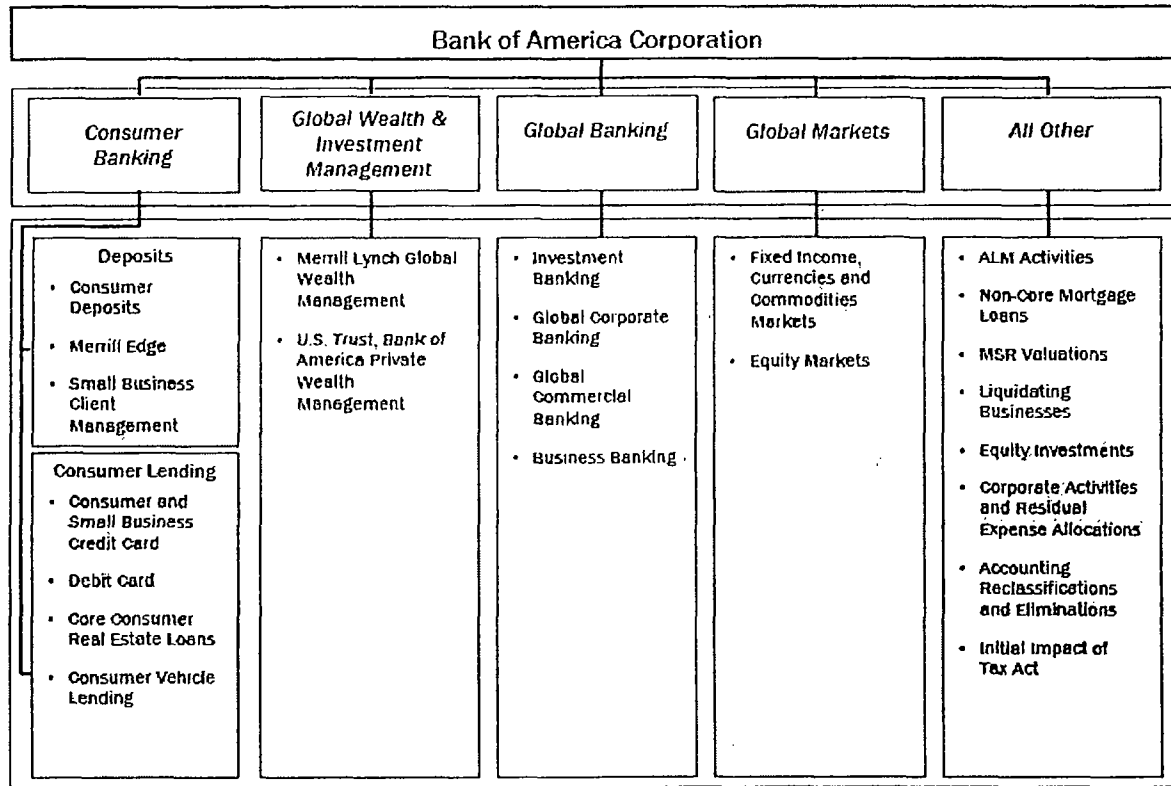
(2) The Corporation sold its non-U.S. credit card business in the second quarter of 2017.

(3) Includes changes in FTE basis adjustments of a \$315 million decrease from 2017 to 2018 and a \$25 million increase from 2016 to 2017.

Business Segment Operations

Segment Description and Basis of Presentation

We report our results of operations through the following four business segments: *Consumer Banking*, *GWIM*, *Global Banking* and *Global Markets*, with the remaining operations recorded in *All Other*. We manage our segments and report their results on an FTE basis. For more information on our presentation of financial information on an FTE basis, see Supplemental Financial Data on page 24. The primary activities, products and businesses of the business segments and *All Other* are shown below.



We periodically review capital allocated to our businesses and allocate capital annually during the strategic and capital planning processes. We utilize a methodology that considers the effect of regulatory capital requirements in addition to internal risk-based capital models. Our internal risk-based capital models use a risk-adjusted methodology incorporating each segment's credit, market, interest rate, business and operational risk components. For more information on the nature of these risks, see *Managing Risk* on page 40. The capital allocated to the business segments is referred to as allocated capital. Allocated equity in the reporting

units is comprised of allocated capital plus capital for the portion of goodwill and intangibles specifically assigned to the reporting unit. For more information, including the definition of reporting unit, see *Note 8 – Goodwill and Intangible Assets* to the Consolidated Financial Statements.

For more information on the basis of presentation for business segments and reconciliations to consolidated total revenue, net income and year-end total assets, see *Note 23 – Business Segment Information* to the Consolidated Financial Statements.

Consumer Banking

(Dollars in millions)	Deposits		Consumer Lending		Total Consumer Banking		% Change
	2018	2017	2018	2017	2018	2017	
Net interest income	\$ 16,024	\$ 13,353	\$ 11,099	\$ 10,954	\$ 27,123	\$ 24,307	12 %
Noninterest income:							
Card income	8	8	5,281	5,062	5,289	5,070	4
Service charges	4,298	4,265	2	1	4,300	4,266	1
All other income	430	391	381	487	811	878	(8)
Total noninterest income	4,736	4,664	5,664	5,550	10,400	10,214	2
Total revenue, net of interest expense	20,760	18,017	16,763	16,504	37,523	34,521	9
Provision for credit losses	195	201	3,469	3,324	3,664	3,525	4
Noninterest expense	10,522	10,388	7,191	7,407	17,713	17,795	—
Income before income taxes	10,043	7,428	6,103	5,773	16,146	13,201	22
Income tax expense	2,561	2,813	1,556	2,186	4,117	4,999	(18)
Net Income	\$ 7,482	\$ 4,615	\$ 4,547	\$ 3,587	\$ 12,029	\$ 8,202	47
Effective tax rate (1)					25.5%	37.9%	
Net interest yield	2.35%	2.05%	3.97%	4.18%	3.78	3.54	
Return on average allocated capital	62	38	18	14	33	22	
Efficiency ratio	50.68	57.66	42.90	44.88	47.20	51.55	
Balance Sheet							
Average							
Total loans and leases	\$ 5,233	\$ 5,084	\$ 278,574	\$ 260,974	\$ 283,807	\$ 266,058	7 %
Total earning assets (2)	682,600	651,963	279,217	261,802	717,197	686,612	4
Total assets (2)	710,925	679,306	290,068	273,253	756,373	725,406	4
Total deposits	678,640	646,930	5,533	6,390	684,173	653,320	5
Allocated capital	12,000	12,000	25,000	25,000	37,000	37,000	—
Year end							
Total loans and leases	\$ 5,470	\$ 5,143	\$ 288,865	\$ 275,330	\$ 294,335	\$ 280,473	5 %
Total earning assets (2)	694,676	675,485	289,249	275,742	728,817	709,832	3
Total assets (2)	724,015	703,330	299,970	287,390	768,877	749,325	3
Total deposits	691,666	670,802	4,480	5,728	696,146	676,530	3

(1) Estimated at the segment level only.

(2) In segments and businesses where the total of liabilities and equity exceeds assets, we allocate assets from All Other to match the segments' and businesses' liabilities and allocated shareholders' equity. As a result, total earning assets and total assets of the businesses may not equal total Consumer Banking.

Consumer Banking, which is comprised of Deposits and Consumer Lending, offers a diversified range of credit, banking and investment products and services to consumers and small businesses. Deposits and Consumer Lending include the net impact of migrating customers and their related deposit, brokerage asset and loan balances between Deposits, Consumer Lending and GWIM, as well as other client-managed businesses. Our customers and clients have access to a coast to coast network including financial centers in 34 states and the District of Columbia. Our network includes approximately 4,300 financial centers, approximately 16,300 ATMs, nationwide call centers, and leading digital banking platforms with more than 36 million active users, including over 26 million active mobile users.

Consumer Banking Results

Net income for *Consumer Banking* increased \$3.8 billion to \$12.0 billion in 2018 compared to 2017 primarily driven by higher pretax income and lower income tax expense from the reduction in the federal income tax rate. The increase in pretax income was driven by higher revenue and lower noninterest expense, partially offset by higher provision for credit losses. Net interest income increased \$2.8 billion to \$27.1 billion primarily due to the beneficial impact of an increase in investable assets as a result of an increase in deposits, as well as higher interest rates, pricing discipline and loan growth. Noninterest income increased \$186 million to \$10.4 billion driven by higher card income, partially offset by lower mortgage banking income, which is included in all other income.

The provision for credit losses increased \$139 million to \$3.7 billion driven by portfolio seasoning and loan growth in the U.S. credit card portfolio. Noninterest expense decreased \$82 million to \$17.7 billion driven by operating efficiencies and lower litigation and FDIC expense. These decreases were partially offset by investments in digital capabilities and business growth, including primary sales professionals, combined with investments in new financial centers and renovations.

The return on average allocated capital was 33 percent, up from 22 percent, driven by higher net income. For more information on capital allocated to the business segments, see Business Segment Operations on page 30.

Deposits

Deposits include the results of consumer deposit activities which consist of a comprehensive range of products provided to consumers and small businesses. Our deposit products include traditional savings accounts, money market savings accounts, CDs and IRAs, and noninterest- and interest-bearing checking accounts, as well as investment accounts and products. Net interest income is allocated to the deposit products using our funds transfer pricing process that matches assets and liabilities with similar interest rate sensitivity and maturity characteristics. Deposits generates fees such as account service fees, non-sufficient funds fees, overdraft charges and ATM fees, as well as investment and brokerage fees from Merrill Edge accounts. Merrill Edge is an integrated investing and banking service targeted at customers with less than \$250,000 in investable assets. Merrill

Edge provides investment advice and guidance, client brokerage asset services, a self-directed online investing platform and key banking capabilities including access to the Corporation's network of financial centers and ATMs.

Net income for Deposits increased \$2.9 billion to \$7.5 billion in 2018 driven by higher revenue and lower income tax expense, partially offset by higher noninterest expense. Net interest income increased \$2.7 billion to \$16.0 billion primarily due to the beneficial impact of an increase in investable assets as a result of higher deposits, and pricing discipline. Noninterest income increased \$72 million to \$4.7 billion primarily driven by higher service charges.

The provision for credit losses decreased \$6 million to \$195 million in 2018. Noninterest expense increased \$134 million to \$10.5 billion primarily driven by investments in digital capabilities and business growth, including primary sales professionals, combined with investments in new financial centers and renovations. Those increases were partially offset by lower litigation and FDIC expense.

Average deposits increased \$31.7 billion to \$678.6 billion in 2018 driven by strong organic growth. Growth in checking, money market savings and traditional savings of \$36.3 billion was partially offset by a decline in time deposits of \$4.6 billion.

Key Statistics – Deposits

	2018	2017
Total deposit spreads (excludes noninterest costs) ⁽¹⁾	2.14%	1.84%
Year end		
Client brokerage assets (in millions)	\$ 185,881	\$ 177,045
Active digital banking users (units in thousands) ⁽²⁾	36,264	34,855
Active mobile banking users (units in thousands)	26,433	24,238
Financial centers	4,341	4,477
ATMs	16,255	16,039

⁽¹⁾ Includes deposits held in Consumer Lending

⁽²⁾ Digital users represents mobile and/or online users across consumer businesses

Client brokerage assets increased \$8.8 billion in 2018 driven by strong client flows, partially offset by market performance. Active mobile banking users increased 2.2 million reflecting continuing changes in our customers' banking preferences. The number of financial centers declined by a net 136 reflecting changes in customer preferences to self-service options as we continue to optimize our consumer banking network and improve our cost to serve.

Consumer Lending

Consumer Lending offers products to consumers and small businesses across the U.S. The products offered include credit and debit cards, residential mortgages and home equity loans, and direct and indirect loans such as automotive, recreational vehicle and consumer personal loans. In addition to earning net interest spread revenue on its lending activities, Consumer Lending generates interchange revenue from credit and debit card transactions, late fees, cash advance fees, annual credit card fees, mortgage banking fee income and other miscellaneous fees. Consumer Lending products are available to our customers through our retail network, direct telephone, and online and mobile channels. Consumer Lending results also include the impact of

servicing residential mortgages and home equity loans in the core portfolio, including loans held on the balance sheet of Consumer Lending and loans serviced for others.

Net income for Consumer Lending increased \$960 million to \$4.5 billion in 2018 driven by lower income tax expense, higher revenue and lower noninterest expense, partially offset by higher provision for credit losses. Net interest income increased \$145 million to \$11.1 billion primarily driven by higher interest rates and the impact of an increase in loan balances. Noninterest income increased \$114 million to \$5.7 billion driven by higher card income, partially offset by lower mortgage banking income.

The provision for credit losses increased \$145 million to \$3.5 billion driven by portfolio seasoning and loan growth in the U.S. credit card portfolio. Noninterest expense decreased \$216 million to \$7.2 billion primarily driven by operating efficiencies.

Average loans increased \$17.6 billion to \$278.6 billion in 2018 driven by increases in residential mortgages and U.S. credit card loans, partially offset by lower home equity balances.

Key Statistics – Consumer Lending

(Dollars in millions)	2018	2017
Total U.S. credit card ⁽¹⁾		
Gross interest yield	10.12%	9.65%
Risk-adjusted margin	8.34	8.67
New accounts (in thousands)	4,544	4,939
Purchase volumes	\$ 264,706	\$ 244,753
Debit card purchase volumes	\$ 318,562	\$ 298,641

⁽¹⁾ In addition to the U.S. credit card portfolio in Consumer Banking, the remaining U.S. credit card portfolio is in GWIM.

During 2018, the total U.S. credit card risk-adjusted margin decreased 33 bps compared to 2017, primarily driven by increased net charge-offs and higher credit card rewards costs. Total U.S. credit card purchase volumes increased \$20.0 billion to \$264.7 billion, and debit card purchase volumes increased \$19.9 billion to \$318.6 billion, reflecting higher levels of consumer spending.

Key Statistics – Loan Production ⁽¹⁾

(Dollars in millions)	2018	2017
Total ⁽²⁾		
First mortgage	\$ 41,195	\$ 50,581
Home equity	14,869	16,924
Consumer Banking		
First mortgage	\$ 27,280	\$ 34,065
Home equity	13,251	15,199

⁽¹⁾ The loan production amounts represent the unpaid principal balance of loans and, in the case of home equity, the principal amount of the total line of credit.

⁽²⁾ In addition to loan production in Consumer Banking, there is a so first mortgage and home equity loan production in GWIM.

First mortgage loan originations in Consumer Banking and for the total Corporation decreased \$6.8 billion and \$9.4 billion in 2018 primarily driven by a higher interest rate environment driving lower first-lien mortgage refinances.

Home equity production in Consumer Banking and for the total Corporation decreased \$1.9 billion and \$2.1 billion in 2018 primarily driven by lower demand.

Global Wealth & Investment Management

(Dollars in millions)	2018	2017	% Change
Net interest income	\$ 6,294	\$ 6,173	2 %
Noninterest income:			
Investment and brokerage services	11,959	11,394	5
All other income	1,085	1,023	6
Total noninterest income	13,044	12,417	5
Total revenue, net of interest expense	19,338	18,590	4
Provision for credit losses	86	56	54
Noninterest expense	13,777	13,556	2
Income before income taxes	5,475	4,978	10
Income tax expense	1,396	1,885	(26)
Net income	\$ 4,079	\$ 3,093	32
Effective tax rate	25.5%	37.9%	
Net interest yield	2.42	2.32	
Return on average allocated capital	28	22	
Efficiency ratio	71.24	72.92	
Balance Sheet			
Average			
Total loans and leases	\$ 161,342	\$ 152,682	6 %
Total earning assets	259,807	265,670	(2)
Total assets	277,219	281,517	(2)
Total deposits	241,256	245,559	(2)
Allocated capital	14,500	14,000	4
Year end			
Total loans and leases	\$ 164,854	\$ 159,378	3 %
Total earning assets	287,197	267,026	8
Total assets	305,906	284,321	8
Total deposits	268,700	246,994	9

GWIM consists of two primary businesses: Merrill Lynch Global Wealth Management (MLGWM) and U.S. Trust, Bank of America Private Wealth Management (U.S. Trust).

MLGWM's advisory business provides a high-touch client experience through a network of financial advisors focused on clients with over \$250,000 in total investable assets. MLGWM provides tailored solutions to meet clients' needs through a full set of investment management, brokerage, banking and retirement products.

U.S. Trust, together with MLGWM's Private Banking & Investments Group, provides comprehensive wealth management solutions targeted to high net worth and ultra high net worth clients, as well as customized solutions to meet clients' wealth structuring, investment management, trust and banking needs, including specialty asset management services.

Net income for GWIM increased \$986 million to \$4.1 billion in 2018 compared to 2017 due to higher revenue and lower income tax expense from the reduction in the federal income tax rate, partially offset by an increase in noninterest expense and provision for credit losses. The operating margin was 28 percent compared to 27 percent a year ago.

Net interest income increased \$121 million to \$6.3 billion due to higher deposit spreads and average loan balances, partially offset by lower loan spreads and average deposit balances.

Noninterest income, which primarily includes investment and brokerage services income, increased \$627 million to \$13.0 billion. The increase was driven by the impact of AUM flows and higher market valuations, partially offset by the impact of changing market dynamics on transactional revenue and AUM pricing.

Noninterest expense increased \$221 million to \$13.8 billion primarily due to higher revenue-related incentive expense and investments for business growth, partially offset by continued expense discipline.

The return on average allocated capital was 28 percent, up from 22 percent, as higher net income was partially offset by an increased capital allocation. For more information on capital allocated to the business segments, see Business Segment Operations on page 30.

Revenue from MLGWM of \$15.9 billion and revenue from U.S. Trust of \$3.4 billion both increased four percent due to higher asset management fees driven by higher net flows and market valuations, and an increase in net interest income. The increase in MLGWM revenue was partially offset by lower AUM pricing and transactional revenue.

Key Indicators and Metrics

(Dollars in millions, except as noted)

	2018	2017
Revenue by Business		
Merrill Lynch Global Wealth Management	\$ 15,895	\$ 15,288
U.S. Trust	3,432	3,295
Other	11	7
Total revenue, net of interest expense	\$ 19,338	\$ 18,590
Client Balances by Business, at year end		
Merrill Lynch Global Wealth Management	\$ 2,193,562	\$ 2,305,664
U.S. Trust	427,294	446,199
Total client balances	\$ 2,620,856	\$ 2,751,863
Client Balances by Type, at year end		
Assets under management	\$ 1,021,221	\$ 1,080,747
Brokerage and other assets	1,162,997	1,261,990
Deposits	268,700	246,994
Loans and leases (1)	167,938	162,132
Total client balances	\$ 2,620,856	\$ 2,751,863
Assets Under Management Rollforward		
Assets under management, beginning of year	\$ 1,080,747	\$ 886,148
Net client flows	36,406	95,707
Market valuation/other	(95,932)	98,892
Total assets under management, end of year	\$ 1,021,221	\$ 1,080,747
Associates, at year end (2)		
Number of financial advisors	17,518	17,355
Total wealth advisors, including financial advisors	19,459	19,238
Total primary sales professionals, including financial advisors and wealth advisors	20,556	20,318
Merrill Lynch Global Wealth Management Metric		
Financial advisor productivity (3) (in thousands)	\$ 1,034	\$ 1,005

U.S. Trust Metric, at year end

Primary sales professionals	1,747	1,714
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(1) Includes margin receivables which are classified in customer and other receivables on the Consolidated Balance Sheet

(2) Includes financial advisors in the Consumer Banking segment of 2,722 and 2,402 at December 31, 2018 and 2017

(3) Financial advisor productivity is defined as MLGWM total revenue, excluding the allocation of certain asset and liability management (ALM) activities, divided by the total average number of financial advisors (excluding financial advisors in the Consumer Banking segment)

Client Balances

Client balances managed under advisory and/or discretion of GWIM are AUM and are typically held in diversified portfolios. Fees earned on AUM are calculated as a percentage of clients' AUM balances. The asset management fees charged to clients per year depend on various factors, but are commonly driven by the breadth of the client's relationship. The net client AUM flows represent the net change in clients' AUM balances over a specified period

of time, excluding market appreciation/depreciation and other adjustments.

Client balances decreased \$131.0 billion, or five percent, in 2018 to \$2.6 trillion, primarily due to lower market valuations on AUM and brokerage balances, as measured at December 31, 2018, partially offset by positive flows

Global Banking

(Dollars in millions)	2018	2017	% Change
Net interest income	\$ 10,881	\$ 10,504	4 %
Noninterest income:			
Service charges	3,027	3,125	(3)
Investment banking fees	2,891	3,471	(17)
All other income	2,845	2,899	(2)
Total noninterest income	8,763	9,495	(8)
Total revenue, net of interest expense	19,644	19,999	(2)
Provision for credit losses	8	212	(96)
Noninterest expense	8,591	8,596	—
Income before income taxes	11,045	11,191	(1)
Income tax expense	2,872	4,238	(32)
Net income	\$ 8,173	\$ 6,953	18
Effective tax rate	26.0%	37.9%	
Net interest yield	2.98	2.93	
Return on average allocated capital	20	17	
Efficiency ratio	43.73	42.98	
Balance Sheet			
Average			
Total loans and leases	\$ 354,236	\$ 346,089	2 %
Total earning assets	364,748	358,302	2
Total assets	424,353	416,038	2
Total deposits	336,337	312,859	8
Allocated capital	41,000	40,000	3
Year end			
Total loans and leases	\$ 365,717	\$ 350,668	4 %
Total earning assets	377,812	365,560	3
Total assets	441,477	424,533	4
Total deposits	360,248	329,273	9

Global Banking, which includes Global Corporate Banking, Global Commercial Banking, Business Banking and Global Investment Banking, provides a wide range of lending-related products and services, integrated working capital management and treasury solutions, and underwriting and advisory services through our network of offices and client relationship teams. Our lending products and services include commercial loans, leases, commitment facilities, trade finance, commercial real estate lending and asset-based lending. Our treasury solutions business includes treasury management, foreign exchange and short-term investing options. We also provide investment banking products to our clients such as debt and equity underwriting and distribution, and merger-related and other advisory services. Underwriting debt and equity issuances, fixed-income and equity research, and certain market-based activities are executed through our global broker-dealer affiliates, which are our primary dealers in several countries. Within *Global Banking*, Global Commercial Banking clients generally include middle-market companies, commercial real estate firms and not-for-profit companies. Global Corporate Banking clients generally include large global corporations, financial institutions and leasing clients. Business Banking clients include mid-sized U.S.-based businesses requiring customized and integrated financial advice and solutions.

Net income for *Global Banking* increased \$1.2 billion to \$8.2 billion in 2018 compared to 2017 primarily driven by lower income tax expense from the reduction in the federal income tax rate and lower provision for credit losses, partially offset by lower revenue. Noninterest expense was relatively unchanged.

Revenue decreased \$355 million to \$19.6 billion driven by lower noninterest income, partially offset by higher net interest income. Net interest income increased \$377 million to \$10.9 billion primarily due to the impact of higher interest rates, as well as loan and deposit growth. Noninterest income decreased \$732 million to \$8.8 billion primarily due to lower investment banking fees. The provision for credit losses improved \$204 million to \$8 million primarily driven by *Global Banking's* portion of a 2017 single-name non-U.S. commercial charge-off and continued improvement in the commercial portfolio.

The return on average allocated capital was 20 percent, up from 17 percent, as higher net income was partially offset by an increased capital allocation. For more information on capital allocated to the business segments, see Business Segment Operations on page 30.

Global Corporate, Global Commercial and Business Banking

Global Corporate, Global Commercial and Business Banking each include Business Lending and Global Transaction Services activities. Business Lending includes various lending-related products and services, and related hedging activities, including commercial loans, leases, commitment facilities, trade finance, real estate lending and asset-based lending. Global Transaction Services includes deposits, treasury management, credit card, foreign exchange and short-term investment products.

The table below and following discussion present a summary of the results, which exclude certain investment banking activities in *Global Banking*.

Global Corporate, Global Commercial and Business Banking

	Global Corporate Banking		Global Commercial Banking		Business Banking		Total	
	2018	2017	2018	2017	2018	2017	2018	2017
(Dollars in millions)								
Revenue								
Business Lending	\$ 4,122	\$ 4,387	\$ 4,039	\$ 4,280	\$ 393	\$ 404	\$ 8,554	\$ 9,071
Global Transaction Services	3,656	3,322	3,288	3,017	973	849	7,917	7,188
Total revenue, net of interest expense	\$ 7,778	\$ 7,709	\$ 7,327	\$ 7,297	\$ 1,366	\$ 1,253	\$ 16,471	\$ 16,259
Balance Sheet								
Average								
Total loans and leases	\$ 163,516	\$ 158,292	\$ 174,279	\$ 170,101	\$ 16,432	\$ 17,682	\$ 354,227	\$ 346,075
Total deposits	163,559	148,704	135,337	127,720	37,462	36,435	336,368	312,859
Year end								
Total loans and leases	\$ 174,378	\$ 163,184	\$ 175,937	\$ 169,997	\$ 15,402	\$ 17,500	\$ 365,717	\$ 350,681
Total deposits	173,183	155,614	149,118	137,538	37,973	36,120	360,274	329,272

Business Lending revenue decreased \$517 million in 2018 compared to 2017. The decrease was primarily driven by the impact of tax reform on certain tax-advantaged investments and lower leasing-related revenues.

Global Transaction Services revenue increased \$729 million to \$7.9 billion in 2018 compared to 2017 driven by higher short-term rates and increased deposits.

Average loans and leases increased two percent in 2018 compared to 2017 driven by growth in the commercial and industrial, and commercial real estate portfolios. Average deposits increased eight percent due to growth in domestic and international interest-bearing balances.

Global Investment Banking

Client teams and product specialists underwrite and distribute debt, equity and loan products, and provide advisory services and tailored risk management solutions. The economics of certain investment banking and underwriting activities are shared primarily between *Global Banking* and *Global Markets*. *Global Banking* originates certain deal-related transactions with our corporate and commercial clients that are executed and distributed by *Global Markets*. To provide a complete discussion of our consolidated investment banking fees, the following table presents total Corporation investment banking fees and the portion attributable to *Global Banking*. *Global Banking* originates certain deal-related transactions with our corporate and commercial clients that are executed and distributed by *Global Markets*. To provide a complete discussion of our consolidated investment banking fees, the following table presents total Corporation investment banking fees and the portion attributable to *Global Banking*. *Global Banking* originates certain deal-related transactions with our corporate and commercial clients that are executed and distributed by *Global Markets*. To provide a complete discussion of our consolidated investment banking fees, the following table presents total Corporation investment banking fees and the portion attributable to *Global Banking*. *Global Banking* originates certain deal-related transactions with our corporate and commercial clients that are executed and distributed by *Global Markets*. To provide a complete discussion of our consolidated investment banking fees, the following table presents total Corporation investment banking fees and the portion attributable to *Global Banking*. *Global Banking* originates certain deal-related transactions with our corporate and commercial clients that are executed and distributed by *Global Markets*. To provide a complete discussion of our consolidated investment banking fees, the following table presents total Corporation investment banking fees and the portion attributable to *Global Banking*.

fees and the portion attributable to *Global Banking*.

Investment Banking Fees

(Dollars in millions)	Global Banking		Total Corporation	
	2018	2017	2018	2017
Products				
Advisory	\$ 1,152	\$ 1,557	\$ 1,258	\$ 1,691
Debt issuance	1,327	1,506	3,084	3,635
Equity issuance	412	408	1,183	940
Gross investment banking fees	2,891	3,471	5,526	6,266
Self led deals	(68)	(113)	(198)	(255)
Total investment banking fees	\$ 2,823	\$ 3,358	\$ 5,327	\$ 6,011

Total Corporation investment banking fees, excluding self-led deals, of \$5.3 billion, which are primarily included within *Global Banking* and *Global Markets*, decreased 11 percent in 2018 compared to 2017 primarily due to declines in advisory fees and debt underwriting, the latter of which was driven by lower fee pools.

Global Markets

(Dollars in millions)	2018	2017	% Change
Net interest income	\$ 3,171	\$ 3,744	(15)%
Noninterest income:			
Investment and brokerage services	1,780	2,049	(13)
Investment banking fees	2,296	2,476	(7)
Trading account profits	7,932	6,710	18
All other income	884	972	(9)
Total noninterest income	12,892	12,207	6
Total revenue, net of interest expense	16,063	15,951	1
Provision for credit losses	—	164	(100)
Noninterest expense	10,688	10,731	—
Income before income taxes	5,377	5,056	6
Income tax expense	1,398	1,763	(21)
Net income	\$ 3,979	\$ 3,293	21
Effective tax rate	26.0%	34.9%	
Return on average allocated capital	11	9	
Efficiency ratio	66.53	67.27	
Balance Sheet			
Average			
Trading-related assets:			
Trading account securities	\$ 215,112	\$ 216,996	(1)%
Reverse repurchases	125,084	101,795	23
Securities borrowed	78,889	82,210	(4)
Derivative assets	46,047	40,811	13
Total trading-related assets	465,132	441,812	5
Total loans and leases	72,651	71,413	2
Total earning assets	473,383	449,441	5
Total assets	666,003	638,673	4
Total deposits	31,209	32,864	(5)
Allocated capital	35,000	35,000	—
Year end			
Total trading-related assets	\$ 447,998	\$ 419,375	7 %
Total loans and leases	73,928	76,778	(4)
Total earning assets	457,224	449,314	2
Total assets	641,922	629,013	2
Total deposits	37,841	34,029	11

Global Markets offers sales and trading services and research services to institutional clients across fixed-income, credit, currency, commodity and equity businesses. *Global Markets* provides market-making, financing, securities clearing, settlement and custody services globally to our institutional investor clients in support of their investing and trading activities. We also work with our commercial and corporate clients to provide risk management products using interest rate, equity, credit, currency and commodity derivatives, foreign exchange, fixed-income and mortgage-related products. As a result of our market-making activities in these products, we may be required to manage risk in a broad range of financial products including government securities, equity and equity-linked securities, high-grade and high-yield corporate debt securities, syndicated loans, MBS, commodities and asset-backed securities. The economics of certain investment banking and underwriting activities are shared primarily between *Global Markets* and *Global Banking* under an internal revenue-sharing arrangement. *Global Banking* originates certain deal product coverage includes securities and derivative products in both the primary and secondary markets. *Global Markets* provides market-making, financing, securities clearing, settlement and custody services globally to our institutional investor clients in support of their investing and trading activities. We also work with our commercial and corporate clients to provide risk management products using interest rate, equity, credit, currency and commodity derivatives, foreign exchange, fixed-income and mortgage-related products. As a result of our market-making activities in these products, we may be required to manage risk in a broad range of financial products including government securities, equity and equity-linked securities, high-grade and high-yield corporate debt securities, syndicated loans, MBS, commodities and asset-backed securities. The economics of certain investment banking and underwriting activities are shared primarily between *Global Markets* and *Global Ban*

related transactions with our corporate and commercial clients that are executed and distributed by *Global Markets*. For information on investment banking fees on a consolidated basis, see page 36. *Global Banking* originates certain deal-related transactions with our corporate and commercial clients that are executed and distributed by *Global Markets*. For information on investment banking fees on a consolidated basis, see page 36.

Net income for *Global Markets* increased \$686 million to \$4.0 billion in 2018 compared to 2017. Net DVA losses were \$162 million compared to losses of \$428 million in 2017. Excluding net DVA, net income increased \$544 million to \$4.1 billion. These increases were primarily driven by lower income tax expense from the reduction in the federal income tax rate, a decrease in the provision for credit losses and modestly higher revenue.

Sales and trading revenue, excluding net DVA, increased \$19 million due to higher Equities revenue, largely offset by lower FICC revenue. The provision for credit losses decreased \$164 million driven by *Global Markets*' portion of a single-name non-U.S. commercial charge-off in 2017. Noninterest expense decreased \$45 million to \$10.7 billion primarily due to lower operating costs.

Average total assets increased \$27.3 billion to \$666.0 billion in 2018 primarily driven by increased levels of inventory in FICC to facilitate client demand and growth in Equities derivative client financing activities. Total year-end assets increased \$12.9 billion to \$641.9 billion at December 31, 2018 due to increased levels of inventory in FICC.

The return on average allocated capital was 11 percent, up from 9 percent, reflecting higher net income. For more information on capital allocated to the business segments, see Business Segment Operations on page 30.

Sales and Trading Revenue

Sales and trading revenue includes unrealized and realized gains and losses on trading and other assets, net interest income, and fees primarily from commissions on equity securities. Sales and trading revenue is segregated into fixed-income (government debt obligations, investment and non-investment grade corporate debt obligations, commercial MBS, residential mortgage-backed securities, collateralized loan obligations, interest rate and credit derivative contracts), currencies (interest rate and foreign exchange contracts), commodities (primarily futures, forwards, swaps and options) and equities (equity-linked derivatives and cash equity activity). The following table and related discussion present sales and trading revenue, substantially all of which is in *Global Markets*, with the remainder in *Global Banking*. In addition, the following table and related discussion present sales and trading revenue, excluding net DVA, which is a non-GAAP financial measure. For more information on net DVA, see Supplemental Financial Data on page 24.

Sales and Trading Revenue (1, 2)

(Dollars in millions)	2018	2017
Sales and trading revenue		
Fixed-income, currencies and commodities	\$ 8,186	\$ 8,657
Equities	4,876	4,120
Total sales and trading revenue	\$ 13,062	\$ 12,777

Sales and trading revenue, excluding net DVA (3)

Fixed-income, currencies and commodities	\$ 8,328	\$ 9,051
Equities	4,896	4,154
Total sales and trading revenue, excluding net DVA	\$ 13,224	\$ 13,205

(1) Includes FTE adjustments of \$249 million and \$236 million for 2018 and 2017. For more information on sales and trading revenue, see Note 3 – Derivatives to the Consolidated Financial Statements.

(2) Includes *Global Banking* sales and trading revenue of \$430 million and \$236 million for 2018 and 2017.

(3) FICC and Equities sales and trading revenue, excluding net DVA, is a non-GAAP financial measure. FICC net DVA losses were \$142 million and \$394 million for 2018 and 2017. Equities net DVA losses were \$20 million and \$34 million for 2018 and 2017.

The following explanations for year-over-year changes in sales and trading, FICC and Equities revenue exclude net DVA, but would be the same whether net DVA was included or excluded. FICC revenue decreased \$723 million in 2018 primarily due to lower activity and a less favorable market in credit-related products. The decline in FICC revenue was also impacted by higher funding costs, which were driven by increases in market interest rates. Equities revenue increased \$742 million in 2018 driven by strength in client financing and derivatives.

All Other

(Dollars in millions)	2018	2017	% Change
Net interest income	\$ 573	\$ 864	(34)%
Noninterest income (loss)	(1,284)	(1,648)	(22)
Total revenue, net of interest expense	(711)	(784)	(9)
Provision for credit losses	(476)	(561)	(15)
Noninterest expense	2,614	4,065	(36)
Loss before income taxes	(2,849)	(4,288)	(34)
Income tax benefit	(2,736)	(979)	n/m
Net loss	\$ (113)	\$ (3,309)	(97)

Balance Sheet

Average

Total loans and leases	\$ 61,013	\$ 82,489	(26)%
Total assets (1)	201,298	206,999	(3)
Total deposits	21,966	25,194	(13)

Year end

Total loans and leases	\$ 48,061	\$ 69,452	(31)%
Total assets (1)	196,325	194,042	1
Total deposits	18,541	22,719	(18)

(1) In segments where the total of liabilities and equity exceeds assets, which are generally deposit taking segments, we allocate assets from *All Other* to these segments to match liabilities (i.e., deposits) and allocated shareholders' equity. Average allocated assets were \$517.0 billion and \$515.6 billion for 2018 and 2017 and year-end allocated assets were \$540.8 billion and \$520.4 billion at December 31, 2018 and 2017.

n/m = not meaningful

All Other consists of ALM activities, equity investments, non-core mortgage loans and servicing activities, the net impact of periodic revisions to the MSR valuation model for core and non-core MSRs and the related economic hedge results, liquidating businesses and residual expense allocations. ALM activities encompass certain residential mortgages, debt securities, interest rate and foreign currency risk management activities, the impact of certain

allocation methodologies and hedge ineffectiveness. The results of certain ALM activities are allocated to our business segments. For more information on our ALM activities, see *Note 23 – Business Segment Information* to the Consolidated Financial Statements. Equity investments include our merchant services joint venture as well as a portfolio of equity, real estate and other alternative investments. For more information on our merchant services joint

venture, see *Note 12 – Commitments and Contingencies* to the Consolidated Financial Statements.

The Corporation classifies consumer real estate loans as core or non-core based on loan and customer characteristics. For more information on the core and non-core portfolios, see *Consumer Portfolio Credit Risk Management* on page 51. Residential mortgage loans that are held for ALM purposes, including interest rate or liquidity risk management, are classified as core and are presented on the balance sheet of *All Other*. During 2018, residential mortgage loans held for ALM activities decreased \$3.6 billion to \$24.9 billion at December 31, 2018 primarily as a result of payoffs and paydowns. Non-core residential mortgage and home equity loans, which are principally runoff portfolios, are also held in *All Other*. During 2018, total non-core loans decreased \$17.8 billion to \$23.5 billion at December 31, 2018 due primarily to loan sales of \$10.8 billion, as well as payoffs and paydowns.

The net loss for *All Other* improved \$3.2 billion to a loss of \$113 million, driven by a charge of \$2.9 billion in 2017 due to enactment of the Tax Act. The pretax loss for 2018 compared to 2017 decreased \$1.4 billion primarily due to lower noninterest expense.

Revenue increased \$73 million to a loss of \$711 million primarily due to gains of \$731 million from the sale of consumer real estate loans, primarily non-core, offset by a \$729 million charge related to the redemption of certain trust preferred securities in 2018. Results for 2017 included a downward valuation adjustment of \$946 million on tax-advantaged energy investments in connection with the Tax Act and a pretax gain of \$793 million recognized in connection with the sale of the non-U.S. consumer credit card business in 2017.

Noninterest expense decreased \$1.5 billion to \$2.6 billion primarily due to lower non-core mortgage costs and reduced operational costs from the sale of the non-U.S. consumer credit card business. Also, the prior-year period included a \$316 million impairment charge related to certain data centers.

The income tax benefit was \$2.7 billion in 2018 compared to a benefit of \$1.0 billion in 2017. The increase in the tax benefit was primarily driven by a charge of \$1.9 billion in 2017 related to impacts of the Tax Act for the lower valuation of certain deferred tax assets and liabilities. Both periods included income tax benefit adjustments to eliminate the FTE treatment of certain tax credits recorded in *Global Banking*.

Off-Balance Sheet Arrangements and Contractual Obligations

We have contractual obligations to make future payments on debt and lease agreements. Additionally, in the normal course of business, we enter into contractual arrangements whereby we commit to future purchases of products or services from unaffiliated parties. Purchase obligations are defined as obligations that are legally binding agreements whereby we agree to purchase products or services with a specific minimum quantity at a fixed, minimum or variable price over a specified period of time. Included in purchase obligations are vendor contracts, the most significant of which include communication services, processing services and software contracts. Debt, lease and other obligations are more fully discussed in *Note 11 – Long-term Debt* and *Note 12 – Commitments and Contingencies* to the Consolidated Financial Statements.

Other long-term liabilities include our contractual funding obligations related to the Non-U.S. Pension Plans and Nonqualified and Other Pension Plans (together, the Plans). Obligations to the Plans are based on the current and projected obligations of the Plans, performance of the Plans' assets, and any participant contributions, if applicable. During 2018 and 2017, we contributed \$156 million and \$514 million to the Plans, and we expect to make \$127 million of contributions during 2019. The Plans are more fully discussed in *Note 17 – Employee Benefit Plans* to the Consolidated Financial Statements.

We enter into commitments to extend credit such as loan commitments, standby letters of credit (SBLCs) and commercial letters of credit to meet the financing needs of our customers. For a summary of the total unfunded, or off-balance sheet, credit extension commitment amounts by expiration date, see *Credit Extension Commitments* in *Note 12 – Commitments and Contingencies* to the Consolidated Financial Statements.

We also utilize variable interest entities (VIEs) in the ordinary course of business to support our financing and investing needs as well as those of our customers. For more information on our involvement with unconsolidated VIEs, see *Note 7 – Securitizations and Other Variable Interest Entities* to the Consolidated Financial Statements.

Table 12 includes certain contractual obligations at December 31, 2018 and 2017.

Table 12 Contractual Obligations

	December 31, 2018				December 31, 2017	
	Due In One Year or Less	Due After One Year Through Three Years	Due After Three Years Through Five Years	Due After Five Years	Total	Total
(Dollars in millions)						
Long-term debt	\$ 37,975	\$ 43,685	\$ 41,603	\$ 106,077	\$ 229,340	\$ 227,402
Operating lease obligations	2,370	4,197	3,043	6,160	15,770	14,520
Purchase obligations	1,288	1,162	507	1,091	4,048	4,219
Time deposits	53,482	5,477	1,473	607	61,039	67,844
Other long-term liabilities	1,611	1,049	729	544	3,933	4,972
Estimated interest expense on long term debt and time deposits (1)	6,795	10,778	8,407	30,872	56,852	49,123
Total contractual obligations	\$ 103,521	\$ 66,348	\$ 55,762	\$ 145,351	\$ 370,982	\$ 368,060

(1) Represents forecasted net interest expense on long-term debt and time deposits based on interest rates at December 31, 2018 and 2017. Forecasts are based on the contractual maturity dates of each liability, and are net of derivative hedges, where applicable.

Representations and Warranties Obligations

For more information on representations and warranties obligations in connection with the sale of mortgage loans, see *Note 12 – Commitments and Contingencies* to the Consolidated Financial Statements. For more information related to the sensitivity of the assumptions used to estimate our reserve for representations and warranties, see *Complex Accounting Estimates – Representations and Warranties Liability* on page 79.

Managing Risk

Overview

Risk is inherent in all our business activities. Sound risk management enables us to serve our customers and deliver for our shareholders. If not managed well, risks can result in financial loss, regulatory sanctions and penalties, and damage to our reputation, each of which may adversely impact our ability to execute our business strategies. We take a comprehensive approach to risk management with a defined Risk Framework and an articulated Risk Appetite Statement which are approved annually by the Enterprise Risk Committee (ERC) and the Board.

The seven key types of risk faced by the Corporation are strategic, credit, market, liquidity, compliance, operational and reputational.

- Strategic risk is the risk resulting from incorrect assumptions about external or internal factors, inappropriate business plans, ineffective business strategy execution, or failure to respond in a timely manner to changes in the regulatory, macroeconomic or competitive environments in the geographic locations in which we operate.
- Credit risk is the risk of loss arising from the inability or failure of a borrower or counterparty to meet its obligations.
- Market risk is the risk that changes in market conditions may adversely impact the value of assets or liabilities, or otherwise negatively impact earnings.
- Liquidity risk is the inability to meet expected or unexpected cash flow and collateral needs while continuing to support our businesses and customers under a range of economic conditions.
- Compliance risk is the risk of legal or regulatory sanctions, material financial loss or damage to the reputation of the Corporation arising from the failure of the Corporation to comply with the requirements of applicable laws, rules and regulations and our internal policies and procedures.
- Operational risk is the risk of loss resulting from inadequate or failed processes, people and systems, or from external events.
- Reputational risk is the risk that negative perceptions of the Corporation's conduct or business practices may adversely impact its profitability or operations.

The following sections address in more detail the specific procedures, measures and analyses of the major categories of risk. This discussion of managing risk focuses on the current Risk Framework that, as part of its annual review process, was approved by the ERC and the Board.

As set forth in our Risk Framework, a culture of managing risk well is fundamental to fulfilling our purpose and our values and delivering responsible growth. It requires us to focus on risk in all activities and encourages the necessary mindset and behavior to enable effective risk management, and promotes sound risk-taking

within our risk appetite. Sustaining a culture of managing risk well throughout the organization is critical to our success and is a clear expectation of our executive management team and the Board.

Our Risk Framework serves as the foundation for the consistent and effective management of risks facing the Corporation. The Risk Framework sets forth clear roles, responsibilities and accountability for the management of risk and provides a blueprint for how the Board, through delegation of authority to committees and executive officers, establishes risk appetite and associated limits for our activities.

Executive management assesses, with Board oversight, the risk-adjusted returns of each business. Management reviews and approves the strategic and financial operating plans, as well as the capital plan and Risk Appetite Statement, and recommends them annually to the Board for approval. Our strategic plan takes into consideration return objectives and financial resources, which must align with risk capacity and risk appetite. Management sets financial objectives for each business by allocating capital and setting a target for return on capital for each business. Capital allocations and operating limits are regularly evaluated as part of our overall governance processes as the businesses and the economic environment in which we operate continue to evolve. For more information regarding capital allocations, see *Business Segment Operations* on page 30.

The Corporation's risk appetite indicates the amount of capital, earnings or liquidity we are willing to put at risk to achieve our strategic objectives and business plans, consistent with applicable regulatory requirements. Our risk appetite provides a common and comparable set of measures for senior management and the Board to clearly indicate our aggregate level of risk and to monitor whether the Corporation's risk profile remains in alignment with our strategic and capital plans. Our risk appetite is formally articulated in the Risk Appetite Statement, which includes both qualitative components and quantitative limits.

Our overall capacity to take risk is limited; therefore, we prioritize the risks we take in order to maintain a strong and flexible financial position so we can withstand challenging economic conditions and take advantage of organic growth opportunities. Therefore, we set objectives and targets for capital and liquidity that are intended to permit us to continue to operate in a safe and sound manner, including during periods of stress.

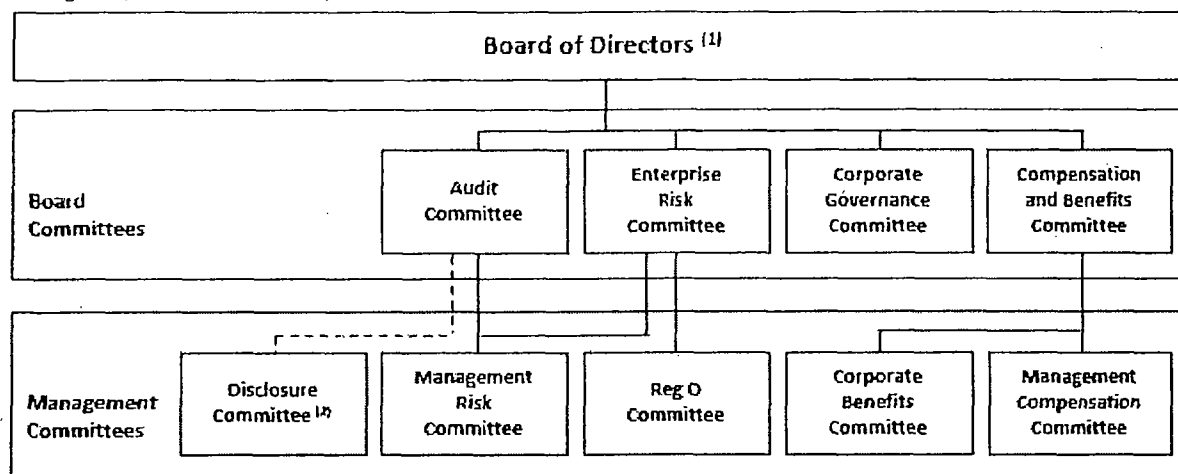
Our lines of business operate with risk limits (which may include credit, market and/or operational limits, as applicable) that align with the Corporation's risk appetite. Executive management is responsible for tracking and reporting performance measurements as well as any exceptions to guidelines or limits. The Board, and its committees when appropriate, oversees financial performance, execution of the strategic and financial operating plans, adherence to risk appetite limits and the adequacy of internal controls.

For a more detailed discussion of our risk management activities, see the discussion below and pages 43 through 77.

Risk Management Governance

The Risk Framework describes delegations of authority whereby the Board and its committees may delegate authority to management-level committees or executive officers. Such delegations may authorize certain decision-making and approval functions, which may be evidenced in, for example, committee charters, job descriptions, meeting minutes and resolutions

The chart below illustrates the inter-relationship among the Board, Board committees and management committees that have the majority of risk oversight responsibilities for the Corporation.



(1) This presentation does not include committees for other legal entities.
 (2) Reports to the CEO and CFO with oversight by the Audit Committee.

Board of Directors and Board Committees

The Board is composed of 16 directors, all but one of whom are independent. The Board authorizes management to maintain an effective Risk Framework, and oversees compliance with safe and sound banking practices. In addition, the Board or its committees conduct inquiries of, and receive reports from management on risk-related matters to assess scope or resource limitations that could impede the ability of Independent Risk Management (IRM) and/or Corporate Audit to execute its responsibilities. The Board committees discussed below have the principal responsibility for enterprise-wide oversight of our risk management activities. Through these activities, the Board and applicable committees are provided with information on our risk profile and oversee executive management addressing key risks we face. Other Board committees, as described below, provide additional oversight of specific risks.

Each of the committees shown on the above chart regularly reports to the Board on risk-related matters within the committee's responsibilities, which is intended to collectively provide the Board with integrated insight about our management of enterprise-wide risks.

Audit Committee

The Audit Committee oversees the qualifications, performance and independence of the Independent Registered Public Accounting Firm, the performance of our corporate audit function, the integrity of our consolidated financial statements, our compliance with legal and regulatory requirements, and makes inquiries of management or the Corporate General Auditor (CGA) to determine whether there are scope or resource limitations that impede the ability of Corporate Audit to execute its responsibilities. The Audit Committee is also responsible for overseeing compliance risk pursuant to the New York Stock Exchange listing standards.

Enterprise Risk Committee

The ERC has primary responsibility for oversight of the Risk Framework and key risks we face and of the Corporation's overall risk appetite. It approves the Risk Framework and the Risk Appetite Statement and further recommends these documents to the Board for approval. The ERC oversees senior management's

responsibilities for the identification, measurement, monitoring and control of key risks we face. The ERC may consult with other Board committees on risk-related matters.

Other Board Committees

Our Corporate Governance Committee oversees our Board's governance processes, identifies and reviews the qualifications of potential Board members, recommends nominees for election to our Board, recommends committee appointments for Board approval and reviews our Environmental, Social and Governance and stockholder engagement activities.

Our Compensation and Benefits Committee oversees establishing, maintaining and administering our compensation programs and employee benefit plans, including approving and recommending our Chief Executive Officer's (CEO) compensation to our Board for further approval by all independent directors, and reviewing and approving all of our executive officers' compensation, as well as compensation for non-management directors.

Management Committees

Management committees may receive their authority from the Board, a Board committee, another management committee or from one or more executive officers. Our primary management-level risk committee is the Management Risk Committee (MRC). Subject to Board oversight, the MRC is responsible for management oversight of key risks facing the Corporation. This includes providing management oversight of our compliance and operational risk programs, balance sheet and capital management, funding activities and other liquidity activities, stress testing, trading activities, recovery and resolution planning, model risk, subsidiary governance and activities between member banks and their nonbank affiliates pursuant to Federal Reserve rules and regulations, among other things.

Lines of Defense

We have clear ownership and accountability across three lines of defense: Front Line Units (FLUs), IRM and Corporate Audit. We also have control functions outside of FLUs and IRM (e.g., Legal and Global Human Resources). The three lines of defense are

integrated into our management-level governance structure. Each of these functional roles is described in more detail below

Executive Officers

Executive officers lead various functions representing the functional roles. Authority for functional roles may be delegated to executive officers from the Board, Board committees or management-level committees. Executive officers, in turn, may further delegate responsibilities, as appropriate, to management-level committees, management routines or individuals. Executive officers review our activities for consistency with our Risk Framework, Risk Appetite Statement and applicable strategic, capital and financial operating plans, as well as applicable policies, standards, procedures and processes. Executive officers and other employees make decisions individually on a day-to-day basis, consistent with the authority they have been delegated. Executive officers and other employees may also serve on committees and participate in committee decisions.

Front Line Units

FLUs, which include the lines of business as well as the Global Technology and Operations Group, are responsible for appropriately assessing and effectively managing all of the risks associated with their activities.

Three organizational units that include FLU activities and control function activities, but are not part of IRM are the Chief Financial Officer (CFO) Group, Global Marketing and Corporate Affairs (GM&CA) and the Chief Administrative Officer (CAO) Group.

Independent Risk Management

IRM is part of our control functions and includes Global Risk Management and Global Compliance and Operational Risk. We have other control functions that are not part of IRM (other control functions may also provide oversight to FLU activities), including Legal, Global Human Resources and certain activities within the CAO Group, CFO Group and GM&CA. IRM, led by the Chief Risk Officer (CRO), is responsible for independently assessing and overseeing risks within FLUs and other control functions. IRM establishes written enterprise policies and procedures that include concentration risk limits, where appropriate. Such policies and procedures outline how aggregate risks are identified, measured, monitored and controlled.

The CRO has the stature, authority and independence to develop and implement a meaningful risk management framework. The CRO has unrestricted access to the Board and reports directly to both the ERC and to the CEO. Global Risk Management is organized into horizontal risk teams, front line unit risk teams and control function risk teams that work collaboratively in executing their respective duties.

Corporate Audit

Corporate Audit and the CGA maintain their independence from the FLUs, IRM and other control functions by reporting directly to the Audit Committee or the Board. The CGA administratively reports to the CEO. Corporate Audit provides independent assessment and validation through testing of key processes and controls across the Corporation. Corporate Audit includes Credit Review which periodically tests and examines credit portfolios and processes.

Risk Management Processes

The Risk Framework requires that strong risk management practices are integrated in key strategic, capital and financial planning processes and in day-to-day business processes across

the Corporation, with a goal of ensuring risks are appropriately considered, evaluated and responded to in a timely manner.

We employ our risk management process, referred to as Identify, Measure, Monitor and Control, as part of our daily activities.

Identify – To be effectively managed, risks must be clearly defined and proactively identified. Proper risk identification focuses on recognizing and understanding key risks inherent in our business activities or key risks that may arise from external factors. Each employee is expected to identify and escalate risks promptly. Risk identification is an ongoing process, incorporating input from FLUs and control functions, designed to be forward looking and capture relevant risk factors across all of our lines of business.

Measure – Once a risk is identified, it must be prioritized and accurately measured through a systematic risk quantification process including quantitative and qualitative components. Risk is measured at various levels including, but not limited to, risk type, FLU, legal entity and on an aggregate basis. This risk quantification process helps to capture changes in our risk profile due to changes in strategic direction, concentrations, portfolio quality and the overall economic environment. Senior management considers how risk exposures might evolve under a variety of stress scenarios.

Monitor – We monitor risk levels regularly to track adherence to risk appetite, policies, standards, procedures and processes. We also regularly update risk assessments and review risk exposures. Through our monitoring, we can determine our level of risk relative to limits and can take action in a timely manner. We also can determine when risk limits are breached and have processes to appropriately report and escalate exceptions. This includes requests for approval to managers and alerts to executive management, management-level committees or the Board (directly or through an appropriate committee).

Control – We establish and communicate risk limits and controls through policies, standards, procedures and processes that define the responsibilities and authority for risk-taking. The limits and controls can be adjusted by the Board or management when conditions or risk tolerances warrant. These limits may be absolute (e.g., loan amount, trading volume) or relative (e.g., percentage of loan book in higher-risk categories). Our lines of business are held accountable to perform within the established limits.

The formal processes used to manage risk represent a part of our overall risk management process. We instill a strong and comprehensive culture of managing risk well through communications, training, policies, procedures and organizational roles and responsibilities. Establishing a culture reflective of our purpose to help make our customers' financial lives better and delivering our responsible growth strategy are also critical to effective risk management. We understand that improper actions, behaviors or practices that are illegal, unethical or contrary to our core values could result in harm to the Corporation, our shareholders or our customers, damage the integrity of the financial markets, or negatively impact our reputation, and have established protocols and structures so that such conduct risk is governed and reported across the Corporation. Specifically, our Code of Conduct provides a framework for all of our employees to conduct themselves with the highest integrity. Additionally, we continue to strengthen the link between the employee performance management process and individual compensation to encourage employees to work toward enterprise-wide risk goals.

Corporation-wide Stress Testing

Integral to our Capital Planning, Financial Planning and Strategic Planning processes, we conduct capital scenario management and stress forecasting on a periodic basis to better understand balance sheet, earnings and capital sensitivities to certain economic and business scenarios, including economic and market conditions that are more severe than anticipated. These stress forecasts provide an understanding of the potential impacts from our risk profile on the balance sheet, earnings and capital, and serve as a key component of our capital and risk management practices. The intent of stress testing is to develop a comprehensive understanding of potential impacts of on- and off-balance sheet risks at the Corporation and how they impact financial resiliency, which provides confidence to management, regulators and our investors.

Contingency Planning

We have developed and maintain contingency plans that are designed to prepare us in advance to respond in the event of potential adverse economic, financial or market stress. These contingency plans include our Capital Contingency Plan and Financial Contingency and Recovery Plan, which provide monitoring, escalation, actions and routines designed to enable us to increase capital, access funding sources and reduce risk through consideration of potential options that include asset sales, business sales, capital or debt issuances, or other de-risking strategies. We also maintain a Resolution Plan to limit adverse systemic impacts that could be associated with a potential resolution of Bank of America.

Strategic Risk Management

Strategic risk is embedded in every business and is one of the major risk categories along with credit, market, liquidity, compliance, operational and reputational risks. This risk results from incorrect assumptions about external or internal factors, inappropriate business plans, ineffective business strategy execution, or failure to respond in a timely manner to changes in the regulatory, macroeconomic or competitive environments, in the geographic locations in which we operate, such as competitor actions, changing customer preferences, product obsolescence and technology developments. Our strategic plan is consistent with our risk appetite, capital plan and liquidity requirements, and specifically addresses strategic risks.

On an annual basis, the Board reviews and approves the strategic plan, capital plan, financial operating plan and Risk Appetite Statement. With oversight by the Board, executive management directs the lines of business to execute our strategic plan consistent with our core operating principles and risk appetite. The executive management team monitors business performance throughout the year and provides the Board with regular progress reports on whether strategic objectives and timelines are being met, including reports on strategic risks and if additional or alternative actions need to be considered or implemented. The regular executive reviews focus on assessing forecasted earnings and returns on capital, the current risk profile, current capital and liquidity requirements, staffing levels and changes required to support the strategic plan, stress testing results, and other qualitative factors such as market growth rates and peer analysis.

Significant strategic actions, such as capital actions, material acquisitions or divestitures, and resolution plans are reviewed and approved by the Board. At the business level, processes are in place to discuss the strategic risk implications of new, expanded or modified businesses, products or services and other strategic initiatives, and to provide formal review and approval where

required. With oversight by the Board and the ERC, executive management performs similar analyses throughout the year, and evaluates changes to the financial forecast or the risk, capital or liquidity positions as deemed appropriate to balance and optimize achieving the targeted risk appetite, shareholder returns and maintaining the targeted financial strength. Proprietary models are used to measure the capital requirements for credit, country, market, operational and strategic risks. The allocated capital assigned to each business is based on its unique risk profile. With oversight by the Board, executive management assesses the risk-adjusted returns of each business in approving strategic and financial operating plans. The businesses use allocated capital to define business strategies, and price products and transactions.

Capital Management

The Corporation manages its capital position so that its capital is more than adequate to support its business activities and aligns with risk, risk appetite and strategic planning. Additionally, we seek to maintain safety and soundness at all times, even under adverse scenarios, take advantage of organic growth opportunities, meet obligations to creditors and counterparties, maintain ready access to financial markets, continue to serve as a credit intermediary, remain a source of strength for our subsidiaries, and satisfy current and future regulatory capital requirements. Capital management is integrated into our risk and governance processes, as capital is a key consideration in the development of our strategic plan, risk appetite and risk limits.

We conduct an Internal Capital Adequacy Assessment Process (ICAAP) on a periodic basis. The ICAAP is a forward-looking assessment of our projected capital needs and resources, incorporating earnings, balance sheet and risk forecasts under baseline and adverse economic and market conditions. We utilize periodic stress tests to assess the potential impacts to our balance sheet, earnings, regulatory capital and liquidity under a variety of stress scenarios. We perform qualitative risk assessments to identify and assess material risks not fully captured in our forecasts or stress tests. We assess the potential capital impacts of proposed changes to regulatory capital requirements. Management assesses ICAAP results and provides documented quarterly assessments of the adequacy of our capital guidelines and capital position to the Board or its committees.

We periodically review capital allocated to our businesses and allocate capital annually during the strategic and capital planning processes. For additional information, see Business Segment Operations on page 30.

CCAR and Capital Planning

The Federal Reserve requires BHCs to submit a capital plan and requests for capital actions on an annual basis, consistent with the rules governing the CCAR capital plan.

On June 28, 2018, following the Federal Reserve's non-objection to our 2018 CCAR capital plan, the Board authorized the repurchase of approximately \$20.6 billion in common stock from July 1, 2018 through June 30, 2019, which includes approximately \$600 million in repurchases² to offset shares awarded under equity-based compensation plans during the same period. In addition to the previously announced repurchases associated with the 2018 CCAR capital plan, on February 7, 2019, we announced a plan to repurchase an additional \$2.5 billion of common stock through June 30, 2019, which was approved by the Federal Reserve.

During 2018, pursuant to the Board's authorizations, including those related to our 2017 CCAR capital plan that expired June 30, 2018, we repurchased \$20.1 billion of common stock, which includes common stock repurchases to offset equity-based

compensation awards. At December 31, 2018, our remaining stock repurchase authorization was \$10.3 billion.

Our stock repurchases are subject to various factors, including the Corporation's capital position, liquidity, financial performance and alternative uses of capital, stock trading price and general market conditions, and may be suspended at any time. The repurchases may be effected through open market purchases or privately negotiated transactions, including repurchase plans that satisfy the conditions of Rule 10b5-1 of the Securities Exchange Act of 1934, as amended. As a "well-capitalized" BHC, we may notify the Federal Reserve of our intention to make additional capital distributions not to exceed 0.25 percent of Tier 1 capital, and which were not contemplated in our capital plan, subject to the Federal Reserve's non-objection.

Regulatory Capital

As a financial services holding company, we are subject to regulatory capital rules, including Basel 3, issued by U.S. banking regulators. Basel 3 established minimum capital ratios and buffer requirements and outlined two methods of calculating risk-weighted assets, the Standardized approach and the Advanced approaches. The Standardized approach relies primarily on supervisory risk weights based on exposure type, and the Advanced approaches determine risk weights based on internal models.

The Corporation and its primary affiliated banking entity, BANA, are Advanced approaches institutions under Basel 3 and are required to report regulatory risk-based capital ratios and risk-weighted assets under both the Standardized and Advanced approaches. The approach that yields the lower ratio is used to assess capital adequacy including under the Prompt Corrective Action (PCA) framework. As of December 31, 2018, Common equity tier 1 (CET1) and Tier 1 capital ratios for the Corporation were lower under the Standardized approach whereas the Advanced approaches yielded a lower Total capital ratio.

Minimum Capital Requirements

Minimum capital requirements and related buffers were fully phased in as of January 1, 2019. The PCA framework established categories of capitalization, including well capitalized, based on the Basel 3 regulatory ratio requirements. U.S. banking regulators are required to take certain mandatory actions depending on the category of capitalization, with no mandatory actions required for well-capitalized banking organizations.

In order to avoid restrictions on capital distributions and discretionary bonus payments, the Corporation must meet risk-based capital ratio requirements that include a capital conservation buffer greater than 2.5 percent, plus any applicable countercyclical capital buffer and a global systemically important bank (G-SIB) surcharge. The buffers and surcharge must be comprised solely of CET1 capital and were phased in over a three-year period that ended January 1, 2019.

The Corporation is also required to maintain a minimum supplementary leverage ratio (SLR) of 3.0 percent plus a leverage buffer of 2.0 percent in order to avoid certain restrictions on capital distributions and discretionary bonus payments. Our insured depository institution subsidiaries are required to maintain a minimum 6.0 percent SLR to be considered well capitalized under the PCA framework. The numerator of the SLR is quarter-end Basel 3 Tier 1 capital. The denominator is total leverage exposure based on the daily average of the sum of on-balance sheet exposures less permitted Tier 1 deductions, as well as the simple average of certain off-balance sheet exposures, as of the end of each month in a quarter.

Capital Composition and Ratios

Table 13 presents Bank of America Corporation's capital ratios and related information in accordance with Basel 3 Standardized and Advanced approaches as measured at December 31, 2018 and 2017. As of the periods presented, the Corporation met the definition of well capitalized under current regulatory requirements.

Table 13 Bank of America Corporation Regulatory Capital under Basel 3 (1)

	Standardized Approach	Advanced Approaches	Current Regulatory Minimum (2)	2019 Regulatory Minimum (3)
December 31, 2018				
(Dollars in millions, except as noted)				
Risk-based capital metrics:				
Common equity tier 1 capital	\$ 167,272	\$ 167,272		
Tier 1 capital	189,038	189,038		
Total capital (4)	221,304	212,878		
Risk-weighted assets (in billions)	1,437	1,409		
Common equity tier 1 capital ratio	11.6%	11.9%	8.25%	9.5%
Tier 1 capital ratio	13.2	13.4	9.75	11.0
Total capital ratio	15.4	15.1	11.75	13.0
Leverage-based metrics:				
Adjusted quarterly average assets (in billions) (5)	\$ 2,258	\$ 2,258		
Tier 1 leverage ratio	8.4%	8.4%	4.0	4.0
SLR leverage exposure (in billions)		\$ 2,791		
SLR		6.8%	5.0	5.0
December 31, 2017				
Risk-based capital metrics:				
Common equity tier 1 capital	\$ 168,461	\$ 168,461		
Tier 1 capital	190,189	190,189		
Total capital (4)	224,209	215,311		
Risk-weighted assets (in billions)	1,443	1,459		
Common equity tier 1 capital ratio	11.7%	11.5%	7.25%	9.5%
Tier 1 capital ratio	13.2	13.0	8.75	11.0
Total capital ratio	15.5	14.8	10.75	13.0
Leverage-based metrics:				
Adjusted quarterly average assets (in billions) (5)	\$ 2,223	\$ 2,223		
Tier 1 leverage ratio	8.6%	8.6%	4.0	4.0

(1) Basel 3 transition provisions for regulatory capital adjustments and deductions were fully phased in as of January 1, 2018. Prior periods are presented on a fully phased-in basis.

(2) The December 31, 2018 and 2017 amounts include a transition capital conservation buffer of 1.875 percent and 1.25 percent and a transition G-SIB surcharge of 1.875 percent and 1.5 percent. The countercyclical capital buffer for both periods is zero.

(3) The 2019 regulatory minimums include a capital conservation buffer of 2.5 percent and G-SIB surcharge of 2.5 percent. The countercyclical capital buffer is zero. We became subject to these regulatory minimums on January 1, 2019. The SLR minimum includes a leverage buffer of 2.0 percent and was applicable beginning on January 1, 2018.

(4) Total capital under the Advanced approaches differs from the Standardized approach due to differences in the amount permitted in Tier 2 capital related to the qualifying allowance for credit losses.

(5) Reflects adjusted average total assets for the three months ended December 31, 2018 and 2017.

CET1 capital was \$167.3 billion at December 31, 2018, a decrease of \$1.2 billion from December 31, 2017, driven by common stock repurchases, dividends and market value declines on AFS debt securities included in accumulated OCI, partially offset by earnings. During 2018, Total capital under the Advanced approaches decreased \$2.4 billion driven by the same factors as CET1 capital and a decrease in subordinated debt included in Tier

2 capital. Standardized risk-weighted assets, which yielded the lower CET1 capital ratio for December 31, 2018, decreased \$5.5 billion during 2018 to \$1,437 billion primarily due to sales of non-core mortgage loans and a decrease in market risk, partially offset by an increase in commercial loans.

Table 14 shows the capital composition at December 31, 2018 and 2017.

Table 14 Capital Composition under Basel 3 (1)

	December 31	
	2018	2017
(Dollars in millions)		
Total common shareholders' equity	\$ 242,999	\$ 244,823
Goodwill, net of related deferred tax liabilities	(68,572)	(68,576)
Deferred tax assets arising from net operating loss and tax credit carryforwards	(5,981)	(6,555)
Intangibles, other than mortgage servicing rights and goodwill, net of related deferred tax liabilities	(1,294)	(1,743)
Other	120	512
Common equity tier 1 capital	167,272	168,461
Qualifying preferred stock, net of issuance cost	22,326	22,323

Other	(560)	(595)
Tier 1 capital	189,038	190,189
Tier 2 capital instruments	21,887	22,938
Eligible credit reserves included in Tier 2 capital	1,972	2,272
Other	(19)	(88)
Total capital under the Advanced approaches	\$ 212,878	\$ 215,311

(1) Basel 3 transition provisions for regulatory capital adjustments and deductions were fully phased in as of January 1, 2018. Prior periods are presented on a fully phased-in basis.

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Table 15 shows the components of risk-weighted assets as measured under Basel 3 at December 31, 2018 and 2017.

Table 15 Risk-weighted Assets under Basel 3 (1)

	Standardized Approach	Advanced Approaches	Standardized Approach	Advanced Approaches
	December 31			
	2018		2017	
(Dollars in billions)				
Credit risk	\$ 1,384	\$ 827	\$ 1,384	\$ 867
Market risk	53	52	59	58
Operational risk	n/a	500	n/a	500
Risks related to credit valuation adjustments	n/a	30	n/a	34
Total risk-weighted assets	\$ 1,437	\$ 1,409	\$ 1,443	\$ 1,459

(1) Basel 3 transition provisions for regulatory capital adjustments and deductions were fully phased in as of January 1, 2018. Prior periods are presented on a fully phased-in basis.
n/a = not applicable

Bank of America, N.A. Regulatory Capital

Table 16 presents regulatory capital information for BANA in accordance with Basel 3 Standardized and Advanced approaches as measured at December 31, 2018 and 2017. BANA met the definition of well capitalized under the PCA framework for both periods.

Table 16 Bank of America, N.A. Regulatory Capital under Basel 3

	Standardized Approach		Advanced Approaches		Minimum Required (1)
	Ratio	Amount	Ratio	Amount	
(Dollars in millions)					
	December 31, 2018				
Common equity tier 1 capital	12.5%	\$ 149,824	15.6%	\$ 149,824	6.5%
Tier 1 capital	12.5	149,824	15.6	149,824	8.0
Total capital	13.5	161,760	16.0	153,627	10.0
Tier 1 leverage	8.7	149,824	8.7	149,824	5.0
SLR			7.1	149,824	6.0
	December 31, 2017				
Common equity tier 1 capital	12.5%	\$ 150,552	14.9%	\$ 150,552	6.5%
Tier 1 capital	12.5	150,552	14.9	150,552	8.0
Total capital	13.6	163,243	15.4	154,675	10.0
Tier 1 leverage	9.0	150,552	9.0	150,552	5.0

(1) Percent required to meet guidelines to be considered well capitalized under the PCA framework.

Regulatory Developments

Minimum Total Loss-Absorbing Capacity

The Federal Reserve's final rule, which was effective January 1, 2019, includes minimum external total loss-absorbing capacity (TLAC) and long-term debt requirements to improve the resolvability and resiliency of large, interconnected BHCs. As of December 31, 2018, the Corporation's TLAC and long-term debt exceeded our estimated 2019 minimum requirements.

Stress Buffer Requirements

On April 10, 2018, the Federal Reserve announced a proposal to integrate the annual quantitative assessment of the CCAR program with the buffer requirements in the Basel 3 capital rule by introducing stress buffer requirements as a replacement of the CCAR quantitative objection. Under the Standardized approach, the proposal replaces the existing static 2.5 percent capital conservation buffer with a stress capital buffer, calculated as the decrease in the CET1 capital ratio in the supervisory severely adverse scenario of the modified CCAR stress test plus four quarters of planned common stock dividend payments, floored at 2.5 percent. The static 2.5 percent capital conservation buffer would be retained under the Advanced approaches. The proposal also introduces a stress leverage buffer requirement which would be calculated as the decrease in the Tier 1 leverage ratio in the supervisory severely adverse scenario of the modified CCAR stress test plus four quarters of planned common stock dividends, with

no floor. The SLR would not incorporate a stress buffer requirement. The proposal also updates the capital distribution assumptions used in the CCAR stress test to better align with a firm's expected actions in stress, notably removing the assumption that a BHC will carry out all of its planned capital actions under stress.

Enhanced Supplementary Leverage Ratio and TLAC Requirements

On April 11, 2018, the Federal Reserve and Office of the Comptroller of the Currency announced a proposal to modify the enhanced SLR standards applicable to U.S. G-SIBs and their insured depository institution subsidiaries. The proposal replaces the existing 2.0 percent leverage buffer with a leverage buffer tailored to each G-SIB, set at 50 percent of the applicable G-SIB surcharge. This proposal also replaces the current 6.0 percent threshold at which a G-SIB's insured depository institution subsidiaries are considered well capitalized under the PCA framework with a threshold set at 3.0 percent plus 50 percent of the G-SIB surcharge applicable to the subsidiary's G-SIB holding company. Correspondingly, the proposal updates the external TLAC leverage buffer for each G-SIB to 50 percent of the applicable G-SIB surcharge and revises the leverage component of the minimum external long-term debt requirement from 4.5 percent to 2.5 percent plus 50 percent of the applicable G-SIB surcharge.

Revisions to Basel 3 to Address Current Expected Credit Loss Accounting

On December 18, 2018, the U.S. banking regulators issued a final rule to address the regulatory capital impact of using the current expected credit loss methodology to measure credit reserves under a new accounting standard that is effective on January 1, 2020. For more information on this standard, see *Note 1 – Summary of Significant Accounting Principles* to the Consolidated Financial Statements. The final rule provides an option to phase in the impact to regulatory capital over a three-year period on a straight-line basis. It also updates the existing regulatory capital framework by creating a new defined term, adjusted allowance for credit losses, which would include credit losses on all financial instruments measured at amortized cost with the exception of purchased credit-deteriorated assets. The final rule continues to allow a limited amount of credit losses to be recognized in Tier 2 capital and maintains the existing limits under the Standardized and Advanced approaches.

Single-Counterparty Credit Limits

On June 14, 2018, the Federal Reserve published a final rule establishing single-counterparty credit limits (SCCL) for BHCs with total consolidated assets of \$250 billion or more. The SCCL rule is designed to ensure that the maximum possible loss that a BHC could incur due to the default of a single counterparty or a group of connected counterparties would not endanger the BHC's survival, thereby reducing the probability of future financial crises. Beginning January 1, 2020, G-SIBs must calculate SCCL on a daily basis by dividing the aggregate net credit exposure to a given counterparty by the G-SIB's Tier 1 capital, ensuring that exposures to other G-SIBs and nonbank financial institutions regulated by the Federal Reserve do not breach 15 percent of Tier 1 capital and exposures to most other counterparties do not breach 25 percent of Tier 1 capital. Certain exposures, including exposures to the U.S. government, U.S. government-sponsored entities and qualifying central counterparties, are exempt from the credit limits.

Broker-dealer Regulatory Capital and Securities Regulation

The Corporation's principal U.S. broker-dealer subsidiaries are Merrill Lynch, Pierce, Fenner & Smith Incorporated (MLPF&S) and Merrill Lynch Professional Clearing Corp (MLPCC). MLPCC is a fully-guaranteed subsidiary of MLPF&S and provides clearing and settlement services. Both entities are subject to the net capital requirements of Securities and Exchange Commission (SEC) Rule 15c3-1. Both entities are also registered as futures commission merchants and are subject to the Commodity Futures Trading Commission Regulation 1.17.

MLPF&S has elected to compute the minimum capital requirement in accordance with the Alternative Net Capital Requirement as permitted by SEC Rule 15c3-1. At December 31, 2018, MLPF&S' regulatory net capital as defined by Rule 15c3-1 was \$13.4 billion and exceeded the minimum requirement of \$2.0 billion by \$11.4 billion. MLPCC's net capital of \$4.4 billion exceeded the minimum requirement of \$617 million by \$3.8 billion.

In accordance with the Alternative Net Capital Requirements, MLPF&S is required to maintain tentative net capital in excess of \$1.0 billion, net capital in excess of \$500 million and notify the SEC in the event its tentative net capital is less than \$5.0 billion. At December 31, 2018, MLPF&S had tentative net capital and net capital in excess of the minimum and notification requirements.

As a result of resolution planning, the current business of MLPF&S is expected to be reorganized into two affiliated broker-

dealers: MLPF&S and BofA Securities, Inc., a newly formed broker-dealer. Under the contemplated reorganization, which is expected to occur during 2019, BofA Securities, Inc. would become the legal entity for the institutional services that are now provided by MLPF&S. MLPF&S' retail services would remain with MLPF&S. The contemplated reorganization is subject to regulatory approval. For more information on resolution planning, see Item 1. Business. - .Resolution Planning.

Merrill Lynch International (MLI), a U.K. investment firm, is regulated by the Prudential Regulation Authority and the FCA, and is subject to certain regulatory capital requirements. At December 31, 2018, MLI's capital resources were \$35.0 billion, which exceeded the minimum Pillar 1 requirement of \$12.7 billion.

Liquidity Risk

Funding and Liquidity Risk Management

Our primary liquidity risk management objective is to meet expected or unexpected cash flow and collateral needs while continuing to support our businesses and customers under a range of economic conditions. To achieve that objective, we analyze and monitor our liquidity risk under expected and stressed conditions, maintain liquidity and access to diverse funding sources, including our stable deposit base, and seek to align liquidity-related incentives and risks.

We define liquidity as readily available assets, limited to cash and high-quality, liquid, unencumbered securities that we can use to meet our contractual and contingent financial obligations as those obligations arise. We manage our liquidity position through line of business and ALM activities, as well as through our legal entity funding strategy, on both a forward and current (including intraday) basis under both expected and stressed conditions. We believe that a centralized approach to funding and liquidity management enhances our ability to monitor liquidity requirements, maximizes access to funding sources, minimizes borrowing costs and facilitates timely responses to liquidity events.

The Board approves our liquidity risk policy and the Financial Contingency and Recovery Plan. The ERC establishes our liquidity risk tolerance levels. The MRC is responsible for overseeing liquidity risks and directing management to maintain exposures within the established tolerance levels. The MRC reviews and monitors our liquidity position and stress testing results, approves certain liquidity risk limits and reviews the impact of strategic decisions on our liquidity. For more information, see *Managing Risk* on page 40. Under this governance framework, we have developed certain funding and liquidity risk management practices which include: maintaining liquidity at the parent company and selected subsidiaries, including our bank subsidiaries and other regulated entities; determining what amounts of liquidity are appropriate for these entities based on analysis of debt maturities and other potential cash outflows, including those that we may experience during stressed market conditions; diversifying funding sources, considering our asset profile and legal entity structure; and performing contingency planning.

NB Holdings Corporation

We have intercompany arrangements with certain key subsidiaries under which we transferred certain assets of Bank of America Corporation, as the parent company, which is a separate and distinct legal entity from our banking and nonbank subsidiaries, and agreed to transfer certain additional parent company assets not needed to satisfy anticipated near-term expenditures, to NB Holdings Corporation, a wholly-owned holding company subsidiary

(NB Holdings). The parent company is expected to continue to have access to the same flow of dividends, interest and other amounts of cash necessary to service its debt, pay dividends and perform other obligations as it would have had if it had not entered into these arrangements and transferred any assets.

In consideration for the transfer of assets, NB Holdings issued a subordinated note to the parent company in a principal amount equal to the value of the transferred assets. The aggregate principal amount of the note will increase by the amount of any future asset transfers. NB Holdings also provided the parent company with a committed line of credit that allows the parent company to draw funds necessary to service near-term cash needs. These arrangements support our preferred single point of entry resolution strategy, under which only the parent company would be resolved under the U.S. Bankruptcy Code. These arrangements include provisions to terminate the line of credit, forgive the subordinated note and require the parent company to transfer its remaining financial assets to NB Holdings if our projected liquidity resources deteriorate so severely that resolution of the parent company becomes imminent.

Global Liquidity Sources and Other Unencumbered Assets

We maintain liquidity available to the Corporation, including the parent company and selected subsidiaries, in the form of cash and high-quality, liquid, unencumbered securities. Our liquidity buffer, referred to as Global Liquidity Sources (GLS), is comprised of assets that are readily available to the parent company and selected subsidiaries, including holding company, bank and broker-dealer subsidiaries, even during stressed market conditions. Our cash is primarily on deposit with the Federal Reserve Bank and, to a lesser extent, central banks outside of the U.S. We limit the composition of high-quality, liquid, unencumbered securities to U.S. government securities, U.S. agency securities, U.S. agency MBS and a select group of non-U.S. government securities. We can quickly obtain cash for these securities, even in stressed conditions, through repurchase agreements or outright sales. We hold our GLS in legal entities that allow us to meet the liquidity requirements of our global businesses, and we consider the impact of potential regulatory, tax, legal and other restrictions that could limit the transferability of funds among entities.

Table 17 presents average GLS for the three months ended December 31, 2018 and 2017.

Table 17 Average Global Liquidity Sources

(Dollars in billions)	Three Months Ended December 31	
	2018	2017
Parent company and NB Holdings	\$ 76	\$ 79
Bank subsidiaries	420	394
Other regulated entities	48	49
Total Average Global Liquidity Sources	\$ 544	\$ 522

Typically, parent company and NB Holdings liquidity is in the form of cash deposited with BANA.

Our bank subsidiaries' liquidity is primarily driven by deposit and lending activity, as well as securities valuation and net debt activity. Liquidity at bank subsidiaries excludes the cash deposited by the parent company and NB Holdings. Our bank subsidiaries can also generate incremental liquidity by pledging a range of unencumbered loans and securities to certain FHLBs and the Federal Reserve Discount Window. The cash we could have obtained by borrowing against this pool of specifically-identified eligible assets was \$344 billion and \$308 billion at December 31,

2018 and 2017. We have established operational procedures to enable us to borrow against these assets, including regularly monitoring our total pool of eligible loans and securities collateral. Eligibility is defined in guidelines from the FHLBs and the Federal Reserve and is subject to change at their discretion. Due to regulatory restrictions, liquidity generated by the bank subsidiaries can generally be used only to fund obligations within the bank subsidiaries, and transfers to the parent company or nonbank subsidiaries may be subject to prior regulatory approval.

Liquidity held in other regulated entities, comprised primarily of broker-dealer subsidiaries, is primarily available to meet the obligations of that entity and transfers to the parent company or to any other subsidiary may be subject to prior regulatory approval due to regulatory restrictions and minimum requirements. Our other regulated entities also hold unencumbered investment-grade securities and equities that we believe could be used to generate additional liquidity.

Table 18 presents the composition of average GLS for the three months ended December 31, 2018 and 2017.

Table 18 Average Global Liquidity Sources Composition

(Dollars in billions)	Three Months Ended December 31	
	2018	2017
Cash on deposit	\$ 113	\$ 118
U.S. Treasury securities	81	62
U.S. agency securities and mortgage-backed securities	340	330
Non-U.S. government securities	10	12
Total Average Global Liquidity Sources	\$ 544	\$ 522

Our GLS are substantially the same in composition to what qualifies as High Quality Liquid Assets (HQLA) under the final U.S. Liquidity Coverage Ratio (LCR) rules. However, HQLA for purposes of calculating LCR is not reported at market value, but at a lower value that incorporates regulatory deductions and the exclusion of excess liquidity held at certain subsidiaries. The LCR is calculated as the amount of a financial institution's unencumbered HQLA relative to the estimated net cash outflows the institution could encounter over a 30-day period of significant liquidity stress, expressed as a percentage. Our average consolidated HQLA, on a net basis, was \$446 billion and \$439 billion for the three months ended December 31, 2018 and 2017. For the same periods, the average consolidated LCR was 118 percent and 125 percent. Our LCR will fluctuate due to normal business flows from customer activity.

Liquidity Stress Analysis

We utilize liquidity stress analysis to assist us in determining the appropriate amounts of liquidity to maintain at the parent company and our subsidiaries to meet contractual and contingent cash outflows under a range of scenarios. The scenarios we consider and utilize incorporate market-wide and Corporation-specific events, including potential credit rating downgrades for the parent company and our subsidiaries, and more severe events including potential resolution scenarios. The scenarios are based on our historical experience, experience of distressed and failed financial institutions, regulatory guidance, and both expected and unexpected future events.

The types of potential contractual and contingent cash outflows we consider in our scenarios may include, but are not limited to, upcoming contractual maturities of unsecured debt and reductions in new debt issuance; diminished access to secured financing markets; potential deposit withdrawals; increased draws on loan

commitments, liquidity facilities and letters of credit; additional collateral that counterparties could call if our credit ratings were downgraded; collateral and margin requirements arising from market value changes; and potential liquidity required to maintain businesses and finance customer activities. Changes in certain market factors, including, but not limited to, credit rating downgrades, could negatively impact potential contractual and contingent outflows and the related financial instruments, and in some cases these impacts could be material to our financial results.

We consider all sources of funds that we could access during each stress scenario and focus particularly on matching available sources with corresponding liquidity requirements by legal entity. We also use the stress modeling results to manage our asset and liability profile and establish limits and guidelines on certain funding sources and businesses.

Net Stable Funding Ratio

U.S. banking regulators issued a proposal for a Net Stable Funding Ratio (NSFR) requirement applicable to U.S. financial institutions following the Basel Committee's final standard. The proposed U.S. NSFR would apply to the Corporation on a consolidated basis and to our insured depository institutions. While the final requirement remains pending and is subject to change, if finalized as proposed, we expect to be in compliance within the regulatory timeline. The standard is intended to reduce funding risk over a longer time horizon. The NSFR is designed to provide an appropriate amount of stable funding, generally capital and liabilities maturing beyond one year, given the mix of assets and off-balance sheet items.

Diversified Funding Sources

We fund our assets primarily with a mix of deposits, and secured and unsecured liabilities through a centralized, globally coordinated funding approach diversified across products, programs, markets, currencies and investor groups.

The primary benefits of our centralized funding approach include greater control, reduced funding costs, wider name recognition by investors and greater flexibility to meet the variable funding requirements of subsidiaries. Where regulations, time zone differences or other business considerations make parent company funding impractical, certain other subsidiaries may issue their own debt.

We fund a substantial portion of our lending activities through our deposits, which were \$1.38 trillion and \$1.31 trillion at December 31, 2018 and 2017. Deposits are primarily generated by our *Consumer Banking*, *GWIM* and *Global Banking* segments. These deposits are diversified by clients, product type and geography, and the majority of our U.S. deposits are insured by the FDIC. We consider a substantial portion of our deposits to be a stable, low-cost and consistent source of funding. We believe this deposit funding is generally less sensitive to interest rate changes, market volatility or changes in our credit ratings than wholesale funding sources. Our lending activities may also be financed through secured borrowings, including credit card securitizations and securitizations with government-sponsored enterprises (GSE), the Federal Housing Administration (FHA) and private-label investors, as well as FHLB loans.

Our trading activities in other regulated entities are primarily funded on a secured basis through securities lending and repurchase agreements, and these amounts will vary based on customer activity and market conditions. We believe funding these activities in the secured financing markets is more cost-efficient and less sensitive to changes in our credit ratings than unsecured financing. Repurchase agreements are generally short-term and

often overnight. Disruptions in secured financing markets for financial institutions have occurred in prior market cycles which resulted in adverse changes in terms or significant reductions in the availability of such financing. We manage the liquidity risks arising from secured funding by sourcing funding globally from a diverse group of counterparties, providing a range of securities collateral and pursuing longer durations, when appropriate. For more information on secured financing agreements, see Note 10 - *Federal Funds Sold or Purchased, Securities Financing Agreements, Short-term Borrowings and Restricted Cash* to the Consolidated Financial Statements.

We issue long-term unsecured debt in a variety of maturities and currencies to achieve cost-efficient funding and to maintain an appropriate maturity profile. While the cost and availability of unsecured funding may be negatively impacted by general market conditions or by matters specific to the financial services industry or the Corporation, we seek to mitigate refinancing risk by actively managing the amount of our borrowings that we anticipate will mature within any month or quarter.

Table 19 presents our long-term debt by major currency at December 31, 2018 and 2017.

Table 19 Long-term Debt by Major Currency

(Dollars in millions)	December 31	
	2018	2017
U.S. dollar	\$ 180,709	\$ 175,623
Euro	34,296	35,481
British pound	5,450	7,016
Japanese yen	3,036	2,993
Canadian dollar	2,935	1,966
Australian dollar	1,722	3,046
Other	1,192	1,277
Total long-term debt	\$ 229,340	\$ 227,402

Total long-term debt increased \$1.9 billion during 2018, primarily due to issuances outpacing maturities and redemptions. We may, from time to time, purchase outstanding debt instruments in various transactions, depending on market conditions, liquidity and other factors. Our other regulated entities may also make markets in our debt instruments to provide liquidity for investors. For more information on long-term debt funding, see Note 11 - *Long-term Debt* to the Consolidated Financial Statements.

During 2018, we issued \$64.4 billion of long-term debt consisting of \$30.7 billion for Bank of America Corporation, substantially all of which was TLAC compliant, \$18.7 billion for Bank of America, N.A. and \$15.0 billion of other debt. During 2017, we issued \$53.3 billion of long-term debt consisting of \$37.7 billion for Bank of America Corporation, substantially all of which was TLAC compliant, \$8.2 billion for Bank of America, N.A. and \$7.4 billion of other debt.

During 2018, we had total long-term debt maturities and redemptions in the aggregate of \$53.3 billion consisting of \$29.8 billion for Bank of America Corporation, \$11.2 billion for Bank of America, N.A. and \$12.3 billion of other debt. During 2017, we had total long-term debt maturities and redemptions in the aggregate of \$48.8 billion consisting of \$29.1 billion for Bank of America Corporation, \$13.3 billion for Bank of America, N.A. and \$6.4 billion of other debt.

During 2018, we redeemed trust preferred securities of 11 trusts with a carrying value of \$3.1 billion and recorded a charge of \$729 million in other income. We also collapsed two trusts, with no financial statement impact, that held fixed-rate junior subordinated notes with a carrying value of \$741 million that were

outstanding at December 31, 2018. At December 31, 2018, we had one remaining floating-rate junior subordinated note held in trust.

We use derivative transactions to manage the duration, interest rate and currency risks of our borrowings, considering the characteristics of the assets they are funding. For more information on our ALM activities, see Interest Rate Risk Management for the Banking Book on page 74.

We may also issue unsecured debt in the form of structured notes for client purposes, certain of which qualify as TLAC eligible debt. During 2018, we issued \$6.9 billion of structured notes, which are debt obligations that pay investors returns linked to other debt or equity securities, indices, currencies or commodities. We typically hedge the returns we are obligated to pay on these liabilities with derivatives and/or investments in the underlying instruments, so that from a funding perspective, the cost is similar to our other unsecured long-term debt. We could be required to settle certain structured note obligations for cash or other securities prior to maturity under certain circumstances, which we consider for liquidity planning purposes. We believe, however, that a portion of such borrowings will remain outstanding beyond the earliest put or redemption date.

Substantially all of our senior and subordinated debt obligations contain no provisions that could trigger a requirement for an early repayment, require additional collateral support, result in changes to terms, accelerate maturity or create additional financial obligations upon an adverse change in our credit ratings, financial ratios, earnings, cash flows or stock price.

Contingency Planning

We maintain contingency funding plans that outline our potential responses to liquidity stress events at various levels of severity. These policies and plans are based on stress scenarios and include potential funding strategies and communication and notification procedures that we would implement in the event we experienced stressed liquidity conditions. We periodically review and test the contingency funding plans to validate efficacy and assess readiness.

Our U.S. bank subsidiaries can access contingency funding through the Federal Reserve Discount Window. Certain non-U.S. subsidiaries have access to central bank facilities in the jurisdictions in which they operate. While we do not rely on these sources in our liquidity modeling, we maintain the policies, procedures and governance processes that would enable us to access these sources if necessary.

Credit Ratings

Our borrowing costs and ability to raise funds are impacted by our credit ratings. In addition, credit ratings may be important to customers or counterparties when we compete in certain markets and when we seek to engage in certain transactions, including over-the-counter (OTC) derivatives. Thus, it is our objective to maintain high-quality credit ratings, and management maintains an active dialogue with the major rating agencies.

Credit ratings and outlooks are opinions expressed by rating agencies on our creditworthiness and that of our obligations

or securities, including long-term debt, short-term borrowings, preferred stock and other securities, including asset securitizations. Our credit ratings are subject to ongoing review by the rating agencies, and they consider a number of factors, including our own financial strength, performance, prospects and operations as well as factors not under our control. The rating agencies could make adjustments to our ratings at any time, and they provide no assurances that they will maintain our ratings at current levels.

Other factors that influence our credit ratings include changes to the rating agencies' methodologies for our industry or certain security types; the rating agencies' assessment of the general operating environment for financial services companies; our relative positions in the markets in which we compete; our various risk exposures and risk management policies and activities; pending litigation and other contingencies or potential tail risks; our reputation; our liquidity position, diversity of funding sources and funding costs; the current and expected level and volatility of our earnings; our capital position and capital management practices; our corporate governance; the sovereign credit ratings of the U.S. government; current or future regulatory and legislative initiatives; and the agencies' views on whether the U.S. government would provide meaningful support to the Corporation or its subsidiaries in a crisis.

On December 5, 2018, Moody's Investors Service (Moody's) placed the long-term and short-term ratings of the Corporation as well as the long-term ratings of its rated subsidiaries, including BANA, on review for upgrade. The agency cited the Corporation's strengthening profitability, continued adherence to a conservative risk profile, and stable capital ratios as drivers of the review. A rating review indicates that those ratings are under consideration for a change in the near term, which typically concludes within 90 days. Moody's concurrently affirmed the short-term ratings of the Corporation's rated subsidiaries, including BANA.

The ratings from Standard & Poor's Global Ratings (S&P) for the Corporation and its subsidiaries did not change during 2018. The last change to the ratings from S&P was a one-notch upgrade of the Corporation's long-term ratings in November 2017.

On June 21, 2018, Fitch Ratings (Fitch) upgraded the Corporation's long-term senior debt rating to A+ from A as part of the agency's latest review of 12 Global Trading & Investment Banks, citing our sustained and improved risk-adjusted earnings, lower risk appetite relative to peers, overall franchise strength and solid liquidity position. The Corporation's short-term debt rating of F1 was affirmed. Additionally, Fitch upgraded the long- and short-term debt ratings of the Corporation's rated U.S. subsidiaries, including BANA and MLPF&S, and upgraded the long-term debt ratings of our rated international subsidiaries, including MLI. The outlook at Fitch remains stable for all long-term debt ratings.

Table 20 presents the Corporation's current long-term/short-term senior debt ratings and outlooks expressed by the rating agencies.

Table 20 Senior Debt Ratings

	Moody's Investors Service			Standard & Poor's Global Ratings			Fitch Ratings		
	Long-term	Short-term	Outlook	Long-term	Short-term	Outlook	Long-term	Short-term	Outlook
Bank of America Corporation	A3	P-2	Review for upgrade	A-	A-2	Stable	A+	F1	Stable
Bank of America, N.A.	Aa3	P-1	Review for upgrade (1)	A+	A-1	Stable	AA-	F1+	Stable
Merrill Lynch, Pierce, Fenner & Smith Incorporated	NR	NR	NR	A+	A-1	Stable	AA-	F1+	Stable
Merrill Lynch International	NR	NR	NR	A+	A-1	Stable	A+	F1	Stable

(1) Review for upgrade only applies to BANA's long term rating.
NR = not rated

A reduction in certain of our credit ratings or the ratings of certain asset-backed securitizations may have a material adverse effect on our liquidity, potential loss of access to credit markets, the related cost of funds, our businesses and on certain trading revenues, particularly in those businesses where counterparty creditworthiness is critical. In addition, under the terms of certain OTC derivative contracts and other trading agreements, in the event of downgrades of our or our rated subsidiaries' credit ratings, the counterparties to those agreements may require us to provide additional collateral, or to terminate these contracts or agreements, which could cause us to sustain losses and/or adversely impact our liquidity. If the short-term credit ratings of our parent company, bank or broker-dealer subsidiaries were downgraded by one or more levels, the potential loss of access to short-term funding sources such as repo financing and the effect on our incremental cost of funds could be material.

While certain potential impacts are contractual and quantifiable, the full scope of the consequences of a credit rating downgrade to a financial institution is inherently uncertain, as it depends upon numerous dynamic, complex and inter-related factors and assumptions, including whether any downgrade of a company's long-term credit ratings precipitates downgrades to its short-term credit ratings, and assumptions about the potential behaviors of various customers, investors and counterparties. For more information on potential impacts of credit rating downgrades, see Liquidity Risk - Liquidity Stress Analysis on page 48.

For more information on additional collateral and termination payments that could be required in connection with certain OTC derivative contracts and other trading agreements as a result of such a credit rating downgrade, see Note 3 - Derivatives to the Consolidated Financial Statements and Item 1A. Risk Factors.

Common Stock Dividends

For a summary of our declared quarterly cash dividends on common stock during 2018 and through February 26, 2019, see Note 13 - Shareholders' Equity to the Consolidated Financial Statements.

Credit Risk Management

Credit risk is the risk of loss arising from the inability or failure of a borrower or counterparty to meet its obligations. Credit risk can also arise from operational failures that result in an erroneous advance, commitment or investment of funds. We define the credit exposure to a borrower or counterparty as the loss potential arising from all product classifications including loans and leases, deposit overdrafts, derivatives, assets held-for-sale and unfunded lending commitments which include loan commitments, letters of credit and financial guarantees. Derivative positions are recorded at fair value and assets held-for-sale are recorded at either fair value or the lower of cost or fair value. Certain loans and unfunded commitments are accounted for under the fair value option. Credit

risk for categories of assets carried at fair value is not accounted for as part of the allowance for credit losses but as part of the fair value adjustments recorded in earnings. For derivative positions, our credit risk is measured as the net cost in the event the counterparties with contracts in which we are in a gain position fail to perform under the terms of those contracts. We use the current fair value to represent credit exposure without giving consideration to future mark-to-market changes. The credit risk amounts take into consideration the effects of legally enforceable master netting agreements and cash collateral. Our consumer and commercial credit extension and review procedures encompass funded and unfunded credit exposures. For more information on derivatives and credit extension commitments, see Note 3 - Derivatives and Note 12 - Commitments and Contingencies to the Consolidated Financial Statements.

We manage credit risk based on the risk profile of the borrower or counterparty, repayment sources, the nature of underlying collateral, and other support given current events, conditions and expectations. We classify our portfolios as either consumer or commercial and monitor credit risk in each as discussed below.

We refine our underwriting and credit risk management practices as well as credit standards to meet the changing economic environment. To mitigate losses and enhance customer support in our consumer businesses, we have in place collection programs and loan modification and customer assistance infrastructures. We utilize a number of actions to mitigate losses in the commercial businesses including increasing the frequency and intensity of portfolio monitoring, hedging activity and our practice of transferring management of deteriorating commercial exposures to independent special asset officers as credits enter criticized categories.

For more information on our credit risk management activities, see Consumer Portfolio Credit Risk Management below, Commercial Portfolio Credit Risk Management on page 59, Non-U.S. Portfolio on page 65, Provision for Credit Losses on page 67, Allowance for Credit Losses on page 67, and Note 5 - Outstanding Loans and Leases and Note 6 - Allowance for Credit Losses to the Consolidated Financial Statements.

Consumer Portfolio Credit Risk Management

Credit risk management for the consumer portfolio begins with initial underwriting and continues throughout a borrower's credit cycle. Statistical techniques in conjunction with experiential judgment are used in all aspects of portfolio management including underwriting, product pricing, risk appetite, setting credit limits, and establishing operating processes and metrics to quantify and balance risks and returns. Statistical models are built using detailed behavioral information from external sources such as credit bureaus and/or internal historical experience and are a component of our consumer credit risk management process. These models are used in part to assist in making both new and

ongoing credit decisions, as well as portfolio management strategies, including authorizations and line management, collection practices and strategies, and determination of the allowance for loan and lease losses and allocated capital for credit risk.

Consumer Credit Portfolio

Improvement in home prices continued during 2018 resulting in improved credit quality and lower credit losses in the home equity portfolio, partially offset by seasoning and loan growth in the U.S. credit card portfolio compared to 2017.

Improved credit quality, continued loan balance runoff and sales primarily in the non-core consumer real estate portfolio, partially offset by seasoning within the U.S. credit card portfolio, drove a \$581 million decrease in the consumer allowance for loan and lease losses in 2018 to \$4.8 billion at December 31, 2018. For additional information, see Allowance for Credit Losses on page 67.

For more information on our accounting policies regarding delinquencies, nonperforming status, charge-offs, troubled debt restructurings (TDRs) for the consumer portfolio and PCI loans, see Note 1 - Summary of Significant Accounting Principles and

Note 5 - Outstanding Loans and Leases to the Consolidated Financial Statements.

Table 21 presents our outstanding consumer loans and leases, consumer nonperforming loans and accruing consumer loans past due 90 days or more. Nonperforming loans do not include past due consumer credit card loans, other unsecured loans and in general, consumer loans not secured by real estate (bankruptcy loans are included) as these loans are typically charged off no later than the end of the month in which the loan becomes 180 days past due. Real estate-secured past due consumer loans that are insured by the FHA or individually insured under long-term standby agreements with Fannie Mae and Freddie Mac (collectively, the fully-insured loan portfolio) are reported as accruing as opposed to nonperforming since the principal repayment is insured. Fully-insured loans included in accruing past due 90 days or more are primarily from our repurchases of delinquent FHA loans pursuant to our servicing agreements with the Government National Mortgage Association (GNMA). Additionally, nonperforming loans and accruing balances past due 90 days or more do not include the PCI loan portfolio or loans accounted for under the fair value option even though the customer may be contractually past due.

Table 21 Consumer Credit Quality

	Outstandings		Nonperforming		Accruing Past Due 90 Days or More	
	December 31					
(Dollars in millions)	2018	2017	2018	2017	2018	2017
Residential mortgage (1)	\$ 208,557	\$ 203,811	\$ 1,893	\$ 2,476	\$ 1,884	\$ 3,230
Home equity	48,286	57,744	1,893	2,644	—	—
U.S. credit card	98,338	96,285	n/a	n/a	994	900
Direct/indirect consumer (2)	91,166	96,342	56	46	38	40
Other consumer (3)	202	166	—	—	—	—
Consumer loans excluding loans accounted for under the fair value option	\$ 446,549	\$ 454,348	\$ 3,842	\$ 5,166	\$ 2,916	\$ 4,170
Loans accounted for under the fair value option (4)	682	928				
Total consumer loans and leases	\$ 447,231	\$ 455,276				
Percentage of outstanding consumer loans and leases (5)	n/a	n/a	0.86%	1.14%	0.65%	0.92%
Percentage of outstanding consumer loans and leases, excluding PCI and fully-insured loan portfolios (5)	n/a	n/a	0.91	1.23	0.24	0.22

(1) Residential mortgage loans accruing past due 90 days or more are fully-insured loans. At December 31, 2018 and 2017, residential mortgage includes \$1.4 billion and \$2.2 billion of loans on which interest had been curtailed by the FHA, and therefore were no longer accruing interest, although principal was still insured, and \$498 million and \$1.0 billion of loans on which interest was still accruing.

(2) Outstandings include auto and specialty lending loans and leases of \$50.1 billion and \$52.4 billion, unsecured consumer lending loans of \$383 million and \$469 million, U.S. securities based lending loans of \$37.0 billion and \$39.8 billion, non U.S. consumer loans of \$2.9 billion and \$3.0 billion and other consumer loans of \$746 million and \$684 million at December 31, 2018 and 2017.

(3) Substantially all of other consumer at December 31, 2018 and 2017 is consumer overdrafts.

(4) Consumer loans accounted for under the fair value option include residential mortgage loans of \$336 million and \$567 million and home equity loans of \$346 million and \$361 million at December 31, 2018 and 2017. For more information on the fair value option, see Note 21 - Fair Value Option to the Consolidated Financial Statements.

(5) Excludes consumer loans accounted for under the fair value option. At December 31, 2018 and 2017, \$12 million and \$26 million of loans accounted for under the fair value option were past due 90 days or more and not accruing interest.

n/a = not applicable

Table 22 presents net charge-offs and related ratios for consumer loans and leases.

Table 22 Consumer Net Charge-offs and Related Ratios

	Net Charge-offs (1)		Net Charge-off Ratios (1, 2)	
	2018	2017	2018	2017
(Dollars in millions)				
Residential mortgage	\$ 28	\$ (100)	0.01%	(0.05)%
Home equity	(2)	213	—	0.34
U.S. credit card	2,837	2,513	3.00	2.76
Non-U.S. credit card (3)	—	75	—	1.91
Direct/indirect consumer	195	214	0.21	0.22
Other consumer	182	163	n/m	n/m
Total	\$ 3,240	\$ 3,078	0.72	0.68

(1) Net charge-offs exclude write-offs in the PCI loan portfolio. For more information, see Consumer Portfolio Credit Risk Management - Purchased Credit Impaired Loan Portfolio on page 57.

(2) Net charge-off ratios are calculated as net charge offs divided by average outstanding loans and leases excluding loans accounted for under the fair value option.

(3) Represents net charge offs related to the non-U.S. credit card loan portfolio, which was sold during the second quarter of 2017.

n/m = not meaningful

Net charge-offs, as shown in Tables 22 and 23, exclude write-offs in the PCI loan portfolio of \$154 million and \$131 million in residential mortgage and \$119 million and \$76 million in home equity for 2018 and 2017. Net charge-off ratios including the PCI write-offs were 0.09 percent and 0.02 percent for residential mortgage and 0.22 percent and 0.47 percent for home equity in 2018 and 2017.

Table 23 presents outstandings, nonperforming balances, net charge-offs, allowance for loan and lease losses and provision for loan and lease losses for the core and non-core portfolios within the consumer real estate portfolio. We categorize consumer real estate loans as core and non-core based on loan and customer characteristics such as origination date, product type, loan-to-value (LTV), Fair Isaac Corporation (FICO) score and delinquency status consistent with our current consumer and mortgage servicing strategy. Generally, loans that were originated after January 1,

2010, qualified under GSE underwriting guidelines, or otherwise met our underwriting guidelines in place in 2015 are characterized as core loans. All other loans are generally characterized as non-core loans and represent runoff portfolios. Core loans as reported in Table 23 include loans held in the *Consumer Banking* and *GWIM* segments, as well as loans held for ALM activities in *All Other*.

As shown in Table 23, outstanding core consumer real estate loans increased \$12.8 billion during 2018 driven by an increase of \$17.1 billion in residential mortgage, partially offset by a \$4.2 billion decrease in home equity.

During 2018, we sold \$11.6 billion of consumer real estate loans compared to \$4.0 billion in 2017. In addition to recurring loan sales, the 2018 amount includes sales of loans, primarily non-core, with a carrying value of \$9.6 billion and related gains of \$731 million recorded in other income in the Consolidated Statement of Income.

Table
23 Consumer Real Estate Portfolio (1)

(Dollars in millions)	Outstandings		Nonperforming		Net Charge-offs (2)	
	December 31					
	2018	2017	2018	2017	2018	2017
Core portfolio						
Residential mortgage	\$ 193,695	\$ 176,618	\$ 1,010	\$ 1,087	\$ 11	\$ (45)
Home equity	40,010	44,245	955	1,079	78	100
Total core portfolio	233,705	220,863	1,965	2,166	89	55
Non-core portfolio						
Residential mortgage	14,862	27,193	883	1,389	17	(55)
Home equity	8,276	13,499	938	1,565	(80)	113
Total non-core portfolio	23,138	40,692	1,821	2,954	(63)	58
Consumer real estate portfolio						
Residential mortgage	208,557	203,811	1,893	2,476	28	(100)
Home equity	48,286	57,744	1,893	2,644	(2)	213
Total consumer real estate portfolio	\$ 256,843	\$ 261,555	\$ 3,786	\$ 5,120	\$ 26	\$ 113
			Allowance for Loan and Lease Losses			
			December 31		Provision for Loan and Lease Losses	
			2018	2017	2018	2017
Core portfolio						
Residential mortgage			\$ 214	\$ 218	\$ 7	\$ (79)
Home equity			228	367	(60)	(91)
Total core portfolio			442	585	(53)	(170)
Non-core portfolio						
Residential mortgage			208	483	(104)	(201)
Home equity			278	652	(335)	(339)
Total non-core portfolio			486	1,135	(439)	(540)
Consumer real estate portfolio						
Residential mortgage			422	701	(97)	(280)
Home equity			506	1,019	(395)	(430)
Total consumer real estate portfolio			\$ 928	\$ 1,720	\$ (492)	\$ (710)

(1) Outstandings and nonperforming loans exclude loans accounted for under the fair value option. Consumer loans accounted for under the fair value option included residential mortgage loans of \$336 million and \$567 million and home equity loans of \$346 million and \$361 million at December 31, 2018 and 2017. For additional information, see Note 21, *Fair Value Option* to the Consolidated Financial Statements.

(2) Net charge-offs exclude write-offs in the PCI loan portfolio. For more information, see Consumer Portfolio Credit Risk Management - Purchased Credit Impaired Loan Portfolio on page 57.

We believe that the presentation of information adjusted to exclude the impact of the PCI loan portfolio, the fully-insured loan portfolio and loans accounted for under the fair value option is more representative of the ongoing operations and credit quality of the business. As a result, in the following tables and discussions of the residential mortgage and home equity portfolios, we exclude loans accounted for under the fair value option and provide information that excludes the impact of the PCI loan portfolio and the fully-insured loan portfolio in certain credit quality statistics. We separately disclose information on the PCI loan portfolio on page 57.

Residential Mortgage

The residential mortgage portfolio made up the largest percentage of our consumer loan portfolio at 47 percent of consumer loans and leases at December 31, 2018. Approximately 44 percent of the residential mortgage portfolio was in *Consumer Banking* and 37 percent was in *GWIM*. The remaining portion was in *All Other* and was comprised of originated loans, purchased loans used in our overall ALM activities, delinquent FHA loans repurchased pursuant to our servicing agreements with GNMA as well as loans repurchased related to our representations and warranties.

Outstanding balances in the residential mortgage portfolio increased \$4.7 billion in 2018 as retention of new originations was partially offset by loan sales of \$8.9 billion and runoff.

At December 31, 2018 and 2017, the residential mortgage portfolio included \$20.1 billion and \$23.7 billion of outstanding fully-insured loans, of which \$14.0 billion and \$17.4 billion had FHA insurance with the remainder protected by long-term standby agreements. At December 31, 2018 and 2017, \$3.5 billion and \$5.2 billion of the FHA-insured loan population were repurchases of delinquent FHA loans pursuant to our servicing agreements with GNMA.

Table 24 presents certain residential mortgage key credit statistics on both a reported basis and excluding the PCI loan portfolio and the fully-insured loan portfolio. Additionally, in the "Reported Basis" columns in the following table, accruing balances past due and nonperforming loans do not include the PCI loan portfolio, in accordance with our accounting policies, even though the customer may be contractually past due. As such, the following discussion presents the residential mortgage portfolio excluding the PCI loan portfolio and the fully-insured loan portfolio.

**Table
24 Residential Mortgage – Key Credit Statistics**

	Reported Basis (1)		Excluding Purchased Credit-Impaired and Fully-Insured Loans (1)	
	December 31			
	2018	2017	2018	2017
(Dollars in millions)				
Outstandings	\$ 208,557	\$ 203,811	\$ 184,627	\$ 172,069
Accruing past due 30 days or more	3,945	5,987	1,155	1,521
Accruing past due 90 days or more	1,884	3,230	—	—
Nonperforming loans	1,893	2,476	1,893	2,476
Percent of portfolio				
Refreshed LTV greater than 90 but less than or equal to 100	2%	3%	1%	2%
Refreshed LTV greater than 100	1	2	1	1
Refreshed FICO below 620	4	6	2	3
2006 and 2007 vintages (2)	6	10	5	8
Net charge-off ratio (3)				
	2018	2017	2018	2017
	0.01%	(0.05)%	0.02%	(0.06)%

(1) Outstandings, accruing past due, nonperforming loans and percentages of portfolio exclude loans accounted for under the fair value option.

(2) These vintages of loans accounted for \$536 million, or 28 percent, and \$825 million, or 33 percent, of nonperforming residential mortgage loans at December 31, 2018 and 2017.

(3) Net charge off ratios are calculated as net charge-offs divided by average outstanding loans excluding loans accounted for under the fair value option.

Nonperforming residential mortgage loans decreased \$583 million in 2018 primarily driven by sales. Of the nonperforming residential mortgage loans at December 31, 2018, \$716 million, or 38 percent, were current on contractual payments. Loans accruing past due 30 days or more decreased \$366 million due to continued improvement in credit quality as well as loan sales in the non-core portfolio.

Net charge-offs increased \$128 million to \$28 million in 2018 compared to \$100 million of net recoveries in 2017 primarily due to net recoveries related to loan sales in 2017.

Loans with a refreshed LTV greater than 100 percent represented one percent of the residential mortgage loan portfolio at both December 31, 2018 and 2017. Of the loans with a refreshed LTV greater than 100 percent, 99 percent and 98 percent were performing at December 31, 2018 and 2017. Loans with a refreshed LTV greater than 100 percent reflect loans where the outstanding carrying value of the loan is greater than the most recent valuation of the property securing the loan.

Of the \$184.6 billion in total residential mortgage loans outstanding at December 31, 2018, as shown in Table 24, 30 percent were originated as interest-only loans. The outstanding balance of interest-only residential mortgage loans that have

entered the amortization period was \$8.6 billion, or 16 percent, at December 31, 2018. Residential mortgage loans that have entered the amortization period generally have experienced a higher rate of early stage delinquencies and nonperforming status compared to the residential mortgage portfolio as a whole. At December 31, 2018, \$177 million, or two percent, of outstanding interest-only residential mortgages that had entered the amortization period were accruing past due 30 days or more compared to \$1.2 billion, or one percent, for the entire residential mortgage portfolio. In addition, at December 31, 2018, \$365 million, or four percent, of outstanding interest-only residential mortgage loans that had entered the amortization period were nonperforming, of which \$128 million were contractually current, compared to \$1.9 billion, or one percent, for the entire residential mortgage portfolio. Loans that have yet to enter the amortization period in our interest-only residential mortgage portfolio are primarily well-collateralized loans to our wealth management clients and have an interest-only period of three to ten years. Approximately 90 percent of these loans that have yet to enter the amortization period will not be required to make a fully-amortizing payment until 2022 or later.

Table 25 presents outstandings, nonperforming loans and net charge-offs by certain state concentrations for the residential mortgage portfolio. The Los Angeles-Long Beach-Santa Ana Metropolitan Statistical Area (MSA) within California represented 16 percent of outstandings at both December 31, 2018 and 2017. In the New York area, the New York-Northern New Jersey-Long Island MSA made up 13 percent of outstandings at both December 31, 2018 and 2017.

**Table
25 Residential Mortgage State Concentrations**

(Dollars in millions)	Outstandings ⁽¹⁾		Nonperforming ⁽¹⁾		Net Charge-offs ⁽²⁾	
	December 31					
	2018	2017	2018	2017	2018	2017
California	\$ 74,463	\$ 68,455	\$ 314	\$ 433	\$ (22)	\$ (103)
New York ⁽³⁾	19,085	17,239	222	227	10	(2)
Florida ⁽³⁾	11,296	10,880	221	280	(6)	(13)
Texas	7,747	7,237	102	126	4	1
New Jersey ⁽³⁾	6,959	6,099	98	130	8	—
Other	65,077	62,159	936	1,280	34	17
Residential mortgage loans ⁽⁴⁾	\$ 184,627	\$ 172,069	\$ 1,893	\$ 2,476	\$ 28	\$ (100)
Fully-insured loan portfolio	20,130	23,741				
Purchased credit-impaired residential mortgage loan portfolio ⁽⁵⁾	3,800	8,001				
Total residential mortgage loan portfolio	\$ 208,557	\$ 203,811				

⁽¹⁾ Outstandings and nonperforming loans exclude loans accounted for under the fair value option.

⁽²⁾ Net charge-offs exclude \$154 million and \$131 million of write-offs in the residential mortgage PCI loan portfolio in 2018 and 2017. For more information on PCI write-offs, see Consumer Portfolio Credit Risk Management - Purchased Credit-impaired Loan Portfolio on page 57.

⁽³⁾ In these states, foreclosure requires a court order following a legal proceeding (judicial states).

⁽⁴⁾ Amounts exclude the PCI residential mortgage and fully-insured loan portfolios.

⁽⁵⁾ At December 31, 2018 and 2017, 49 percent and 47 percent of PCI residential mortgage loans were in California. There were no other significant single state concentrations.

Home Equity

At December 31, 2018, the home equity portfolio made up 11 percent of the consumer portfolio and was comprised of home equity lines of credit (HELOCs), home equity loans and reverse mortgages.

At December 31, 2018, our HELOC portfolio had an outstanding balance of \$44.3 billion, or 92 percent of the total home equity portfolio, compared to \$51.2 billion, or 89 percent, at December 31, 2017. HELOCs generally have an initial draw period of 10 years, and after the initial draw period ends, the loans generally convert to 15-year amortizing loans.

At December 31, 2018, our home equity loan portfolio had an outstanding balance of \$1.8 billion, or four percent of the total home equity portfolio, compared to \$4.4 billion, or seven percent, at December 31, 2017. Home equity loans are almost all fixed-rate loans with amortizing payment terms of 10 to 30 years, and of the \$1.8 billion at December 31, 2018, 68 percent have 25- to 30-year terms. At December 31, 2018, our reverse mortgage portfolio had an outstanding balance of \$2.2 billion, or four percent of the total home equity portfolio, compared to \$2.1 billion, or four percent, at December 31, 2017. We no longer originate reverse mortgages.

At December 31, 2018, 75 percent of the home equity portfolio was in *Consumer Banking*, 17 percent was in *All Other* and the remainder of the portfolio was primarily in *GWIM*. Outstanding

balances in the home equity portfolio decreased \$9.5 billion in 2018 primarily due to paydowns and loan sales of \$2.7 billion outpacing new originations and draws on existing lines. Of the total home equity portfolio at December 31, 2018 and 2017, \$17.3 billion and \$18.7 billion, or 36 percent and 32 percent, were in first-lien positions. At December 31, 2018, outstanding balances in the home equity portfolio that were in a second-lien or more junior-lien position and where we also held the first-lien loan totaled \$7.9 billion, or 17 percent of our total home equity portfolio excluding the PCI loan portfolio.

Unused HELOCs totaled \$43.1 billion and \$44.2 billion at December 31, 2018 and 2017. The decrease was primarily due to accounts reaching the end of their draw period, which automatically eliminates open line exposure, and customers choosing to close accounts. Both of these more than offset the impact of new production. The HELOC utilization rate was 51 percent and 54 percent at December 31, 2018 and 2017.

Table 26 presents certain home equity portfolio key credit statistics on both a reported basis and excluding the PCI loan portfolio. Additionally, in the "Reported Basis" columns in the following table, accruing balances past due 30 days or more and nonperforming loans do not include the PCI loan portfolio, in accordance with our accounting policies, even though the customer may be contractually past due. As such, the following discussion presents the home equity portfolio excluding the PCI loan portfolio.

Table
26 Home Equity – Key Credit Statistics

	Reported Basis (1)		Excluding Purchased Credit-Impaired Loans (1)	
	December 31			
(Dollars in millions)	2018	2017	2018	2017
Outstandings	\$ 48,286	\$ 57,744	\$ 47,441	\$ 55,028
Accruing past due 30 days or more (2)	363	502	363	502
Nonperforming loans (2)	1,893	2,644	1,893	2,644
Percent of portfolio				
Refreshed CLTV greater than 90 but less than or equal to 100	2%	3%	2%	3%
Refreshed CLTV greater than 100	3	5	3	4
Refreshed FICO below 620	5	6	5	6
2006 and 2007 vintages (3)	22	29	21	27
	2018	2017	2018	2017
Net charge-off ratio (4)	—%	0.34%	—%	0.36%

(1) Outstandings, accruing past due, nonperforming loans and percentages of the portfolio exclude loans accounted for under the fair value option.

(2) Accruing past due 30 days or more include \$48 million and \$67 million and nonperforming loans include \$218 million and \$344 million of loans where we serviced the underlying first lien at December 31, 2018 and 2017.

(3) Those vintages of loans have higher refreshed combined loan-to-value (CLTV) ratios and accounted for 49 percent and 52 percent of nonperforming home equity loans at December 31, 2018 and 2017, and \$11 million and \$193 million of net charge-offs in 2018 and 2017.

(4) Net charge-off ratios are calculated as net charge-offs divided by average outstanding loans excluding loans accounted for under the fair value option.

Nonperforming outstanding balances in the home equity portfolio decreased \$751 million in 2018 as outflows, including sales, outpaced new inflows. Of the nonperforming home equity loans at December 31, 2018, \$1.1 billion, or 59 percent, were current on contractual payments. Nonperforming loans that are contractually current primarily consist of collateral-dependent TDRs, including those that have been discharged in Chapter 7 bankruptcy, junior-lien loans where the underlying first lien is 90 days or more past due, as well as loans that have not yet demonstrated a sustained period of payment performance following a TDR. In addition, \$463 million, or 24 percent, of nonperforming home equity loans were 180 days or more past due and had been written down to the estimated fair value of the collateral, less costs to sell. Accruing loans that were 30 days or more past due decreased \$139 million in 2018.

In some cases, the junior-lien home equity outstanding balance that we hold is performing, but the underlying first lien is not. For outstanding balances in the home equity portfolio on which we service the first-lien loan, we are able to track whether the first-lien loan is in default. For loans where the first lien is serviced by a third party, we utilize credit bureau data to estimate the delinquency status of the first lien. At December 31, 2018, we estimate that \$610 million of current and \$83 million of 30 to 89 days past due junior-lien loans were behind a delinquent first-lien loan. We service the first-lien loans on \$114 million of these combined amounts, with the remaining \$579 million serviced by third parties. Of the \$693 million of current to 89 days past due junior-lien loans, based on available credit bureau data and our own internal servicing data, we estimate that approximately \$221 million had first-lien loans that were 90 days or more past due.

Net charge-offs decreased \$215 million to a net recovery of \$2 million in 2018 compared to net charge-offs of \$213 million in 2017 driven by favorable portfolio trends due in part to improvement in home prices and the U.S. economy.

Outstanding balances with a refreshed CLTV greater than 100 percent comprised three percent and four percent of the home equity portfolio at December 31, 2018 and 2017. Outstanding balances with a refreshed CLTV greater than 100 percent reflect loans where our loan and available line of credit combined with any outstanding senior liens against the property are equal to or greater than the most recent valuation of the property securing the loan. Depending on the value of the property, there may be collateral in excess of the first lien that is available to reduce the

severity of loss on the second lien. Of those outstanding balances with a refreshed CLTV greater than 100 percent, 96 percent of the customers were current on their home equity loan and 91 percent of second-lien loans with a refreshed CLTV greater than 100 percent were current on both their second-lien and underlying first-lien loans at December 31, 2018.

Of the \$47.4 billion in total home equity portfolio outstandings at December 31, 2018, as shown in Table 26, 20 percent require interest-only payments. The outstanding balance of HELOCs that have reached the end of their draw period and have entered the amortization period was \$15.8 billion at December 31, 2018. The HELOCs that have entered the amortization period have experienced a higher percentage of early stage delinquencies and nonperforming status when compared to the HELOC portfolio as a whole. At December 31, 2018, \$267 million, or two percent, of outstanding HELOCs that had entered the amortization period were accruing past due 30 days or more. In addition, at December 31, 2018, \$1.7 billion, or 11 percent, of outstanding HELOCs that had entered the amortization period were nonperforming. Loans that have yet to enter the amortization period in our interest-only portfolio are primarily post-2008 vintages and generally have better credit quality than the previous vintages that had entered the amortization period. We communicate to contractually current customers more than a year prior to the end of their draw period to inform them of the potential change to the payment structure before entering the amortization period, and provide payment options to customers prior to the end of the draw period.

Although we do not actively track how many of our home equity customers pay only the minimum amount due on their home equity loans and lines, we can infer some of this information through a review of our HELOC portfolio that we service and that is still in its revolving period. During 2018, 14 percent of these customers with an outstanding balance did not pay any principal on their HELOCs.

Table 27 presents outstandings, nonperforming balances and net charge-offs by certain state concentrations for the home equity portfolio. In the New York area, the New York-Northern New Jersey-Long Island MSA made up 13 percent of the outstanding home equity portfolio at both December 31, 2018 and 2017. Loans within this MSA contributed \$35 million and \$58 million of net charge-offs in 2018 and 2017 within the home equity portfolio. The Los Angeles-Long Beach-Santa Ana MSA within California made up 11 percent of the outstanding home equity portfolio

at both December 31, 2018 and 2017. Loans within this MSA contributed net recoveries of \$23 million and \$20 million within the home equity portfolio in 2018 and 2017.

**Table
27 Home Equity State Concentrations**

	Outstandings (1)		Nonperforming (1)			
	December 31				Net Charge-offs (2)	
(Dollars in millions)	2018	2017	2018	2017	2018	2017
California	\$ 13,228	\$ 15,145	\$ 536	\$ 766	\$ (54)	\$ (37)
Florida (3)	5,363	6,308	315	411	1	38
New Jersey (3)	3,833	4,546	150	191	25	44
New York (3)	3,549	4,195	194	252	23	35
Massachusetts	2,376	2,751	65	92	5	9
Other	19,092	22,083	633	932	(2)	124
Home equity loans (4)	\$ 47,441	\$ 55,028	\$ 1,893	\$ 2,644	\$ (2)	\$ 213
Purchased credit-impaired home equity portfolio (5)	845	2,716				
Total home equity loan portfolio	\$ 48,286	\$ 57,744				

(1) Outstandings and nonperforming loans exclude loans accounted for under the fair value option.

(2) Net charge-offs exclude \$119 million and \$76 million of write-offs in the home equity PCI loan portfolio in 2018 and 2017. For more information on PCI write-offs, see Consumer Portfolio Credit Risk Management - Purchased Credit-Impaired Loan Portfolio.

(3) In these states, foreclosure requires a court order following a legal proceeding (judicial states).

(4) Amount excludes the PCI home equity portfolio.

(5) At December 31, 2018 and 2017, 34 percent and 28 percent of PCI home equity loans were in California. There were no other significant single state concentrations.

Purchased Credit-Impaired Loan Portfolio

Loans acquired with evidence of credit quality deterioration since origination and for which it is probable at purchase that we will be unable to collect all contractually required payments are accounted for under the accounting standards for PCI loans.

Table 28 presents the unpaid principal balance, carrying value, related valuation allowance and the net carrying value as a percentage of the unpaid principal balance for the PCI loan portfolio.

**Table
28 Purchased Credit-Impaired Loan Portfolio**

	Unpaid Principal Balance	Gross Carrying Value	Related Valuation Allowance	Carrying Value Net of Valuation Allowance	Percent of Unpaid Principal Balance
(Dollars in millions)	December 31, 2018				
Residential mortgage ⁽¹⁾	\$ 3,872	\$ 3,800	\$ 30	\$ 3,770	97.37%
Home equity	896	845	61	784	87.50
Total purchased credit-impaired loan portfolio	\$ 4,768	\$ 4,645	\$ 91	\$ 4,554	95.51
	December 31, 2017				
Residential mortgage ⁽¹⁾	\$ 8,117	\$ 8,001	\$ 117	\$ 7,884	97.13%
Home equity	2,787	2,716	172	2,544	91.28
Total purchased credit-impaired loan portfolio	\$ 10,904	\$ 10,717	\$ 289	\$ 10,428	95.63

(1) At December 31, 2018 and 2017, pay option loans had an unpaid principal balance of \$757 million and \$1.4 billion and a carrying value of \$744 million and \$1.4 billion. This includes \$645 million and \$1.2 billion of loans that were credit-impaired upon acquisition and \$67 million and \$141 million of loans that were 90 days or more past due. The total unpaid principal balance of pay option loans with accumulated negative amortization was \$73 million and \$160 million, including \$4 million and \$9 million of negative amortization at December 31, 2018 and 2017.

The total PCI unpaid principal balance decreased \$6.1 billion, or 56 percent, in 2018 primarily driven by loan sales with a carrying value of \$4.4 billion compared to sales of \$803 million in 2017.

Of the unpaid principal balance of \$4.8 billion at December 31, 2018, \$4.3 billion, or 90 percent, was current based on the contractual terms, \$208 million, or four percent, was in early stage delinquency and \$205 million was 180 days or more past due, including \$172 million of first-lien mortgages and \$33 million of home equity loans.

The PCI residential mortgage loan and home equity portfolios represented 82 percent and 18 percent of the total PCI loan portfolio at December 31, 2018. Those loans to borrowers with a refreshed FICO score below 620 represented 19 percent and 21 percent of the PCI residential mortgage loan and home equity portfolios at December 31, 2018. Residential mortgage and home equity loans with a refreshed LTV or CLTV greater than 90 percent, after consideration of purchase accounting adjustments and the related valuation allowance, represented 10 percent and 28 percent of their respective PCI loan portfolios and 11 percent and

32 percent based on the unpaid principal balance at December 31, 2018.

U.S. Credit Card

At December 31, 2018, 97 percent of the U.S. credit card portfolio was managed in *Consumer Banking* with the remainder in *GWIM*. Outstandings in the U.S. credit card portfolio increased \$2.1 billion in 2018 to \$98.3 billion due to higher retail volume partially offset by payments as well as the sale of a small portfolio. In 2018, net charge-offs increased \$324 million to \$2.8 billion, and U.S. credit card loans 30 days or more past due and still accruing interest increased \$142 million and loans 90 days or more past due and still accruing interest increased \$94 million, each driven by portfolio seasoning and loan growth.

Unused lines of credit for U.S. credit card totaled \$334.8 billion and \$326.3 billion at December 31, 2018 and 2017. The increase was driven by account growth and lines of credit increases.

Table 29 presents certain state concentrations for the U.S. credit card portfolio.

Table
29 U.S. Credit Card State Concentrations

(Dollars in millions)	Outstandings		Accruing Past Due 90 Days or More		Net Charge-offs	
	December 31					
	2018	2017	2018	2017	2018	2017
California	\$ 16,062	\$ 15,254	\$ 163	\$ 136	\$ 479	\$ 412
Florida	8,840	8,359	119	94	332	259
Texas	7,730	7,451	84	76	224	194
New York	6,066	5,977	81	91	268	218
Washington	4,558	4,350	24	20	63	56
Other	55,082	54,894	523	483	1,471	1,374
Total U.S. credit card portfolio	\$ 98,338	\$ 96,285	\$ 994	\$ 900	\$ 2,837	\$ 2,513

Direct/Indirect Consumer

At December 31, 2018, 55 percent of the direct/indirect portfolio was included in *Consumer Banking* (consumer auto and specialty lending – automotive, marine, aircraft, recreational vehicle loans and consumer personal loans) and 45 percent was included in *GWIM* (principally securities-based lending loans).

Outstandings in the direct/indirect portfolio decreased \$5.2 billion in 2018 to \$91.2 billion primarily due to declines in

securities-based lending due to higher paydowns, and in our auto portfolio as paydowns outpaced originations. Net charge-offs decreased \$19 million to \$195 million in 2018 due largely to clarifying regulatory guidance related to bankruptcy and repossession issued during 2017.

Table 30 presents certain state concentrations for the direct/indirect consumer loan portfolio.

Table
30 Direct/Indirect State Concentrations

(Dollars in millions)	Outstandings		Accruing Past Due 90 Days or More		Net Charge-offs	
	December 31					
	2018	2017	2018	2017	2018	2017
California	\$ 11,734	\$ 12,897	\$ 4	\$ 3	\$ 21	\$ 21
Florida	10,240	11,184	4	5	36	43
Texas	9,876	10,676	6	5	30	38
New York	6,296	6,557	2	2	9	7
New Jersey	3,308	3,449	1	1	2	6
Other	49,712	51,579	21	24	97	99
Total direct/indirect loan portfolio	\$ 91,166	\$ 96,342	\$ 38	\$ 40	\$ 195	\$ 214

Nonperforming Consumer Loans, Leases and Foreclosed Properties Activity

Table 31 presents nonperforming consumer loans, leases and foreclosed properties activity during 2018 and 2017. During 2018, nonperforming consumer loans declined \$1.3 billion to \$3.8 billion primarily driven by loan sales of \$969 million.

At December 31, 2018, \$1.1 billion, or 29 percent, of nonperforming loans were 180 days or more past due and had been written down to their estimated property value less costs to sell. In addition, at December 31, 2018, \$1.9 billion, or 49 percent, of nonperforming consumer loans were modified and are now current after successful trial periods, or are current loans classified as nonperforming loans in accordance with applicable policies.

Foreclosed properties increased \$8 million in 2018 to \$244 million as additions outpaced liquidations. PCI loans are excluded from nonperforming loans as these loans were written down to fair value at the acquisition date; however, once we acquire the underlying real estate upon foreclosure of the delinquent PCI loan,

it is included in foreclosed properties. Certain delinquent government-guaranteed loans (principally FHA-insured loans) are excluded from our nonperforming loans and foreclosed properties activity as we expect we will be reimbursed once the property is conveyed to the guarantor for principal and, up to certain limits, costs incurred during the foreclosure process and interest accrued during the holding period.

We classify junior-lien home equity loans as nonperforming when the first-lien loan becomes 90 days past due even if the junior-lien loan is performing. At December 31, 2018 and 2017, \$221 million and \$330 million of such junior-lien home equity loans were included in nonperforming loans and leases.

Nonperforming loans also include certain loans that have been modified in TDRs where economic concessions have been granted to borrowers experiencing financial difficulties. Nonperforming TDRs, excluding those modified loans in the PCI loan portfolio, are included in Table 31.

Table 31 Nonperforming Consumer Loans, Leases and Foreclosed Properties Activity

(Dollars in millions)	2018	2017
Nonperforming loans and leases, January 1	\$ 5,166	\$ 6,004
Additions	2,440	3,254
Reductions:		
Paydowns and payoffs	(958)	(1,052)
Sales	(969)	(511)
Returns to performing status ⁽¹⁾	(1,283)	(1,438)
Charge-offs	(401)	(676)
Transfers to foreclosed properties	(151)	(217)
Transfers to loans held-for-sale	(2)	(198)
Total net reductions to nonperforming loans and leases	(1,324)	(838)
Total nonperforming loans and leases, December 31	3,842	5,166
Foreclosed properties, December 31 ⁽²⁾	244	236
Nonperforming consumer loans, leases and foreclosed properties, December 31	\$ 4,086	\$ 5,402
Nonperforming consumer loans and leases as a percentage of outstanding consumer loans and leases ⁽³⁾	0.86%	1.14%
Nonperforming consumer loans, leases and foreclosed properties as a percentage of outstanding consumer loans, leases and foreclosed properties ⁽³⁾	0.92	1.19

⁽¹⁾ Consumer loans may be returned to performing status when all principal and interest is current and full repayment of the remaining contractual principal and interest is expected, or when the loan otherwise becomes well-secured and is in the process of collection.

⁽²⁾ Foreclosed property balances do not include properties insured by certain government-guaranteed loans, principally FHA-insured, of \$488 million and \$801 million at December 31, 2018 and 2017.

⁽³⁾ Outstanding consumer loans and leases exclude loans accounted for under the fair value option.

Table 32 presents TDRs for the consumer real estate portfolio. Performing TDR balances are excluded from nonperforming loans and leases in Table 31.

Table 32 Consumer Real Estate Troubled Debt Restructurings

(Dollars in millions)	December 31, 2018			December 31, 2017		
	Nonperforming	Performing	Total	Nonperforming	Performing	Total
Residential mortgage (1, 2)	\$ 1,209	\$ 4,988	\$ 6,197	\$ 1,535	\$ 8,163	\$ 9,698
Home equity (3)	1,107	1,252	2,359	1,457	1,399	2,856
Total consumer real estate troubled debt restructurings	\$ 2,316	\$ 6,240	\$ 8,556	\$ 2,992	\$ 9,562	\$ 12,554

⁽¹⁾ At December 31, 2018 and 2017, residential mortgage TDRs deemed collateral dependent totaled \$1.6 billion and \$2.8 billion, and included \$960 million and \$1.7 billion of loans classified as nonperforming and \$605 million and \$1.6 billion of loans classified as performing.

⁽²⁾ Residential mortgage performing TDRs included \$2.8 billion and \$3.7 billion of loans that were fully-insured at December 31, 2018 and 2017.

⁽³⁾ At December 31, 2018 and 2017, home equity TDRs deemed collateral dependent totaled \$1.3 billion and \$1.6 billion, and included \$961 million and \$1.2 billion of loans classified as nonperforming and \$322 million and \$388 million of loans classified as performing.

In addition to modifying consumer real estate loans, we work with customers who are experiencing financial difficulty by modifying credit card and other consumer loans. Credit card and other consumer loan modifications generally involve a reduction in the customer's interest rate on the account and placing the customer on a fixed payment plan not exceeding 60 months, all of which are considered TDRs (the renegotiated TDR portfolio).

Modifications of credit card and other consumer loans are made through renegotiation programs utilizing direct customer contact, but may also utilize external renegotiation programs. The renegotiated TDR portfolio is excluded in large part from Table 31 as substantially all of the loans remain on accrual status until either charged off or paid in full. At December 31, 2018 and 2017, our renegotiated TDR portfolio was \$566 million and \$490 million, of which \$481 million and \$426 million were current or less than 30 days past due under the modified terms. The increase in the renegotiated TDR portfolio was primarily driven by new renegotiated enrollments outpacing runoff of existing portfolios.

Commercial Portfolio Credit Risk Management

Credit risk management for the commercial portfolio begins with an assessment of the credit risk profile of the borrower or counterparty based on an analysis of its financial position. As part of the overall credit risk assessment, our commercial credit exposures are assigned a risk rating and are subject to approval based on defined credit approval standards. Subsequent to loan origination, risk ratings are monitored on an ongoing basis, and if necessary, adjusted to reflect changes in the financial condition,

cash flow, risk profile or outlook of a borrower or counterparty. In making credit decisions, we consider risk rating, collateral, country, industry and single-name concentration limits while also balancing these considerations with the total borrower or counterparty relationship. We use a variety of tools to continuously monitor the ability of a borrower or counterparty to perform under its obligations. We use risk rating aggregations to measure and evaluate concentrations within portfolios. In addition, risk ratings are a factor in determining the level of allocated capital and the allowance for credit losses.

As part of our ongoing risk mitigation initiatives, we attempt to work with clients experiencing financial difficulty to modify their loans to terms that better align with their current ability to pay. In situations where an economic concession has been granted to a borrower experiencing financial difficulty, we identify these loans as TDRs. For more information on our accounting policies regarding delinquencies, nonperforming status and net charge-offs for the commercial portfolio, see *Note 1 – Summary of Significant Accounting Principles* to the Consolidated Financial Statements.

Management of Commercial Credit Risk Concentrations

Commercial credit risk is evaluated and managed with the goal that concentrations of credit exposure continue to be aligned with our risk appetite. We review, measure and manage concentrations of credit exposure by industry, product, geography, customer relationship and loan size. We also review, measure and manage commercial real estate loans by geographic location and property

type. In addition, within our non-U.S. portfolio, we evaluate exposures by region and by country. Tables 37, 40, 43 and 44 summarize our concentrations. We also utilize syndications of exposure to third parties, loan sales, hedging and other risk mitigation techniques to manage the size and risk profile of the commercial credit portfolio. For more information on our industry concentrations, see Commercial Portfolio Credit Risk Management - Industry Concentrations on page 63 and Table 40.

We account for certain large corporate loans and loan commitments, including issued but unfunded letters of credit which are considered utilized for credit risk management purposes, that exceed our single-name credit risk concentration guidelines under the fair value option. Lending commitments, both funded and unfunded, are actively managed and monitored, and as appropriate, credit risk for these lending relationships may be mitigated through the use of credit derivatives, with our credit view and market perspectives determining the size and timing of the hedging activity. In addition, we purchase credit protection to cover the funded portion as well as the unfunded portion of certain other credit exposures. To lessen the cost of obtaining our desired credit protection levels, credit exposure may be added within an industry, borrower or counterparty group by selling protection. These credit derivatives do not meet the requirements for treatment as accounting hedges. They are carried at fair value with changes in fair value recorded in other income.

In addition, we are a member of various securities and derivative exchanges and clearinghouses, both in the U.S. and

other countries. As a member, we may be required to pay a pro-rata share of the losses incurred by some of these organizations as a result of another member default and under other loss scenarios. For additional information, see Note 12 - Commitments and Contingencies to the Consolidated Financial Statements.

Commercial Credit Portfolio

During 2018, credit quality among large corporate borrowers was strong, and there was continued improvement in the energy portfolio. Credit quality of commercial real estate borrowers in most sectors remained stable with conservative LTV ratios. However, some of the commercial real estate markets experienced slowing tenant demand and decelerating rental income.

Total commercial utilized credit exposure increased \$20.2 billion in 2018 to \$621.0 billion primarily driven by commercial loan growth. The utilization rate for loans and leases, SBLCs and financial guarantees, and commercial letters of credit, in the aggregate, was 59 percent at both December 31, 2018 and 2017.

Table 33 presents commercial credit exposure by type for utilized, unfunded and total binding committed credit exposure. Commercial utilized credit exposure includes SBLCs and financial guarantees and commercial letters of credit that have been issued and for which we are legally bound to advance funds under prescribed conditions during a specified time period, and excludes exposure related to trading account assets. Although funds have not yet been advanced, these exposure types are considered utilized for credit risk management purposes.

Table 33 Commercial Credit Exposure by Type

	Commercial Utilized (1)		Commercial Unfunded (2, 3, 4)		Total Commercial Committed	
	December 31					
(Dollars in millions)	2018	2017	2018	2017	2018	2017
Loans and leases (5)	\$ 605,724	\$ 487,748	\$ 369,282	\$ 364,743	\$ 875,006	\$ 852,491
Derivative assets (6)	43,725	37,762	—	—	43,725	37,762
Standby letters of credit and financial guarantees	34,941	34,517	491	863	35,432	35,380
Debt securities and other investments	25,425	28,161	4,250	4,864	29,675	33,025
Loans held-for-sale	9,090	10,257	14,812	9,742	23,902	19,999
Commercial letters of credit	1,210	1,467	168	155	1,378	1,622
Other	898	888	—	—	898	888
Total	\$ 621,013	\$ 600,800	\$ 389,003	\$ 380,367	\$ 1,010,016	\$ 981,167

(1) Commercial utilized exposure includes loans of \$3.7 billion and \$4.8 billion and issued letters of credit with a notional amount of \$100 million and \$232 million accounted for under the fair value option at December 31, 2018 and 2017.

(2) Commercial unfunded exposure includes commitments accounted for under the fair value option with a notional amount of \$3.0 billion and \$4.6 billion at December 31, 2018 and 2017.

(3) Excludes unused business card lines, which are not legally binding.

(4) Includes the notional amount of unfunded legally binding lending commitments net of amounts distributed (i.e., syndicated or participated) to other financial institutions. The distributed amounts were \$10.7 billion and \$11.0 billion at December 31, 2018 and 2017.

(5) Includes credit risk exposure associated with assets under operating lease arrangements of \$6.1 billion and \$6.3 billion at December 31, 2018 and 2017.

(6) Derivative assets are carried at fair value, reflect the effects of legally enforceable master netting agreements and have been reduced by cash collateral of \$32.4 billion and \$34.6 billion at December 31, 2018 and 2017. Not reflected in utilized and committed exposure is additional non-cash derivative collateral held of \$33.0 billion and \$26.2 billion at December 31, 2018 and 2017, which consists primarily of other marketable securities.

Outstanding commercial loans and leases increased \$18.2 billion during 2018 primarily in the U.S. commercial portfolio. The allowance for loan and lease losses for the commercial portfolio decreased \$211 million to \$4.8 billion at December 31, 2018. For additional information, see Allowance for Credit Losses on page 67. Table 34 presents our commercial loans and leases portfolio and related credit quality information at December 31, 2018 and 2017.

**Table
34 Commercial Credit Quality**

(Dollars in millions)	Outstandings		Nonperforming		Accruing Past Due 90 Days or More	
			December 31			
	2018	2017	2018	2017	2018	2017
Commercial and industrial:						
U.S. commercial	\$ 299,277	\$ 284,836	\$ 794	\$ 814	\$ 197	\$ 144
Non-U.S. commercial	98,776	97,792	80	299	—	3
Total commercial and industrial	398,053	382,628	874	1,113	197	147
Commercial real estate (1)	60,845	58,298	156	112	4	4
Commercial lease financing	22,534	22,116	18	24	29	19
	481,432	463,042	1,048	1,249	230	170
U.S. small business commercial (2)	14,565	13,649	54	55	84	75
Commercial loans excluding loans accounted for under the fair value option	495,997	476,691	1,102	1,304	314	245
Loans accounted for under the fair value option (3)	3,667	4,782	—	43	—	—
Total commercial loans and leases	\$ 499,664	\$ 481,473	\$ 1,102	\$ 1,347	\$ 314	\$ 245

(1) Includes U.S. commercial real estate of \$56.6 billion and \$54.8 billion and non-U.S. commercial real estate of \$4.2 billion and \$3.5 billion at December 31, 2018 and 2017.

(2) Includes card-related products.

(3) Commercial loans accounted for under the fair value option include U.S. commercial of \$2.5 billion and \$2.6 billion and non-U.S. commercial of \$1.1 billion and \$2.2 billion at December 31, 2018 and 2017. For more information on the fair value option, see Note 21 – Fair Value Option to the Consolidated Financial Statements.

Table 35 presents net charge-offs and related ratios for our commercial loans and leases for 2018 and 2017. The decrease in net charge-offs of \$378 million for 2018 was primarily driven by a single-name non-U.S. commercial charge-off of \$292 million in 2017.

Table 35 Commercial Net Charge-offs and Related Ratios

(Dollars in millions)	Net Charge-offs		Net Charge-off Ratios (1)	
	2018	2017	2018	2017
Commercial and industrial:				
U.S. commercial	\$ 215	\$ 232	0.07%	0.08%
Non-U.S. commercial	68	440	0.07	0.48
Total commercial and industrial	283	672	0.07	0.18
Commercial real estate	1	9	—	0.02
Commercial lease financing	(1)	5	(0.01)	0.02
	283	686	0.06	0.15
U.S. small business commercial	240	215	1.70	1.60
Total commercial	\$ 523	\$ 901	0.11	0.20

(1) Net charge-off ratios are calculated as net charge-offs divided by average outstanding loans and leases excluding loans accounted for under the fair value option.

Table 36 presents commercial reservable criticized utilized exposure by loan type. Criticized exposure corresponds to the Special Mention, Substandard and Doubtful asset categories as defined by regulatory authorities. Total commercial reservable criticized utilized exposure decreased \$2.5 billion, or 18 percent, during 2018 driven by broad-based improvements including the energy sector. At December 31, 2018 and 2017, 91 percent and 84 percent of commercial reservable criticized utilized exposure was secured.

Table 36 Commercial Reservable Criticized Utilized Exposure (1, 2)

(Dollars in millions)	December 31			
	2018		2017	
Commercial and industrial:				
U.S. commercial	\$ 7,986	2.43%	\$ 9,591	3.15%
Non-U.S. commercial	1,013	0.97	1,766	1.70
Total commercial and industrial	8,999	2.08	11,657	2.79
Commercial real estate	936	1.50	566	0.95
Commercial lease financing	366	1.62	561	2.63

	10,301	1.99	12,804	2.57
U.S. small business commercial	760	6.22	759	5.56
Total commercial reservable criticized utilized exposure (1)	\$ 11,061	2.08	\$ 13,563	2.65

(1) Total commercial reservable criticized utilized exposure includes loans and leases of \$10.3 billion and \$12.5 billion and commercial letters of credit of \$761 million and \$1.1 billion at December 31, 2018 and 2017.

(2) Percentages are calculated as commercial reservable criticized utilized exposure divided by total commercial reservable utilized exposure for each exposure category.

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Commercial and Industrial

Commercial and industrial loans include U.S. commercial and non-U.S. commercial portfolios.

U.S. Commercial

At December 31, 2018, 70 percent of the U.S. commercial loan portfolio, excluding small business, was managed in *Global Banking*, 16 percent in *Global Markets*, 12 percent in *GWIM* (generally business-purpose loans for high net worth clients) and the remainder primarily in *Consumer Banking*. U.S. commercial loans increased \$14.4 billion in 2018 primarily in *Global Banking*. Reservable criticized utilized exposure decreased \$1.9 billion, or 19 percent, driven by broad-based improvements including the energy sector.

Non-U.S. Commercial

At December 31, 2018, 81 percent of the non-U.S. commercial loan portfolio was managed in *Global Banking* and 19 percent in *Global Markets*. Reservable criticized utilized exposure decreased \$753 million, or 43 percent, and nonperforming loans and leases decreased \$219 million, or 73 percent, due primarily to paydowns, sales and charge-offs. Net charge-offs decreased \$372 million in 2018 primarily due to a single-name non-U.S. commercial charge-off of \$292 million in 2017. For more information on the non-U.S. commercial portfolio, see Non-U.S. Portfolio on page 65.

Commercial Real Estate

Commercial real estate primarily includes commercial loans and leases secured by non-owner-occupied real estate and is

dependent on the sale or lease of the real estate as the primary source of repayment. The portfolio remains diversified across property types and geographic regions. California represented the largest state concentration at 23 percent of the commercial real estate loans and leases portfolio at both December 31, 2018 and 2017. The commercial real estate portfolio is predominantly managed in *Global Banking* and consists of loans made primarily to public and private developers, and commercial real estate firms. Outstanding loans increased \$2.5 billion, or four percent, during 2018 to \$60.8 billion due to new originations, including higher hold levels on syndicated loans, outpacing paydowns.

During 2018, we continued to see low default rates and solid credit quality in both the residential and non-residential portfolios. We use a number of proactive risk mitigation initiatives to reduce adversely rated exposure in the commercial real estate portfolio, including transfers of deteriorating exposures to management by independent special asset officers and the pursuit of loan restructurings or asset sales to achieve the best results for our customers and the Corporation.

Nonperforming commercial real estate loans and foreclosed properties increased \$48 million, or 29 percent, during 2018 to \$212 million, primarily due to a single-name downgrade.

Table 37 presents outstanding commercial real estate loans by geographic region, based on the geographic location of the collateral, and by property type.

Table 37 Outstanding Commercial Real Estate Loans

	December 31	
	2018	2017
(Dollars in millions)		
By Geographic Region		
California	\$ 14,002	\$ 13,607
Northeast	10,895	10,072
Southwest	7,339	6,970
Southeast	5,726	5,487
Midwest	3,772	3,769
Florida	3,680	3,170
Illinois	2,989	3,263
Midsouth	2,919	2,962
Northwest	2,178	2,657
Non-U.S.	4,240	3,538
Other (1)	3,105	2,803
Total outstanding commercial real estate loans	\$ 60,845	\$ 58,298
By Property Type		
Non-residential		
Office	\$ 17,246	\$ 16,718
Shopping centers / Retail	8,798	8,825
Multi-family rental	7,762	8,280
Hotels / Motels	7,248	6,344
Industrial / Warehouse	5,379	6,070
Unsecured	2,956	2,187
Multi-use	2,848	2,771
Other	7,029	5,645
Total non-residential	59,266	56,840
Residential	1,579	1,458
Total outstanding commercial real estate loans	\$ 60,845	\$ 58,298

(1) Includes unsecured loans to real estate investment trusts and national home builders whose portfolios of properties span multiple geographic regions and properties in the states of Colorado, Utah, Hawaii, Wyoming and Montana

U.S. Small Business Commercial

The U.S. small business commercial loan portfolio is comprised of small business card loans and small business loans managed in *Consumer Banking*. Credit card-related products were 51 percent and 50 percent of the U.S. small business commercial portfolio at December 31, 2018 and 2017. Of the U.S. small business commercial net charge-offs, 95 percent and 90 percent were credit card-related products in 2018 and 2017.

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Nonperforming Commercial Loans, Leases and Foreclosed Properties Activity

Table 38 presents the nonperforming commercial loans, leases and foreclosed properties activity during 2018 and 2017. Nonperforming loans do not include loans accounted for under the fair value option. During 2018, nonperforming commercial loans and leases decreased \$202 million to \$1.1 billion. At December

31, 2018, 93 percent of commercial nonperforming loans, leases and foreclosed properties were secured and 55 percent were contractually current. Commercial nonperforming loans were carried at 89 percent of their unpaid principal balance before consideration of the allowance for loan and lease losses as the carrying value of these loans has been reduced to the estimated collateral value less costs to sell.

Table 38 Nonperforming Commercial Loans, Leases and Foreclosed Properties Activity (1, 2)

(Dollars in millions)	2018	2017
Nonperforming loans and leases, January 1	\$ 1,304	\$ 1,703
Additions	1,415	1,616
Reductions:		
Paydowns	(771)	(930)
Sales	(210)	(136)
Returns to performing status (3)	(246)	(280)
Charge-offs	(361)	(455)
Transfers to foreclosed properties	(12)	(40)
Transfers to loans held-for-sale	(17)	(174)
Total net reductions to nonperforming loans and leases	(202)	(399)
Total nonperforming loans and leases, December 31	1,102	1,304
Foreclosed properties, December 31	56	52
Nonperforming commercial loans, leases and foreclosed properties, December 31	\$ 1,158	\$ 1,356
Nonperforming commercial loans and leases as a percentage of outstanding commercial loans and leases (4)	0.22%	0.27%
Nonperforming commercial loans, leases and foreclosed properties as a percentage of outstanding commercial loans, leases and foreclosed properties (4)	0.23	0.28

(1) Balances do not include nonperforming loans held for sale of \$292 million and \$339 million at December 31, 2018 and 2017.

(2) Includes U.S. small business commercial activity. Small business card loans are excluded as they are not classified as nonperforming.

(3) Commercial loans and leases may be returned to performing status when all principal and interest is current and full repayment of the remaining contractual principal and interest is expected, or when the loan otherwise becomes well-secured and is in the process of collection. TDRs are generally classified as performing after a sustained period of demonstrated payment performance.

(4) Outstanding commercial loans exclude loans accounted for under the fair value option.

Table 39 presents our commercial TDRs by product type and performing status. U.S. small business commercial TDRs are comprised of renegotiated small business card loans and small business loans. The renegotiated small business card loans are not classified as nonperforming as they are charged off no later than the end of the month in which the loan becomes 180 days past due. For more information on TDRs, see Note 5 - *Outstanding Loans and Leases* to the Consolidated Financial Statements.

Table 39 Commercial Troubled Debt Restructurings

(Dollars in millions)	December 31, 2018			December 31, 2017		
	Nonperforming	Performing	Total	Nonperforming	Performing	Total
Commercial and industrial:						
U.S. commercial	\$ 306	\$ 1,092	\$ 1,398	\$ 370	\$ 866	\$ 1,236
Non-U.S. commercial	78	162	240	11	219	230
Total commercial and industrial	384	1,254	1,638	381	1,085	1,466
Commercial real estate	114	6	120	38	9	47
Commercial lease financing	3	68	71	5	13	18
	501	1,328	1,829	424	1,107	1,531
U.S. small business commercial	3	18	21	4	15	19
Total commercial troubled debt restructurings	\$ 504	\$ 1,346	\$ 1,850	\$ 428	\$ 1,122	\$ 1,550

Industry Concentrations

Table 40 presents commercial committed and utilized credit exposure by industry and the total net credit default protection purchased to cover the funded and unfunded portions of certain credit exposures. Our commercial credit exposure is diversified across a broad range of industries. Total commercial committed exposure increased \$28.8 billion, or three percent, during 2018 to \$1.0 trillion. The increase in commercial committed exposure was concentrated in the Asset Managers and Funds, Pharmaceuticals and Biotechnology, and Capital Goods industry sectors. Increases were partially offset by reduced exposure to the Media, Food and Staples Retailing, and Energy industry sectors.

Industry limits are used internally to manage industry concentrations and are based on committed exposure that is

allocated on an industry-by-industry basis. A risk management framework is in place to set and approve industry limits as well as to provide ongoing monitoring. The MRC oversees industry limit governance.

Asset Managers and Funds, our largest industry concentration with committed exposure of \$107.9 billion, increased \$16.8 billion, or 18 percent, during 2018. The change reflects an increase in exposure to several counterparties.

Real Estate, our second largest industry concentration with committed exposure of \$86.5 billion, increased \$2.7 billion, or three percent, during 2018. For more information on the commercial real estate and related portfolios, see Commercial Portfolio Credit Risk Management - Commercial Real Estate on page 62.

Capital Goods, our third largest industry concentration with committed exposure of \$75.1 billion, increased \$4.7 billion, or seven percent, during 2018. The increase in committed exposure occurred primarily as a result of increases in large conglomerates, as well as trading companies, distributors and electrical equipment companies, partially offset by a decrease in machinery companies.

Our energy-related committed exposure decreased \$4.5 billion, or 12 percent, during 2018 to \$32.3 billion. Energy sector net

charge-offs were \$31 million in 2018 compared to \$156 million in 2017. Energy sector reservable criticized exposure decreased \$833 million during 2018 to \$787 million due to improvement in credit quality coupled with exposure reductions. The energy allowance for credit losses decreased \$225 million during 2018 to \$335 million

Table 40 Commercial Credit Exposure by Industry (1)

	Commercial Utilized		Total Commercial Committed (2)	
	December 31			
(Dollars in millions)	2018	2017	2018	2017
Asset managers and funds	\$ 71,756	\$ 59,190	\$ 107,888	\$ 91,092
Real estate (3)	65,328	61,940	86,514	83,773
Capital goods	39,192	36,705	75,080	70,411
Finance companies	36,662	34,050	56,659	53,107
Healthcare equipment and services	35,763	37,780	56,489	57,256
Government and public education	43,675	48,684	54,749	58,067
Materials	27,347	24,001	51,865	47,386
Retailing	25,333	26,117	47,507	48,796
Consumer services	25,702	27,191	43,298	43,605
Food, beverage and tobacco	23,586	23,252	42,745	42,815
Commercial services and supplies	22,623	22,100	39,349	35,496
Energy	13,727	16,345	32,279	36,765
Transportation	22,814	21,704	31,523	29,946
Global commercial banks	26,269	29,491	28,321	31,764
Utilities	12,035	11,342	27,623	27,935
Technology hardware and equipment	13,014	10,728	26,228	22,071
Individuals and trusts	18,643	18,549	25,019	25,097
Media	12,132	19,155	24,502	33,955
Pharmaceuticals and biotechnology	7,430	5,653	23,634	18,623
Vehicle dealers	17,603	16,896	20,446	20,361
Consumer durables and apparel	9,904	8,859	20,199	17,296
Software and services	8,809	8,562	19,172	18,202
Insurance	8,674	6,411	16,807	12,990
Telecommunication services	8,686	6,389	14,166	13,108
Automobiles and components	7,131	5,988	13,893	13,318
Food and staples retailing	4,787	4,955	9,093	15,589
Religious and social organizations	3,757	4,454	5,620	6,318
Financial markets infrastructure (clearinghouses)	2,382	688	4,107	2,403
Other	6,249	3,621	6,241	3,616
Total commercial credit exposure by industry	\$ 621,013	\$ 600,800	\$ 1,010,016	\$ 981,167
Net credit default protection purchased on total commitments (4)			\$ (2,663)	\$ (2,129)

(1) Includes U.S. small business commercial exposure

(2) Includes the notional amount of unfunded legally binding lending commitments net of amounts distributed (i.e., syndicated or participated) to other financial institutions. The distributed amounts were \$10.7 billion and \$11.0 billion at December 31, 2018 and 2017.

(3) Industries are viewed from a variety of perspectives to best isolate the perceived risks. For purposes of this table, the real estate industry is defined based on the primary business activity of the borrowers or counterparties using operating cash flows and primary source of repayment as key factors.

(4) Represents net notional credit protection purchased. For additional information, see Commercial Portfolio Credit Risk Management - Risk Mitigation

Risk Mitigation

We purchase credit protection to cover the funded portion as well as the unfunded portion of certain credit exposures. To lower the cost of obtaining our desired credit protection levels, we may add credit exposure within an industry, borrower or counterparty group by selling protection.

At December 31, 2018 and 2017, net notional credit default protection purchased in our credit derivatives portfolio to hedge our funded and unfunded exposures for which we elected the fair

value option, as well as certain other credit exposures, was \$2.7 billion and \$2.1 billion. We recorded net losses of \$2 million for 2018 compared to net losses of \$66 million in 2017 on these positions. The *gains and losses on these instruments were offset by gains and losses on the related exposures.* The Value-at-Risk (VaR) results for these exposures are included in the fair value option portfolio information in Table 47. For additional information, see Trading Risk Management on page 71.

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Tables 41 and 42 present the maturity profiles and the credit exposure debt ratings of the net credit default protection portfolio at December 31, 2018 and 2017.

Table 41 Net Credit Default Protection by Maturity

	December 31	
	2018	2017
Less than or equal to one year	20%	42%
Greater than one year and less than or equal to five years	78	58
Greater than five years	2	—
Total net credit default protection	100%	100%

Table 42 Net Credit Default Protection by Credit Exposure Debt Rating

	Net Notional (1)		Percent of Total	
	December 31		December 31	
	2018		2017	
(Dollars in millions)				
Ratings (2, 3)				
A	\$ (700)	26.3%	\$ (280)	13.2%
BBB	(501)	18.8	(459)	21.6
BB	(804)	30.2	(893)	41.9
B	(422)	15.8	(403)	18.9
CCC and below	(205)	7.7	(84)	3.9
NR (4)	(31)	1.2	(10)	0.5
Total net credit default protection	\$ (2,663)	100.0%	\$ (2,129)	100.0%

(1) Represents net credit default protection purchased.

(2) Ratings are refreshed on a quarterly basis.

(3) Ratings of BBB- or higher are considered to meet the definition of Investment grade.

(4) NR is comprised of Index positions held and any names that have not been rated.

In addition to our net notional credit default protection purchased to cover the funded and unfunded portion of certain credit exposures, credit derivatives are used for market-making activities for clients and establishing positions intended to profit from directional or relative value changes. We execute the majority of our credit derivative trades in the OTC market with large, multinational financial institutions, including broker-dealers and, to a lesser degree, with a variety of other investors. Because these transactions are executed in the OTC market, we are subject to settlement risk. We are also subject to credit risk in the event that these counterparties fail to perform under the terms of these contracts. In order to properly reflect counterparty credit risk, we record counterparty credit risk valuation adjustments on certain derivative assets, including our purchased credit default protection

In most cases, credit derivative transactions are executed on a daily margin basis. Therefore, events such as a credit downgrade, depending on the ultimate rating level, or a breach of credit covenants would typically require an increase in the amount of collateral required by the counterparty, where applicable, and/or allow us to take additional protective measures such as early termination of all trades. For more information on credit derivatives and counterparty credit risk valuation adjustments, see Note 3 – Derivatives to the Consolidated Financial Statements.

Non-U.S. Portfolio

Our non-U.S. credit and trading portfolios are subject to country risk. We define country risk as the risk of loss from unfavorable economic and political conditions, currency fluctuations, social instability and changes in government policies. A risk management framework is in place to measure, monitor and manage non-U.S. risk and exposures. In addition to the direct risk of doing business in a country, we also are exposed to indirect country risks (e.g., related to the collateral received on secured financing transactions or related to client clearing activities). These indirect exposures are managed in the normal course of business through credit, market and operational risk governance, rather than through country risk governance.

Table 43 presents our 20 largest non-U.S. country exposures at December 31, 2018. These exposures accounted for 89 percent and 86 percent of our total non-U.S. exposure at December 31, 2018 and 2017. Net country exposure for these 20 countries increased \$44.1 billion in 2018, primarily driven by increased placements with central banks in the U.K., Japan and Germany.

Non-U.S. exposure is presented on an internal risk management basis and includes sovereign and non-sovereign credit exposure, securities and other investments issued by or domiciled in countries other than the U.S.

Funded loans and loan equivalents include loans, leases, and other extensions of credit and funds, including letters of credit and due from placements. Unfunded commitments are the undrawn portion of legally binding commitments related to loans and loan equivalents. Net counterparty exposure includes the fair value of derivatives, including the counterparty risk associated with credit default swaps (CDS), and secured financing transactions. Securities and other investments are carried at fair value and long securities exposures are netted against short exposures with the same underlying issuer to, but not below, zero. Net country exposure represents country exposure less hedges and credit default protection purchased, net of credit default protection sold.

Table 43 Top 20 Non-U.S. Countries Exposure

(Dollars in millions)	Funded Loans and Loan Equivalents	Unfunded Loan Commitments	Net Counterparty Exposure	Securities/ Other Investments	Country Exposure at December 31 2018	Hedges and Credit Default Protection	Net Country Exposure at December 31 2018	Increase (Decrease) from December 31 2017
United Kingdom	\$ 28,833	\$ 20,410	\$ 6,419	\$ 2,639	\$ 58,301	\$ (3,447)	\$ 54,854	\$ 17,259
Germany	24,856	6,823	1,835	443	33,957	(5,300)	28,657	7,154
Japan	17,762	1,316	1,023	1,341	21,442	(1,419)	20,023	10,933
Canada	7,388	7,234	1,641	3,773	20,036	(521)	19,515	792
China	12,774	681	975	495	14,925	(284)	14,641	(1,284)
France	7,137	5,849	1,331	1,214	15,531	(2,880)	12,651	2,108
Netherlands	8,405	2,992	389	973	12,759	(1,182)	11,577	3,110
India	7,147	451	312	3,379	11,289	(177)	11,112	615
Brazil	6,651	544	209	3,172	10,576	(327)	10,249	(467)
Australia	5,173	3,132	571	1,507	10,383	(453)	9,930	(659)
South Korea	5,634	463	897	2,456	9,450	(280)	9,170	1,269
Switzerland	5,494	2,580	335	201	8,610	(846)	7,764	1,967
Hong Kong	5,287	442	321	1,224	7,274	(38)	7,236	(1,442)
Mexico	3,506	1,275	140	1,444	6,365	(129)	6,236	749
Belgium	4,684	1,016	103	147	5,950	(372)	5,578	1,613
Singapore	3,330	125	362	1,770	5,587	(70)	5,517	(746)
Spain	3,769	1,138	290	792	5,989	(1,339)	4,650	1,542
United Arab Emirates	3,371	135	138	55	3,699	(50)	3,649	262
Taiwan	2,311	13	288	623	3,235	-	3,235	523
Italy	2,372	1,065	491	597	4,525	(1,444)	3,081	(1,165)
Total top 20 non-U.S. countries exposure	\$ 165,884	\$ 57,684	\$ 18,070	\$ 28,245	\$ 269,883	\$ (20,558)	\$ 249,325	\$ 44,133

A number of economic conditions and geopolitical events have given rise to risk aversion in certain emerging markets. Our largest emerging market country exposure at December 31, 2018 was China, with net exposure of \$14.6 billion, concentrated in large state-owned companies, subsidiaries of multinational corporations and commercial banks.

The outlook for policy direction and therefore economic performance in the EU remains uncertain as a consequence of reduced political cohesion among EU countries. Additionally, we believe that the uncertainty in the U.K.'s ability to negotiate a favorable exit from the EU will further weigh on economic performance. Our largest EU country exposure at December 31, 2018 was the U.K. with net exposure of \$54.9 billion, a \$17.3 billion increase from December 31, 2017. The increase was driven by corporate loan growth and increased placements with the central bank as part of liquidity management.

Markets have reacted negatively to the escalating tensions between the U.S. and several key trading partners. We are closely

monitoring our exposures to tariff-sensitive industries and our international exposure, particularly to countries that account for a large percentage of U.S. trade.

Table 44 presents countries where total cross-border exposure exceeded one percent of our total assets. At December 31, 2018, the U.K. and France were the only countries where total cross-border exposure exceeded one percent of our total assets. At December 31, 2018, Germany and China had total cross-border exposure of \$20.4 billion and \$19.5 billion representing 0.87 percent and 0.83 percent of our total assets. No other countries had total cross-border exposure that exceeded 0.75 percent of our total assets at December 31, 2018.

Cross-border exposure includes the components of Country Risk Exposure as detailed in Table 43 as well as the notional amount of cash loaned under secured financing agreements. Local exposure, defined as exposure booked in local offices of a respective country with clients in the same country, is excluded.

Table 44 Total Cross-border Exposure Exceeding One Percent of Total Assets

(Dollars in millions)	December 31	Public Sector	Banks	Private Sector	Cross-border Exposure	Exposure as a Percent of Total Assets
United Kingdom	2018	\$ 1,505	\$ 3,458	\$ 46,191	\$ 51,154	2.17%
	2017	923	2,984	47,205	51,112	2.24
	2016	2,975	4,557	42,105	49,637	2.27
France	2018	633	2,385	29,847	32,865	1.40

2017	2,964	1,521	27,903	32,388	142
2016	4,956	1,205	23,193	29,354	134

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Provision for Credit Losses

The provision for credit losses decreased \$114 million to \$3.3 billion in 2018 compared to 2017 primarily due to improvement in the commercial portfolio, partially offset by an increase in the consumer portfolio. The provision for credit losses was \$481 million lower than net charge-offs for 2018, resulting in a reduction in the allowance for credit losses. This compared to a reduction of \$583 million in the allowance for credit losses in 2017.

The provision for credit losses for the consumer portfolio increased \$222 million to \$2.9 billion in 2018 compared to 2017. The increase was primarily driven by a slower pace of improvement in the consumer real estate portfolio, and portfolio seasoning and loan growth in the U.S. credit card portfolio, partially offset by the impact of the sale of the non-U.S. consumer credit card business in 2017.

The provision for credit losses for the commercial portfolio, including unfunded lending commitments, decreased \$336 million to \$333 million in 2018 compared to 2017. The decrease was primarily driven by a 2017 single-name non-U.S. commercial charge-off and improvement in the commercial portfolio.

Allowance for Credit Losses

Allowance for Loan and Lease Losses

The allowance for loan and lease losses is comprised of two components. The first component covers nonperforming commercial loans and TDRs. The second component covers loans and leases on which there are incurred losses that are not yet individually identifiable, as well as incurred losses that may not be represented in the loss forecast models. We evaluate the adequacy of the allowance for loan and lease losses based on the total of these two components, each of which is described in more detail below. The allowance for loan and lease losses excludes loans held-for-sale (LHFS) and loans accounted for under the fair value option as the fair value reflects a credit risk component.

The first component of the allowance for loan and lease losses covers both nonperforming commercial loans and all TDRs within the consumer and commercial portfolios. These loans are subject to impairment measurement based on the present value of projected future cash flows discounted at the loan's original effective interest rate, or in certain circumstances, impairment may also be based upon the collateral value or the loan's observable market price if available. Impairment measurement for the renegotiated consumer credit card, small business credit card and unsecured consumer TDR portfolios is based on the present value of projected cash flows discounted using the average portfolio contractual interest rate, excluding promotionally priced loans, in effect prior to restructuring. For purposes of computing this specific loss component of the allowance, larger impaired loans are evaluated individually and smaller impaired loans are evaluated as a pool using historical experience for the respective product types and risk ratings of the loans.

The second component of the allowance for loan and lease losses covers the remaining consumer and commercial loans and leases that have incurred losses that are not yet individually identifiable. The allowance for consumer (including credit card and other consumer loans) and certain homogeneous commercial loan and lease products is based on aggregated portfolio evaluations, which include both quantitative and qualitative components, generally by product type. Loss forecast models are utilized that consider a variety of factors including, but not limited to, historical loss experience, estimated defaults or foreclosures based on portfolio trends, delinquencies, economic trends and credit scores. Our consumer real estate loss forecast model estimates

the portion of loans that will default based on individual loan attributes, the most significant of which are refreshed LTV or CLTV, and borrower credit score as well as vintage and geography, all of which are further broken down into current delinquency status. Additionally, we incorporate the delinquency status of underlying first-lien loans on our junior-lien home equity portfolio in our allowance process. Incorporating refreshed LTV and CLTV into our probability of default allows us to factor the impact of changes in home prices into our allowance for loan and lease losses. These loss forecast models are updated on a quarterly basis to incorporate information reflecting the current economic environment. As of December 31, 2018, the loss forecast process resulted in reductions in the allowance related to the residential mortgage and home equity portfolios compared to December 31, 2017.

The allowance for commercial loan and lease losses is established by product type after analyzing historical loss experience, internal risk rating, current economic conditions, industry performance trends, geographic and obligor concentrations within each portfolio and any other pertinent information. The statistical models for commercial loans are generally updated annually and utilize our historical database of actual defaults and other data, including external default data. The loan risk ratings and composition of the commercial portfolios used to calculate the allowance are updated quarterly to incorporate the most recent data reflecting the current economic environment. For risk-rated commercial loans, we estimate the probability of default and the loss given default (LGD) based on our historical experience of defaults and credit losses. Factors considered when assessing the internal risk rating include the value of the underlying collateral, if applicable, the industry in which the obligor operates, the obligor's liquidity and other financial indicators, and other quantitative and qualitative factors relevant to the obligor's credit risk. As of December 31, 2018, the allowance for the U.S. commercial and non-U.S. commercial portfolios decreased compared to December 31, 2017.

Also included within the second component of the allowance for loan and lease losses are reserves to cover losses that are incurred but, in our assessment, may not be adequately represented in the historical loss data used in the loss forecast models. For example, factors that we consider include, among others, changes in lending policies and procedures, changes in economic and business conditions, changes in the nature and size of the portfolio, changes in portfolio concentrations, changes in the volume and severity of past due loans and nonaccrual loans, the effect of external factors such as competition, and legal and regulatory requirements. Further, we consider the inherent uncertainty in mathematical models that are built upon historical data.

During 2018, the factors that impacted the allowance for loan and lease losses included improvement in the credit quality of the consumer real estate portfolios driven by continuing improvements in the U.S. economy and strong labor markets, proactive credit risk management initiatives and the impact of high credit quality originations. Evidencing the improvements in the U.S. economy and strong labor markets are low levels of unemployment and increases in home prices. In addition to these improvements, in the consumer portfolio, nonperforming consumer loans decreased \$1.3 billion in 2018 as returns to performing status, loan sales, paydowns and charge-offs continued to outpace new nonaccrual loans. During 2018, the allowance for loan and lease losses in the commercial portfolio reflected decreased energy reserves primarily driven by improvement in energy exposures including reservable criticized utilized exposures

We monitor differences between estimated and actual incurred loan and lease losses. This monitoring process includes periodic assessments by senior management of loan and lease portfolios and the models used to estimate incurred losses in those portfolios.

The allowance for loan and lease losses for the consumer portfolio, as presented in Table 45, was \$4.8 billion at December 31, 2018, a decrease of \$581 million from December 31, 2017. The decrease was primarily in the consumer real estate portfolio, partially offset by an increase in the U.S. credit card portfolio. The reduction in the allowance for the consumer real estate portfolio was due to improved home prices, lower nonperforming loans and a decrease in loan balances in our non-core portfolio. The increase in the allowance for the U.S. credit card portfolio was driven by portfolio seasoning and loan growth.

The allowance for loan and lease losses for the commercial portfolio, as presented in Table 45, was \$4.8 billion at December 31, 2018, a decrease of \$211 million from December 31, 2017 primarily driven by improvement in energy exposures. Commercial reservable criticized utilized exposure decreased to \$11.1 billion at December 31, 2018 from \$13.6 billion (to 2.08 percent from 2.65 percent of total commercial reservable utilized exposure) at December 31, 2017, driven by broad-based improvements including the energy sector. Nonperforming commercial loans decreased to \$1.1 billion at December 31, 2018 from \$1.3 billion (to 0.22 percent from 0.27 percent of outstanding commercial loans excluding loans accounted for under the fair value option)

at December 31, 2017. See Tables 34, 35 and 36 for more details on key commercial credit statistics

The allowance for loan and lease losses as a percentage of total loans and leases outstanding was 1.02 percent at December 31, 2018 compared to 1.12 percent at December 31, 2017.

Reserve for Unfunded Lending Commitments

In addition to the allowance for loan and lease losses, we also estimate probable losses related to unfunded lending commitments such as letters of credit, financial guarantees, unfunded bankers' acceptances and binding loan commitments, excluding commitments accounted for under the fair value option. Unfunded lending commitments are subject to the same assessment as funded loans, including estimates of probability of default and LGD. Due to the nature of unfunded commitments, the estimate of probable losses must also consider utilization. To estimate the portion of these undrawn commitments that is likely to be drawn by a borrower at the time of estimated default, analyses of our historical experience are applied to the unfunded commitments to estimate the funded exposure at default (EAD). The expected loss for unfunded lending commitments is the product of the probability of default, the LGD and the EAD, adjusted for any qualitative factors including economic uncertainty and inherent imprecision in models.

The reserve for unfunded lending commitments was \$797 million at December 31, 2018 compared to \$777 million at December 31, 2017.

Table 45 Allocation of the Allowance for Credit Losses by Product Type

	Amount	Percent of Total	Percent of Loans and Leases Outstanding (1)	Amount	Percent of Total	Percent of Loans and Leases Outstanding (1)
(Dollars in millions)	December 31, 2018			December 31, 2017		
Allowance for loan and lease losses						
Residential mortgage	\$ 422	4.40%	0.20%	\$ 701	6.74%	0.34%
Home equity	506	5.27	1.05	1,019	9.80	1.76
U.S. credit card	3,597	37.47	3.66	3,368	32.41	3.50
Direct/Indirect consumer	248	2.58	0.27	264	2.54	0.27
Other consumer	29	0.30	n/m	31	0.30	n/m
Total consumer	4,802	50.02	1.08	5,383	51.79	1.18
U.S. commercial (2)	3,010	31.35	0.96	3,113	29.95	1.04
Non-U.S. commercial	677	7.05	0.69	803	7.73	0.82
Commercial real estate	958	9.98	1.57	935	9.00	1.60
Commercial lease financing	154	1.60	0.68	159	1.53	0.72
Total commercial	4,799	49.98	0.97	5,010	48.21	1.05
Allowance for loan and lease losses (3)	9,601	100.00%	1.02	10,393	100.00%	1.12
Reserve for unfunded lending commitments	797			777		
Allowance for credit losses	\$ 10,398			\$ 11,170		

(1) Ratios are calculated as allowance for loan and lease losses as a percentage of loans and leases outstanding excluding loans accounted for under the fair value option. Consumer loans accounted for under the fair value option include residential mortgage loans of \$336 million and \$567 million and home equity loans of \$346 million and \$361 million at December 31, 2018 and 2017. Commercial loans accounted for under the fair value option include U.S. commercial loans of \$2.5 billion and \$2.6 billion and non-U.S. commercial loans of \$1.1 billion and \$2.2 billion at December 31, 2018 and 2017.

(2) Includes allowance for loan and lease losses for U.S. small business commercial loans of \$474 million and \$439 million at December 31, 2018 and 2017.

(3) Includes \$91 million and \$289 million of valuation allowance presented with the allowance for loan and lease losses related to PCI loans at December 31, 2018 and 2017.

n/m = not meaningful

Table 46 presents a rollforward of the allowance for credit losses, which includes the allowance for loan and lease losses and the reserve for unfunded lending commitments, for 2018 and 2017.

Table 46 Allowance for Credit Losses

(Dollars in millions)	2018	2017
Allowance for loan and lease losses, January 1	\$ 10,393	\$ 11,237
Loans and leases charged off		
Residential mortgage	(207)	(188)
Home equity	(483)	(582)
U.S. credit card	(3,345)	(2,968)
Non-U.S. credit card (1)	—	(103)
Direct/Indirect consumer	(495)	(491)
Other consumer	(197)	(212)
Total consumer charge-offs	(4,727)	(4,544)
U.S. commercial (2)	(575)	(589)
Non-U.S. commercial	(82)	(446)
Commercial real estate	(10)	(24)
Commercial lease financing	(8)	(16)
Total commercial charge-offs	(675)	(1,075)
Total loans and leases charged off	(5,402)	(5,619)
Recoveries of loans and leases previously charged off		
Residential mortgage	179	288
Home equity	485	369
U.S. credit card	508	455
Non-U.S. credit card (1)	—	28
Direct/Indirect consumer	300	277
Other consumer	15	49
Total consumer recoveries	1,487	1,466
U.S. commercial (3)	120	142
Non-U.S. commercial	14	6
Commercial real estate	9	15
Commercial lease financing	9	11
Total commercial recoveries	152	174
Total recoveries of loans and leases previously charged off	1,639	1,640
Net charge-offs	(3,763)	(3,979)
Write-offs of PCI loans	(273)	(207)
Provision for loan and lease losses	3,262	3,381
Other (4)	(18)	(39)
Allowance for loan and lease losses, December 31	9,601	10,393
Reserve for unfunded lending commitments, January 1	777	762
Provision for unfunded lending commitments	20	15
Reserve for unfunded lending commitments, December 31	797	777
Allowance for credit losses, December 31	\$ 10,398	\$ 11,170
Loan and allowance ratios:		
Loans and leases outstanding at December 31 (5)	\$ 942,546	\$ 931,039
Allowance for loan and lease losses as a percentage of total loans and leases outstanding at December 31 (5)	1.02%	1.12%
Consumer allowance for loan and lease losses as a percentage of total consumer loans and leases outstanding at December 31 (6)	1.08	1.16
Commercial allowance for loan and lease losses as a percentage of total commercial loans and leases outstanding at December 31 (7)	0.97	1.05
Average loans and leases outstanding (5)	\$ 927,531	\$ 911,988
Net charge offs as a percentage of average loans and leases outstanding (5, 8)	0.41%	0.44%

Net charge-offs and PCI write-offs as a percentage of average loans and leases outstanding (5)	0.44	0.46
Allowance for loan and lease losses as a percentage of total nonperforming loans and leases at December 31 (5)	194	161
Ratio of the allowance for loan and lease losses at December 31 to net charge-offs (8)	2.65	2.61
Ratio of the allowance for loan and lease losses at December 31 to net charge-offs and PCI write-offs	2.38	2.48
Amounts included in allowance for loan and lease losses for loans and leases that are excluded from nonperforming loans and leases at December 31 (9)	\$ 4,031	\$ 3,971
Allowance for loan and lease losses as a percentage of total nonperforming loans and leases, excluding the allowance for loan and lease losses for loans and leases that are excluded from nonperforming loans and leases at December 31 (5, 9)	113%	99%

(1) Represents net charge-offs related to the non-U.S. credit card loan portfolio, which was sold in 2017.

(2) Includes U.S. small business commercial charge-offs of \$267 million and \$258 million in 2018 and 2017.

(3) Includes U.S. small business commercial recoveries of \$47 million and \$43 million in 2018 and 2017.

(4) Primarily represents the net impact of portfolio sales, consolidations and deconsolidations, foreign currency translation adjustments, transfers to held for sale and certain other reclassifications.

(5) Outstanding loan and lease balances and ratios do not include loans accounted for under the fair value option of \$4.3 billion and \$5.7 billion at December 31, 2018 and 2017. Average loans accounted for under the fair value option were \$5.5 billion and \$6.7 billion in 2018 and 2017.

(6) Excludes consumer loans accounted for under the fair value option of \$682 million and \$928 million at December 31, 2018 and 2017.

(7) Excludes commercial loans accounted for under the fair value option of \$3.7 billion and \$4.8 billion at December 31, 2018 and 2017.

(8) Net charge-offs exclude \$273 million and \$207 million of write-offs in the PCI loan portfolio in 2018 and 2017. For more information on PCI write-offs, see Consumer Portfolio Credit Risk Management - Purchased Credit-Impaired Loan Portfolio on page 57.

(9) Primarily includes amounts allocated to U.S. credit card and unsecured consumer lending portfolios in Consumer Banking and PCI loans in All Other.

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Market Risk Management

Market risk is the risk that changes in market conditions may adversely impact the value of assets or liabilities, or otherwise negatively impact earnings. This risk is inherent in the financial instruments associated with our operations, primarily within our *Global Markets* segment. We are also exposed to these risks in other areas of the Corporation (e.g., our ALM activities). In the event of market stress, these risks could have a material impact on our results. For more information, see Interest Rate Risk Management for the Banking Book on page 74.

Our traditional banking loan and deposit products are non-trading positions and are generally reported at amortized cost for assets or the amount owed for liabilities (historical cost). However, these positions are still subject to changes in economic value based on varying market conditions, with one of the primary risks being changes in the levels of interest rates. The risk of adverse changes in the economic value of our non-trading positions arising from changes in interest rates is managed through our ALM activities. We have elected to account for certain assets and liabilities under the fair value option.

Our trading positions are reported at fair value with changes reflected in income. Trading positions are subject to various changes in market-based risk factors. The majority of this risk is generated by our activities in the interest rate, foreign exchange, credit, equity and commodities markets. In addition, the values of assets and liabilities could change due to market liquidity, correlations across markets and expectations of market volatility. We seek to manage these risk exposures by using a variety of techniques that encompass a broad range of financial instruments. The key risk management techniques are discussed in more detail in the Trading Risk Management section.

Global Risk Management is responsible for providing senior management with a clear and comprehensive understanding of the trading risks to which we are exposed. These responsibilities include ownership of market risk policy, developing and maintaining quantitative risk models, calculating aggregated risk measures, establishing and monitoring position limits consistent with risk appetite, conducting daily reviews and analysis of trading inventory, approving material risk exposures and fulfilling regulatory requirements. Market risks that impact businesses outside of *Global Markets* are monitored and governed by their respective governance functions.

Quantitative risk models, such as VaR, are an essential component in evaluating the market risks within a portfolio. The Enterprise Model Risk Committee (EMRC), a subcommittee of the MRC, is responsible for providing management oversight and approval of model risk management and governance. The EMRC defines model risk standards, consistent with our risk framework and risk appetite, prevailing regulatory guidance and industry best practice. Models must meet certain validation criteria, including effective challenge of the model development process and a sufficient demonstration of developmental evidence incorporating a comparison of alternative theories and approaches. The EMRC oversees that model standards are consistent with model risk requirements and monitors the effective challenge in the model validation process across the Corporation. In addition, the relevant stakeholders must agree on any required actions or restrictions to the models and maintain a stringent monitoring process for continued compliance.

Interest Rate Risk

Interest rate risk represents exposures to instruments whose values vary with the level or volatility of interest rates. These instruments include, but are not limited to, loans, debt securities,

certain trading-related assets and liabilities, deposits, borrowings and derivatives. Hedging instruments used to mitigate these risks include derivatives such as options, futures, forwards and swaps.

Foreign Exchange Risk

Foreign exchange risk represents exposures to changes in the values of current holdings and future cash flows denominated in currencies other than the U.S. dollar. The types of instruments exposed to this risk include investments in non-U.S. subsidiaries, foreign currency-denominated loans and securities, future cash flows in foreign currencies arising from foreign exchange transactions, foreign currency-denominated debt and various foreign exchange derivatives whose values fluctuate with changes in the level or volatility of currency exchange rates or non-U.S. interest rates. Hedging instruments used to mitigate this risk include foreign exchange options, currency swaps, futures, forwards, and foreign currency-denominated debt and deposits.

Mortgage Risk

Mortgage risk represents exposures to changes in the values of mortgage-related instruments. The values of these instruments are sensitive to prepayment rates, mortgage rates, agency debt ratings, default, market liquidity, government participation and interest rate volatility. Our exposure to these instruments takes several forms. For example, we trade and engage in market-making activities in a variety of mortgage securities including whole loans, pass-through certificates, commercial mortgages and collateralized mortgage obligations including collateralized debt obligations using mortgages as underlying collateral. In addition, we originate a variety of MBS, which involves the accumulation of mortgage-related loans in anticipation of eventual securitization, and we may hold positions in mortgage securities and residential mortgage loans as part of the ALM portfolio. We also record MSRs as part of our mortgage origination activities. Hedging instruments used to mitigate this risk include derivatives such as options, swaps, futures and forwards as well as securities including MBS and U.S. Treasury securities. For more information, see Mortgage Banking Risk Management on page 76.

Equity Market Risk

Equity market risk represents exposures to securities that represent an ownership interest in a corporation in the form of domestic and foreign common stock or other equity-linked instruments. Instruments that would lead to this exposure include, but are not limited to, the following: common stock, exchange-traded funds, American Depositary Receipts, convertible bonds, listed equity options (puts and calls), OTC equity options, equity total return swaps, equity index futures and other equity derivative products. Hedging instruments used to mitigate this risk include options, futures, swaps, convertible bonds and cash positions.

Commodity Risk

Commodity risk represents exposures to instruments traded in the petroleum, natural gas, power and metals markets. These instruments consist primarily of futures, forwards, swaps and options. Hedging instruments used to mitigate this risk include options, futures and swaps in the same or similar commodity product, as well as cash positions.

Issuer Credit Risk

Issuer credit risk represents exposures to changes in the creditworthiness of individual issuers or groups of issuers. Our portfolio is exposed to issuer credit risk where the value of an asset may be adversely impacted by changes in the levels of credit spreads, by credit migration or by defaults. Hedging instruments

used to mitigate this risk include bonds, CDS and other credit fixed-income instruments.

Market Liquidity Risk

Market liquidity risk represents the risk that the level of expected market activity changes dramatically and, in certain cases, may even cease. This exposes us to the risk that we will not be able to transact business and execute trades in an orderly manner which may impact our results. This impact could be further exacerbated if expected hedging or pricing correlations are compromised by disproportionate demand or lack of demand for certain instruments. We utilize various risk mitigating techniques as discussed in more detail in Trading Risk Management.

Trading Risk Management

To evaluate risk in our trading activities, we focus on the actual and potential volatility of revenues generated by individual positions as well as portfolios of positions. Various techniques and procedures are utilized to enable the most complete understanding of these risks. Quantitative measures of market risk are evaluated on a daily basis from a single position to the portfolio of the Corporation. These measures include sensitivities of positions to various market risk factors, such as the potential impact on revenue from a one basis point change in interest rates, and statistical measures utilizing both actual and hypothetical market moves, such as VaR and stress testing. Periods of extreme market stress influence the reliability of these techniques to varying degrees. Qualitative evaluations of market risk utilize the suite of quantitative risk measures while understanding each of their respective limitations. Additionally, risk managers independently evaluate the risk of the portfolios under the current market environment and potential future environments.

VaR is a common statistic used to measure market risk as it allows the aggregation of market risk factors, including the effects of portfolio diversification. A VaR model simulates the value of a portfolio under a range of scenarios in order to generate a distribution of potential gains and losses. VaR represents the loss a portfolio is not expected to exceed more than a certain number of times per period, based on a specified holding period, confidence level and window of historical data. We use one VaR model consistently across the trading portfolios and it uses a historical simulation approach based on a three-year window of historical data. Our primary VaR statistic is equivalent to a 99 percent confidence level. This means that for a VaR with a one-day holding period, there should not be losses in excess of VaR, on average, 99 out of 100 trading days.

Within any VaR model, there are significant and numerous assumptions that will differ from company to company. The accuracy of a VaR model depends on the availability and quality of historical data for each of the risk factors in the portfolio. A VaR model may require additional modeling assumptions for new products that do not have the necessary historical market data or for less liquid positions for which accurate daily prices are not consistently available. For positions with insufficient historical data for the VaR calculation, the process for establishing an appropriate proxy is based on fundamental and statistical analysis of the new product or less liquid position. This analysis identifies reasonable alternatives that replicate both the expected volatility and correlation to other market risk factors that the missing data would be expected to experience.

VaR may not be indicative of realized revenue volatility as changes in market conditions or in the composition of the portfolio can have a material impact on the results. In particular, the historical data used for the VaR calculation might indicate higher

or lower levels of portfolio diversification than will be experienced. In order for the VaR model to reflect current market conditions, we update the historical data underlying our VaR model on a weekly basis, or more frequently during periods of market stress, and regularly review the assumptions underlying the model. A minor portion of risks related to our trading positions is not included in VaR. These risks are reviewed as part of our ICAAP. For more information regarding ICAAP, see Capital Management on page 43.

Global Risk Management continually reviews, evaluates and enhances our VaR model so that it reflects the material risks in our trading portfolio. Changes to the VaR model are reviewed and approved prior to implementation and any material changes are reported to management through the appropriate management committees.

Trading limits on quantitative risk measures, including VaR, are independently set by Global Markets Risk Management and reviewed on a regular basis so that trading limits remain relevant and within our overall risk appetite for market risks. Trading limits are reviewed in the context of market liquidity, volatility and strategic business priorities. Trading limits are set at both a granular level to allow for extensive coverage of risks as well as at aggregated portfolios to account for correlations among risk factors. All trading limits are approved at least annually. Approved trading limits are stored and tracked in a centralized limits management system. Trading limit excesses are communicated to management for review. Certain quantitative market risk measures and corresponding limits have been identified as critical in the Corporation's Risk Appetite Statement. These risk appetite limits are reported on a daily basis and are approved at least annually by the ERC and the Board.

In periods of market stress, Global Markets senior leadership communicates daily to discuss losses, key risk positions and any limit excesses. As a result of this process, the businesses may selectively reduce risk.

Table 47 presents the total market-based portfolio VaR which is the combination of the total covered positions (and less liquid trading positions) portfolio and the fair value option portfolio. Covered positions are defined by regulatory standards as trading assets and liabilities, both on- and off-balance sheet, that meet a defined set of specifications. These specifications identify the most liquid trading positions which are intended to be held for a short-term horizon and where we are able to hedge the material risk elements in a two-way market. Positions in less liquid markets, or where there are restrictions on the ability to trade the positions, typically do not qualify as covered positions. Foreign exchange and commodity positions are always considered covered positions, except for structural foreign currency positions that are excluded with prior regulatory approval. In addition, Table 47 presents our fair value option portfolio, which includes substantially all of the funded and unfunded exposures for which we elect the fair value option, and their corresponding hedges. Additionally, market risk VaR for trading activities as presented in Table 47 differs from VaR used for regulatory capital calculations due to the holding period being used. The holding period for VaR used for regulatory capital calculations is 10 days, while for the market risk VaR presented below, it is one day. Both measures utilize the same process and methodology.

The total market-based portfolio VaR results in Table 47 include market risk to which we are exposed from all business segments, excluding credit valuation adjustment (CVA), DVA and related hedges. The majority of this portfolio is within the Global Markets segment.

Table 47 presents year-end, average, high and low daily trading VaR for 2018 and 2017 using a 99 percent confidence level. The amounts disclosed in Table 47 and Table 48 align to the view of covered positions used in the Basel 3 capital calculations. Foreign exchange and commodity positions are always considered covered positions, regardless of trading or banking treatment for the trade,

except for structural foreign currency positions that are excluded with prior regulatory approval.

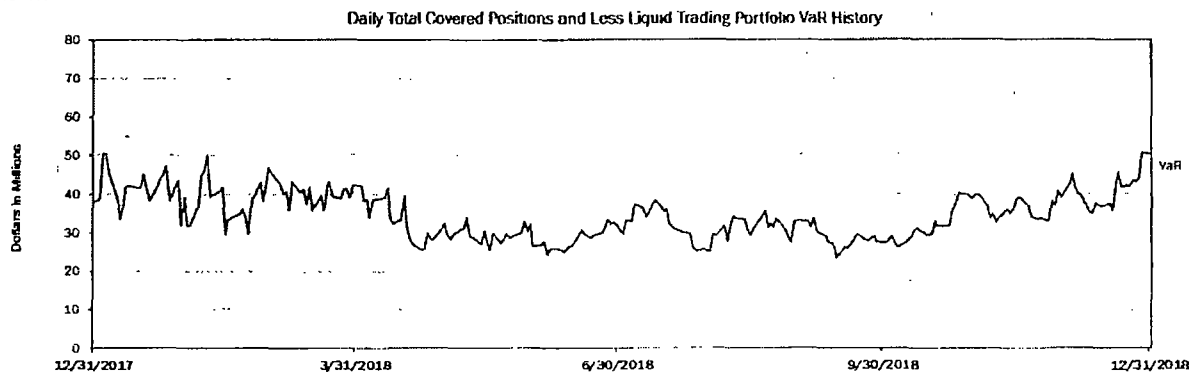
The average total covered positions and less liquid trading positions portfolio VaR decreased during 2018 primarily due to a decrease in credit risk along with an increase in portfolio diversification.

Table 47 Market Risk VaR for Trading Activities

(Dollars in millions)	2018				2017			
	Year End	Average	High (1)	Low (1)	Year End	Average	High (1)	Low (1)
Foreign exchange	\$ 9	\$ 8	\$ 15	\$ 2	\$ 7	\$ 11	\$ 25	\$ 3
Interest rate	36	25	45	15	22	21	41	11
Credit	26	25	31	20	29	26	33	21
Equity	20	20	40	11	19	18	33	12
Commodities	13	8	15	3	5	5	9	3
Portfolio diversification	(59)	(55)	—	—	(49)	(47)	—	—
Total covered positions portfolio	45	31	45	20	33	34	53	23
Impact from less liquid exposures	5	3	—	—	5	6⁽¹⁾	—	—
Total covered positions and less liquid trading positions portfolio	50	34	51	23	38	40	63	26
Fair value option loans	8	11	18	8	9	10	14	7
Fair value option hedges	5	9	17	4	7	7	11	4
Fair value option portfolio diversification	(7)	(11)	—	—	(7)	(8)	—	—
Total fair value option portfolio	6	9	16	5	9	9	11	6
Portfolio diversification	(3)	(5)	—	—	(4)	(4)	—	—
Total market-based portfolio	\$ 53	\$ 38	57	26	\$ 43	\$ 45	63	29

(1) The high and low for each portfolio may have occurred on different trading days than the high and low for the components. Therefore the impact from less liquid exposures and the amount of portfolio diversification, which is the difference between the total portfolio and the sum of the individual components, is not relevant.

The graph below presents the daily covered positions and less liquid trading positions portfolio VaR for 2018, corresponding to the data in Table 47.



Additional VaR statistics produced within our single VaR model are provided in Table 48 at the same level of detail as in Table 47. Evaluating VaR with additional statistics allows for an increased understanding of the risks in the portfolio as the historical market data used in the VaR calculation does not necessarily follow a predefined statistical distribution. Table 48 presents average trading VaR statistics at 99 percent and 95 percent confidence levels for 2018 and 2017.

Table 48 Average Market Risk VaR for Trading Activities – 99 percent and 95 percent VaR Statistics

(Dollars in millions)	2018		2017	
	99 percent	95 percent	99 percent	95 percent
Foreign exchange	\$ 8	\$ 5	\$ 11	\$ 6
Interest rate	25	16	21	14
Credit	25	15	26	15
Equity	20	11	18	10
Commodities	8	4	5	3
Portfolio diversification	(55)	(33)	(47)	(30)
Total covered positions portfolio	31	18	34	18
Impact from less liquid exposures	3	1	6	2
Total covered positions and less liquid trading positions portfolio	34	19	40	20
Fair value option loans	11	6	10	6
Fair value option hedges	9	6	7	5
Fair value option portfolio diversification	(11)	(7)	(8)	(6)
Total fair value option portfolio	9	5	9	5
Portfolio diversification	(5)	(3)	(4)	(3)
Total market-based portfolio	\$ 38	\$ 21	\$ 45	\$ 22

Backtesting

The accuracy of the VaR methodology is evaluated by backtesting, which compares the daily VaR results, utilizing a one-day holding period, against a comparable subset of trading revenue. A backtesting excess occurs when a trading loss exceeds the VaR for the corresponding day. These excesses are evaluated to understand the positions and market moves that produced the trading loss with a goal to ensure that the VaR methodology accurately represents those losses. We expect the frequency of trading losses in excess of VaR to be in line with the confidence level of the VaR statistic being tested. For example, with a 99 percent confidence level, we expect one trading loss in excess of VaR every 100 days or between two to three trading losses in excess of VaR over the course of a year. The number of backtesting excesses observed can differ from the statistically expected number of excesses if the current level of market volatility is materially different than the level of market volatility that existed during the three years of historical data used in the VaR calculation.

The trading revenue used for backtesting is defined by regulatory agencies in order to most closely align with the VaR component of the regulatory capital calculation. This revenue differs from total trading-related revenue in that it excludes revenue from trading activities that either do not generate market risk or the market risk cannot be included in VaR. Some examples of the types of revenue excluded for backtesting are fees, commissions, reserves, net interest income and intraday trading revenues.

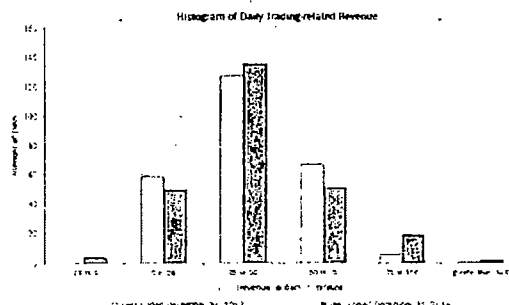
We conduct daily backtesting on the VaR results used for regulatory capital calculations as well as the VaR results for key legal entities, regions and risk factors. These results are reported to senior market risk management. Senior management regularly reviews and evaluates the results of these tests.

During 2018, there were three days in which there was a backtesting excess for our total covered portfolio VaR, utilizing a one-day holding period.

Total Trading-related Revenue

Total trading-related revenue, excluding brokerage fees, and CVA, DVA and funding valuation adjustment gains (losses), represents the total amount earned from trading positions, including market-based net interest income, which are taken in a diverse range of financial instruments and markets. Trading account assets and liabilities are reported at fair value. For more information on fair value, see Note 20 – Fair Value Measurements to the Consolidated Financial Statements. Trading-related revenue can be volatile and is largely driven by general market conditions and customer demand. Also, trading-related revenue is dependent on the volume and type of transactions, the level of risk assumed, and the volatility of price and rate movements at any given time within the ever-changing market environment. Significant daily revenue by business is monitored and the primary drivers of these are reviewed.

The following histogram is a graphic depiction of trading volatility and illustrates the daily level of trading-related revenue for 2018 and 2017. During 2018, positive trading-related revenue was recorded for 98 percent of the trading days, of which 79 percent were daily trading gains of over \$25 million. This compares to 2017 where positive trading-related revenue was recorded for 100 percent of the trading days, of which 77 percent were daily trading gains of over \$25 million.



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Trading Portfolio Stress Testing

Because the very nature of a VaR model suggests results can exceed our estimates and it is dependent on a limited historical window, we also stress test our portfolio using scenario analysis. This analysis estimates the change in the value of our trading portfolio that may result from abnormal market movements.

A set of scenarios, categorized as either historical or hypothetical, are computed daily for the overall trading portfolio and individual businesses. These scenarios include shocks to underlying market risk factors that may be well beyond the shocks found in the historical data used to calculate VaR. Historical scenarios simulate the impact of the market moves that occurred during a period of extended historical market stress. Generally, a multi-week period representing the most severe point during a crisis is selected for each historical scenario. Hypothetical scenarios provide estimated portfolio impacts from potential future market stress events. Scenarios are reviewed and updated in response to changing positions and new economic or political information. In addition, new or ad hoc scenarios are developed to address specific potential market events or particular vulnerabilities in the portfolio. The stress tests are reviewed on a regular basis and the results are presented to senior management.

Stress testing for the trading portfolio is integrated with enterprise-wide stress testing and incorporated into the limits framework. The macroeconomic scenarios used for enterprise-wide stress testing purposes differ from the typical trading portfolio scenarios in that they have a longer time horizon and the results are forecasted over multiple periods for use in consolidated capital and liquidity planning. For more information, see Managing Risk on page 40.

Interest Rate Risk Management for the Banking Book

The following discussion presents net interest income for banking book activities.

Interest rate risk represents the most significant market risk exposure to our banking book balance sheet. Interest rate risk is measured as the potential change in net interest income caused by movements in market interest rates. Client-facing activities, primarily lending and deposit-taking, create interest rate sensitive positions on our balance sheet.

We prepare forward-looking forecasts of net interest income. The baseline forecast takes into consideration expected future business growth, ALM positioning and the direction of interest rate movements as implied by the market-based forward curve. We then measure and evaluate the impact that alternative interest rate scenarios have on the baseline forecast in order to assess interest rate sensitivity under varied conditions. The net interest income forecast is frequently updated for changing assumptions and differing outlooks based on economic trends, market conditions and business strategies. Thus, we continually monitor our balance sheet position in order to maintain an acceptable level of exposure to interest rate changes.

The interest rate scenarios that we analyze incorporate balance sheet assumptions such as loan and deposit growth and pricing, changes in funding mix, product repricing, maturity characteristics and investment securities premium amortization. Our overall goal is to manage interest rate risk so that movements in interest rates do not significantly adversely affect earnings and capital.

Table 49 presents the spot and 12-month forward rates used in our baseline forecasts at December 31, 2018 and 2017.

Table 49 Forward Rates

	December 31, 2018		
	Federal Funds	Three-month LIBOR	10-Year Swap
Spot rates	2.50%	2.81%	2.71%
12-month forward rates	2.50	2.64	2.75
December 31, 2017			
Spot rates	1.50%	1.69%	2.40%
12-month forward rates	2.00	2.14	2.48

Table 50 shows the pretax impact to forecasted net interest income over the next 12 months from December 31, 2018 and 2017, resulting from instantaneous parallel and non-parallel shocks to the market-based forward curve. Periodically we evaluate the scenarios presented so that they are meaningful in the context of the current rate environment.

During 2018, the asset sensitivity of our balance sheet to rising rates declined primarily due to increases in long-end rates. We continue to be asset sensitive to a parallel move in interest rates with the majority of that impact coming from the short end of the yield curve. Additionally, higher interest rates impact the fair value of debt securities and, accordingly, for debt securities classified as AFS, may adversely affect accumulated OCI and thus capital levels under the Basel 3 capital rules. Under instantaneous upward parallel shifts, the near-term adverse impact to Basel 3 capital is reduced over time by offsetting positive impacts to net interest income. For more information on Basel 3, see Capital Management – Regulatory Capital on page 44.

Table 50 Estimated Banking Book Net Interest Income Sensitivity to Curve Changes

(Dollars in millions)	Short Rate (bps)	Long Rate (bps)	December 31	
			2018	2017
Parallel Shifts				
+100 bps instantaneous shift	+100	+100	\$ 2,651	\$ 3,317
-100 bps instantaneous shift	-100	-100	(4,109)	(5,183)
Flatteners				
Short-end instantaneous change	+100	--	1,977	2,182
Long-end instantaneous change	--	-100	(1,616)	(2,765)
Steeperers				
Short-end instantaneous change	-100	--	(2,478)	(2,394)
Long-end instantaneous change	--	+100	673	1,135

The sensitivity analysis in Table 50 assumes that we take no action in response to these rate shocks and does not assume any change in other macroeconomic variables normally correlated with changes in interest rates. As part of our ALM activities, we use securities, certain residential mortgages, and interest rate and foreign exchange derivatives in managing interest rate sensitivity.

The behavior of our deposit portfolio in the baseline forecast and in alternate interest rate scenarios is a key assumption in our projected estimates of net interest income. The sensitivity analysis in Table 50 assumes no change in deposit portfolio size or mix from the baseline forecast in alternate rate environments. In higher rate scenarios, any

deposits or market-based funding would reduce our benefit in those scenarios.

Interest Rate and Foreign Exchange Derivative Contracts

Interest rate and foreign exchange derivative contracts are utilized in our ALM activities and serve as an efficient tool to manage our interest rate and foreign exchange risk. We use derivatives to hedge the variability in cash flows or changes in fair value on our balance sheet due to interest rate and foreign exchange components. For more information on our hedging activities, see *Note 3 – Derivatives* to the Consolidated Financial Statements.

Our interest rate contracts are generally non-leveraged generic interest rate and foreign exchange basis swaps, options, futures and forwards. In addition, we use foreign exchange contracts, including cross-currency interest rate swaps, foreign currency futures contracts, foreign currency forward contracts and options to mitigate the foreign exchange risk associated with foreign currency-denominated assets and liabilities.

Changes to the composition of our derivatives portfolio during 2018 reflect actions taken for interest rate and foreign exchange rate risk management. The decisions to reposition our derivatives portfolio are based on the current assessment of economic and financial conditions including the interest rate and foreign currency environments, balance sheet composition and trends, and the relative mix of our cash and derivative positions.

We use interest rate derivative instruments to hedge the variability in the cash flows of our assets and liabilities and other forecasted transactions (collectively referred to as cash flow

hedges). The net losses on both open and terminated cash flow hedge derivative instruments recorded in accumulated OCI were \$1.3 billion, on a pretax basis, at both December 31, 2018 and 2017. These net losses are expected to be reclassified into earnings in the same period as the hedged cash flows affect earnings and will decrease income or increase expense on the respective hedged cash flows. Assuming no change in open cash flow derivative hedge positions and no changes in prices or interest rates beyond what is implied in forward yield curves at December 31, 2018, the pretax net losses are expected to be reclassified into earnings as follows: 25 percent within the next year, 56 percent in years two through five and 11 percent in years six through 10, with the remaining eight percent thereafter. For more information on derivatives designated as cash flow hedges, see *Note 3 – Derivatives* to the Consolidated Financial Statements.

We hedge our net investment in non-U.S. operations determined to have functional currencies other than the U.S. dollar using forward foreign exchange contracts that typically settle in less than 180 days, cross-currency basis swaps and foreign exchange options. We recorded net after-tax losses on derivatives in accumulated OCI associated with net investment hedges which were offset by gains on our net investments in consolidated non-U.S. entities at December 31, 2018.

Table 51 presents derivatives utilized in our ALM activities and shows the notional amount, fair value, weighted-average receive-fixed and pay-fixed rates, expected maturity and average estimated durations of our open ALM derivatives at December 31, 2018 and 2017. These amounts do not include derivative hedges on our MSRs.

Table 51 Asset and Liability Management Interest Rate and Foreign Exchange Contracts

	December 31, 2018								
		Expected Maturity							
(Dollars in millions, average estimated duration in years)	Fair Value	Total	2019	2020	2021	2022	2023	Thereafter	Average Estimated Duration
Receive-fixed interest rate swaps (1)	\$ 2,128								5.17
Notional amount		\$ 198,914	\$ 27,176	\$ 16,347	\$ 14,640	\$ 19,866	\$ 36,215	\$ 84,670	
Weighted-average fixed-rate		2.66%	1.87%	2.68%	3.17%	2.56%	2.37%	2.97%	
Pay-fixed interest rate swaps (1)	295								6.30
Notional amount		\$ 49,275	\$ 1,210	\$ 4,344	\$ 1,616	\$ —	\$ 10,801	\$ 31,304	
Weighted-average fixed-rate		2.50%	2.07%	2.16%	2.22%	—%	2.59%	2.55%	
Same-currency basis swaps (2)	21								
Notional amount		\$ 101,203	\$ 7,628	\$ 15,097	\$ 15,493	\$ 2,586	\$ 2,017	\$ 58,382	
Foreign exchange basis swaps (1, 3, 4)	(1,716)								
Notional amount		106,742	13,946	21,448	19,241	10,239	6,260	35,608	
Option products	2								
Notional amount		587	572	—	—	—	15	—	
Foreign exchange contracts (1, 4, 5)	82								
Notional amount (6)		(8,447)	(27,823)	13	4,196	2,741	2,448	9,978	
Net ALM contracts	\$ 812								

For footnotes, see page 76.

For footnotes, see page 76.

Table 51 Asset and Liability Management Interest Rate and Foreign Exchange Contracts (continued)

	December 31, 2017								
	Expected Maturity								
(Dollars in millions, average estimated duration in years)	Fair Value	Total	2018	2019	2020	2021	2022	thereafter	Average Estimated Duration
Receive-fixed interest rate swaps (1)	\$ 2,330								5.36
Notional amount		\$ 176,390	\$ 21,850	\$ 27,176	\$ 16,347	\$ 6,498	\$ 19,120	\$ 85,399	
Weighted-average fixed-rate		2.42%	3.20%	1.87%	1.88%	2.99%	2.10%	2.52%	
Pay-fixed interest rate swaps (1)	(37)								5.63
Notional amount		\$ 45,873	\$ 11,555	\$ 1,210	\$ 4,344	\$ 1,616	\$ —	\$ 27,148	
Weighted-average fixed-rate		2.15%	1.73%	2.07%	2.16%	2.22%	—%	2.32%	
Same-currency basis swaps (2)	(17)								
Notional amount		\$ 38,622	\$ 11,028	\$ 6,789	\$ 1,180	\$ 2,607	\$ 955	\$ 15,863	
Foreign exchange basis swaps (1, 3, 4)	(1,616)								
Notional amount		107,263	24,886	11,922	13,367	9,301	6,860	40,927	
Option products	13								
Notional amount		1,218	1,201	—	—	—	—	17	
Foreign exchange contracts (1, 4, 5)	1,424								
Notional amount (6)		(11,783)	(28,689)	2,231	(24)	2,471	2,919	9,309	
Net ALM contracts	\$ 2,097								

(1) Does not include basis adjustments on either fixed rate debt issued by the Corporation or AFS debt securities, which are hedged using derivatives designated as fair value hedging instruments, that substantially offset the fair values of these derivatives.

(2) At December 31, 2018 and 2017, the notional amount of same-currency basis swaps included \$101.2 billion and \$38.6 billion in both foreign currency and U.S. dollar-denominated basis swaps in which both sides of the swap are in the same currency.

(3) Foreign exchange basis swaps consisted of cross-currency variable interest rate swaps used separately or in conjunction with receive-fixed interest rate swaps.

(4) Does not include foreign currency translation adjustments on certain non-U.S. debt issued by the Corporation that substantially offset the fair values of these derivatives.

(5) The notional amount of foreign exchange contracts of \$(8.4) billion at December 31, 2018 was comprised of \$25.2 billion in foreign currency denominated and cross-currency receive-fixed swaps, \$(32.7) billion in net foreign currency forward rate contracts, \$(1.8) billion in foreign currency-denominated pay-fixed swaps and \$814 million in net foreign currency futures contracts. Foreign exchange contracts of \$(11.8) billion at December 31, 2017 were comprised of \$29.1 billion in foreign currency denominated and cross-currency receive-fixed swaps, \$(35.6) billion in net foreign currency forward rate contracts, \$(6.2) billion in foreign currency-denominated pay-fixed swaps and \$940 million in foreign currency futures contracts.

(6) Reflects the net of long and short positions. Amounts shown as negative reflect a net short position.

Mortgage Banking Risk Management

We originate, fund and service mortgage loans, which subject us to credit, liquidity and interest rate risks, among others. We determine whether loans will be held for investment or held for sale at the time of commitment and manage credit and liquidity risks by selling or securitizing a portion of the loans we originate.

Interest rate risk and market risk can be substantial in the mortgage business. Changes in interest rates and other market factors impact the volume of mortgage originations. Changes in interest rates also impact the value of interest rate lock commitments (IRLCs) and the related residential first mortgage LHFS between the date of the IRLC and the date the loans are sold to the secondary market. An increase in mortgage interest rates typically leads to a decrease in the value of these instruments. Conversely, when there is an increase in interest rates, the value of the MSRs will increase driven by lower prepayment expectations. Because the interest rate risks of these two hedged items offset, we combine them into one overall hedged item with one combined economic hedge portfolio consisting of derivative contracts and securities.

During 2018 and 2017, we recorded gains of \$244 million and \$118 million related to the change in fair value of the MSRs, IRLCs and LHFS, net of gains and losses on the hedge portfolio. For more information on MSRs, see Note 20 – Fair Value Measurements to the Consolidated Financial Statements.

Compliance and Operational Risk Management

Compliance risk is the risk of legal or regulatory sanctions, material financial loss or damage to the reputation of the Corporation arising from the failure of the Corporation to comply with the requirements of applicable laws, rules, regulations and our internal policies and procedures (collectively, applicable laws, rules and regulations).

Operational risk is the risk of loss resulting from inadequate or failed processes, people and systems or from external events. Operational risk may occur anywhere in the Corporation, including third-party business processes, and is not limited to operations functions. Effects may extend beyond financial losses and may result in reputational risk impacts. Operational risk includes legal risk. Additionally, operational risk is a component in the calculation of total risk-weighted assets used in the Basel 3 capital calculation. For more information on Basel 3 calculations, see Capital Management on page 43.

FLUs and control functions are first and foremost responsible for managing all aspects of their businesses, including their compliance and operational risk. FLUs and control functions are required to understand their business processes and related risks and controls, including the related regulatory requirements, and monitor and report on the effectiveness of the control environment. In order to actively monitor and assess the performance of their processes and controls, they must conduct comprehensive quality assurance activities and identify issues and risks to remediate control gaps and weaknesses. FLUs and control functions must also adhere to compliance and operational risk appetite limits to meet strategic, capital and financial planning objectives. Finally, FLUs and control functions are responsible for the proactive identification, management and escalation of compliance and operational risks across the Corporation.

Global Compliance and Operational Risk teams independently assess compliance and operational risk, monitor business activities and processes, evaluate FLUs and control functions for adherence to applicable laws, rules and regulations, including identifying issues and risks, determining and developing tests to be conducted by the Enterprise Independent Testing unit, and reporting on the state of the control environment. Enterprise Independent Testing, an independent testing function within IRM, works with Global Compliance and Operational Risk, the FLUs and

control functions in the identification of testing needs and test design, and is accountable for test execution, reporting and analysis of results.

The Corporation's approach to the management of compliance risk is described in the Global Compliance - Enterprise Policy, which outlines the requirements of the Corporation's compliance risk management program, and defines roles and responsibilities of FLUs, IRM and Corporate Audit, the three lines of defense in managing compliance risk. The requirements work together to drive a comprehensive risk-based approach for the proactive identification, management and escalation of compliance risks throughout the Corporation. For more information on FLUs and control functions, see Managing Risk on page 40.

The Corporation's approach to operational risk management is outlined in the Operational Risk Management - Enterprise Policy which establishes the requirements of the Corporation's operational risk management program and specifies the responsibilities and accountabilities of the first and second lines of defense for managing operational risk so that our business processes are designed and executed effectively.

The Global Compliance Enterprise Policy and Operational Risk Management - Enterprise Policy also set the requirements for reporting compliance and operational risk information to executive management as well as the Board or appropriate Board-level committees in support of Global Compliance and Operational Risk's responsibilities for conducting independent oversight of our compliance and operational risk management activities. The Board provides oversight of compliance risk through its Audit Committee and the ERC, and operational risk through the ERC.

A key operational risk facing the Corporation is information security, which includes cybersecurity. Cybersecurity risk represents, among other things, exposure to failures or interruptions of service or breaches of security, resulting from malicious technological attacks or otherwise, that impact the confidentiality, availability or integrity of our operations, systems or data, including sensitive corporate and customer information. The Corporation manages information security risk in accordance with internal policies which govern our comprehensive information security program designed to protect the Corporation by enabling preventative and detective measures to combat information and cybersecurity risks. The Board and the ERC provide cybersecurity and information security risk oversight for the Corporation and our Global Information Security Team manages the day-to-day implementation of our information security program.

Reputational Risk Management

Reputational risk is the risk that negative perceptions of the Corporation's conduct or business practices may adversely impact its profitability or operations. Reputational risk may result from many of the Corporation's activities, including those related to the management of our strategic, operational, compliance and credit risks.

The Corporation manages reputational risk through established policies and controls in its businesses and risk management processes to mitigate reputational risks in a timely manner and through proactive monitoring and identification of potential reputational risk events. If reputational risk events occur, we focus on remediating the underlying issue and taking action to minimize damage to the Corporation's reputation. The Corporation has processes and procedures in place to respond to events that give rise to reputational risk, including educating individuals and organizations that influence public opinion, implementing external communication strategies to mitigate the risk, and informing key stakeholders of potential reputational risks.

The Corporation's organization and governance structure provides oversight of reputational risks, and reputational risk reporting is provided regularly and directly to management and the ERC, which provides primary oversight of reputational risk. In addition, each FLU has a committee, which includes representatives from Compliance, Legal and Risk, that is responsible for the oversight of reputational risk. Such committees' oversight includes providing approval for business activities that present elevated levels of reputational risks.

Complex Accounting Estimates

Our significant accounting principles, as described in *Note 1 - Summary of Significant Accounting Principles* to the Consolidated Financial Statements, are essential in understanding the Management's Discussion and Analysis of Financial Condition and Results of Operations (MD&A). Many of our significant accounting principles require complex judgments to estimate the values of assets and liabilities. We have procedures and processes in place to facilitate making these judgments.

The more judgmental estimates are summarized in the following discussion. We have identified and described the development of the variables most important in the estimation processes that involve mathematical models to derive the estimates. In many cases, there are numerous alternative judgments that could be used in the process of determining the inputs to the models. Where alternatives exist, we have used the factors that we believe represent the most reasonable value in developing the inputs. Actual performance that differs from our estimates of the key variables could materially impact our results of operations. Separate from the possible future impact to our results of operations from input and model variables, the value of our lending portfolio and market-sensitive assets and liabilities may change subsequent to the balance sheet date, often significantly, due to the nature and magnitude of future credit and market conditions. Such credit and market conditions may change quickly and in unforeseen ways and the resulting volatility could have a significant, negative effect on future operating results. These fluctuations would not be indicative of deficiencies in our models or inputs.

Allowance for Credit Losses

The allowance for credit losses, which includes the allowance for loan and lease losses and the reserve for unfunded lending commitments, represents management's estimate of probable incurred credit losses in the Corporation's loan and lease portfolio excluding those loans accounted for under the fair value option. The allowance for credit losses includes both quantitative and qualitative components. The qualitative component has a higher degree of management subjectivity, and includes factors such as concentrations, economic conditions and other considerations. Our process for determining the allowance for credit losses is discussed in *Note 1 - Summary of Significant Accounting Principles* to the Consolidated Financial Statements.

Our estimate for the allowance for loan and lease losses is sensitive to the loss rates and expected cash flows from our Consumer Real Estate and Credit Card and Other Consumer portfolio segments, as well as our U.S. small business commercial card portfolio within the Commercial portfolio segment. For each one-percent increase in the loss rates on loans collectively evaluated for impairment in our Consumer Real Estate portfolio segment, excluding PCI loans, coupled with a one-percent decrease in the discounted cash flows on those loans individually evaluated for impairment within this portfolio segment, the allowance for loan and lease losses at December 31, 2018 would have increased \$24 million. We subject our PCI portfolio to stress

scenarios to evaluate the potential impact given certain events. A one-percent decrease in the expected cash flows would result in a \$41 million impairment of the portfolio. Within our Credit Card and Other Consumer portfolio segment and U.S. small business commercial card portfolio, for each one-percent increase in the loss rates on loans collectively evaluated for impairment coupled with a one-percent decrease in the expected cash flows on those loans individually evaluated for impairment, the allowance for loan and lease losses at December 31, 2018 would have increased \$44 million.

Our allowance for loan and lease losses is sensitive to the risk ratings assigned to loans and leases within the Commercial portfolio segment (excluding the U.S. small business commercial card portfolio). Assuming a downgrade of one level in the internal risk ratings for commercial loans and leases, except loans and leases already classified as Substandard and Doubtful as defined by regulatory authorities, the allowance for loan and lease losses would have increased \$2.5 billion at December 31, 2018.

The allowance for loan and lease losses as a percentage of total loans and leases at December 31, 2018 was 1.02 percent and these hypothetical increases in the allowance would raise the ratio to 1.30 percent.

These sensitivity analyses do not represent management's expectations of the deterioration in risk ratings or the increases in loss rates but are provided as hypothetical scenarios to assess the sensitivity of the allowance for loan and lease losses to changes in key inputs. We believe the risk ratings and loss severities currently in use are appropriate and that the probability of the alternative scenarios outlined above occurring within a short period of time is remote.

The process of determining the level of the allowance for credit losses requires a high degree of judgment. It is possible that others, given the same information, may at any point in time reach different reasonable conclusions.

Fair Value of Financial Instruments

Under applicable accounting standards, we are required to maximize the use of observable inputs and minimize the use of unobservable inputs in measuring fair value. We classify fair value measurements of financial instruments and MSRs based on the three-level fair value hierarchy in the accounting standards.

The fair values of assets and liabilities may include adjustments, such as market liquidity and credit quality, where appropriate. Valuations of products using models or other techniques are sensitive to assumptions used for the significant inputs. Where market data is available, the inputs used for valuation reflect that information as of our valuation date. Inputs to valuation models are considered unobservable if they are supported by little or no market activity. In periods of extreme volatility, lessened liquidity or in illiquid markets, there may be more variability in market pricing or a lack of market data to use in the valuation process. In keeping with the prudent application of estimates and management judgment in determining the fair value of assets and liabilities, we have in place various processes and controls that include: a model validation policy that requires review and approval of quantitative models used for deal pricing, financial statement fair value determination and risk quantification; a trading product valuation policy that requires verification of all traded product valuations; and a periodic review and substantiation of daily profit and loss reporting for all traded products. Primarily through validation controls, we utilize both broker and pricing service inputs which can and do include both market-observable and internally-modeled values and/or valuation inputs. Our reliance on this information is affected by our understanding of how the broker and/or pricing service develops

its data with a higher degree of reliance applied to those that are more directly observable and lesser reliance applied to those developed through their own internal modeling. For example, broker quotes in less active markets may only be indicative and therefore less reliable. These processes and controls are performed independently of the business. For additional information, see Note 20 – Fair Value Measurements and Note 21 – Fair Value Option to the Consolidated Financial Statements.

Level 3 Assets and Liabilities

Financial assets and liabilities, and MSRs, where values are based on valuation techniques that require inputs that are both unobservable and are significant to the overall fair value measurement are classified as Level 3 under the fair value hierarchy established in applicable accounting standards. The fair value of these Level 3 financial assets and liabilities and MSRs is determined using pricing models, discounted cash flow methodologies or similar techniques for which the determination of fair value requires significant management judgment or estimation.

Level 3 financial instruments may be hedged with derivatives classified as Level 1 or 2; therefore, gains or losses associated with Level 3 financial instruments may be offset by gains or losses associated with financial instruments classified in other levels of the fair value hierarchy. The Level 3 gains and losses recorded in earnings did not have a significant impact on our liquidity or capital. We conduct a review of our fair value hierarchy classifications on a quarterly basis. Transfers into or out of Level 3 are made if the significant inputs used in the financial models measuring the fair values of the assets and liabilities became unobservable or observable, respectively, in the current marketplace. For more information on transfers into and out of Level 3 during 2018, 2017 and 2016, see Note 20 – Fair Value Measurements to the Consolidated Financial Statements.

Accrued Income Taxes and Deferred Tax Assets

Accrued income taxes, reported as a component of either other assets or accrued expenses and other liabilities on the Consolidated Balance Sheet, represent the net amount of current income taxes we expect to pay to or receive from various taxing jurisdictions attributable to our operations to date. We currently file income tax returns in more than 100 jurisdictions and consider many factors, including statutory, judicial and regulatory guidance, in estimating the appropriate accrued income taxes for each jurisdiction.

Net deferred tax assets, reported as a component of other assets on the Consolidated Balance Sheet, represent the net decrease in taxes expected to be paid in the future because of net operating loss (NOL) and tax credit carryforwards and because of future reversals of temporary differences in the bases of assets and liabilities as measured by tax laws and their bases as reported in the financial statements. NOL and tax credit carryforwards result in reductions to future tax liabilities, and many of these attributes can expire if not utilized within certain periods. We consider the need for valuation allowances to reduce net deferred tax assets to the amounts that we estimate are more likely than not to be realized.

Consistent with the applicable accounting guidance, we monitor relevant tax authorities and change our estimates of accrued income taxes and/or net deferred tax assets due to changes in income tax laws and their interpretation by the courts and regulatory authorities. These revisions of our estimates, which also may result from our income tax planning and from the resolution of income tax audit matters, may be material to our operating results for any given period.

See Note 19 – *Income Taxes* to the Consolidated Financial Statements for a table of significant tax attributes and additional information. For more information, see page 13 under Item 1A. Risk Factors – Regulatory, Compliance and Legal

Goodwill and Intangible Assets

The nature of and accounting for goodwill and intangible assets are discussed in Note 1 – *Summary of Significant Accounting Principles*, and Note 8 – *Goodwill and Intangible Assets*. Beginning with our annual goodwill impairment test as of June 30, 2018, we conducted a qualitative assessment, rather than a quantitative assessment as previously performed, that is more fully described in Note 1 – *Summary of Significant Accounting Principles* to the Consolidated Financial Statements.

We completed our annual goodwill impairment test as of June 30, 2018 for all of our reporting units that had goodwill. We performed that test by assessing qualitative factors to determine whether it is more likely than not that the fair value of each reporting unit is less than its respective carrying value. Factors considered in the qualitative assessments include, among other things, macroeconomic conditions, industry and market considerations, financial performance of the respective reporting unit and other relevant entity- and reporting-unit specific considerations. If based on the results of the qualitative assessment, it is more likely than not that the fair value of a reporting unit is less than its carrying value, a quantitative assessment is performed.

Based on our qualitative assessments, we determined that for each reporting unit with goodwill, it was more likely than not that its respective fair value exceeded its carrying value, indicating there was no impairment. For more information regarding goodwill balances at June 30, 2018, see Note 8 – *Goodwill and Intangible Assets* to the Consolidated Financial Statements.

Representations and Warranties Liability

The methodology used to estimate the liability for obligations under representations and warranties related to transfers of residential mortgage loans is a function of the type of representations and warranties provided in the sales contracts and considers a variety of factors. These factors, which incorporate judgment, are subject to change based on our specific experience. Our experience in negotiating settlements with trustees and other counterparties is an important input in determining our estimate of the liability. We also consider actual defaults, estimated future defaults, historical loss experience, estimated home prices and other economic conditions. Changes to any one of these factors could impact the estimate of our liability.

The representations and warranties provision may vary significantly each period as the methodology used to estimate the expense continues to be refined. The estimate of the liability for representations and warranties is sensitive to future defaults, loss severity and the net repurchase rate. An assumed simultaneous increase or decrease of 10 percent in estimated future defaults, loss severity and the net repurchase rate would result in an increase or decrease of approximately \$200 million in the representations and warranties liability as of December 31, 2018. These sensitivities are hypothetical and are intended to provide an indication of the impact of a significant change in these key assumptions on the representations and warranties liability. In reality, changes in one assumption may result in changes in other assumptions, which may or may not counteract the sensitivity.

For more information on representations and warranties exposure, see Note 12 – *Commitments and Contingencies* to the Consolidated Financial Statements.

2017 Compared to 2016

The following discussion and analysis provide a comparison of our results of operations for 2017 and 2016. This discussion should be read in conjunction with the Consolidated Financial Statements and related Notes.

Overview

Net Income

Net income was \$18.2 billion, or \$1.56 per diluted share in 2017 compared to \$17.8 billion, or \$1.49 per diluted share in 2016. The results for 2017 included a charge of \$2.9 billion related to the Tax Act. The pretax results for 2017 compared to 2016 were driven by higher revenue, largely the result of an increase in net interest income, lower provision for credit losses and a decline in noninterest expense.

Net Interest Income

Net interest income increased \$3.6 billion to \$44.7 billion in 2017 compared to 2016. Net interest yield on an FTE basis increased 12 bps to 2.37 percent for 2017. These increases were primarily driven by the benefits from higher interest rates and loan and deposit growth, partially offset by the sale of the non-U.S. consumer credit card business in the second quarter of 2017.

Noninterest Income

Noninterest income increased \$80 million to \$42.7 billion in 2017 compared to 2016. The following highlights the significant changes.

- Service charges increased \$180 million primarily driven by the impact of pricing strategies and higher treasury services related revenue.
- Investment and brokerage services income increased \$487 million primarily driven by the impact of AUM flows and higher market valuations, partially offset by the impact of changing market dynamics on transactional revenue and AUM pricing.
- Investment banking income increased \$770 million primarily due to higher advisory fees and higher debt and equity issuance fees.
- Trading account profits increased \$375 million primarily due to increased client financing activity in equities, partially offset by weaker performance across most fixed-income products.
- Other income decreased \$1.8 billion primarily due to lower mortgage banking income, with declines in both MSR results and production. Included in 2017 was a \$793 million pretax gain recognized in connection with the sale of the non-U.S. consumer credit card business and a downward valuation adjustment of \$946 million on tax-advantaged energy investments in connection with the Tax Act.

Provision for Credit Losses

The provision for credit losses decreased \$201 million to \$3.4 billion for 2017 compared to 2016 primarily due to reductions in energy exposures in the commercial portfolio and credit quality improvements in the consumer real estate portfolio. This was partially offset by portfolio seasoning and loan growth in the U.S. credit card portfolio and a single-name non-U.S. commercial charge-off.

Noninterest Expense

Noninterest expense decreased \$340 million to \$54.7 billion for 2017 compared to 2016. The decrease was primarily due to lower operating costs, a reduction from the sale of the non-U.S. consumer credit card business and lower litigation expense, partially offset by a \$316 million impairment charge related to certain data centers that were in the process of being sold and

\$145 million for the shared success discretionary year-end bonus awarded to certain employees.

Income Tax Expense

Tax expense for 2017 included a charge of \$1.9 billion reflecting the impact of the Tax Act. Other than the impact of the Tax Act, the effective tax rate for 2017 was driven by our recurring tax preference benefits as well as an expense recognized in connection with the sale of the non-U.S. consumer credit card business, largely offset by benefits related to the adoption of the new accounting standard for the tax impact associated with share-based compensation, and the restructuring of certain subsidiaries. The effective tax rate for 2016 was driven by our recurring tax preferences and net tax benefits related to various tax audit matters, partially offset by a charge for the impact of U.K. tax law changes enacted in 2016.

Business Segment Operations

Consumer Banking

Net income for *Consumer Banking* increased \$1.0 billion to \$8.2 billion in 2017 compared to 2016 primarily driven by higher net interest income, partially offset by higher provision for credit losses and lower mortgage banking income which is included in other noninterest income. Net interest income increased \$3.0 billion to \$24.3 billion primarily due to the beneficial impact of an increase in investable assets as a result of higher deposits, as well as pricing discipline and loan growth. Noninterest income decreased \$227 million to \$10.2 billion driven by lower mortgage banking income, partially offset by higher card income and service charges. The provision for credit losses increased \$810 million to \$3.5 billion due to portfolio seasoning and loan growth in the U.S. credit card portfolio. Noninterest expense increased \$131 million to \$17.8 billion driven by higher personnel expense, including the shared success discretionary year-end bonus, and increased FDIC expense, as well as investments in digital capabilities and business growth. These increases were partially offset by improved operating efficiencies.

Global Wealth & Investment Management

Net income for *GWIM* increased \$312 million to \$3.1 billion in 2017 compared to 2016 due to higher revenue, partially offset by an increase in noninterest expense. Net interest income increased \$414 million to \$6.2 billion driven by higher short-term interest rates. Noninterest income, which primarily includes investment and brokerage services income, increased \$526 million to \$12.4 billion. The increase in noninterest income was driven by the impact of AUM flows and higher market valuations, partially offset by the impact of changing market dynamics on transactional revenue and AUM pricing. Noninterest expense increased \$390 million to \$13.6 billion primarily driven by higher revenue-related incentive costs.

Global Banking

Net income for *Global Banking* increased \$1.2 billion to \$7.0 billion in 2017 compared to 2016 driven by higher revenue and lower

provision for credit losses. Revenue increased \$1.6 billion to \$20.0 billion driven by higher net interest income and noninterest income. Net interest income increased \$1.0 billion to \$10.5 billion due to loan and deposit-related growth, higher short-term rates on an increased deposit base and the impact of the allocation of ALM activities, partially offset by credit spread compression. Noninterest income increased \$521 million to \$9.5 billion largely due to higher investment banking fees. The provision for credit losses decreased \$671 million to \$212 million in 2017 primarily driven by reductions in energy exposures and continued portfolio improvement, partially offset by *Global Banking's* portion of a 2017 single-name non-U.S. commercial charge-off. Noninterest expense increased \$110 million to \$8.6 billion in 2017 primarily driven by higher investments in technology and higher deposit insurance, partially offset by lower litigation costs.

Global Markets

Net income for *Global Markets* decreased \$524 million to \$3.3 billion in 2017 compared to 2016. Net DVA losses were \$428 million compared to losses of \$238 million in 2016. Excluding net DVA, net income decreased \$405 million to \$3.6 billion primarily driven by higher noninterest expense, lower sales and trading revenue and an increase in the provision for credit losses, partially offset by higher investment banking fees. Sales and trading revenue, excluding net DVA, decreased \$423 million primarily due to weaker performance in rates products and emerging markets. The provision for credit losses increased \$133 million to \$164 million in 2017, reflecting *Global Markets'* portion of a single-name non-U.S. commercial charge-off. Noninterest expense increased \$560 million to \$10.7 billion primarily due to higher litigation expense and continued investments in technology.

All Other

The net loss for *All Other* increased \$1.6 billion to a net loss of \$3.3 billion, driven by a charge of \$2.9 billion due to enactment of the Tax Act. The pretax loss for 2017 compared to 2016 decreased \$523 million reflecting lower noninterest expense and a larger benefit in the provision for credit losses, partially offset by a decline in revenue. Revenue declined \$1.5 billion primarily due to lower mortgage banking income. All other noninterest loss decreased marginally and included a pretax gain of \$793 million on the sale of the non-U.S. credit card business and a downward valuation adjustment of \$946 million on tax-advantaged energy investments in connection with the Tax Act.

The benefit in the provision for credit losses increased \$461 million to a benefit of \$561 million primarily driven by continued runoff of the non-core portfolio, loan sale recoveries and the sale of the non-U.S. consumer credit card business.

Noninterest expense decreased \$1.5 billion to \$4.1 billion driven by lower litigation expense, lower personnel expense and a decline in non-core mortgage servicing costs.

The income tax benefit was \$1.0 billion in 2017 compared to a benefit of \$3.1 billion in 2016. The decrease in the tax benefit was driven by the impacts of the Tax Act. Both periods include income tax benefit adjustments to eliminate the FTE treatment of certain tax credits recorded in *Global Banking*.

Statistical Tables

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Table I Outstanding Loans and Leases

(Dollars in millions)	December 31				
	2018	2017	2016	2015	2014
Consumer					
Residential mortgage	\$ 208,557	\$ 203,811	\$ 191,797	\$ 187,911	\$ 216,197
Home equity	48,286	57,744	66,443	75,948	85,725
U.S. credit card	98,338	96,285	92,278	89,602	91,879
Non-U.S. credit card	—	—	9,214	9,975	10,465
Direct/Indirect consumer (1)	91,166	96,342	95,962	90,149	81,386
Other consumer (2)	202	166	626	713	841
Total consumer loans excluding loans accounted for under the fair value option	446,549	454,348	456,320	454,298	486,493
Consumer loans accounted for under the fair value option (3)	682	928	1,051	1,871	2,077
Total consumer	447,231	455,276	457,371	456,169	488,570
Commercial					
U.S. commercial	299,277	284,836	270,372	252,771	220,293
Non-U.S. commercial	98,776	97,792	89,397	91,549	80,083
Commercial real estate (4)	60,845	58,298	57,355	57,199	47,682
Commercial lease financing	22,534	22,116	22,375	21,352	19,579
	481,432	463,042	439,499	422,871	367,637
U.S. small business commercial (5)	14,565	13,649	12,993	12,876	13,293
Total commercial loans excluding loans accounted for under the fair value option	495,997	476,691	452,492	435,747	380,930
Commercial loans accounted for under the fair value option (3)	3,667	4,782	6,034	5,067	6,604
Total commercial	499,664	481,473	458,526	440,814	387,534
Less: Loans of business held for sale (6)	—	—	(9,214)	—	—
Total loans and leases	\$ 946,895	\$ 936,749	\$ 906,683	\$ 896,983	\$ 876,104

(1) Includes auto and specialty lending loans and leases of \$50.1 billion, \$52.4 billion, \$50.7 billion, \$43.9 billion and \$38.7 billion, unsecured consumer lending loans of \$383 million, \$469 million, \$585 million, \$886 million and \$1.5 billion, U.S. securities-based lending loans of \$37.0 billion, \$39.8 billion, \$40.1 billion, \$39.8 billion and \$35.8 billion, non-U.S. consumer loans of \$2.9 billion, \$3.0 billion, \$3.0 billion, \$3.9 billion and \$4.0 billion, student loans of \$0. \$0, \$497 million, \$564 million and \$632 million, and other consumer loans of \$746 million, \$684 million, \$1.1 billion, \$1.0 billion and \$761 million at December 31, 2018, 2017, 2016, 2015 and 2014, respectively.

(2) Substantially all of other consumer at December 31, 2018 and 2017 is consumer overdrafts. Other consumer at December 31, 2016, 2015 and 2014 also includes consumer finance loans of \$465 million, \$564 million and \$676 million, respectively.

(3) Consumer loans accounted for under the fair value option were residential mortgage loans of \$336 million, \$567 million, \$710 million, \$1.6 billion and \$1.9 billion, and home equity loans of \$146 million, \$361 million, \$341 million, \$250 million and \$196 million at December 31, 2018, 2017, 2016, 2015 and 2014, respectively. Commercial loans accounted for under the fair value option were U.S. commercial loans of \$2.5 billion, \$2.6 billion, \$2.9 billion, \$2.3 billion and \$1.9 billion, and non-U.S. commercial loans of \$1.1 billion, \$2.2 billion, \$3.1 billion, \$2.8 billion and \$4.7 billion at December 31, 2018, 2017, 2016, 2015 and 2014, respectively.

(4) Includes U.S. commercial real estate loans of \$56.6 billion, \$54.8 billion, \$54.3 billion, \$53.6 billion and \$45.2 billion, and non-U.S. commercial real estate loans of \$4.2 billion, \$3.5 billion, \$3.1 billion, \$3.5 billion and \$2.5 billion at December 31, 2018, 2017, 2016, 2015 and 2014, respectively.

(5) Includes card-related products.

(6) Represents non-U.S. credit card loans, which were included in assets of business held for sale on the Consolidated Balance Sheet.

Table
II Nonperforming Loans, Leases and Foreclosed Properties (1)

	December 31				
	2018	2017	2016	2015	2014
(Dollars in millions)					
Consumer					
Residential mortgage	\$ 1,893	\$ 2,476	\$ 3,056	\$ 4,803	\$ 6,889
Home equity	1,893	2,644	2,918	3,337	3,901
Direct/indirect consumer	56	46	28	24	28
Other consumer	—	—	2	1	1
Total consumer (2)	3,842	5,166	6,004	8,165	10,819
Commercial					
U.S. commercial	794	814	1,256	867	701
Non-U.S. commercial	80	299	279	158	1
Commercial real estate	166	112	72	93	321
Commercial lease financing	18	24	36	12	3
	1,048	1,249	1,643	1,130	1,026
U.S. small business commercial	54	55	60	82	87
Total commercial (3)	1,102	1,304	1,703	1,212	1,113
Total nonperforming loans and leases	4,944	6,470	7,707	9,377	11,932
Foreclosed properties	300	288	377	459	697
Total nonperforming loans, leases and foreclosed properties	\$ 5,244	\$ 6,758	\$ 8,084	\$ 9,836	\$ 12,629

(1) Balances do not include PCI loans even though the customer may be contractually past due. PCI loans were recorded at fair value upon acquisition and accrete interest income over the remaining life of the loan. In addition, balances do not include foreclosed properties insured by certain government-guaranteed loans, principally FHA-insured loans, that entered foreclosure of \$488 million, \$801 million, \$1.2 billion, \$1.4 billion and \$1.1 billion at December 31, 2018, 2017, 2016, 2015 and 2014, respectively.

(2) In 2018, \$625 million in interest income was estimated to be contractually due on \$3.8 billion of consumer loans and leases classified as nonperforming at December 31, 2018, as presented in the table above, plus \$6.8 billion of TDIs classified as performing at December 31, 2018. Approximately \$388 million of the estimated \$625 million in contractual interest was received and included in interest income for 2018.

(3) In 2018, \$119 million in interest income was estimated to be contractually due on \$1.1 billion of commercial loans and leases classified as nonperforming at December 31, 2018, as presented in the table above, plus \$1.3 billion of TDIs classified as performing at December 31, 2018. Approximately \$84 million of the estimated \$119 million in contractual interest was received and included in interest income for 2018.

Table
III Accruing Loans and Leases Past Due 90 Days or More (1)

	December 31				
	2018	2017	2016	2015	2014
(Dollars in millions)					
Consumer					
Residential mortgage (2)	\$ 1,884	\$ 3,230	\$ 4,793	\$ 7,150	\$ 11,407
U.S. credit card	994	900	782	789	866
Non-U.S. credit card	—	—	66	76	95
Direct/indirect consumer	38	40	34	39	64
Other consumer	—	—	4	3	1
Total consumer	2,916	4,170	5,679	8,057	12,433
Commercial					
U.S. commercial	197	144	106	113	110
Non-U.S. commercial	—	3	5	1	—
Commercial real estate	4	4	7	3	3
Commercial lease financing	29	19	19	15	40
	230	170	137	132	153
U.S. small business commercial	84	75	71	61	67
Total commercial	314	245	208	193	220
Total accruing loans and leases past due 90 days or more	\$ 3,230	\$ 4,415	\$ 5,887	\$ 8,250	\$ 12,653

(1) Our policy is to classify consumer real estate secured loans as nonperforming at 90 days past due except the PCI loan portfolio, the fully insured loan portfolio and loans accounted for under the fair value option.

(2) Balances are fully insured loans.

Table IV
Selected Loan Maturity Data (1, 2)

(Dollars in millions)	December 31, 2018			
	Due In One Year or Less	Due After One Year Through Five Years	Due After Five Years	Total
U.S. commercial	\$ 74,365	\$ 194,116	\$ 47,888	\$ 316,369
U.S. commercial real estate	11,622	40,393	4,590	56,605
Non-U.S. and other (3)	42,217	55,360	6,579	104,156
Total selected loans	\$ 128,204	\$ 289,869	\$ 59,057	\$ 477,130
Percent of total	27%	61%	12%	100%
Sensitivity of selected loans to changes in interest rates for loans due after one year.				
Fixed interest rates		\$ 17,109	\$ 27,664	
Floating or adjustable interest rates		272,760	31,393	
Total		\$ 289,869	\$ 59,057	

(1) Loan maturities are based on the remaining maturities under contractual terms.

(2) Includes loans accounted for under the fair value option.

(3) Loan maturities include non-U.S. commercial and commercial real estate loans.

Table V Allowance for Credit Losses

(Dollars in millions)	2018	2017	2016	2015	2014
Allowance for loan and lease losses, January 1	\$ 10,393	\$ 11,237	\$ 12,234	\$ 14,419	\$ 17,428
Loans and leases charged off					
Residential mortgage	(207)	(188)	(403)	(866)	(855)
Home equity	(483)	(582)	(752)	(975)	(1,364)
U.S. credit card	(3,345)	(2,968)	(2,691)	(2,738)	(3,068)
Non-U.S. credit card (1)	—	(103)	(238)	(275)	(357)
Direct/Indirect consumer	(495)	(491)	(392)	(383)	(456)
Other consumer	(197)	(212)	(232)	(224)	(268)
Total consumer charge-offs	(4,727)	(4,544)	(4,708)	(5,461)	(6,368)
U.S. commercial (2)	(575)	(589)	(567)	(536)	(584)
Non-U.S. commercial	(82)	(446)	(133)	(59)	(35)
Commercial real estate	(10)	(24)	(10)	(30)	(29)
Commercial lease financing	(8)	(16)	(30)	(19)	(10)
Total commercial charge-offs	(675)	(1,075)	(740)	(644)	(658)
Total loans and leases charged off	(5,402)	(5,619)	(5,448)	(6,105)	(7,026)
Recoveries of loans and leases previously charged off					
Residential mortgage	179	288	272	393	969
Home equity	485	369	347	339	457
U.S. credit card	508	455	422	424	430
Non-U.S. credit card (1)	—	28	63	87	115
Direct/Indirect consumer	300	277	258	271	287
Other consumer	15	49	27	31	39
Total consumer recoveries	1,487	1,466	1,389	1,545	2,297
U.S. commercial (3)	120	142	175	172	214
Non-U.S. commercial	14	6	13	5	1
Commercial real estate	9	15	41	35	112
Commercial lease financing	9	11	9	10	19
Total commercial recoveries	152	174	238	222	346
Total recoveries of loans and leases previously charged off	1,639	1,640	1,627	1,767	2,643

Net charge-offs	(3,763)	(3,979)	(3,821)	(4,338)	(4,383)
Write-offs of PCI loans	(273)	(207)	(340)	(808)	(810)
Provision for loan and lease losses	3,262	3,381	3,581	3,043	2,231
Other (4)	(18)	(39)	(174)	(82)	(47)
Total allowance for loan and lease losses, December 31	9,601	10,393	11,480	12,234	14,419
Less: Allowance included in assets of business held for sale (5)	—	—	(243)	—	—
Allowance for loan and lease losses, December 31	9,601	10,393	11,237	12,234	14,419
Reserve for unfunded lending commitments, January 1	777	762	646	528	484
Provision for unfunded lending commitments	20	15	16	118	44
Other (4)	—	—	100	—	—
Reserve for unfunded lending commitments, December 31	797	777	762	646	528
Allowance for credit losses, December 31	\$ 10,398	\$ 11,170	\$ 11,999	\$ 12,880	\$ 14,947

(1) Represents net charge-offs related to the non-U.S. credit card loan portfolio, which was sold in 2017.

(2) Includes U.S. small business commercial charge-offs of \$287 million, \$258 million, \$253 million, \$282 million and \$345 million in 2018, 2017, 2016, 2015 and 2014, respectively.

(3) Includes U.S. small business commercial recoveries of \$47 million, \$43 million, \$45 million, \$57 million and \$63 million in 2018, 2017, 2016, 2015 and 2014, respectively.

(4) Primarily represents the net impact of portfolio sales, consolidations and deconsolidations, foreign currency translation adjustments, transfers to held for sale and certain other reclassifications.

(5) Represents allowance related to the non-U.S. credit card loan portfolio, which was sold in 2017.

Table V Allowance for Credit Losses (continued)

(Dollars in millions)	2018	2017	2016	2015	2014
Loan and allowance ratios (6):					
Loans and leases outstanding at December 31 (7)	\$ 942,546	\$ 931,039	\$ 908,812	\$ 890,045	\$ 867,422
Allowance for loan and lease losses as a percentage of total loans and leases outstanding at December 31 (7)	1.02%	1.12%	1.26%	1.37%	1.66%
Consumer allowance for loan and lease losses as a percentage of total consumer loans and leases outstanding at December 31 (8)	1.08	1.18	1.36	1.63	2.05
Commercial allowance for loan and lease losses as a percentage of total commercial loans and leases outstanding at December 31 (9)	0.97	1.05	1.16	1.11	1.16
Average loans and leases outstanding (7)	\$ 927,531	\$ 911,988	\$ 892,255	\$ 869,065	\$ 888,804
Net charge-offs as a percentage of average loans and leases outstanding (7, 10)	0.41%	0.44%	0.43%	0.50%	0.49%
Net charge-offs and PCI write-offs as a percentage of average loans and leases outstanding (7)	0.44	0.46	0.47	0.59	0.58
Allowance for loan and lease losses as a percentage of total nonperforming loans and leases at December 31 (7)	194	161	149	130	121
Ratio of the allowance for loan and lease losses at December 31 to net charge-offs (10)	2.65	2.61	3.00	2.82	3.29
Ratio of the allowance for loan and lease losses at December 31 to net charge-offs and PCI write-offs	2.38	2.48	2.76	2.38	2.78
Amounts included in allowance for loan and lease losses for loans and leases that are excluded from nonperforming loans and leases at December 31 (11)	\$ 4,031	\$ 3,971	\$ 3,951	\$ 4,518	\$ 5,944
Allowance for loan and lease losses as a percentage of total nonperforming loans and leases, excluding the allowance for loan and lease losses for loans and leases that are excluded from nonperforming loans and leases at December 31 (7, 11)	113%	99%	98%	82%	71%

(6) Loan and allowance ratios for 2016 include \$243 million of non-U.S. credit card allowance for loan and lease losses and \$9.2 billion of ending non-U.S. credit card loans, which were sold in 2017.

(7) Outstanding loan and lease balances and ratios do not include loans accounted for under the fair value option of \$4.3 billion, \$5.7 billion, \$7.1 billion, \$6.9 billion and \$8.7 billion at December 31, 2018, 2017, 2016, 2015 and 2014, respectively. Average loans accounted for under the fair value option were \$5.5 billion, \$6.7 billion, \$8.2 billion, \$7.7 billion and \$9.9 billion in 2018, 2017, 2016, 2015 and 2014, respectively.

(8) Excludes consumer loans accounted for under the fair value option of \$682 million, \$928 million, \$1.1 billion, \$1.9 billion and \$2.1 billion at December 31, 2018, 2017, 2016, 2015 and 2014, respectively.

(9) Excludes commercial loans accounted for under the fair value option of \$3.7 billion, \$4.8 billion, \$6.0 billion, \$5.1 billion and \$6.6 billion at December 31, 2018, 2017, 2016, 2015 and 2014, respectively.

(10) Net charge-offs exclude \$273 million, \$207 million, \$340 million, \$808 million and \$810 million of write-offs in the PCI loan portfolio in 2018, 2017, 2016, 2015 and 2014 respectively. For more information on PCI write-offs, see Consumer Portfolio Credit Risk Management - Purchased Credit-Impaired Loan Portfolio on page 57.

(11) Primarily includes amounts allocated to U.S. credit card and unsecured consumer lending portfolios in Consumer Banking and PCI loans and the non-U.S. credit card portfolio in All Other.

Table
VI Allocation of the Allowance for Credit Losses by Product Type

(Dollars in millions)	December 31									
	2018		2017		2016		2015		2014	
	Amount	Percent of Total	Amount	Percent of Total	Amount	Percent of Total	Amount	Percent of Total	Amount	Percent of Total
Allowance for loan and lease losses										
Residential mortgage	\$ 422	4.40%	\$ 701	6.74%	\$ 1,012	8.82%	\$ 1,500	12.26%	\$ 2,900	20.11%
Home equity	506	5.27	1,019	9.80	1,738	15.14	2,414	19.73	3,035	21.05
U.S. credit card	3,597	37.47	3,368	32.41	2,934	25.56	2,927	23.93	3,320	23.03
Non-U.S. credit card	—	—	—	—	243	2.12	274	2.24	369	2.56
Direct/indirect consumer	248	2.58	264	2.54	244	2.13	223	1.82	299	2.07
Other consumer	29	0.30	31	0.30	51	0.44	47	0.38	59	0.41
Total consumer	4,802	50.02	5,383	51.79	6,222	54.21	7,385	60.36	9,982	69.23
U.S. commercial (1)	3,010	31.35	3,113	29.95	3,326	28.97	2,964	24.23	2,619	18.16
Non-U.S. commercial	677	7.05	803	7.73	874	7.61	754	6.17	649	4.50
Commercial real estate	958	9.98	935	9.00	920	8.01	967	7.90	1,016	7.05
Commercial lease financing	154	1.60	159	1.53	138	1.20	164	1.34	153	1.06
Total commercial	4,799	49.98	5,010	48.21	5,258	45.79	4,849	39.64	4,437	30.77
Total allowance for loan and lease losses (2)	9,601	100.00%	10,393	100.00%	11,480	100.00%	12,234	100.00%	14,419	100.00%
Less: Allowance included in assets of business held for sale (3)	—	—	—	—	(243)	—	—	—	—	—
Allowance for loan and lease losses	9,601		10,393		11,237		12,234		14,419	
Reserve for unfunded lending commitments	797		777		762		646		528	
Allowance for credit losses	\$ 10,398		\$ 11,170		\$ 11,999		\$ 12,880		\$ 14,947	

(1) Includes allowance for loan and lease losses for U.S. small business commercial loans of \$474 million, \$439 million, \$416 million, \$507 million and \$536 million at December 31, 2018, 2017, 2016, 2015 and 2014, respectively.

(2) includes \$91 million, \$289 million, \$419 million, \$804 million and \$1.7 billion of valuation allowance presented with the allowance for loan and lease losses related to PCI loans at December 31, 2016, 2017, 2018, 2019 and 2020, respectively.

(3) Represents allowance for loan and lease losses related to the non-U.S. credit card loan portfolio, which was sold in 2017.

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Item 7A. Quantitative and Qualitative Disclosures about Market Risk

See Market Risk Management on page 70 in the MD&A and the sections referenced therein for Quantitative and Qualitative Disclosures about Market Risk.

Item 8. Financial Statements and Supplementary Data**Table of Contents**

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Report of Management on Internal Control Over Financial Reporting

The management of Bank of America Corporation is responsible for establishing and maintaining adequate internal control over financial reporting.

The Corporation's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with accounting principles generally accepted in the United States of America. The Corporation's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the Corporation; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with accounting principles generally accepted in the United States of America, and that receipts and expenditures of the Corporation are being made only in accordance with authorizations of management and directors of the Corporation; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the Corporation's assets that could have a material effect on the financial statements.

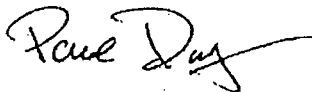
Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Management assessed the effectiveness of the Corporation's internal control over financial reporting as of December 31, 2018 based on the framework set forth by the Committee of Sponsoring Organizations of the Treadway Commission in *Internal Control - Integrated Framework (2013)*. Based on that assessment, management concluded that, as of December 31, 2018, the Corporation's internal control over financial reporting is effective.

The Corporation's internal control over financial reporting as of December 31, 2018 has been audited by PricewaterhouseCoopers, LLP, an independent registered public accounting firm, as stated in their accompanying report which expresses an unqualified opinion on the effectiveness of the Corporation's internal control over financial reporting as of December 31, 2018.



Brian T. Moynihan
Chairman, Chief Executive Officer and President



Paul M. Donofrio
Chief Financial Officer

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareholders of Bank of America Corporation:

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of Bank of America Corporation and its subsidiaries as of December 31, 2018 and December 31, 2017, and the related consolidated statements of income, comprehensive income, changes in shareholders' equity and cash flows for each of the three years in the period ended December 31, 2018, including the related notes (collectively referred to as the "consolidated financial statements") We also have audited the Corporation's internal control over financial reporting as of December 31, 2018, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Corporation as of December 31, 2018 and December 31, 2017, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2018 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Corporation maintained, in all material respects, effective internal control over financial reporting as of December 31, 2018, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the COSO.

Basis for Opinions

The Corporation's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Report of Management on Internal Control Over Financial Reporting. Our responsibility is to express opinions on the Corporation's consolidated financial statements and on the Corporation's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Corporation in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

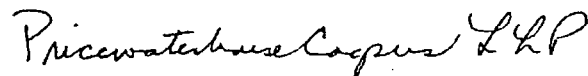
Our audits of the consolidated financial statements included performing procedures to assess the risks of material

misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.



Charlotte, North Carolina
February 26, 2019

We have served as the Corporation's auditor since 1958.

Bank of America Corporation and Subsidiaries

Consolidated Statement of Income

(In millions, except per share information)

	2018	2017	2016
Interest Income			
Loans and leases	\$ 40,811	\$ 36,221	\$ 33,226
Debt securities	11,724	10,471	9,167
Federal funds sold and securities borrowed or purchased under agreements to resell	3,176	2,390	1,118
Trading account assets	4,811	4,474	4,423
Other interest income	6,247	4,023	3,121
Total interest income	66,769	57,579	51,057
Interest expense			
Deposits	4,495	1,931	1,015
Short-term borrowings	5,839	3,538	2,350
Trading account liabilities	1,358	1,204	1,018
Long-term debt	7,645	6,239	5,578
Total interest expense	19,337	12,912	9,961
Net interest income	47,432	44,667	41,096
Noninterest Income			
Card income	6,051	5,902	5,851
Service charges	7,767	7,818	7,638
Investment and brokerage services	14,160	13,836	13,349
Investment banking income	5,327	6,011	5,241
Trading account profits	8,540	7,277	6,902
Other income	1,970	1,841	3,624
Total noninterest income	43,815	42,685	42,605
Total revenue, net of interest expense	91,247	87,352	83,701
Provision for credit losses	3,282	3,396	3,597
Noninterest expense			
Personnel	31,880	31,931	32,018
Occupancy	4,066	4,009	4,038
Equipment	1,705	1,692	1,804
Marketing	1,674	1,746	1,703
Professional fees	1,699	1,888	1,971
Data processing	3,222	3,139	3,007
Telecommunications	699	699	746
Other general operating	8,436	9,639	9,796
Total noninterest expense	53,381	54,743	55,083
Income before income taxes	34,584	29,213	25,021
Income tax expense	6,437	10,981	7,199
Net income	\$ 28,147	\$ 18,232	\$ 17,822
Preferred stock dividends	1,451	1,614	1,682
Net income applicable to common shareholders	\$ 26,696	\$ 16,618	\$ 16,140
Per common share information			
Earnings	\$ 2.64	\$ 1.63	\$ 1.57
Diluted earnings	2.61	1.56	1.49
Average common shares issued and outstanding	10,096.5	10,195.6	10,284.1

Average diluted common shares issued and outstanding	10,236.9	10,778.4	11,046.8
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Consolidated Statement of Comprehensive Income

(Dollars in millions)	2018	2017	2016
Net Income	\$ 28,147	\$ 18,232	\$ 17,822
Other comprehensive income (loss), net-of-tax:			
Net change in debt and equity securities	(3,953)	61	(1,345)
Net change in debt valuation adjustments	749	(293)	(156)
Net change in derivatives	(53)	64	182
Employee benefit plan adjustments	(405)	288	(524)
Net change in foreign currency translation adjustments	(254)	86	(87)
Other comprehensive income (loss)	(3,916)	206	(1,930)
Comprehensive Income	\$ 24,231	\$ 18,438	\$ 15,892

See accompanying Notes to Consolidated Financial Statements.

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Bank of America Corporation and Subsidiaries

Consolidated Balance Sheet

(Dollars in millions)	December 31	
	2018	2017
Assets		
Cash and due from banks	\$ 29,063	\$ 29,480
Interest-bearing deposits with the Federal Reserve, non-U.S. central banks and other banks	148,341	127,954
Cash and cash equivalents	177,404	157,434
Time deposits placed and other short-term investments	7,494	11,153
Federal funds sold and securities borrowed or purchased under agreements to resell (includes \$56,399 and \$52,906 measured at fair value)	261,131	212,747
Trading account assets (includes \$119,363 and \$106,274 pledged as collateral)	214,348	209,358
Derivative assets	43,725	37,762
Debt securities:		
Carried at fair value	238,101	315,117
Hold-to-maturity, at cost (fair value - \$200,435 and \$123,299)	203,652	125,013
Total debt securities	441,753	440,130
Loans and leases (includes \$4,349 and \$5,710 measured at fair value)	946,895	936,749
Allowance for loan and lease losses	(9,601)	(10,393)
Loans and leases, net of allowance	937,294	926,356
Premises and equipment, net	9,906	9,247
Goodwill	68,951	68,951
Loans held-for-sale (includes \$2,942 and \$2,156 measured at fair value)	10,367	11,430
Customer and other receivables	65,814	61,623
Other assets (includes \$19,739 and \$22,581 measured at fair value)	116,320	135,043
Total assets	\$ 2,354,507	\$ 2,281,234
Liabilities		
Deposits in U.S. offices:		
Noninterest-bearing	\$ 412,587	\$ 430,650
Interest-bearing (includes \$492 and \$449 measured at fair value)	891,636	796,576
Deposits in non-U.S. offices:		
Noninterest-bearing	14,060	14,024
Interest-bearing	63,193	68,295
Total deposits	1,381,476	1,309,545
Federal funds purchased and securities loaned or sold under agreements to repurchase (includes \$28,875 and \$36,182 measured at fair value)	186,988	176,865
Trading account liabilities	68,220	81,187
Derivative liabilities	37,891	34,300
Short-term borrowings (includes \$1,648 and \$1,494 measured at fair value)	20,189	32,666
Accrued expenses and other liabilities (includes \$20,075 and \$22,840 measured at fair value and \$797 and \$777 of reserve for unfunded lending commitments)	165,078	152,123
Long-term debt (includes \$27,637 and \$31,786 measured at fair value)	229,340	227,402
Total liabilities	2,089,182	2,014,088
Commitments and contingencies (Note 7 - Securitizations and Other Variable Interest Entities and Note 12 - Commitments and Contingencies)		
Shareholders' equity		
Preferred stock, \$0.01 par value, authorized - 100,000,000 shares; issued and outstanding - 3,843,140 and 3,837,683 shares	22,326	22,323
Common stock and additional paid-in capital, \$0.01 par value; authorized - 12,800,000,000 shares; issued and outstanding - 9,669,286,370 and 10,287,302,431 shares	118,896	138,089
Retained earnings	136,314	113,816
Accumulated other comprehensive income (loss)	(12,211)	(7,082)
Total shareholders' equity	265,325	267,146
Total liabilities and shareholders' equity	\$ 2,354,507	\$ 2,281,234

Assets of consolidated variable interest entities included in total assets above (isolated to settle the liabilities of the variable interest entities)

Trading account assets	\$	5,798	\$	6,521
Loans and leases		43,850		48,929
Allowance for loan and lease losses		(912)		(1,016)
Loans and leases, net of allowance		42,938		47,913
All other assets		337		1,721
Total assets of consolidated variable interest entities	\$	49,073	\$	56,155
Liabilities of consolidated variable interest entities included in total liabilities above				
Short term borrowings	\$	742	\$	312
Long term debt (includes \$10,943 and \$9,872 of non recourse debt)		10,944		9,873
All other liabilities (includes \$27 and \$34 of non recourse liabilities)		30		37
Total liabilities of consolidated variable interest entities	\$	11,716	\$	10,222

See accompanying Notes to Consolidated Financial Statements.

Bank of America Corporation and Subsidiaries

Consolidated Statement of Changes in Shareholders' Equity

(In millions)	Preferred Stock	Common Stock and Additional Paid-in Capital		Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Total Shareholders' Equity
		Shares	Amount			
Balance, December 31, 2015	\$ 22,273	10,380.3	\$ 151,042	\$ 87,658	\$ (5,358)	\$ 255,615
Net income				17,822		17,822
Net change in debt and equity securities					(1,345)	(1,345)
Net change in debt valuation adjustments					(156)	(156)
Net change in derivatives					182	182
Employee benefit plan adjustments					(524)	(524)
Net change in foreign currency translation adjustments					(87)	(87)
Dividends declared:						
Common				(2,573)		(2,573)
Preferred				(1,682)		(1,682)
Issuance of preferred stock	2,947					2,947
Common stock issued under employee plans, net, and related tax effects		5.1	1,108			1,108
Common stock repurchased		(332.8)	(5,112)			(5,112)
Balance, December 31, 2016	\$ 25,220	10,052.6	\$ 147,038	\$ 101,225	\$ (7,288)	\$ 266,195
Net income				18,232		18,232
Net change in debt and equity securities					61	61
Net change in debt valuation adjustments					(293)	(293)
Net change in derivatives					64	64
Employee benefit plan adjustments					288	288
Net change in foreign currency translation adjustments					86	86
Dividends declared:						
Common				(4,027)		(4,027)
Preferred				(1,578)		(1,578)
Common stock issued in connection with exercise of warrants and exchange of preferred stock	(2,897)	700.0	2,933	(36)		—
Common stock issued under employee plans, net, and other		43.3	932			932
Common stock repurchased		(508.6)	(12,814)			(12,814)
Balance, December 31, 2017	\$ 22,323	10,287.3	\$ 138,089	\$ 113,816	\$ (7,082)	\$ 267,146
Cumulative adjustment for adoption of hedge accounting standard				(32)	57	25
Adoption of accounting standard related to certain tax effects stranded in accumulated other comprehensive income (loss)				1,270	(1,270)	—
Net income				28,147		28,147
Net change in debt and equity securities					(3,953)	(3,953)
Net change in debt valuation adjustments					749	749
Net change in derivatives					(53)	(53)
Employee benefit plan adjustments					(405)	(405)
Net change in foreign currency translation adjustments					(254)	(254)
Dividends declared:						
Common				(5,424)		(5,424)
Preferred				(1,451)		(1,451)
Issuance of preferred stock	4,515					4,515
Redemption of preferred stock	(4,512)					(4,512)
Common stock issued under employee plans, net, and other		58.2	901	(12)		889
Common stock repurchased		(676.2)	(20,094)			(20,094)
Balance, December 31, 2018	\$ 22,326	9,669.3	\$ 118,896	\$ 136,314	\$ (12,211)	\$ 265,325

See accompanying Notes to Consolidated Financial Statements

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Bank of America Corporation and Subsidiaries

Consolidated Statement of Cash Flows

(Dollars in millions)	2018	2017	2016
Operating activities			
Net income	\$ 28,147	\$ 18,232	\$ 17,822
Adjustments to reconcile net income to net cash provided by operating activities:			
Provision for credit losses	3,282	3,396	3,597
Gains on sales of debt securities	(154)	(255)	(490)
Depreciation and premises improvements amortization	1,525	1,482	1,511
Amortization of intangibles	538	621	730
Net amortization of premium/discount on debt securities	1,824	2,251	3,134
Deferred income taxes	3,041	8,175	5,793
Stock-based compensation	1,729	1,649	1,367
Loans held-for-sale:			
Originations and purchases	(28,071)	(43,506)	(33,107)
Proceeds from sales and paydowns of loans originally classified as held for sale and instruments from related securitization activities	28,972	40,548	32,588
Net change in:			
Trading and derivative instruments	(23,673)	(14,663)	(2,635)
Other assets	11,920	(20,090)	(14,103)
Accrued expenses and other liabilities	13,010	4,673	(35)
Other operating activities, net	(2,570)	7,351	1,105
Net cash provided by operating activities	39,520	9,864	17,277
Investing activities			
Net change in:			
Time deposits placed and other short-term investments	3,659	(1,292)	(2,117)
Federal funds sold and securities borrowed or purchased under agreements to resell	(48,384)	(14,523)	(5,742)
Debt securities carried at fair value:			
Proceeds from sales	5,117	73,353	71,547
Proceeds from paydowns and maturities	78,513	93,874	108,592
Purchases	(76,640)	(166,975)	(189,061)
Held-to-maturity debt securities:			
Proceeds from paydowns and maturities	18,789	16,653	18,677
Purchases	(35,980)	(25,088)	(39,899)
Loans and leases:			
Proceeds from sales of loans originally classified as held for investment and instruments from related securitization activities	21,365	11,996	18,787
Purchases	(4,629)	(6,846)	(12,283)
Other changes in loans and leases, net	(31,292)	(41,104)	(31,194)
Other investing activities, net	(1,986)	8,411	408
Net cash used in investing activities	(71,468)	(51,541)	(62,285)
Financing activities			
Net change in:			
Deposits	71,931	48,611	63,675
Federal funds purchased and securities loaned or sold under agreements to repurchase	10,070	7,024	(4,000)
Short-term borrowings	(12,478)	8,538	(4,014)
Long-term debt:			
Proceeds from issuance	64,278	53,486	35,537
Retirement	(53,046)	(49,480)	(51,623)
Preferred stock:			
Proceeds from issuance	4,515		2,947

Redemption	(4,512)	—	—
Common stock repurchased	(20,094)	(12,814)	(5,112)
Cash dividends paid	(6,895)	(5,700)	(4,194)
Other financing activities, net	(651)	(397)	(63)
Net cash provided by financing activities	53,118	49,268	33,153
Effect of exchange rate changes on cash and cash equivalents	(1,200)	2,105	240
Net increase (decrease) in cash and cash equivalents	19,970	9,696	(11,615)
Cash and cash equivalents at January 1	157,434	147,738	159,353
Cash and cash equivalents at December 31	\$ 177,404	\$ 157,434	\$ 147,738
Supplemental cash flow disclosures			
Interest paid	\$ 19,087	\$ 12,852	\$ 10,510
Income taxes paid, net	2,470	3,235	1,043

See accompanying Notes to Consolidated Financial Statements.

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Bank of America Corporation and Subsidiaries

Notes to Consolidated Financial Statements

NOTE 1 Summary of Significant Accounting Principles

Bank of America Corporation, a bank holding company and a financial holding company, provides a diverse range of financial services and products throughout the U.S. and in certain international markets. The term "the Corporation" as used herein may refer to Bank of America Corporation, individually, Bank of America Corporation and its subsidiaries, or certain of Bank of America Corporation's subsidiaries or affiliates.

Principles of Consolidation and Basis of Presentation

The Consolidated Financial Statements include the accounts of the Corporation and its majority-owned subsidiaries and those variable interest entities (VIEs) where the Corporation is the primary beneficiary. Intercompany accounts and transactions have been eliminated. Results of operations of acquired companies are included from the dates of acquisition and for VIEs, from the dates that the Corporation became the primary beneficiary. Assets held in an agency or fiduciary capacity are not included in the Consolidated Financial Statements. The Corporation accounts for investments in companies for which it owns a voting interest and for which it has the ability to exercise significant influence over operating and financing decisions using the equity method of accounting. These investments are included in other assets. Equity method investments are subject to impairment testing, and the Corporation's proportionate share of income or loss is included in other income.

The preparation of the Consolidated Financial Statements in conformity with accounting principles generally accepted in the United States of America (GAAP) requires management to make estimates and assumptions that affect reported amounts and disclosures. Realized results could materially differ from those estimates and assumptions. Certain prior-period amounts have been reclassified to conform to current-period presentation.

New Accounting Standards

Effective January 1, 2018, the Corporation adopted the following new accounting standards on a prospective basis.

- **Revenue Recognition** – The new accounting standard addresses the recognition of revenue from contracts with customers. For additional information, see Revenue Recognition Accounting Policies in this Note, and .
- **Hedge Accounting** – The new accounting standard simplifies and expands the ability to apply hedge accounting to certain risk management activities. For additional information, see .
- **Recognition and Measurement of Financial Assets and Liabilities** – The new accounting standard relates to the recognition and measurement of financial instruments, including equity investments. For additional information, see and .
- **Tax Effects in Accumulated Other Comprehensive Income** – The new accounting standard addresses certain tax effects stranded in accumulated other comprehensive income (OCI) related to the 2017 Tax Cuts and Job Act (the Tax Act). For additional information, see .

Effective January 1, 2018, the Corporation adopted the following new accounting standards on a retrospective basis, resulting in restatement of all prior periods presented in the Consolidated Statement of Income and the Consolidated Statement of Cash Flows. The changes in presentation are not material to the individual line items affected.

- **Presentation of Pension Costs** – The new accounting standard requires separate presentation of the service cost component of pension expense from all other components of net pension benefit/cost in the Consolidated Statement of Income. As a result, the service cost component continues to be presented in personnel expense while other components of net pension benefit/cost (e.g., interest cost, actual return on plan assets, amortization of prior service cost) are now presented in other general operating expense. For additional information, see .
- **Classification of Cash Flows and Restricted Cash** – The new accounting standards address the classification of certain cash receipts and cash payments in the statement of cash flows as well as the presentation and disclosure of restricted cash. For more information on restricted cash, see .

Lease Accounting

On January 1, 2019, the Corporation adopted the new accounting standards that require lessees to recognize operating leases on the Consolidated Balance Sheet as right-of-use assets and lease liabilities based on the value of the discounted future lease payments. Lessor accounting is largely unchanged. Expanded disclosures about the nature and terms of lease agreements will be required prospectively. The Corporation elected to apply certain transition elections which allow for the continued application of the previous determination of whether a contract that existed at transition is or contains a lease, the associated lease classification, and the recognition of leases on January 1, 2019 through a cumulative-effect adjustment to retained earnings, with no adjustment to comparative prior periods presented. Upon adoption, the Corporation recognized right-of-use assets and lease liabilities of \$9.7 billion. Adoption of the standard did not have a significant effect on the Corporation's regulatory capital measures.

Accounting Standards Issued and Not Yet Adopted

Accounting for Financial Instruments – Credit Losses

The Financial Accounting Standards Board issued a new accounting standard that will be effective for the Corporation on January 1, 2020. The standard replaces the existing measurement of the allowance for credit losses that is based on management's best estimate of probable credit losses inherent in the Corporation's lending activities with management's best estimate of lifetime expected credit losses inherent in the Corporation's financial assets that are recognized at amortized cost. The standard will also expand credit quality disclosures. While the standard changes the measurement of the allowance for credit losses, it does not change the Corporation's credit risk of its lending portfolios. The credit loss estimation models and processes to be used in implementing the new standard have largely been designed and developed. The validation of the models and testing of controls are in process and expected to be completed during 2019. Currently, the impact of this new accounting standard may be an increase in the Corporation's allowance for credit losses at the date of adoption which would have a resulting negative adjustment to retained earnings. The ultimate impact will be dependent on the characteristics of the

Corporation's portfolio at adoption date as well as the macroeconomic conditions and forecasts as of that date.

Significant Accounting Principles

Cash and Cash Equivalents

Cash and cash equivalents include cash on hand, cash items in the process of collection, cash segregated under federal and other brokerage regulations, and amounts due from correspondent banks, the Federal Reserve Bank and certain non-U.S. central banks. Certain cash balances are restricted as to withdrawal or usage by legal binding contractual agreements or regulatory requirements.

Securities Financing Agreements

Securities borrowed or purchased under agreements to resell and securities loaned or sold under agreements to repurchase (securities financing agreements) are treated as collateralized financing transactions except in instances where the transaction is required to be accounted for as individual sale and purchase transactions. Generally, these agreements are recorded at acquisition or sale price plus accrued interest, except for certain securities financing agreements that the Corporation accounts for under the fair value option. Changes in the fair value of securities financing agreements that are accounted for under the fair value option are recorded in trading account profits in the Consolidated Statement of Income.

The Corporation's policy is to monitor the market value of the principal amount loaned under resale agreements and obtain collateral from or return collateral pledged to counterparties when appropriate. Securities financing agreements do not create material credit risk due to these collateral provisions; therefore, an allowance for loan losses is not necessary.

In transactions where the Corporation acts as the lender in a securities lending agreement and receives securities that can be pledged or sold as collateral, it recognizes an asset on the Consolidated Balance Sheet at fair value, representing the securities received, and a liability, representing the obligation to return those securities.

Collateral

The Corporation accepts securities and loans as collateral that it is permitted by contract or practice to sell or repledge. At December 31, 2018 and 2017, the fair value of this collateral was \$599.0 billion and \$561.9 billion, of which \$508.6 billion and \$476.1 billion were sold or repledged. The primary source of this collateral is securities borrowed or purchased under agreements to resell.

The Corporation also pledges company-owned securities and loans as collateral in transactions that include repurchase agreements, securities loaned, public and trust deposits, U.S. Treasury tax and loan notes, and short-term borrowings. This collateral, which in some cases can be sold or repledged by the counterparties to the transactions, is parenthetically disclosed on the Consolidated Balance Sheet.

In certain cases, the Corporation has transferred assets to consolidated VIEs where those restricted assets serve as collateral for the interests issued by the VIEs. These assets are included on the Consolidated Balance Sheet in Assets of Consolidated VIEs.

In addition, the Corporation obtains collateral in connection with its derivative contracts. Required collateral levels vary depending on the credit risk rating and the type of counterparty. Generally, the Corporation accepts collateral in the form of cash, U.S. Treasury securities and other marketable securities. Based on provisions contained in master netting agreements, the

Corporation nets cash collateral received against derivative assets. The Corporation also pledges collateral on its own derivative positions which can be applied against derivative liabilities.

Trading Instruments

Financial instruments utilized in trading activities are carried at fair value. Fair value is generally based on quoted market prices for the same or similar assets and liabilities. If these market prices are not available, fair values are estimated based on dealer quotes, pricing models, discounted cash flow methodologies, or similar techniques where the determination of fair value may require significant management judgment or estimation. Realized gains and losses are recorded on a trade-date basis. Realized and unrealized gains and losses are recognized in trading account profits.

Derivatives and Hedging Activities

Derivatives are entered into on behalf of customers, for trading or to support risk management activities. Derivatives used in risk management activities include derivatives that are both designated in qualifying accounting hedge relationships and derivatives used to hedge market risks in relationships that are not designated in qualifying accounting hedge relationships (referred to as other risk management activities). The Corporation manages interest rate and foreign currency exchange rate sensitivity predominantly through the use of derivatives. Derivatives utilized by the Corporation include swaps, futures and forward settlement contracts, and option contracts.

All derivatives are recorded on the Consolidated Balance Sheet at fair value, taking into consideration the effects of legally enforceable master netting agreements that allow the Corporation to settle positive and negative positions and offset cash collateral held with the same counterparty on a net basis. For exchange-traded contracts, fair value is based on quoted market prices in active or inactive markets or is derived from observable market-based pricing parameters, similar to those applied to over-the-counter (OTC) derivatives. For non-exchange traded contracts, fair value is based on dealer quotes, pricing models, discounted cash flow methodologies or similar techniques for which the determination of fair value may require significant management judgment or estimation.

Valuations of derivative assets and liabilities reflect the value of the instrument including counterparty credit risk. These values also take into account the Corporation's own credit standing.

Trading Derivatives and Other Risk Management Activities

Derivatives held for trading purposes are included in derivative assets or derivative liabilities on the Consolidated Balance Sheet with changes in fair value included in trading account profits.

Derivatives used for other risk management activities are included in derivative assets or derivative liabilities. Derivatives used in other risk management activities have not been designated in qualifying accounting hedge relationships because they did not qualify or the risk that is being mitigated pertains to an item that is reported at fair value through earnings so that the effect of measuring the derivative instrument and the asset or liability to which the risk exposure pertains will offset in the Consolidated Statement of Income to the extent effective. The changes in the fair value of derivatives that serve to mitigate certain risks associated with mortgage servicing rights (MSRs), interest rate lock commitments (IRLCs) and first-lien mortgage loans held-for-sale (LHFS) that are originated by the Corporation are recorded in other income. Changes in the fair value of derivatives that serve to mitigate interest rate risk and foreign currency risk are included

in other income. Credit derivatives are also used by the Corporation to mitigate the risk associated with various credit exposures. The changes in the fair value of these derivatives are included in other income.

Derivatives Used For Hedge Accounting Purposes (Accounting Hedges)

For accounting hedges, the Corporation formally documents at inception all relationships between hedging instruments and hedged items, as well as the risk management objectives and strategies for undertaking various accounting hedges. Additionally, the Corporation primarily uses regression analysis at the inception of a hedge and for each reporting period thereafter to assess whether the derivative used in an accounting hedge transaction is expected to be and has been highly effective in offsetting changes in the fair value or cash flows of a hedged item or forecasted transaction. The Corporation discontinues hedge accounting when it is determined that a derivative is not expected to be or has ceased to be highly effective as a hedge, and then reflects changes in fair value of the derivative in earnings after termination of the hedge relationship.

Fair value hedges are used to protect against changes in the fair value of the Corporation's assets and liabilities that are attributable to interest rate or foreign exchange volatility. Changes in the fair value of derivatives designated as fair value hedges are recorded in earnings, together and in the same income statement line item with changes in the fair value of the related hedged item. If a derivative instrument in a fair value hedge is terminated or the hedge designation removed, the previous adjustments to the carrying value of the hedged asset or liability are subsequently accounted for in the same manner as other components of the carrying value of that asset or liability. For interest-earning assets and interest-bearing liabilities, such adjustments are amortized to earnings over the remaining life of the respective asset or liability.

Cash flow hedges are used primarily to minimize the variability in cash flows of assets and liabilities or forecasted transactions caused by interest rate or foreign exchange rate fluctuations. Changes in the fair value of derivatives used in cash flow hedges are recorded in accumulated OCI and are reclassified into the line item in the income statement in which the hedged item is recorded in the same period the hedged item affects earnings. Components of a derivative that are excluded in assessing hedge effectiveness are recorded in the same income statement line item as the hedged item.

Net investment hedges are used to manage the foreign exchange rate sensitivity arising from a net investment in a foreign operation. Changes in the spot prices of derivatives that are designated as net investment hedges of foreign operations are recorded as a component of accumulated OCI. The remaining components of these derivatives are excluded in assessing hedge effectiveness and are recorded in other income.

Securities

Debt securities are reported on the Consolidated Balance Sheet at their trade date. Their classification is dependent on the purpose for which the securities were acquired. Debt securities purchased for use in the Corporation's trading activities are reported in trading account assets at fair value with unrealized gains and losses included in trading account profits. Substantially all other debt securities purchased are used in the Corporation's asset and liability management (ALM) activities and are reported on the Consolidated Balance Sheet as either debt securities carried at fair value or as hold-to-maturity (HTM) debt securities. Debt securities carried at fair value are either available-for-sale (AFS)

securities with unrealized gains and losses net-of-tax included in accumulated OCI or carried at fair value with unrealized gains and losses reported in other income. HTM debt securities, which are certain debt securities that management has the intent and ability to hold to maturity, are reported at amortized cost.

The Corporation regularly evaluates each AFS and HTM debt security where the value has declined below amortized cost to assess whether the decline in fair value is other than temporary. In determining whether an impairment is other than temporary, the Corporation considers the severity and duration of the decline in fair value, the length of time expected for recovery, the financial condition of the issuer, and other qualitative factors, as well as whether the Corporation either plans to sell the security or it is more likely than not that it will be required to sell the security before recovery of the amortized cost. For AFS debt securities the Corporation intends to hold, an analysis is performed to determine how much of the decline in fair value is related to the issuer's credit and how much is related to market factors (e.g., interest rates). If any of the decline in fair value is due to credit, an other-than-temporary impairment (OTTI) loss is recognized in the Consolidated Statement of Income for that amount. If any of the decline in fair value is related to market factors, that amount is recognized in accumulated OCI. In certain instances, the credit loss may exceed the total decline in fair value, in which case, the difference is due to market factors and is recognized as an unrealized gain in accumulated OCI. If the Corporation intends to sell or believes it is more likely than not that it will be required to sell the debt security, it is written down to fair value as an OTTI loss.

Interest on debt securities, including amortization of premiums and accretion of discounts, is included in interest income. Premiums and discounts are amortized or accreted to interest income at a constant effective yield over the contractual lives of the securities. Realized gains and losses from the sales of debt securities are determined using the specific identification method.

Equity securities with readily determinable fair values that are not held for trading purposes are carried at fair value with unrealized gains and losses included in other income. Equity securities that do not have readily determinable fair values are held at cost and evaluated for impairment. These securities are reported in other assets or time deposits placed and other short-term investments.

Loans and Leases

Loans, with the exception of loans accounted for under the fair value option, are measured at historical cost and reported at their outstanding principal balances net of any unearned income, charge-offs, unamortized deferred fees and costs on originated loans, and for purchased loans, net of any unamortized premiums or discounts. Loan origination fees and certain direct origination costs are deferred and recognized as adjustments to interest income over the lives of the related loans. Unearned income, discounts and premiums are amortized to interest income using a level yield methodology. The Corporation elects to account for certain consumer and commercial loans under the fair value option with changes in fair value reported in other income.

Under applicable accounting guidance, for reporting purposes, the loan and lease portfolio is categorized by portfolio segment and, within each portfolio segment, by class of financing receivables. A portfolio segment is defined as the level at which an entity develops and documents a systematic methodology to determine the allowance for credit losses, and a class of financing receivables is defined as the level of disaggregation of portfolio segments based on the initial measurement attribute, risk

characteristics and methods for assessing risk. The Corporation's three portfolio segments are Consumer Real Estate, Credit Card and Other Consumer, and Commercial. The classes within the Consumer Real Estate portfolio segment are residential mortgage and home equity. The classes within the Credit Card and Other Consumer portfolio segment are U.S. credit card, direct/indirect consumer and other consumer. The classes within the Commercial portfolio segment are U.S. commercial, non-U.S. commercial, commercial real estate, commercial lease financing and U.S. small business commercial.

Purchased Credit-Impaired Loans

At acquisition, purchased credit-impaired (PCI) loans are recorded at fair value with no allowance for credit losses, and accounted for individually or aggregated in pools based on similar risk characteristics. The expected cash flows in excess of the amount paid for the loans is referred to as the accretable yield and is recorded as interest income over the remaining estimated life of the loan or pool of loans. The excess of the contractual principal and interest over the expected cash flows of the PCI loans is referred to as the nonaccretable difference. If, upon subsequent valuation, the Corporation determines it is probable that the present value of the expected cash flows has decreased, a charge to the provision for credit losses is recorded. If it is probable that there is a significant increase in the present value of expected cash flows, the allowance for credit losses is reduced or, if there is no remaining allowance for credit losses related to these PCI loans, the accretable yield is increased through a reclassification from nonaccretable difference, resulting in a prospective increase in interest income. Reclassifications to or from nonaccretable difference can also occur for changes in the estimated lives of the PCI loans. If a loan within a PCI pool is sold, foreclosed, forgiven or the expectation of any future proceeds is remote, the loan is removed from the pool at its proportional carrying value. If the loan's recovery value is less than its carrying value, the difference is first applied against the PCI pool's nonaccretable difference and then against the allowance for credit losses.

Leases

The Corporation provides equipment financing to its customers through a variety of lease arrangements. Direct financing leases are carried at the aggregate of lease payments receivable plus estimated residual value of the leased property less unearned income. Leveraged leases, which are a form of financing leases, are reported net of non-recourse debt. Unearned income on leveraged and direct financing leases is accreted to interest income over the lease terms using methods that approximate the interest method.

Allowance for Credit Losses

The allowance for credit losses, which includes the allowance for loan and lease losses and the reserve for unfunded lending commitments, represents management's estimate of probable incurred credit losses in the Corporation's loan and lease portfolio excluding loans and unfunded lending commitments accounted for under the fair value option. The allowance for credit losses includes both quantitative and qualitative components. The qualitative component has a higher degree of management subjectivity, and includes factors such as concentrations, economic conditions and other considerations. The allowance for loan and lease losses represents the estimated probable credit losses on funded consumer and commercial loans and leases while the reserve for unfunded lending commitments, including standby letters of credit (SBLCs) and binding unfunded loan commitments, represents estimated probable credit losses on

these unfunded credit instruments based on utilization assumptions. Lending-related credit exposures deemed to be uncollectible, excluding loans carried at fair value, are charged off against these accounts.

The Corporation performs periodic and systematic detailed reviews of its lending portfolios to identify credit risks and to assess the overall collectability of those portfolios. The allowance on certain homogeneous consumer loan portfolios, which generally consist of consumer real estate loans within the Consumer Real Estate portfolio segment and credit card loans within the Credit Card and Other Consumer portfolio segment, is based on aggregated portfolio segment evaluations generally by product type. Loss forecast models are utilized for these portfolios which consider a variety of factors including, but not limited to, historical loss experience, estimated defaults or foreclosures based on portfolio trends, delinquencies, bankruptcies, economic conditions, credit scores and the amount of loss in the event of default.

For consumer loans secured by residential real estate, using statistical modeling methodologies, the Corporation estimates the number of loans that will default based on the individual loan attributes aggregated into pools of homogeneous loans with similar attributes. The attributes that are most significant to the probability of default and are used to estimate defaults include refreshed loan-to-value (LTV) or, in the case of a subordinated lien, refreshed combined LTV (CLTV), borrower credit score, months since origination (referred to as vintage) and geography, all of which are further broken down by present collection status (whether the loan is current, delinquent, in default or in bankruptcy). The severity or loss given default is estimated based on the refreshed LTV for first-lien mortgages or CLTV for subordinated liens. The estimates are based on the Corporation's historical experience with the loan portfolio, adjusted to reflect an assessment of environmental factors not yet reflected in the historical data underlying the loss estimates, such as changes in real estate values, local and national economies, underwriting standards and the regulatory environment. The probability of default models also incorporate recent experience with modification programs including re-defaults subsequent to modification, a loan's default history prior to modification and the change in borrower payments post-modification. On home equity loans where the Corporation holds only a second-lien position and foreclosure is not the best alternative, the loss severity is estimated at 100 percent.

The allowance on certain commercial loans (except business card and certain small business loans) is calculated using loss rates delineated by risk rating and product type. Factors considered when assessing loss rates include the value of the underlying collateral, if applicable, the industry of the obligor, and the obligor's liquidity and other financial indicators along with certain qualitative factors. These statistical models are updated regularly for changes in economic and business conditions. Included in the analysis of consumer and commercial loan portfolios are qualitative estimates which are maintained to cover uncertainties that affect the Corporation's estimate of probable losses including domestic and global economic uncertainty and large single-name defaults.

For individually impaired loans, which include nonperforming commercial loans as well as consumer and commercial loans and leases modified in a troubled debt restructuring (TDR), management measures impairment primarily based on the present value of payments expected to be received, discounted at the loans' original effective contractual interest rates. Credit card loans are discounted at the portfolio average contractual annual percentage rate, excluding promotionally priced loans, in effect prior to restructuring. Impaired loans and TDRs may also be

measured based on observable market prices, or for loans that are solely dependent on the collateral for repayment, the estimated fair value of the collateral less costs to sell. If the recorded investment in impaired loans exceeds this amount, a specific allowance is established as part of the allowance for loan and lease losses unless these are secured consumer loans that are solely dependent on collateral for repayment, in which case the amount that exceeds the fair value of the collateral is charged off.

Generally, the Corporation initially estimates the fair value of the collateral securing these consumer real estate-secured loans using an automated valuation model (AVM). An AVM is a tool that estimates the value of a property by reference to market data including sales of comparable properties and price trends specific to the Metropolitan Statistical Area in which the property being valued is located. In the event that an AVM value is not available, the Corporation utilizes publicized indices or if these methods provide less reliable valuations, the Corporation uses appraisals or broker price opinions to estimate the fair value of the collateral. While there is inherent imprecision in these valuations, the Corporation believes that they are representative of the portfolio in the aggregate.

In addition to the allowance for loan and lease losses, the Corporation also estimates probable losses related to unfunded lending commitments, such as letters of credit, financial guarantees and binding unfunded loan commitments. Unfunded lending commitments are subject to individual reviews and are analyzed and segregated by risk according to the Corporation's internal risk rating scale. These risk classifications, in conjunction with an analysis of historical loss experience, utilization assumptions, current economic conditions, performance trends within the portfolio and any other pertinent information, result in the estimation of the reserve for unfunded lending commitments.

The allowance for credit losses related to the loan and lease portfolio is reported separately on the Consolidated Balance Sheet whereas the reserve for unfunded lending commitments is reported on the Consolidated Balance Sheet in accrued expenses and other liabilities. The provision for credit losses related to the loan and lease portfolio and unfunded lending commitments is reported in the Consolidated Statement of Income.

Nonperforming Loans and Leases, Charge-offs and Delinquencies

Nonperforming loans and leases generally include loans and leases that have been placed on nonaccrual status. Loans accounted for under the fair value option, PCI loans and LHFS are not reported as nonperforming.

In accordance with the Corporation's policies, consumer real estate-secured loans, including residential mortgages and home equity loans, are generally placed on nonaccrual status and classified as nonperforming at 90 days past due unless repayment of the loan is insured by the Federal Housing Administration (FHA) or through individually insured long-term standby agreements with Fannie Mae (FNMA) or Freddie Mac (FHLMC) (the fully-insured portfolio). Residential mortgage loans in the fully-insured portfolio are not placed on nonaccrual status and, therefore, are not reported as nonperforming. Junior-lien home equity loans are placed on nonaccrual status and classified as nonperforming when the underlying first-lien mortgage loan becomes 90 days past due even if the junior-lien loan is current. The outstanding balance of real estate-secured loans that is in excess of the estimated property value less costs to sell is charged off no later than the end of the month in which the loan becomes 180 days past due unless the loan is fully insured, or for loans in bankruptcy, within

60 days of receipt of notification of filing, with the remaining balance classified as nonperforming.

Consumer loans secured by personal property, credit card loans and other unsecured consumer loans are not placed on nonaccrual status prior to charge-off and, therefore, are not reported as nonperforming loans, except for certain secured consumer loans, including those that have been modified in a TDR. Personal property-secured loans (including auto loans) are charged off to collateral value no later than the end of the month in which the account becomes 120 days past due, or upon repossession of an auto or, for loans in bankruptcy, within 60 days of receipt of notification of filing. Credit card and other unsecured customer loans are charged off no later than the end of the month in which the account becomes 180 days past due, within 60 days after receipt of notification of death or bankruptcy, or upon confirmation of fraud.

Commercial loans and leases, excluding business card loans, that are past due 90 days or more as to principal or interest, or where reasonable doubt exists as to timely collection, including loans that are individually identified as being impaired, are generally placed on nonaccrual status and classified as nonperforming unless well-secured and in the process of collection.

Business card loans are charged off in the same manner as consumer credit card loans. These loans are not placed on nonaccrual status prior to charge-off and, therefore, are not reported as nonperforming loans. Other commercial loans and leases are generally charged off when all or a portion of the principal amount is determined to be uncollectible.

The entire balance of a consumer loan or commercial loan or lease is contractually delinquent if the minimum payment is not received by the specified due date on the customer's billing statement. Interest and fees continue to accrue on past due loans and leases until the date the loan is placed on nonaccrual status, if applicable. Accrued interest receivable is reversed when loans and leases are placed on nonaccrual status. Interest collections on nonaccruing loans and leases for which the ultimate collectability of principal is uncertain are applied as principal reductions; otherwise, such collections are credited to income when received. Loans and leases may be restored to accrual status when all principal and interest is current and full repayment of the remaining contractual principal and interest is expected.

PCI loans are recorded at fair value at the acquisition date. Although the PCI loans may be contractually delinquent, the Corporation does not classify these loans as nonperforming as the loans were written down to fair value at the acquisition date and the accretable yield is recognized in interest income over the remaining life of the loan. In addition, reported net charge-offs exclude write-offs on PCI loans as the fair value already considers the estimated credit losses.

Troubled Debt Restructurings

Consumer and commercial loans and leases whose contractual terms have been restructured in a manner that grants a concession to a borrower experiencing financial difficulties are classified as TDRs. Concessions could include a reduction in the interest rate to a rate that is below market on the loan, payment extensions, forgiveness of principal, forbearance or other actions designed to maximize collections. Loans that are carried at fair value, LHFS and PCI loans are not classified as TDRs.

Loans and leases whose contractual terms have been modified in a TDR and are current at the time of restructuring may remain on accrual status if there is demonstrated performance prior to the restructuring and payment in full under the restructured terms

is expected. Otherwise, the loans are placed on nonaccrual status and reported as nonperforming, except for fully-insured consumer real estate loans, until there is sustained repayment performance for a reasonable period, generally six months. If accruing TDRs cease to perform in accordance with their modified contractual terms, they are placed on nonaccrual status and reported as nonperforming TDRs.

Secured consumer loans that have been discharged in Chapter 7 bankruptcy and have not been reaffirmed by the borrower are classified as TDRs at the time of discharge. Such loans are placed on nonaccrual status and written down to the estimated collateral value less costs to sell no later than at the time of discharge. If these loans are contractually current, interest collections are generally recorded in interest income on a cash basis. Consumer real estate-secured loans for which a binding offer to restructure has been extended are also classified as TDRs. Credit card and other unsecured consumer loans that have been renegotiated in a TDR generally remain on accrual status until the loan is either paid in full or charged off, which occurs no later than the end of the month in which the loan becomes 180 days past due or, for loans that have been placed on a fixed payment plan, 120 days past due.

A loan that had previously been modified in a TDR and is subsequently refinanced under current underwriting standards at a market rate with no concessionary terms is accounted for as a new loan and is no longer reported as a TDR.

Loans Held-for-sale

Loans that are intended to be sold in the foreseeable future, including residential mortgages, loan syndications, and to a lesser degree, commercial real estate, consumer finance and other loans, are reported as LHFS and are carried at the lower of aggregate cost or fair value. The Corporation accounts for certain LHFS, including residential mortgage LHFS, under the fair value option. Loan origination costs related to LHFS that the Corporation accounts for under the fair value option are recognized in noninterest expense when incurred. Loan origination costs for LHFS carried at the lower of cost or fair value are capitalized as part of the carrying value of the loans and recognized as a reduction of noninterest income upon the sale of such loans. LHFS that are on nonaccrual status and are reported as nonperforming, as defined in the policy herein, are reported separately from nonperforming loans and leases.

Premises and Equipment

Premises and equipment are carried at cost less accumulated depreciation and amortization. Depreciation and amortization are recognized using the straight-line method over the estimated useful lives of the assets. Estimated lives range up to 40 years for buildings, up to 12 years for furniture and equipment, and the shorter of lease term or estimated useful life for leasehold improvements.

Goodwill and Intangible Assets

Goodwill is the purchase premium after adjusting for the fair value of net assets acquired. Goodwill is not amortized but is reviewed for potential impairment on an annual basis, or when events or circumstances indicate a potential impairment, at the reporting unit level. A reporting unit is a business segment or one level below a business segment.

The Corporation assesses the fair value of each reporting unit against its carrying value, including goodwill, as measured by allocated equity. For purposes of goodwill impairment testing, the Corporation utilizes allocated equity as a proxy for the carrying value of its reporting units. Allocated equity in the reporting units

is comprised of allocated capital plus capital for the portion of goodwill and intangibles specifically assigned to the reporting unit.

In performing its goodwill impairment testing, the Corporation first assesses qualitative factors to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying value. Qualitative factors include, among other things, macroeconomic conditions, industry and market considerations, financial performance of the respective reporting unit and other relevant entity- and reporting-unit specific considerations.

If the Corporation concludes it is more likely than not that the fair value of a reporting unit is less than its carrying value, a quantitative assessment is performed. If the fair value of the reporting unit exceeds its carrying value, goodwill of the reporting unit is considered not impaired; however, if the carrying value of the reporting unit exceeds its fair value, an additional step is performed to measure potential impairment.

This step involves calculating an implied fair value of goodwill which is the excess of the fair value of the reporting unit, as determined in the first step, over the aggregate fair values of the assets, liabilities and identifiable intangibles as if the reporting unit was being acquired in a business combination. If the implied/fair value of goodwill exceeds the goodwill assigned to the reporting unit, there is no impairment. If the goodwill assigned to a reporting unit exceeds the implied fair value of goodwill, an impairment charge is recorded for the excess. An impairment loss recognized cannot exceed the amount of goodwill assigned to a reporting unit. An impairment loss establishes a new basis in the goodwill, and subsequent reversals of goodwill impairment losses are not permitted under applicable accounting guidance.

For intangible assets subject to amortization, an impairment loss is recognized if the carrying value of the intangible asset is not recoverable and exceeds fair value. The carrying value of the intangible asset is considered not recoverable if it exceeds the sum of the undiscounted cash flows expected to result from the use of the asset. Intangible assets deemed to have indefinite useful lives are not subject to amortization. An impairment loss is recognized if the carrying value of the intangible asset with an indefinite life exceeds its fair value.

Variable Interest Entities

A VIE is an entity that lacks equity investors or whose equity investors do not have a controlling financial interest in the entity through their equity investments. The Corporation consolidates a VIE if it has both the power to direct the activities of the VIE that most significantly impact the VIE's economic performance and an obligation to absorb losses or the right to receive benefits that could potentially be significant to the VIE. On a quarterly basis, the Corporation reassesses its involvement with the VIE and evaluates the impact of changes in governing documents and its financial interests in the VIE. The consolidation status of the VIEs with which the Corporation is involved may change as a result of such reassessments.

The Corporation primarily uses VIEs for its securitization activities, in which the Corporation transfers whole loans or debt securities into a trust or other vehicle. When the Corporation is the servicer of whole loans held in a securitization trust, including non-agency residential mortgages, home equity loans, credit cards, and other loans, the Corporation has the power to direct the most significant activities of the trust. The Corporation generally does not have the power to direct the most significant activities of a residential mortgage agency trust except in certain circumstances in which the Corporation holds substantially all of the issued securities and has the unilateral right to liquidate the trust. The power to direct the most significant activities of a commercial

mortgage securitization trust is typically held by the special servicer or by the party holding specific subordinate securities which embody certain controlling rights. The Corporation consolidates a whole-loan securitization trust if it has the power to direct the most significant activities and also holds securities issued by the trust or has other contractual arrangements, other than standard representations and warranties, that could potentially be significant to the trust.

The Corporation may also transfer trading account securities and AFS securities into municipal bond or resecuritization trusts. The Corporation consolidates a municipal bond or resecuritization trust if it has control over the ongoing activities of the trust such as the remarketing of the trust's liabilities or, if there are no ongoing activities, sole discretion over the design of the trust, including the identification of securities to be transferred in and the structure of securities to be issued, and also retains securities or has liquidity or other commitments that could potentially be significant to the trust. The Corporation does not consolidate a municipal bond or resecuritization trust if one or a limited number of third-party investors share responsibility for the design of the trust or have control over the significant activities of the trust through liquidation or other substantive rights.

Other VIEs used by the Corporation include collateralized debt obligations (CDOs), investment vehicles created on behalf of customers and other investment vehicles. The Corporation does not routinely serve as collateral manager for CDOs and, therefore, does not typically have the power to direct the activities that most significantly impact the economic performance of a CDO. However, following an event of default, if the Corporation is a majority holder of senior securities issued by a CDO and acquires the power to manage its assets, the Corporation consolidates the CDO.

The Corporation consolidates a customer or other investment vehicle if it has control over the initial design of the vehicle or manages the assets in the vehicle and also absorbs potentially significant gains or losses through an investment in the vehicle, derivative contracts or other arrangements. The Corporation does not consolidate an investment vehicle if a single investor controlled the initial design of the vehicle or manages the assets in the vehicles or if the Corporation does not have a variable interest that could potentially be significant to the vehicle.

Retained interests in securitized assets are initially recorded at fair value. In addition, the Corporation may invest in debt securities issued by unconsolidated VIEs. Fair values of these debt securities, which are classified as trading account assets, debt securities carried at fair value or HTM securities, are based primarily on quoted market prices in active or inactive markets. Generally, quoted market prices for retained residual interests are not available; therefore, the Corporation estimates fair values based on the present value of the associated expected future cash flows.

Fair Value

The Corporation measures the fair values of its assets and liabilities, where applicable, in accordance with accounting guidance that requires an entity to base fair value on exit price. Under this guidance, an entity is required to maximize the use of observable inputs and minimize the use of unobservable inputs in measuring fair value. A hierarchy is established which categorizes fair value measurements into three levels based on the inputs to the valuation technique with the highest priority given to unadjusted quoted prices in active markets and the lowest priority given to unobservable inputs. The Corporation categorizes its fair value measurements of financial instruments based on this three-level hierarchy.

Level 1 Unadjusted quoted prices in active markets for identical assets or liabilities. Level 1 assets and liabilities include debt and equity securities and derivative contracts that are traded in an active exchange market, as well as certain U.S. Treasury securities that are highly liquid and are actively traded in OTC markets.

Level 2 Observable inputs other than Level 1 prices, such as quoted prices for similar assets or liabilities, quoted prices in markets that are not active, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities. Level 2 assets and liabilities include debt securities with quoted prices that are traded less frequently than exchange-traded instruments and derivative contracts where fair value is determined using a pricing model with inputs that are observable in the market or can be derived principally from or corroborated by observable market data. This category generally includes U.S. government and agency mortgage-backed (MBS) and asset-backed securities (ABS), corporate debt securities, derivative contracts, certain loans and LHFS.

Level 3 Unobservable inputs that are supported by little or no market activity and that are significant to the overall fair value of the assets or liabilities. Level 3 assets and liabilities include financial instruments for which the determination of fair value requires significant management judgment or estimation. The fair value for such assets and liabilities is generally determined using pricing models, discounted cash flow methodologies or similar techniques that incorporate the assumptions a market participant would use in pricing the asset or liability. This category generally includes retained residual interests in securitizations, consumer MSRs, certain ABS, highly structured, complex or long-dated derivative contracts, certain loans and LHFS, IRLCs and certain CDOs where independent pricing information cannot be obtained for a significant portion of the underlying assets.

Income Taxes

There are two components of income tax expense: current and deferred. Current income tax expense reflects taxes to be paid or refunded for the current period. Deferred income tax expense results from changes in deferred tax assets and liabilities between periods. These gross deferred tax assets and liabilities represent decreases or increases in taxes expected to be paid in the future because of future reversals of temporary differences in the bases of assets and liabilities as measured by tax laws and their bases as reported in the financial statements. Deferred tax assets are also recognized for tax attributes such as net operating loss carryforwards and tax credit carryforwards. Valuation allowances are recorded to reduce deferred tax assets to the amounts management concludes are more likely than not to be realized.

Income tax benefits are recognized and measured based upon a two-step model: first, a tax position must be more likely than not to be sustained based solely on its technical merits in order to be recognized, and second, the benefit is measured as the largest dollar amount of that position that is more likely than not to be sustained upon settlement. The difference between the benefit recognized and the tax benefit claimed on a tax return is referred to as an unrecognized tax benefit. The Corporation records income tax-related interest and penalties, if applicable, within income tax expense.

Revenue Recognition

The following summarizes the Corporation's revenue recognition accounting policies for certain noninterest income activities.

Card Income

Card income includes annual, late and over-limit fees as well as fees earned from interchange, cash advances and other miscellaneous transactions and is presented net of direct costs. Interchange fees are recognized upon settlement of the credit and debit card payment transactions and are generally determined on a percentage basis for credit cards and fixed rates for debit cards based on the corresponding payment network's rates. Substantially all card fees are recognized at the transaction date, except for certain time-based fees such as annual fees, which are recognized over 12 months. Fees charged to cardholders that are estimated to be uncollectible are reserved in the allowance for loan and lease losses. Included in direct cost are rewards and credit card partner payments. Rewards paid to cardholders are related to points earned by the cardholder that can be redeemed for a broad range of rewards including cash, travel and gift cards. The points to be redeemed are estimated based on past redemption behavior, card product type, account transaction activity and other historical card performance. The liability is reduced as the points are redeemed. The Corporation also makes payments to credit card partners. The payments are based on revenue-sharing agreements that are generally driven by cardholder transactions and partner sales volumes. As part of the revenue-sharing agreements, the credit card partner provides the Corporation exclusive rights to market to the credit card partner's members or customers on behalf of the Corporation.

Service Charges

Service charges include deposit and lending-related fees. Deposit-related fees consist of fees earned on consumer and commercial deposit activities and are generally recognized when the transactions occur or as the service is performed. Consumer fees are earned on consumer deposit accounts for account maintenance and various transaction-based services, such as ATM transactions, wire transfer activities, check and money order processing and insufficient funds/overdraft transactions. Commercial deposit-related fees are from the Corporation's Global Transaction Services business and consist of commercial deposit and treasury management services, including account maintenance and other services, such as payroll, sweep account and other cash management services. Lending-related fees generally represent transactional fees earned from certain loan commitments, financial guarantees and SBLCs.

Investment and Brokerage Services

Investment and brokerage services consist of asset management and brokerage fees. Asset management fees are earned from the management of client assets under advisory agreements or the full discretion of the Corporation's financial advisors (collectively referred to as assets under management (AUM)). Asset management fees are earned as a percentage of the client's AUM and generally range from 50 basis points (bps) to 150 bps of the AUM. In cases where a third party is used to obtain a client's investment allocation, the fee remitted to the third party is recorded net and is not reflected in the transaction price, as the Corporation is an agent for those services.

Brokerage fees include income earned from transaction-based services that are performed as part of investment management services and are based on a fixed price per unit or as a percentage of the total transaction amount. Brokerage fees also include distribution fees and sales commissions that are primarily in the

Global Wealth & Investment Management (GWIM) segment and are earned over time. In addition, primarily in the Global Markets segment, brokerage fees are earned when the Corporation fills customer orders to buy or sell various financial products or when it acknowledges, affirms, settles and clears transactions and/or submits trade information to the appropriate clearing broker. Certain customers pay brokerage, clearing and/or exchange fees imposed by relevant regulatory bodies or exchanges in order to execute or clear trades. These fees are recorded net and are not reflected in the transaction price, as the Corporation is an agent for those services.

Investment Banking Income

Investment banking income includes underwriting income and financial advisory services income. Underwriting consists of fees earned for the placement of a customer's debt or equity securities. The revenue is generally earned based on a percentage of the fixed number of shares or principal placed. Once the number of shares or notes is determined and the service is completed, the underwriting fees are recognized. The Corporation incurs certain out-of-pocket expenses, such as legal costs, in performing these services. These expenses are recovered through the revenue the Corporation earns from the customer and are included in operating expenses. Syndication fees represent fees earned as the agent or lead lender responsible for structuring, arranging and administering a loan syndication.

Financial advisory services consist of fees earned for assisting customers with transactions related to mergers and acquisitions and financial restructurings. Revenue varies depending on the size and number of services performed for each contract and is generally contingent on successful execution of the transaction. Revenue is typically recognized once the transaction is completed and all services have been rendered. Additionally, the Corporation may earn a fixed fee in merger and acquisition transactions to provide a fairness opinion, with the fees recognized when the opinion is delivered to the customer.

Other Revenue Measurement and Recognition Policies

The Corporation did not disclose the value of any open performance obligations at December 31, 2018, as its contracts with customers generally have a fixed term that is less than one year, an open term with a cancellation period that is less than one year, or provisions that allow the Corporation to recognize revenue at the amount it has the right to invoice.

Earnings Per Common Share

Earnings per common share (EPS) is computed by dividing net income allocated to common shareholders by the weighted-average common shares outstanding, excluding unvested common shares subject to repurchase or cancellation. Net income allocated to common shareholders is net income adjusted for preferred stock dividends including dividends declared, accretion of discounts on preferred stock including accelerated accretion when preferred stock is repaid early, and cumulative dividends related to the current dividend period that have not been declared as of period end, less income allocated to participating securities. Diluted EPS is computed by dividing income allocated to common shareholders plus dividends on dilutive convertible preferred stock and preferred stock that can be tendered to exercise warrants, by the weighted-average common shares outstanding plus amounts representing the dilutive effect of stock options outstanding, restricted stock, restricted stock units (RSUs), outstanding warrants and the dilution resulting from the conversion of convertible preferred stock, if applicable.

Foreign Currency Translation

Assets, liabilities and operations of foreign branches and subsidiaries are recorded based on the functional currency of each entity. When the functional currency of a foreign operation is the local currency, the assets, liabilities and operations are translated, for consolidation purposes, from the local currency to the U.S. dollar reporting currency at period-end rates for assets and

liabilities and generally at average rates for results of operations. The resulting unrealized gains and losses are reported as a component of accumulated OCI, net-of-tax. When the foreign entity's functional currency is the U.S. dollar, the resulting remeasurement gains or losses on foreign currency-denominated assets or liabilities are included in earnings

NOTE 2 Noninterest Income

The table below presents the Corporation's noninterest income disaggregated by revenue source for 2018, 2017 and 2016. For more information, see Note 1 – *Summary of Significant Accounting Principles*. For a disaggregation of noninterest income by business segment and All Other, see Note 23 – *Business Segment Information*.

(Dollars in millions)	2018	2017	2016
Card income			
Interchange fees (1)	\$ 4,093	\$ 3,942	\$ 3,960
Other card income	1,958	1,960	1,891
Total card income	6,051	5,902	5,851
Service charges			
Deposit-related fees	6,667	6,708	6,545
Lending-related fees	1,100	1,110	1,093
Total service charges	7,767	7,818	7,638
Investment and brokerage services			
Asset management fees	10,189	9,310	8,328
Brokerage fees	3,971	4,526	5,021
Total investment and brokerage services	14,160	13,836	13,349
Investment banking income			
Underwriting income	2,722	2,821	2,585
Syndication fees	1,347	1,499	1,388
Financial advisory services	1,258	1,691	1,268
Total investment banking income	5,327	6,011	5,241
Trading account profits	8,540	7,277	6,902
Other income	1,970	1,841	3,624
Total noninterest income	\$ 43,815	\$ 42,685	\$ 42,605

(1) During 2018, 2017 and 2016, gross interchange fees were \$9.5 billion, \$8.8 billion and \$8.2 billion and are presented net of \$5.4 billion, \$4.8 billion and \$4.2 billion, respectively, of expenses for rewards and partner payments.

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NOTE 3 Derivatives

Derivative Balances

Derivatives are entered into on behalf of customers, for trading or to support risk management activities. Derivatives used in risk management activities include derivatives that may or may not be designated in qualifying hedge accounting relationships. Derivatives that are not designated in qualifying hedge accounting relationships are referred to as other risk management derivatives. For more information on the Corporation's derivatives and hedging

activities, see Note 1 - Summary of Significant Accounting Principles. The following tables present derivative instruments included on the Consolidated Balance Sheet in derivative assets and liabilities at December 31, 2018 and 2017. Balances are presented on a gross basis, prior to the application of counterparty and cash collateral netting. Total derivative assets and liabilities are adjusted on an aggregate basis to take into consideration the effects of legally enforceable master netting agreements and have been reduced by cash collateral received or paid.

(Dollars in billions)	December 31, 2018						
	Gross Derivative Assets				Gross Derivative Liabilities		
	Contract/ Notional (1)	Trading and Other Risk Management Derivatives	Qualifying Accounting Hedges	Total	Trading and Other Risk Management Derivatives	Qualifying Accounting Hedges	Total
Interest rate contracts							
Swaps	\$ 15,977.9	\$ 141.0	\$ 3.2	\$ 144.2	\$ 138.9	\$ 2.0	\$ 140.9
Futures and forwards	3,656.6	4.7	—	4.7	5.0	—	5.0
Written options	1,584.9	—	—	—	28.6	—	28.6
Purchased options	1,614.0	30.8	—	30.8	—	—	—
Foreign exchange contracts							
Swaps	1,704.8	38.8	1.4	40.2	42.2	2.3	44.5
Spot, futures and forwards	4,276.0	39.8	0.4	40.2	39.3	0.3	39.6
Written options	256.7	—	—	—	5.0	—	5.0
Purchased options	240.4	4.6	—	4.6	—	—	—
Equity contracts							
Swaps	253.6	7.7	—	7.7	8.4	—	8.4
Futures and forwards	100.0	2.1	—	2.1	0.3	—	0.3
Written options	597.1	—	—	—	27.5	—	27.5
Purchased options	549.4	36.0	—	36.0	—	—	—
Commodity contracts							
Swaps	43.1	2.7	—	2.7	4.5	—	4.5
Futures and forwards	51.7	3.2	—	3.2	0.5	—	0.5
Written options	27.5	—	—	—	2.2	—	2.2
Purchased options	23.4	1.7	—	1.7	—	—	—
Credit derivatives (2, 3)							
Purchased credit derivatives:							
Credit default swaps	408.1	5.3	—	5.3	4.9	—	4.9
Total return swaps/options	84.5	0.4	—	0.4	1.0	—	1.0
Written credit derivatives:							
Credit default swaps	371.9	4.4	—	4.4	4.3	—	4.3
Total return swaps/options	87.3	0.6	—	0.6	0.6	—	0.6
Gross derivative assets/liabilities		\$ 323.8	\$ 5.0	\$ 328.8	\$ 313.2	\$ 4.6	\$ 317.8
Less, legally enforceable master netting agreements				(252.7)			(252.7)
Less, Cash collateral received/paid				(32.4)			(27.2)
Total derivative assets/liabilities				\$ 43.7			\$ 37.9

(1) Represents the total contract/notional amount of derivative assets and liabilities outstanding.

(2) The net derivative liability and notional amount of written credit derivatives for which the Corporation held purchased credit derivatives with identical underlying referenced names were \$185 million and \$342.8 billion at December 31, 2018.

(3) Derivative assets and liabilities for credit default swaps (CDS) reflect a central clearing counterparty's amendments to legally re-characterize daily cash variation margin from collateral, which secures an outstanding exposure, to settlement, which discharges an outstanding exposure, effective in 2018.

		December 31, 2017							
		Gross Derivative Assets				Gross Derivative Liabilities			
		Trading and Other Risk Management Derivatives		Qualifying Accounting Hedges	Total	Trading and Other Risk Management Derivatives		Qualifying Accounting Hedges	Total
(Dollars in billions)	Contract/ Notional (1)								
Interest rate contracts									
Swaps	\$ 15,416.4	\$ 175.1	\$ 2.9	\$ 178.0	\$ 172.5	\$ 1.7	\$ 174.2		
Futures and forwards	4,332.4	0.5	—	0.5	0.5	—	0.5		
Written options	1,170.5	—	—	—	35.5	—	35.5		
Purchased options	1,184.5	37.6	—	37.6	—	—	—		
Foreign exchange contracts									
Swaps	2,011.1	35.6	2.2	37.8	36.1	2.7	38.8		
Spot, futures and forwards	3,543.3	39.1	0.7	39.8	39.1	0.8	39.9		
Written options	291.8	—	—	—	5.1	—	5.1		
Purchased options	271.9	4.6	—	4.6	—	—	—		
Equity contracts									
Swaps	265.6	4.8	—	4.8	4.4	—	4.4		
Futures and forwards	106.9	1.5	—	1.5	0.9	—	0.9		
Written options	480.8	—	—	—	23.9	—	23.9		
Purchased options	428.2	24.7	—	24.7	—	—	—		
Commodity contracts									
Swaps	46.1	1.8	—	1.8	4.6	—	4.6		
Futures and forwards	47.1	3.5	—	3.5	0.6	—	0.6		
Written options	21.7	—	—	—	1.4	—	1.4		
Purchased options	22.9	1.4	—	1.4	—	—	—		
Credit derivatives (2)									
Purchased credit derivatives:									
Credit default swaps	470.9	4.1	—	4.1	11.1	—	11.1		
Total return swaps/options	54.1	0.1	—	0.1	1.3	—	1.3		
Written credit derivatives:									
Credit default swaps	448.2	10.6	—	10.6	3.6	—	3.6		
Total return swaps/options	55.2	0.8	—	0.8	0.2	—	0.2		
Gross derivative assets/liabilities		\$ 345.8	\$ 5.8	\$ 351.6	\$ 340.8	\$ 5.2	\$ 346.0		
Less: Legally enforceable master netting agreements				(279.2)	(279.2)				
Less: Cash collateral received/paid				(34.6)	(32.5)				
Total derivative assets/liabilities				\$ 37.8	\$ 34.3				

(1) Represents the total contract/notional amount of derivative assets and liabilities outstanding.

(2) The net derivative asset and notional amount of written credit derivatives for which the Corporation held purchased credit derivatives with identical underlying referenced names were \$6.4 billion and \$435.1 billion at December 31, 2017.

Offsetting of Derivatives

The Corporation enters into International Swaps and Derivatives Association, Inc. (ISDA) master netting agreements or similar agreements with substantially all of the Corporation's derivative counterparties. Where legally enforceable, these master netting agreements give the Corporation, in the event of default by the counterparty, the right to liquidate securities held as collateral and to offset receivables and payables with the same counterparty. For purposes of the Consolidated Balance Sheet, the Corporation offsets derivative assets and liabilities and cash collateral held with the same counterparty where it has such a legally enforceable master netting agreement.

The following table presents derivative instruments included in derivative assets and liabilities on the Consolidated Ba

lance Sheet at December 31, 2018 and 2017 by primary risk (e.g., interest rate risk) and the platform, where applicable, on which these derivatives are transacted. Balances are presented on a gross basis, prior to the application of counterparty and cash collateral netting. Total gross derivative assets and liabilities are adjusted on an aggregate basis to take into consideration the effects of legally enforceable master netting agreements which include reducing the balance for counterparty netting and cash collateral received or paid.

For more information on offsetting of securities financing agreements, see Note 10 – Federal Funds Sold or Purchased, Securities Financing Agreements, Short-term Borrowings and Restricted Cash.

Offsetting of Derivatives (1)

	Derivative Assets		Derivative Liabilities		Derivative Assets	Derivative Liabilities		
(Dollars in billions)	December 31, 2018		December 31, 2017					
Interest rate contracts								
Over-the-counter	\$	174.2	\$	169.4	\$	211.7	\$	206.0
Over-the-counter cleared		4.8		4.0		1.9		1.8
Foreign exchange contracts								
Over-the-counter		82.5		86.3		78.7		80.8
Over-the-counter cleared		0.9		0.9		0.9		0.7
Equity contracts								
Over-the-counter		24.6		14.6		18.3		16.2
Exchange-traded		16.1		15.1		9.1		8.5
Commodity contracts								
Over-the-counter		3.5		4.5		2.9		4.4
Exchange-traded		1.0		0.9		0.7		0.8
Credit derivatives								
Over-the-counter		7.7		8.2		9.1		9.6
Over-the-counter cleared		2.5		2.3		6.1		6.0
Total gross derivative assets/liabilities, before netting								
Over-the-counter		292.5		283.0		320.7		317.0
Exchange-traded		17.1		16.0		9.8		9.3
Over-the-counter cleared		8.2		7.2		8.9		8.5
Less: Legally enforceable master netting agreements and cash collateral received/paid								
Over-the-counter		(264.4)		(259.2)		(296.9)		(294.6)
Exchange-traded		(13.5)		(13.5)		(8.6)		(8.6)
Over-the-counter cleared		(7.2)		(7.2)		(8.3)		(8.5)
Derivative assets/liabilities, after netting								
		32.7		26.3		25.6		23.1
Other gross derivative assets/liabilities (2)		11.0		11.6		12.2		11.2
Total derivative assets/liabilities								
		43.7		37.9		37.8		34.3
Less: Financial instruments collateral (3)		(16.3)		(8.6)		(11.2)		(10.4)
Total net derivative assets/liabilities								
	\$	27.4	\$	29.3	\$	26.6	\$	23.9

(1) OTC derivatives include bilateral transactions between the Corporation and a particular counterparty. OTC-cleared derivatives include bilateral transactions between the Corporation and a counterparty where the transaction is cleared through a clearinghouse. Exchange-traded derivatives include listed options transacted on an exchange.

(2) Consists of derivatives entered into under master netting agreements where the enforceability of these agreements is uncertain under bankruptcy laws in some countries or industries.

(3) Amounts are limited to the derivative asset/liability balance and, accordingly, do not include excess collateral received/pledged. Financial instruments collateral includes securities collateral received or pledged and cash securities held and posted at third party custodians that are not offset on the Consolidated Balance Sheet but shown as a reduction to derive net derivative assets and liabilities.

ALM and Risk Management Derivatives

The Corporation's ALM and risk management activities include the use of derivatives to mitigate risk to the Corporation including derivatives designated in qualifying hedge accounting relationships and derivatives used in other risk management activities. Interest rate, foreign exchange, equity, commodity and credit contracts are utilized in the Corporation's ALM and risk management activities.

The Corporation maintains an overall interest rate risk management strategy that incorporates the use of interest rate contracts, which are generally non-leveraged generic interest rate and basis swaps, options, futures and forwards, to minimize significant fluctuations in earnings caused by interest rate volatility. The Corporation's goal is to manage interest rate sensitivity and volatility so that movements in interest rates do not significantly adversely affect earnings or capital. As a result of interest rate fluctuations, hedged fixed-rate assets and liabilities appreciate or depreciate in fair value. Gains or losses on the derivative instruments that are linked to the hedged fixed-rate assets and liabilities are expected to substantially offset this unrealized appreciation or depreciation.

Market risk, including interest rate risk, can be substantial in the mortgage business. Market risk in the mortgage business is the risk that values of mortgage assets or revenues will be adversely affected by changes in market conditions such as interest rate movements. To mitigate the interest rate risk in mortgage banking production income, the Corporation utilizes forward loan sale commitments and other derivative instruments, including purchased options, and certain debt securities. The

Corporation also utilizes derivatives such as interest rate options, interest rate swaps, forward settlement contracts and eurodollar futures to hedge certain market risks of MSRs. For more information on MSRs, see *Note 20 – Fair Value Measurements*.

The Corporation uses foreign exchange contracts to manage the foreign exchange risk associated with certain foreign currency-denominated assets and liabilities, as well as the Corporation's investments in non-U.S. subsidiaries. Foreign exchange contracts, which include spot and forward contracts, represent agreements to exchange the currency of one country for the currency of another country at an agreed-upon price on an agreed-upon settlement date. Exposure to loss on these contracts will increase or decrease over their respective lives as currency exchange and interest rates fluctuate.

The Corporation purchases credit derivatives to manage credit risk related to certain funded and unfunded credit exposures. Credit derivatives include CDS, total return swaps and swaptions. These derivatives are recorded on the Consolidated Balance Sheet at fair value with changes in fair value recorded in other income

Derivatives Designated as Accounting Hedges

The Corporation uses various types of interest rate and foreign exchange derivative contracts to protect against changes in the fair value of its assets and liabilities due to fluctuations in interest rates and exchange rates (fair value hedges). The Corporation also uses these types of contracts to protect against changes in the cash flows of its assets and liabilities, and other forecasted transactions (cash flow hedges). The Corporation hedges its net investment in consolidated non-U.S. operations determined to have functional currencies other than the U.S. dollar using forward

exchange contracts and cross-currency basis swaps, and by issuing foreign currency-denominated debt (not investment hedges).

Fair Value Hedges

The table below summarizes information related to fair value hedges for 2018, 2017 and 2016.

Gains and Losses on Derivatives Designated as Fair Value Hedges

(Dollars in millions)	Derivative			Hedged Item		
	2018	2017	2016	2018	2017	2016
Interest rate risk on long-term debt (1)	\$ (1,538)	\$ (1,537)	\$ (1,488)	\$ 1,429	\$ 1,045	\$ 646
Interest rate and foreign currency risk on long-term debt (2)	(1,187)	1,811	(941)	1,079	(1,767)	944
Interest rate risk on available-for-sale securities (3)	(52)	(67)	227	50	35	(286)
Total	\$ (2,777)	\$ 207	\$ (2,202)	\$ 2,558	\$ (687)	\$ 1,304

(1) Amounts are recorded in interest expense in the Consolidated Statement of Income. In 2017 and 2016, amounts representing hedge ineffectiveness were losses of \$492 million and \$842 million.

(2) In 2018, 2017 and 2016, the derivative amount includes losses of \$992 million, gains of \$2.2 billion and losses of \$910 million, respectively, in other income and losses of \$116 million, \$365 million and \$30 million, respectively, in interest expense. Line item totals are in the Consolidated Statement of Income.

(3) Amounts are recorded in interest income in the Consolidated Statement of Income.

The table below summarizes the carrying value of hedged assets and liabilities that are designated and qualifying in fair value hedging relationships along with the cumulative amount of fair value hedging adjustments included in the carrying value that have been recorded in the current hedging relationships. These fair value hedging adjustments are open basis adjustments that are not subject to amortization as long as the hedging relationship remains designated.

Designated Fair Value Hedged Assets (Liabilities)

(Dollars in millions)	December 31, 2018	
	Carrying Value	Cumulative Fair Value Adjustments (1)
Long-term debt	\$ (138,682)	\$ (2,117)
Available-for-sale debt securities	981	(29)

(1) For assets, increase (decrease) to carrying value and for liabilities, (increase) decrease to carrying value.

At December 31, 2018, the cumulative fair value adjustments remaining on long-term debt and AFS debt securities from discontinued hedging relationships were a decrease to the related liability and related asset of \$1.6 billion and \$29 million, which are being amortized over the remaining contractual life of the designated hedged items.

Of the \$1.0 billion after-tax net loss (\$1.3 billion pretax) on derivatives in accumulated OCI at December 31, 2018, \$253 million after-tax (\$332 million pretax) is expected to be reclassified into earnings in the next 12 months. These net losses reclassified into earnings are expected to primarily reduce net interest income related to the respective hedged items. For terminated cash flow hedges, the time period over which the majority of the forecasted transactions are hedged is approximately 4 years, with a maximum length of time for certain forecasted transactions of 17 years.

Cash Flow and Net Investment Hedges

The following table summarizes certain information related to cash flow hedges and net investment hedges for 2018, 2017 and 2016.

Gains and Losses on Derivatives Designated as Cash Flow and Net Investment Hedges

(Dollars in millions, amounts pretax)	Gains (Losses) Recognized in Accumulated OCI on Derivatives			Gains (Losses) in Income Reclassified from Accumulated OCI		
	2018	2017	2016	2018	2017	2016
Cash flow hedges						
Interest rate risk on variable-rate assets (1)	\$ (159)	\$ (109)	\$ (340)	\$ (165)	\$ (327)	\$ (553)
Price risk on certain restricted stock awards (2)	4	59	41	27	148	(32)
Total	\$ (155)	\$ (50)	\$ (299)	\$ (138)	\$ (179)	\$ (585)
Net investment hedges						
Foreign exchange risk (3)	\$ 989	\$ (1,588)	\$ 1,636	\$ 411	\$ 1,782	\$ 3

(1) Amounts reclassified from accumulated OCI are recorded in interest income in the Consolidated Statement of Income.

(2) Amounts reclassified from accumulated OCI are recorded in personnel expense in the Consolidated Statement of Income.

(3) Amounts reclassified from accumulated OCI are recorded in other income in the Consolidated Statement of Income. Amounts excluded from effectiveness testing and recognized in other income were gains of \$47 million, \$120 million and \$325 million in 2018, 2017 and 2016, respectively.

Other Risk Management Derivatives

Other risk management derivatives are used by the Corporation to reduce certain risk exposures by economically hedging various assets and liabilities. The gains and losses on these derivatives are recognized in other income. The table below presents gains (losses) on these derivatives for 2018, 2017 and 2016. These gains (losses) are largely offset by the income or expense that is recorded on the hedged item

Gains and Losses on Other Risk Management Derivatives

(Dollars in millions)	2018	2017	2016
Interest rate risk on mortgage activities (1)	\$ (107)	\$ 8	\$ 461
Credit risk on loans	9	(6)	(107)
Interest rate and foreign currency risk on ALM activities (2)	1,010	(36)	(754)

(1) Primarily related to hedges of interest rate risk on MSRs and IRLCs to originate mortgage loans that will be held for sale. The net gains on IRLCs, which are not included in the table but are considered derivative instruments, were \$47 million, \$220 million and \$533 million for 2018, 2017 and 2016, respectively.

(2) Primarily related to hedges of debt securities carried at fair value and hedges of foreign currency denominated debt.

Transfers of Financial Assets with Risk Retained through Derivatives

The Corporation enters into certain transactions involving the transfer of financial assets that are accounted for as sales where substantially all of the economic exposure to the transferred financial assets is retained through derivatives (e.g., interest rate and/or credit), but the Corporation does not retain control over the assets transferred. As of December 31, 2018 and 2017, the Corporation had transferred \$5.8 billion and \$6.0 billion of non-U.S. government-guaranteed MBS to a third-party trust and retained economic exposure to the transferred assets through derivative contracts. In connection with these transfers, the Corporation received gross cash proceeds of \$5.8 billion and \$6.0 billion at the transfer dates. At December 31, 2018 and 2017, the fair value of the transferred securities was \$5.5 billion and \$6.1 billion.

Sales and Trading Revenue

The Corporation enters into trading derivatives to facilitate client transactions and to manage risk exposures arising from trading account assets and liabilities. It is the Corporation's policy to include these derivative instruments in its trading activities which include derivatives and non-derivative cash instruments. The resulting risk from these derivatives is managed on a portfolio basis as part of the Corporation's *Global Markets* business segment. The related sales and trading revenue generated within *Global Markets* is recorded in various income statement line items including trading account profits and net interest income as well as other revenue categories.

Sales and trading revenue includes changes in the fair value and realized gains and losses on the sales of trading and other assets, net interest income, and fees primarily from commissions on equity securities. Revenue is generated by the difference in the client price for an instrument and the price at which the trading desk can execute the trade in the dealer market. For equity securities, commissions related to purchases and sales are recorded in the "Other" column in the Sales and Trading Revenue table. Changes in the fair value of these securities are included in trading account profits. For debt securities, revenue, with the exception of interest associated with the debt securities, is typically included in trading account profits. Unlike commissions for equity securities, the initial revenue related to broker-dealer services for debt securities is typically included in the pricing of

the instrument rather than being charged through separate fee arrangements. Therefore, this revenue is recorded in trading account profits as part of the initial mark to fair value. For derivatives, the majority of revenue is included in trading account profits. In transactions where the Corporation acts as agent, which include exchange-traded futures and options, fees are recorded in other income.

The table below, which includes both derivatives and non-derivative cash instruments, identifies the amounts in the respective income statement line items attributable to the Corporation's sales and trading revenue in *Global Markets*, categorized by primary risk, for 2018, 2017 and 2016. The difference between total trading account profits in the following table and in the Consolidated Statement of Income represents trading activities in business segments other than *Global Markets*. This table includes debit valuation adjustment (DVA) and funding valuation adjustment (FVA) gains (losses). *Global Markets* results in Note 23 – *Business Segment Information* are presented on a fully taxable-equivalent (FTE) basis. The table below is not presented on an FTE basis.

Sales and Trading Revenue

(Dollars in millions)	Trading Account Profits	Net Interest Income	Other (1)	Total
	2018			
Interest rate risk	\$ 1,180	\$ 1,292	\$ 220	\$ 2,692
Foreign exchange risk	1,503	(7)	6	1,502
Equity risk	3,994	(781)	1,619	4,832
Credit risk	1,063	1,853	552	3,468
Other risk	189	64	68	319
Total sales and trading revenue	\$ 7,929	\$ 2,421	\$ 2,463	\$ 12,813
	2017			
Interest rate risk	\$ 712	\$ 1,560	\$ 249	\$ 2,521
Foreign exchange risk	1,417	(1)	7	1,423
Equity risk	2,689	(517)	1,903	4,075
Credit risk	1,685	1,937	576	4,198
Other risk	203	45	76	324
Total sales and trading revenue	\$ 6,706	\$ 3,024	\$ 2,811	\$ 12,541
	2016			
Interest rate risk	\$ 1,189	\$ 2,002	\$ 145	\$ 3,336
Foreign exchange risk	1,360	(10)	5	1,355
Equity risk	1,917	28	2,074	4,019
Credit risk	1,674	1,956	424	4,054
Other risk	407	(7)	39	439
Total sales and trading revenue	\$ 6,547	\$ 3,969	\$ 2,687	\$ 13,203

(1) Represents amounts in investment and brokerage services and other income that are recorded in *Global Markets* and included in the definition of sales and trading revenue. Includes investment and brokerage services revenue of \$1.7 billion, \$2.0 billion and \$2.1 billion for 2018, 2017 and 2016, respectively.

Credit Derivatives

The Corporation enters into credit derivatives primarily to facilitate client transactions and to manage credit risk exposures. Credit derivatives derive value based on an underlying third-party referenced obligation or a portfolio of referenced obligations and generally require the Corporation, as the seller of credit protection, to make payments to a buyer upon the occurrence of a predefined credit event. Such credit events generally include bankruptcy of the referenced credit entity and failure to pay under the obligation, as well as acceleration of indebtedness and payment repudiation or moratorium. For credit derivatives based on a portfolio of referenced credits or credit indices, the Corporation may not be required to make payment until a specified amount of loss has occurred and/or may only be required to make

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Credit derivatives are classified as investment and non-investment grade based on the credit quality of the underlying referenced obligation. The Corporation considers ratings of BBB- or higher as investment grade. Non-investment grade includes non-rated credit derivative instruments. The Corporation discloses

internal categorizations of investment grade and non-investment grade consistent with how risk is managed for these instruments.

Credit derivative instruments where the Corporation is the seller of credit protection and their expiration at December 31, 2018 and 2017 are summarized in the following table.

Credit Derivative Instruments

	Less than One Year	One to Three Years	Three to Five Years	Over Five Years	Total
December 31, 2018					
Carrying Value					
(Dollars in millions)					
Credit default swaps:					
Investment grade	\$ 2	\$ 44	\$ 436	\$ 488	\$ 970
Non-investment grade	132	636	914	1,691	3,373
Total	134	680	1,350	2,179	4,343
Total return swaps/options:					
Investment grade	105	—	—	—	105
Non-investment grade	472	21	—	—	493
Total	577	21	—	—	598
Total credit derivatives	\$ 711	\$ 701	\$ 1,350	\$ 2,179	\$ 4,941
Credit-related notes:					
Investment grade	\$ —	\$ —	\$ 4	\$ 532	\$ 536
Non-investment grade	1	1	1	1,500	1,503
Total credit-related notes	\$ 1	\$ 1	\$ 5	\$ 2,032	\$ 2,039
Maximum Payout/Notional					
Credit default swaps:					
Investment grade	\$ 53,758	\$ 95,699	\$ 95,274	\$ 20,054	\$ 264,785
Non-investment grade	24,297	33,881	34,530	14,426	107,134
Total	78,055	129,580	129,804	34,480	371,919
Total return swaps/options:					
Investment grade	60,042	822	59	72	60,995
Non-investment grade	24,524	1,649	39	70	26,282
Total	84,566	2,471	98	142	87,277
Total credit derivatives	\$ 162,621	\$ 132,051	\$ 129,902	\$ 34,622	\$ 459,196
December 31, 2017					
Carrying Value					
Credit default swaps:					
Investment grade	\$ 4	\$ 3	\$ 61	\$ 245	\$ 313
Non-investment grade	203	453	484	2,133	3,273
Total	207	456	545	2,378	3,586
Total return swaps/options:					
Investment grade	30	—	—	—	30
Non-investment grade	150	—	—	3	153
Total	180	—	—	3	183
Total credit derivatives	\$ 387	\$ 456	\$ 545	\$ 2,381	\$ 3,769
Credit-related notes:					
Investment grade	\$ —	\$ —	\$ 7	\$ 689	\$ 696
Non-investment grade	12	4	34	1,548	1,598
Total credit-related notes	\$ 12	\$ 4	\$ 41	\$ 2,237	\$ 2,294
Maximum Payout/Notional					
Credit default swaps:					
Investment grade	\$ 61,388	\$ 115,480	\$ 107,081	\$ 21,579	\$ 305,528

Non-investment grade	39,312	49,843	39,098	14,420	142,673
Total	100,700	165,323	146,179	35,999	448,201
Total return swaps/options					
Investment grade	37,394	2,581	—	143	40,118
Non-investment grade	13,751	514	143	697	15,105
Total	51,145	3,095	143	840	55,223
Total credit derivatives	\$ 151,845	\$ 168,418	\$ 146,322	\$ 36,839	\$ 503,424

The notional amount represents the maximum amount payable by the Corporation for most credit derivatives. However, the Corporation does not monitor its exposure to credit derivatives based solely on the notional amount because this measure does not take into consideration the probability of occurrence. As such, the notional amount is not a reliable indicator of the Corporation's exposure to these contracts. Instead, a risk framework is used to define risk tolerances and establish limits so that certain credit risk-related losses occur within acceptable, predefined limits.

Credit-related notes in the table above include investments in securities issued by CDO, collateralized loan obligation (CLO) and credit-linked note vehicles. These instruments are primarily classified as trading securities. The carrying value of these instruments equals the Corporation's maximum exposure to loss. The Corporation is not obligated to make any payments to the entities under the terms of the securities owned.

Credit-related Contingent Features and Collateral

The Corporation executes the majority of its derivative contracts in the OTC market with large, international financial institutions, including broker-dealers and, to a lesser degree, with a variety of non-financial companies. A significant majority of the derivative transactions are executed on a daily margin basis. Therefore, events such as a credit rating downgrade (depending on the ultimate rating level) or a breach of credit covenants would typically require an increase in the amount of collateral required of the counterparty, where applicable, and/or allow the Corporation to take additional protective measures such as early termination of all trades. Further, as previously discussed on page 102, the Corporation enters into legally enforceable master netting agreements which reduce risk by permitting closeout and netting of transactions with the same counterparty upon the occurrence of certain events.

A majority of the Corporation's derivative contracts contain credit risk-related contingent features, primarily in the form of ISDA master netting agreements and credit support documentation that enhance the creditworthiness of these instruments compared to other obligations of the respective counterparty with whom the Corporation has transacted. These contingent features may be for the benefit of the Corporation as well as its counterparties with respect to changes in the Corporation's creditworthiness and the mark-to-market exposure under the derivative transactions. At December 31, 2018 and 2017, the Corporation held cash and securities collateral of \$81.6 billion and \$77.2 billion, and posted cash and securities collateral of \$56.5 billion and \$59.2 billion in the normal course of business under derivative agreements, excluding cross-product margining agreements where clients are permitted to margin on a net basis for both derivative and secured financing arrangements.

In connection with certain OTC derivative contracts and other trading agreements, the Corporation can be required to provide additional collateral or to terminate transactions with certain counterparties in the event of a downgrade of the senior debt ratings of the Corporation or certain subsidiaries. The amount of additional collateral required depends on the contract and is usually a fixed incremental amount and/or the market value of the exposure.

At December 31, 2018, the amount of collateral, calculated based on the terms of the contracts, that the Corporation and certain subsidiaries could be required to post to counterparties but had not yet posted to counterparties was \$1.8 billion, including \$1.0 billion for Bank of America, National Association (Bank of America, N.A. or BANA).

Some counterparties are currently able to unilaterally terminate certain contracts, or the Corporation or certain subsidiaries may be required to take other action such as find a suitable replacement or obtain a guarantee. At December 31, 2018 and 2017, the liability recorded for these derivative contracts was not significant.

The table below presents the amount of additional collateral that would have been contractually required by derivative contracts and other trading agreements at December 31, 2018 if the rating agencies had downgraded their long-term senior debt ratings for the Corporation or certain subsidiaries by one incremental notch and by an additional second incremental notch.

Additional Collateral Required to be Posted Upon Downgrade at December 31, 2018

(Dollars in millions)	One Incremental notch	Second Incremental notch
Bank of America Corporation	\$ 619	\$ 347
Bank of America, N.A. and subsidiaries (1)	209	268

(1) Included in Bank of America Corporation collateral requirements in this table.

The following table presents the derivative liabilities that would be subject to unilateral termination by counterparties and the amounts of collateral that would have been contractually required at December 31, 2018 if the long-term senior debt ratings for the Corporation or certain subsidiaries had been lower by one incremental notch and by an additional second incremental notch.

Derivative Liabilities Subject to Unilateral Termination Upon Downgrade at December 31, 2018

(Dollars in millions)	One Incremental notch	Second Incremental notch
Derivative liabilities	\$ 13	\$ 581
Collateral posted	1	305

Valuation Adjustments on Derivatives

The Corporation records credit risk valuation adjustments on derivatives in order to properly reflect the credit quality of the counterparties and its own credit quality. The Corporation calculates valuation adjustments on derivatives based on a modeled expected exposure that incorporates current market risk factors. The exposure also takes into consideration credit mitigants such as enforceable master netting agreements and collateral. CDS spread data is used to estimate the default probabilities and severities that are applied to the exposures. Where no observable credit default data is available for counterparties, the Corporation uses proxies and other market data to estimate default probabilities and severity.

Valuation adjustments on derivatives are affected by changes in market spreads, non-credit related market factors such as interest rate and currency changes that affect the expected exposure, and other factors like changes in collateral arrangements and partial payments. Credit spreads and non-credit factors can move independently. For example, for an interest rate swap, changes in interest rates may increase the expected exposure, which would increase the counterparty credit valuation adjustment (CVA). Independently, counterparty credit spreads may tighten, which would result in an offsetting decrease to CVA.

The Corporation enters into risk management activities to offset market driven exposures. The Corporation often hedges the counterparty spread risk in CVA with CDS. The Corporation hedges other market risks in both CVA and DVA primarily with currency and interest rate swaps. In certain instances, the net-of-hedge amounts in the table below move in the same direction as the gross amount or may move in the opposite direction. This movement is a consequence of the complex interaction of the risks being hedged, resulting in limitations in the ability to perfectly hedge all of the market exposures at all times.

The table below presents CVA, DVA and FVA gains (losses) on derivatives, which are recorded in trading account profits, on a gross and net of hedge basis for 2018, 2017 and 2016. CVA gains reduce the cumulative CVA thereby increasing the derivative assets balance. DVA gains increase the cumulative DVA thereby decreasing the derivative liabilities balance. CVA and DVA losses have the opposite impact. FVA gains related to derivative assets reduce the cumulative FVA thereby increasing the derivative assets balance. FVA gains related to derivative liabilities increase the cumulative FVA thereby decreasing the derivative liabilities balance. FVA losses have the opposite impact.

Valuation Adjustments on Derivatives (1)

Gains (Losses)	Gross	Net	Gross	Net	Gross	Net
(Dollars in millions)	2018		2017		2016	
Derivative assets (CVA)	\$ 77	\$ 187	\$ 330	\$ 98	\$ 374	\$ 214
Derivative assets/liabilities (FVA)	(15)	14	160	178	186	102
Derivative liabilities (DVA)	(19)	(55)	(324)	(281)	24	(141)

(1) At December 31, 2018, 2017 and 2016, cumulative CVA reduced the derivative assets balance by \$60 million, \$677 million and \$1.0 billion, cumulative FVA reduced the net derivatives balance by \$15 million, \$136 million and \$296 million, and cumulative DVA reduced the derivative liabilities balance by \$432 million, \$450 million and \$774 million, respectively.

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NOTE 4 Securities

The table below presents the amortized cost, gross unrealized gains and losses, and fair value of AFS debt securities, other debt securities carried at fair value and HTM debt securities at December 31, 2018 and 2017.

Debt Securities

	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
December 31, 2018				
(Dollars in millions)				
Available-for-sale debt securities				
Mortgage-backed securities:				
Agency	\$ 125,116	\$ 138	\$ (3,428)	\$ 121,826
Agency-collateralized mortgage obligations	5,621	19	(110)	5,530
Commercial	14,469	11	(402)	14,078
Non-agency residential (1)	1,792	136	(11)	1,917
Total mortgage-backed securities	146,998	304	(3,951)	143,351
U.S. Treasury and agency securities	56,239	62	(1,378)	54,923
Non-U.S. securities	9,307	5	(6)	9,306
Other taxable securities, substantially all asset-backed securities	4,387	29	(6)	4,410
Total taxable securities	216,931	400	(5,341)	211,990
Tax-exempt securities	17,349	99	(72)	17,376
Total available-for-sale debt securities	234,280	499	(5,413)	229,366
Other debt securities carried at fair value	8,595	172	(32)	8,735
Total debt securities carried at fair value	242,875	671	(5,445)	238,101
Held-to-maturity debt securities, substantially all U.S. agency mortgage-backed securities (2)	203,652	747	(3,964)	200,435
Total debt securities (3, 4)	\$ 446,527	\$ 1,418	\$ (9,409)	\$ 438,536
December 31, 2017				
Available-for-sale debt securities				
Mortgage-backed securities:				
Agency	\$ 194,119	\$ 506	\$ (1,696)	\$ 192,929
Agency-collateralized mortgage obligations	6,846	39	(81)	6,804
Commercial	13,864	28	(208)	13,684
Non-agency residential (1)	2,410	267	(8)	2,669
Total mortgage-backed securities	217,239	840	(1,993)	216,086
U.S. Treasury and agency securities	54,523	18	(1,018)	53,523
Non-U.S. securities	6,669	9	(1)	6,677
Other taxable securities, substantially all asset-backed securities	5,699	73	(2)	5,770
Total taxable securities	284,130	940	(3,014)	282,056
Tax-exempt securities	20,541	138	(104)	20,575
Total available-for-sale debt securities	304,671	1,078	(3,118)	302,631
Other debt securities carried at fair value	12,273	252	(39)	12,486
Total debt securities carried at fair value	316,944	1,330	(3,157)	315,117
Held-to-maturity debt securities, substantially all U.S. agency mortgage-backed securities	125,013	111	(1,825)	123,299
Total debt securities (3, 4)	\$ 441,957	\$ 1,441	\$ (4,982)	\$ 438,416
Available-for-sale marketable equity securities (5)	\$ 27	\$ —	\$ (2)	\$ 25

(1) At December 31, 2018 and 2017, the underlying collateral type included approximately 68 percent and 69 percent prime, 4 percent and 13 percent Alt A, and 28 percent and 25 percent subprime.

(2) During 2018 the Corporation transferred AFS debt securities with an amortized cost of \$64.5 billion to held-to-maturity.

(3) Includes securities pledged as collateral of \$40.6 billion and \$35.8 billion at December 31, 2018 and 2017.

(4) The Corporation had debt securities from FNMA and FHLMC that each exceeded 10 percent of shareholders' equity, with an amortized cost of \$161.2 billion and \$52.2 billion, and a fair value of \$158.5 billion and \$51.4 billion at December 31, 2018, and an amortized cost of \$163.6 billion and \$50.3 billion, and a fair value of \$162.1 billion and \$50.0 billion at December 31, 2017.

(5) Classified in other assets on the Consolidated Balance Sheet

At December 31, 2018, the accumulated net unrealized loss on AFS debt securities included in accumulated OCI was \$3.7 billion, net of the related income tax benefit of \$1.2 billion. The Corporation had nonperforming AFS debt securities of \$11 million and \$99 million at December 31, 2018 and 2017.

Effective January 1, 2018, the Corporation adopted an accounting standard applicable to equity securities. For additional information, see *Note 1 - Summary of Significant Accounting Principles*. At December 31, 2018, the Corporation held equity securities at an aggregate fair value of \$893 million and other equity securities, as valued under the measurement alternative,

at cost of \$219 million, both of which are included in other assets. At December 31, 2018, the Corporation also held equity securities at fair value of \$1.2 billion included in time deposits placed and other short-term investments.

The following table presents the components of other debt securities carried at fair value where the changes in fair value are reported in other income. In 2018, the Corporation recorded unrealized mark-to-market net losses of \$73 million and realized net gains of \$140 million, and unrealized mark-to-market net gains of \$243 million and realized net losses of \$49 million in 2017. These amounts exclude hedge results.

The gross realized gains and losses on sales of AFS debt securities for 2018, 2017 and 2016 are presented in the table below.

Other Debt Securities Carried at Fair Value

(Dollars in millions)	December 31	
	2018	2017
Mortgage-backed securities	\$ 1,606	\$ 2,769
U.S. Treasury and agency securities	1,282	—
Non-U.S. securities (1)	5,844	9,488
Other taxable securities, substantially all asset-backed securities	3	229
Total	\$ 8,735	\$ 12,486

(1) These securities are primarily used to satisfy certain international regulatory liquidity requirements.

The table below presents the fair value and the associated gross unrealized losses on AFS debt securities and whether these securities have had gross unrealized losses for less than 12 months or for 12 months or longer at December 31, 2018 and 2017.

Temporarily Impaired and Other-than-temporarily Impaired AFS Debt Securities

(Dollars in millions)	Less than Twelve Months		Twelve Months or Longer		Total	
	Fair Value	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses
December 31, 2018						
Temporarily Impaired AFS debt securities						
Mortgage-backed securities:						
Agency	\$ 14,771	\$ (49)	\$ 99,211	\$ (3,379)	\$ 113,982	\$ (3,428)
Agency-collateralized mortgage obligations	3	—	4,452	(110)	4,455	(110)
Commercial	1,344	(8)	11,991	(394)	13,335	(402)
Non-agency residential	106	(8)	49	(3)	155	(11)
Total mortgage-backed securities	16,224	(65)	115,703	(3,886)	131,927	(3,951)
U.S. Treasury and agency securities	288	(1)	51,374	(1,377)	51,662	(1,378)
Non-U.S. securities	773	(5)	21	(1)	794	(6)
Other taxable securities, substantially all asset-backed securities	183	(1)	185	(5)	368	(6)
Total taxable securities	17,468	(72)	167,283	(5,269)	184,751	(5,341)
Tax-exempt securities	232	(2)	2,148	(70)	2,380	(72)
Total temporarily impaired AFS debt securities	17,700	(74)	169,431	(5,339)	187,131	(5,413)
Other-than-temporarily impaired AFS debt securities (1)						
Non-agency residential mortgage-backed securities	131	—	3	—	134	—
Total temporarily impaired and other-than-temporarily impaired AFS debt securities	\$ 17,831	\$ (74)	\$ 169,434	\$ (5,339)	\$ 187,265	\$ (5,413)

December 31, 2017

Temporarily Impaired AFS debt securities

Mortgage-backed securities:						
Agency	\$ 73,535	\$ (352)	\$ 72,612	\$ (1,344)	\$ 146,147	\$ (1,696)
Agency-collateralized mortgage obligations	2,743	(29)	1,684	(52)	4,427	(81)
Commercial	5,575	(50)	4,586	(158)	10,161	(208)
Non-agency residential	335	(7)	—	—	335	(7)
Total mortgage-backed securities	82,188	(438)	78,882	(1,554)	161,070	(1,992)
U.S. Treasury and agency securities	27,537	(251)	24,035	(767)	51,572	(1,018)
Non-U.S. securities	772	(1)	—	—	772	(1)
Other taxable securities, substantially all asset-backed securities	—	—	92	(2)	92	(2)
Total taxable securities	110,497	(690)	103,009	(2,323)	213,506	(3,013)
Tax-exempt securities	1,090	(2)	7,100	(102)	8,190	(104)
Total temporarily impaired AFS debt securities	111,587	(692)	110,109	(2,425)	221,696	(3,117)

Other-than-temporarily impaired AFS debt securities (1)

<i>Non-agency residential mortgage-backed securities</i>	58	(1)	-	58	(1)
Total temporarily impaired and other-than-temporarily impaired					
AFS debt securities	\$ 111,645	\$ (693)	\$ 110,109	\$ (2,425)	\$ 221,754
					\$ (3,118)

(1) Includes other than temporarily impaired AFS debt securities on which an OTTI loss, primarily related to changes in interest rates, remains in accumulated OCI.

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In 2018, 2017 and 2016, the Corporation had \$33 million, \$41 million and \$19 million, respectively, of credit-related OTTI losses on AFS debt securities which were recognized in other income. The amount of noncredit-related OTTI losses recognized in OCI was not significant for all periods presented.

The cumulative OTTI credit losses recognized in income on AFS debt securities that the Corporation does not intend to sell were \$120 million, \$274 million and \$253 million at December 31, 2018, 2017 and 2016, respectively.

The Corporation estimates the portion of a loss on a security that is attributable to credit using a discounted cash flow model and estimates the expected cash flows of the underlying collateral using internal credit, interest rate and prepayment risk models that incorporate management's best estimate of current key assumptions such as default rates, loss severity and prepayment rates. Assumptions used for the underlying loans that support the MBS can vary widely from loan to loan and are influenced by such factors as loan interest rate, geographic location of the borrower, borrower characteristics and collateral type. Based on these assumptions, the Corporation then determines how the underlying collateral cash flows will be distributed to each MBS issued from the applicable special purpose entity. Expected principal and interest cash flows on an impaired AFS debt security are discounted using the effective yield of each individual impaired AFS debt security.

Significant assumptions used in estimating the expected cash flows for measuring credit losses on non-agency residential mortgage-backed securities (RMBS) were as follows at December 31, 2018.

Significant Assumptions

	Weighted average	Range (1)	
		10th Percentile (2)	90th Percentile (2)
Prepayment speed	12.9%	3.3%	21.5%
Loss severity	19.8	8.5	36.4
Life default rate	16.9	1.4	64.4

(1) Represents the range of inputs/assumptions based upon the underlying collateral.

(2) The value of a variable below which the indicated percentile of observations will fall.

Annual constant prepayment speed and loss severity rates are projected considering collateral characteristics such as LTV, creditworthiness of borrowers as measured using Fair Isaac Corporation (FICO) scores, and geographic concentrations. The weighted-average severity by collateral type was 16.0 percent for prime, 16.6 percent for Alt-A and 25.6 percent for subprime at December 31, 2018. Default rates are projected by considering collateral characteristics including, but not limited to, LTV, FICO and geographic concentration. Weighted-average life default rates by collateral type were 14.7 percent for prime, 16.6 percent for Alt-A and 19.1 percent for subprime at December 31, 2018.

The remaining contractual maturity distribution and yields of the Corporation's debt securities carried at fair value and HTM debt securities at December 31, 2018 are summarized in the table below. Actual duration and yields may differ as prepayments on the loans underlying the mortgages or other ABS are passed through to the Corporation.

Maturities of Debt Securities Carried at Fair Value and Held-to-maturity Debt Securities

(Dollars in millions)	Due In One Year or Less		Due after One Year through Five Years		Due after Five Years through Ten Years		Due after Ten Years		Total	
	Amount	Yield (1)	Amount	Yield (1)	Amount	Yield (1)	Amount	Yield (1)	Amount	Yield (1)
Amortized cost of debt securities carried at fair value										
Mortgage-backed securities										
Agency	\$ --	—%	\$ 114	2.42%	\$ 1,245	2.39%	\$ 123,757	3.34%	\$ 125,116	3.33%
Agency-collateralized mortgage obligations	--	--	--	--	30	2.50	5,591	3.17	5,621	3.17
Commercial	198	1.78	2,467	2.36	10,976	2.53	828	2.96	14,469	2.52
Non-agency residential	--	--	--	--	14	--	3,268	9.88	3,282	9.84
Total mortgage backed securities	198	1.78	2,581	2.36	12,265	2.51	133,444	3.49	148,488	3.39
U.S. Treasury and agency securities	670	0.78	33,659	1.48	23,159	2.36	21	2.57	57,509	1.83
Non-U.S. securities	14,318	1.30	682	1.88	21	4.43	121	6.57	15,142	1.37
Other taxable securities, substantially all asset-backed securities	1,591	3.34	2,022	3.54	688	3.48	86	5.59	4,387	3.49
Total taxable securities	16,777	1.48	38,944	1.66	36,133	2.43	133,672	3.49	225,526	2.85
Tax-exempt securities	938	2.59	7,526	2.59	6,162	2.44	2,723	2.55	17,349	2.53
Total amortized cost of debt securities carried at fair value	\$ 17,715	1.54	\$ 46,470	1.81	\$ 42,295	2.43	\$ 136,395	3.47	\$ 242,875	2.83
Amortized cost of HTM debt securities (2)										
	\$ 657	5.78	\$ 18	3.93	\$ 1,475	2.89	\$ 201,502	3.23	\$ 203,652	3.24
Debt securities carried at fair value										
Mortgage-backed securities										
Agency	\$ --	--	\$ 114	--	\$ 1,219	--	\$ 120,493	--	\$ 121,826	--
Agency-collateralized mortgage obligations	--	--	--	--	29	--	5,501	--	5,530	--
Commercial	198	--	2,425	--	10,656	--	799	--	14,078	--
Non-agency residential	--	--	--	--	24	--	3,499	--	3,523	--
Total mortgage backed securities	198	--	2,539	--	11,928	--	130,292	--	144,957	--
U.S. Treasury and agency securities	669	--	32,694	--	22,821	--	21	--	56,205	--
Non-U.S. securities	14,315	--	692	--	19	--	124	--	15,150	--

Other taxable securities, substantially all asset-backed securities	1,585	2,043	898	87	4,413
Total taxable securities	16,767	37,968	35,466	130,524	220,725
Tax exempt securities	936	7,537	6,184	2,719	17,376
Total debt securities carried at fair value	\$ 17,703	\$ 45,505	\$ 41,650	\$ 133,243	\$ 238,101
Fair value of HTM debt securities (2)	\$ 657	\$ 18	\$ 1,429	\$ 198,331	\$ 200,435

(1) The weighted average yield is computed based on a constant effective interest rate over the contractual life of each security. The average yield considers the contractual coupon and the amortization of premiums and accretion of discounts, excluding the effect of related hedging derivatives.

(2) Substantially all U.S. agency MBS.

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NOTE 5 Outstanding Loans and Leases

The following tables present total outstanding loans and leases and an aging analysis for the Consumer Real Estate, Credit Card and Other Consumer, and Commercial portfolio segments, by class of financing receivables, at December 31, 2018 and 2017.

	30-59 Days Past Due (1)	60-89 Days Past Due (1)	90 Days or More Past Due (2)	Total Past Due 30 Days or More	Total Current or Less Than 30 Days Past Due (3)	Purchased Credit- Impaired (4)	Loans Accounted for Under the Fair Value Option	Total Outstandings
(Dollars in millions)	December 31, 2018							
Consumer real estate								
Core portfolio								
Residential mortgage	\$ 1,188	\$ 249	\$ 793	\$ 2,230	\$ 191,465			\$ 193,695
Home equity	200	85	387	672	39,338			40,010
Non-core portfolio								
Residential mortgage	624	268	2,012	2,904	8,158	\$ 3,800		14,862
Home equity	119	60	287	466	6,965	845		8,276
Credit card and other consumer								
U.S. credit card	577	418	994	1,989	96,349			98,338
Direct/indirect consumer (5)	317	90	40	447	90,719			91,166
Other consumer (6)	—	—	—	—	202			202
Total consumer	3,025	1,170	4,513	8,708	433,196	4,645		446,549
Consumer loans accounted for under the fair value option (7)							\$ 682	682
Total consumer loans and leases	3,025	1,170	4,513	8,708	433,196	4,645	682	447,231
Commercial								
U.S. commercial	594	232	573	1,399	297,878			299,277
Non-U.S. commercial	1	49	—	50	98,726			98,776
Commercial real estate (8)	29	16	14	59	60,786			60,845
Commercial lease financing	124	114	37	275	22,259			22,534
U.S. small business commercial	83	54	96	233	14,332			14,565
Total commercial	831	465	720	2,016	493,981			495,997
Commercial loans accounted for under the fair value option (7)							3,667	3,667
Total commercial loans and leases	831	465	720	2,016	493,981		3,667	499,664
Total loans and leases (9)	\$ 3,856	\$ 1,635	\$ 5,233	\$ 10,724	\$ 927,177	\$ 4,645	\$ 4,349	\$ 946,895
Percentage of outstandings	0.41%	0.17%	0.55%	1.13%	97.92%	0.49%	0.46%	100.00%

(1) Consumer real estate loans 30-59 days past due includes fully-insured loans of \$637 million and nonperforming loans of \$217 million. Consumer real estate loans 60-89 days past due includes fully-insured loans of \$269 million and nonperforming loans of \$146 million.

(2) Consumer real estate includes fully-insured loans of \$1.9 billion.

(3) Consumer real estate includes \$1.8 billion and direct/indirect consumer includes \$53 million of nonperforming loans.

(4) PCI loan amounts are shown gross of the valuation allowance.

(5) Total outstandings includes auto and specialty lending loans and leases of \$50.1 billion, unsecured consumer lending loans of \$383 million, U.S. securities based lending loans of \$37.0 billion, non-U.S. consumer loans of \$2.9 billion and other consumer loans of \$746 million.

(6) Substantially all of other consumer is consumer overdrafts.

(7) Consumer loans accounted for under the fair value option includes residential mortgage loans of \$336 million and home equity loans of \$346 million. Commercial loans accounted for under the fair value option includes U.S. commercial loans of \$2.5 billion and non-U.S. commercial loans of \$1.1 billion. For additional information, see Note 20 - Fair Value Measurements and Note 21 - Fair Value Option.

(8) Total outstandings includes U.S. commercial real estate loans of \$56.6 billion and non-U.S. commercial real estate loans of \$4.2 billion.

(9) Total outstandings includes loans and leases pledged as collateral of \$36.7 billion. The Corporation also pledged \$165.1 billion of loans with no related outstanding borrowings to secure potential borrowing capacity with the Federal Reserve Bank and Federal Home Loan Bank (FHLB).

	30-59 Days Past Due (1)	60-89 Days Past Due (1)	90 Days or More Past Due (2)	Total Past Due 30 Days or More	Total Current or Less Than 30 Days Past Due (3)	Purchased Credit- impaired (4)	Loans Accounted for Under the Fair Value Option	Total Outstandings
(Dollars in millions)	December 31, 2017							
Consumer real estate								
Core portfolio								
Residential mortgage	\$ 1,242	\$ 321	\$ 1,040	\$ 2,603	\$ 174,015			\$ 176,618
Home equity	215	108	473	796	43,449			44,245
Non-core portfolio								
Residential mortgage	1,028	468	3,535	5,031	14,161	\$ 8,001		27,193
Home equity	224	121	572	917	9,866	2,716		13,499
Credit card and other consumer								
U.S. credit card	542	405	900	1,847	94,438			96,285
Direct/Indirect consumer (5)	330	104	44	478	95,864			96,342
Other consumer (6)	—	—	—	—	166			166
Total consumer	3,581	1,527	6,564	11,672	431,959	10,717		454,348
Consumer loans accounted for under the fair value option (7)							\$ 928	928
Total consumer loans and leases	3,581	1,527	6,564	11,672	431,959	10,717	928	455,276
Commercial								
U.S. commercial	547	244	425	1,216	283,620			284,836
Non-U.S. commercial	52	1	3	56	97,736			97,792
Commercial real estate (8)	48	10	29	87	58,211			58,298
Commercial lease financing	110	68	26	204	21,912			22,116
U.S. small business commercial	95	45	88	228	13,421			13,649
Total commercial	852	368	571	1,791	474,900			476,691
Commercial loans accounted for under the fair value option (7)							4,782	4,782
Total commercial loans and leases	852	368	571	1,791	474,900		4,782	481,473
Total loans and leases (9)	\$ 4,433	\$ 1,895	\$ 7,135	\$ 13,463	\$ 906,859	\$ 10,717	\$ 5,710	\$ 936,749
Percentage of outstandings	0.48%	0.20%	0.76%	1.44%	96.81%	1.14%	0.61%	100.00%

(1) Consumer real estate loans 30-59 days past due includes fully-insured loans of \$850 million and nonperforming loans of \$253 million. Consumer real estate loans 60-89 days past due includes fully-insured loans of \$386 million and nonperforming loans of \$195 million.

(2) Consumer real estate includes fully-insured loans of \$3.2 billion.

(3) Consumer real estate includes \$2.3 billion and direct/indirect consumer includes \$43 million of nonperforming loans.

(4) PCI loan amounts are shown gross of the valuation allowance.

(5) Total outstandings includes auto and specialty lending loans and leases of \$52.4 billion, unsecured consumer lending loans of \$469 million, U.S. securities-based lending loans of \$39.8 billion, non-U.S. consumer loans of \$3.0 billion and other consumer loans of \$684 million.

(6) Substantially all of other consumer is consumer overdrafts.

(7) Consumer loans accounted for under the fair value option includes residential mortgage loans of \$567 million and home equity loans of \$361 million. Commercial loans accounted for under the fair value option includes U.S. commercial loans of \$2.6 billion and non-U.S. commercial loans of \$2.2 billion. For additional information, see Note 20 - Fair Value Measurements and Note 21 - Fair Value Option.

(8) Total outstandings includes U.S. commercial real estate loans of \$54.8 billion and non-U.S. commercial real estate loans of \$3.5 billion.

(9) Total outstandings includes loans and leases pledged as collateral of \$40.1 billion. The Corporation also pledged \$160.3 billion of loans with no related outstanding borrowings to secure potential borrowing capacity with the Federal Reserve Bank and FHIA.

The Corporation categorizes consumer real estate loans as core and non-core based on loan and customer characteristics such as origination date, product type, LTV, FICO score and delinquency status consistent with its current consumer and mortgage servicing strategy. Generally, loans that were originated after January 1, 2010, qualified under government-sponsored enterprise (GSE) underwriting guidelines, or otherwise met the Corporation's underwriting guidelines in place in 2015 are characterized as core loans. All other loans are generally characterized as non-core loans and represent runoff portfolios.

The Corporation has entered into long-term credit protection agreements with FNMA and FHLMC on loans totaling \$6.1 billion and \$6.3 billion at December 31, 2018 and 2017, providing full credit protection on residential mortgage loans that become severely delinquent. All of these loans are individually insured and therefore the Corporation does not record an allowance for credit losses related to these loans.

During 2018, the Corporation sold \$11.6 billion of consumer real estate loans compared to \$4.0 billion in 2017. In addition to recurring loan sales, the 2018 amount includes sales of loans, primarily non-core, with a carrying value of \$9.6 billion and related gains of \$731 million recorded in other income in the Consolidated Statement of Income.

Nonperforming Loans and Leases

The Corporation classifies junior-lien home equity loans as nonperforming when the first-lien loan becomes 90 days past due even if the junior-lien loan is performing. At December 31, 2018 and 2017, \$221 million and \$330 million of such junior-lien home equity loans were included in nonperforming loans.

The Corporation classifies consumer real estate loans that have been discharged in Chapter 7 bankruptcy and not reaffirmed by the borrower as TDRs, irrespective of payment history or delinquency status, even if the repayment terms for the loan have not been otherwise modified. The Corporation continues to have a lien on the underlying collateral. At December 31, 2018, nonperforming loans discharged in Chapter 7 bankruptcy with no change in repayment terms were \$185 million of which \$98 million were current on their contractual payments, while \$70 million were 90 days or more past due. Of the contractually current nonperforming loans, 63 percent were discharged in Chapter 7 bankruptcy over 12 months ago, and 55 percent were discharged 24 months or more ago.

During 2018, the Corporation sold nonperforming and PCI consumer real estate loans with a carrying value of \$5.3 billion, including \$4.4 billion of PCI loans, compared to \$1.3 billion, including \$803 million of PCI loans, in 2017.

The table below presents the Corporation's nonperforming loans and leases including nonperforming TDRs,

and loans accruing past due 90 days or more at December 31, 2018 and 2017. Nonperforming LHFS are excluded from nonperforming loans and leases as they are recorded at either fair value or the lower of cost or fair value. For more information on the criteria for classification as nonperforming, see Note 1 - Summary of Significant Accounting Principles

Credit Quality

	Nonperforming Loans and Leases		Accruing Past Due 90 Days or More	
	December 31			
(Dollars in millions)	2018	2017	2018	2017
Consumer real estate				
Core portfolio				
Residential mortgage (1)	\$ 1,010	\$ 1,087	\$ 274	\$ 417
Home equity	955	1,079	—	—
Non-core portfolio				
Residential mortgage (1)	883	1,369	1,610	2,813
Home equity	938	1,565	—	—
Credit card and other consumer				
U.S. credit card	n/a	n/a	994	900
Direct/indirect consumer	56	46	38	40
Total consumer	3,842	5,166	2,916	4,170
Commercial				
U.S. commercial	794	814	197	144
Non-U.S. commercial	80	299	—	3
Commercial real estate	156	112	4	4
Commercial lease financing	18	24	29	19
U.S. small business commercial	54	55	84	75
Total commercial	1,102	1,304	314	245
Total loans and leases	\$ 4,944	\$ 6,470	\$ 3,230	\$ 4,415

(1) Residential mortgage loans in the core and non-core portfolios accruing past due 90 days or more are fully-insured loans. At December 31, 2018 and 2017, residential mortgage includes \$1.4 billion and \$2.2 billion of loans on which interest has been curtailed by the FIMA and therefore are no longer accruing interest, although principal is still insured, and \$498 million and \$1.0 billion of loans on which interest is still accruing.

n/a = not applicable

Credit Quality Indicators

The Corporation monitors credit quality within its Consumer Real Estate, Credit Card and Other Consumer, and Commercial portfolio segments based on primary credit quality indicators. For more information on the portfolio segments, see Note 1 - Summary of Significant Accounting Principles. Within the Consumer Real Estate portfolio segment, the primary credit quality indicators are refreshed LTV and refreshed FICO score. Refreshed LTV measures the carrying value of the loan as a percentage of the value of the property securing the loan, refreshed quarterly. Home equity loans are evaluated using CLTV which measures the carrying value of the Corporation's loan and available line of credit combined with any outstanding senior liens against the property as a percentage of the value of the property securing the loan, refreshed quarterly. FICO score measures the creditworthiness of the borrower based on the financial obligations of the borrower and the borrower's credit history. FICO scores are typically refreshed quarterly or more

frequently. Certain borrowers (e.g., borrowers that have had debts discharged in a bankruptcy proceeding) may not have their FICO scores updated. FICO scores are also a primary credit quality indicator for the Credit Card and Other Consumer portfolio segment and the business card portfolio within U.S. small business commercial. Within the Commercial portfolio segment, loans are evaluated using the internal classifications of pass rated or reservable criticized as the primary credit quality indicators. The term reservable criticized refers to those commercial loans that are internally classified or listed by the Corporation as Special Mention, Substandard or Doubtful, which are asset quality categories defined by regulatory authorities. These assets have an elevated level of risk and may have a high probability of default or total loss. Pass rated refers to all loans not considered reservable criticized. In addition to these primary credit quality indicators, the Corporation uses other credit quality indicators for certain types of loans.

The following tables present certain credit quality indicators for the Corporation's Consumer Real Estate, Credit Card and Other Consumer, and Commercial portfolio segments, by class of financing receivables, at December 31, 2018 and 2017.

Consumer Real Estate – Credit Quality Indicators (1)

	Core Residential Mortgage (2)	Non-core Residential Mortgage (2)	Residential Mortgage PCI	Core Home Equity (2)	Non-core Home Equity (2)	Home Equity PCI
(Dollars in millions)	December 31, 2018					
Refreshed LTV (3)						
Less than or equal to 90 percent	\$ 173,911	\$ 6,861	\$ 3,411	\$ 39,246	\$ 5,870	\$ 608
Greater than 90 percent but less than or equal to 100 percent	2,349	340	193	354	603	112
Greater than 100 percent	817	349	196	410	958	125
Fully-insured loans (4)	16,618	3,512				
Total consumer real estate	\$ 193,695	\$ 11,062	\$ 3,800	\$ 40,010	\$ 7,431	\$ 845
Refreshed FICO score						
Less than 620	\$ 2,125	\$ 1,264	\$ 710	\$ 1,064	\$ 1,326	\$ 178
Greater than or equal to 620 and less than 680	4,538	1,068	651	2,008	1,575	145
Greater than or equal to 680 and less than 740	23,841	1,841	1,201	7,008	1,968	220
Greater than or equal to 740	146,573	3,377	1,238	29,930	2,563	302
Fully-insured loans (4)	16,618	3,512				
Total consumer real estate	\$ 193,695	\$ 11,062	\$ 3,800	\$ 40,010	\$ 7,431	\$ 845

(1) Excludes \$682 million of loans accounted for under the fair value option.

(2) Excludes PCI loans

(3) Refreshed LTV percentages for PCI loans are calculated using the carrying value net of the related valuation allowance.

(4) Credit quality indicators are not reported for fully-insured loans as principal repayment is insured.

Credit Card and Other Consumer – Credit Quality Indicators

	U.S. Credit Card	Direct/Indirect Consumer	Other Consumer
(Dollars in millions)	December 31, 2018		
Refreshed FICO score			
Less than 620	\$ 5,016	\$ 1,719	
Greater than or equal to 620 and less than 680	12,415	3,124	
Greater than or equal to 680 and less than 740	35,781	8,921	
Greater than or equal to 740	45,126	36,709	
Other internal credit metrics (1, 2)		40,693	\$ 202
Total credit card and other consumer	\$ 98,338	\$ 91,166	\$ 202

(1) Other internal credit metrics may include delinquency status, geography or other factors.

(2) Direct/indirect consumer includes \$39.9 billion of securities-based lending which is overcollateralized and therefore has minimal credit risk

Commercial – Credit Quality Indicators (1)

	U.S. Commercial	Non-U.S. Commercial	Commercial Real Estate	Commercial Lease Financing	U.S. Small Business Commercial (2)
(Dollars in millions)	December 31, 2018				
Risk ratings					
Pass rated	\$ 291,918	\$ 97,916	\$ 59,910	\$ 22,168	\$ 389
Reservable criticized	7,359	860	935	366	29
Refreshed FICO score (3)					
Less than 620					264
Greater than or equal to 620 and less than 680					684
Greater than or equal to 680 and less than 740					2,072
Greater than or equal to 740					4,254
Other internal credit metrics (3, 4)					6,873
Total commercial	\$ 299,277	\$ 98,776	\$ 60,845	\$ 22,534	\$ 14,565

(1) Excludes \$3.7 billion of loans accounted for under the fair value option

(2) U.S. small business commercial includes \$731 million of credit card and small business loans which are evaluated using refreshed FICO scores or internal credit metrics, including delinquency status, rather than risk ratings. At December 31, 2018, 99 percent of the balances where internal credit metrics are used was current or less than 30 days past due

(3) Refreshed FICO score and other internal credit metrics are applicable only to the U.S. small business commercial portfolio

(4) Other internal credit metrics may include delinquency status, application scores, geography or other factors

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Consumer Real Estate – Credit Quality Indicators (1)

	Core Residential Mortgage (2)	Non-core Residential Mortgage (2)	Residential Mortgage PCI	Core Home Equity (2)	Non-core Home Equity (2)	Home Equity PCI
(Dollars in millions)	December 31, 2017					
Refreshed LTV (3)						
Less than or equal to 90 percent	\$ 153,669	\$ 12,135	\$ 6,872	\$ 43,048	\$ 7,944	\$ 1,781
Greater than 90 percent but less than or equal to 100 percent	3,082	850	559	549	1,053	412
Greater than 100 percent	1,322	1,011	570	648	1,786	523
Fully-insured loans (4)	18,545	5,196				
Total consumer real estate	\$ 176,618	\$ 19,192	\$ 8,001	\$ 44,245	\$ 10,783	\$ 2,716
Refreshed FICO score						
Less than 620	\$ 2,234	\$ 2,390	\$ 1,941	\$ 1,169	\$ 2,098	\$ 452
Greater than or equal to 620 and less than 680	4,531	2,086	1,657	2,371	2,393	466
Greater than or equal to 680 and less than 740	22,934	3,519	2,396	8,115	2,723	786
Greater than or equal to 740	128,374	6,001	2,007	32,590	3,569	1,012
Fully-insured loans (4)	18,545	5,196				
Total consumer real estate	\$ 176,618	\$ 19,192	\$ 8,001	\$ 44,245	\$ 10,783	\$ 2,716
(1) Excludes \$928 million of loans accounted for under the fair value option.						
(2) Excludes PCI loans.						
(3) Refreshed LTV percentages for PCI loans are calculated using the carrying value net of the related valuation allowance.						
(4) Credit quality indicators are not reported for fully-insured loans as principal repayment is insured.						

Credit Card and Other Consumer – Credit Quality Indicators

	U.S. Credit Card	Direct/Indirect Consumer	Other Consumer
(Dollars in millions)	December 31, 2017		
Refreshed FICO score			
Less than 620	\$ 4,730	\$ 2,005	
Greater than or equal to 620 and less than 680	12,422	4,064	
Greater than or equal to 680 and less than 740	35,656	10,371	
Greater than or equal to 740	43,477	36,445	
Other internal credit metrics (1, 2)		43,457	\$ 166
Total credit card and other consumer	\$ 96,285	\$ 96,342	\$ 166
(1) Other internal credit metrics may include delinquency status, geography or other factors.			
(2) Direct/indirect consumer includes \$42.8 billion of securities-based lending which is overcollateralized and therefore has minimal credit risk.			

Commercial – Credit Quality Indicators (1)

	U.S. Commercial	Non-U.S. Commercial	Commercial Real Estate	Commercial Lease Financing	U.S. Small Business Commercial (2)
(Dollars in millions)	December 31, 2017				
Risk ratings					
Pass rated	\$ 275,904	\$ 96,193	\$ 57,732	\$ 21,535	\$ 322
Reservable criticized	8,932	1,593	566	581	50
Refreshed FICO score (3)					
Less than 620					223
Greater than or equal to 620 and less than 680					625
Greater than or equal to 680 and less than 740					1,875
Greater than or equal to 740					3,713
Other internal credit metrics (3, 4)					6,841
Total commercial	\$ 284,836	\$ 97,792	\$ 58,298	\$ 22,116	\$ 13,649
(1) Excludes \$4.8 billion of loans accounted for under the fair value option.					
(2) U.S. small business commercial includes \$709 million of criticized business card and small business loans which are evaluated using refreshed FICO scores or internal credit metrics including delinquency status, rather than risk ratings. At December 31, 2017, 96 percent of the balances where internal credit metrics are used was current or less than 30 days past due.					

⁽³⁾ Refreshed FICO score and other internal credit metrics are applicable only to the U.S. small business commercial portfolio.
⁽⁴⁾ Other internal credit metrics may include delinquency status, application scores, geography or other factors.

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Impaired Loans and Troubled Debt Restructurings

A loan is considered impaired when, based on current information, it is probable that the Corporation will be unable to collect all amounts due from the borrower in accordance with the contractual terms of the loan. For more information, see Note 1 - *Summary of Significant Accounting Principles*.

Consumer Real Estate

Impaired consumer real estate loans within the Consumer Real Estate portfolio segment consist entirely of TDRs. Excluding PCI loans, most modifications of consumer real estate loans meet the definition of TDRs when a binding offer is extended to a borrower. Modifications of consumer real estate loans are done in accordance with government programs or the Corporation's proprietary programs. These modifications are considered to be TDRs if concessions have been granted to borrowers experiencing financial difficulties. Concessions may include reductions in interest rates, capitalization of past due amounts, principal and/or interest forbearance, payment extensions, principal and/or interest forgiveness, or combinations thereof.

Prior to permanently modifying a loan, the Corporation may enter into trial modifications with certain borrowers under both government and proprietary programs. Trial modifications generally represent a three- to four-month period during which the borrower makes monthly payments under the anticipated modified payment terms. Upon successful completion of the trial period, the Corporation and the borrower enter into a permanent modification. Binding trial modifications are classified as TDRs when the trial offer is made and continue to be classified as TDRs regardless of whether the borrower enters into a permanent modification.

Consumer real estate loans that have been discharged in Chapter 7 bankruptcy with no change in repayment terms and not reaffirmed by the borrower of \$858 million were included in TDRs at December 31, 2018, of which \$185 million were classified as nonperforming and \$344 million were loans fully insured by the FHA. For more information on loans discharged in Chapter 7 bankruptcy, see Nonperforming Loans and Leases in this Note.

Consumer real estate TDRs are measured primarily based on the net present value of the estimated cash flows discounted at the loan's original effective interest rate. If the carrying value of a TDR exceeds this amount, a specific allowance is recorded as a component of the allowance for loan and lease losses.

Alternatively, consumer real estate TDRs that are considered to be dependent solely on the collateral for repayment (e.g., due to the lack of income verification) are measured based on the estimated fair value of the collateral and a charge-off is recorded if the carrying value exceeds the fair value of the collateral. Consumer real estate loans that reached 180 days past due prior to modification had been charged off to their net realizable value, less costs to sell, before they were modified as TDRs in accordance with established policy. Therefore, modifications of consumer real estate loans that are 180 or more days past due as TDRs do not have an impact on the allowance for loan and lease losses nor are additional charge-offs required at the time of modification. Subsequent declines in the fair value of the collateral after a loan has reached 180 days past due are recorded as charge-offs. Fully-insured loans are protected against principal loss, and therefore, the Corporation does not record an allowance for loan and lease losses on the outstanding principal balance, even after they have been modified in a TDR.

At December 31, 2018 and 2017, remaining commitments to lend additional funds to debtors whose terms have been modified in a consumer real estate TDR were not significant. Consumer real estate foreclosed properties totaled \$244 million and \$236 million at December 31, 2018 and 2017. The carrying value of consumer real estate loans, including fully-insured and PCI loans, for which formal foreclosure proceedings were in process at December 31, 2018 was \$2.5 billion. During 2018 and 2017, the Corporation reclassified \$670 million and \$815 million of consumer real estate loans to foreclosed properties or, for properties acquired upon foreclosure of certain government-guaranteed loans (principally FHA-insured loans), to other assets. The reclassifications represent non-cash investing activities and, accordingly, are not reflected in the Consolidated Statement of Cash Flows.

The following table provides the unpaid principal balance, carrying value and related allowance at December 31, 2018 and 2017, and the average carrying value and interest income recognized in 2018, 2017 and 2016 for impaired loans in the Corporation's Consumer Real Estate portfolio segment. Certain impaired consumer real estate loans do not have a related allowance as the current valuation of these impaired loans exceeded the carrying value, which is net of previously recorded charge-offs.

Impaired Loans – Consumer Real Estate

	Unpaid Principal Balance	Carrying Value	Related Allowance	Unpaid Principal Balance	Carrying Value	Related Allowance
(Dollars in millions)	December 31, 2018			December 31, 2017		
With no recorded allowance						
Residential mortgage	\$ 5,396	\$ 4,268	\$ —	\$ 8,856	\$ 6,870	\$ —
Home equity	2,948	1,599	—	3,622	1,956	—
With an allowance recorded						
Residential mortgage	\$ 1,977	\$ 1,929	\$ 114	\$ 2,908	\$ 2,828	\$ 174
Home equity	812	760	144	972	900	174
Total (1)						
Residential mortgage	\$ 7,373	\$ 6,197	\$ 114	\$ 11,764	\$ 9,698	\$ 174
Home equity	3,760	2,359	144	4,594	2,856	174
	Average Carrying Value	Interest Income Recognized (2)	Average Carrying Value	Interest Income Recognized (2)	Average Carrying Value	Interest Income Recognized (2)
	2018		2017		2016	
With no recorded allowance						
Residential mortgage	\$ 5,424	\$ 207	\$ 7,737	\$ 311	\$ 10,178	\$ 360
Home equity	1,894	105	1,997	109	1,906	90
With an allowance recorded						
Residential mortgage	\$ 2,409	\$ 91	\$ 3,414	\$ 123	\$ 5,067	\$ 167
Home equity	861	25	858	24	852	24
Total (1)						
Residential mortgage	\$ 7,833	\$ 298	\$ 11,151	\$ 434	\$ 15,245	\$ 527
Home equity	2,755	130	2,855	133	2,758	114

(1) During 2018, previously impaired consumer real estate loans with a carrying value of \$2.3 billion were sold.

(2) Interest income recognized includes interest accrued and collected on the outstanding balances of accruing impaired loans as well as interest cash collections on nonaccruing impaired loans for which the principal is considered collectible.

The table below presents the December 31, 2018, 2017 and 2016 unpaid principal balance, carrying value, and average pre- and post-modification interest rates on consumer real estate loans that were modified in TDRs during 2018, 2017 and 2016. The following Consumer Real Estate portfolio segment tables include loans that were initially classified as TDRs during the period and also loans that had previously been classified as TDRs and were modified again during the period.

Consumer Real Estate – TDRs Entered Into During 2018, 2017 and 2016

	Unpaid Principal Balance	Carrying Value	Pre-Modification Interest Rate	Post-Modification Interest Rate (1)
(Dollars in millions)	December 31, 2018			
Residential mortgage	\$ 774	\$ 641	4.33%	4.21%
Home equity	489	358	4.46	3.74
Total	\$ 1,263	\$ 999	4.38	4.03
	December 31, 2017			
Residential mortgage	\$ 824	\$ 712	4.43%	4.16%
Home equity	764	590	4.22	3.49
Total	\$ 1,588	\$ 1,302	4.23	3.83
	December 31, 2016			
Residential mortgage	\$ 1,130	\$ 1,017	4.73%	4.16%
Home equity	849	649	3.95	2.72
Total	\$ 1,979	\$ 1,666	4.40	3.54

(1) The post-modification interest rate reflects the interest rate applicable only to permanently capitalized modifications, which exclude loans that are in a trial modification period.

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The table below presents the December 31, 2018, 2017 and 2016 carrying value for consumer real estate loans that were modified in a TDR during 2018, 2017 and 2016, by type of modification

Consumer Real Estate – Modification Programs

(Dollars in millions)	TDRs Entered Into During		
	2018	2017	2016
Modifications under government programs			
Contractual interest rate reduction	\$ 19	\$ 59	\$ 151
Principal and/or interest forbearance	—	4	13
Other modifications (1)	42	22	23
Total modifications under government programs	61	85	187
Modifications under proprietary programs			
Contractual interest rate reduction	209	281	235
Capitalization of past due amounts	96	63	40
Principal and/or interest forbearance	51	38	72
Other modifications (1)	167	55	75
Total modifications under proprietary programs	523	437	422
Trial modifications	285	569	831
Loans discharged in Chapter 7 bankruptcy (2)	130	211	226
Total modifications	\$ 999	\$ 1,302	\$ 1,666

(1) Includes other modifications such as term or payment extensions and repayment plans. During 2018, this included \$196 million of modifications that met the definition of a TDR related to the 2017 hurricanes. These modifications had been written down to their net realizable value less costs to sell or were fully insured as of December 31, 2018.

(2) Includes loans discharged in Chapter 7 bankruptcy with no change in repayment terms that are classified as TDRs.

The table below presents the carrying value of consumer real estate loans that entered into payment default during 2018, 2017 and 2016 that were modified in a TDR during the 12 months preceding payment default. A payment default for consumer real estate TDRs is recognized when a borrower has missed three monthly payments (not necessarily consecutively) since modification.

Consumer Real Estate – TDRs Entering Payment Default that were Modified During the Preceding 12 Months

(Dollars in millions)	2018	2017	2016
Modifications under government programs	\$ 39	\$ 81	\$ 262
Modifications under proprietary programs	158	138	196
Loans discharged in Chapter 7 bankruptcy (1)	64	116	158
Trial modifications (2)	107	391	824
Total modifications	\$ 368	\$ 726	\$ 1,440

(1) Includes loans discharged in Chapter 7 bankruptcy with no change in repayment terms that are classified as TDRs.

(2) Includes trial modification offers to which the customer did not respond.

Credit Card and Other Consumer

Impaired loans within the Credit Card and Other Consumer portfolio segment consist entirely of loans that have been modified in TDRs. The Corporation seeks to assist customers that are experiencing financial difficulty by modifying loans while ensuring compliance with federal and local laws and guidelines. Credit card and other consumer loan modifications generally involve reducing the interest rate on the account, placing the customer on a fixed payment plan not exceeding 60 months and canceling the customer's available line of credit, all of which are considered TDRs. The Corporation makes loan modifications directly with borrowers for debt held only by the Corporation (internal programs). Additionally, the Corporation makes loan modifications for

borrowers working with third-party renegotiation agencies that provide solutions to customers' entire unsecured debt structures (external programs). The Corporation classifies other secured consumer loans that have been discharged in Chapter 7 bankruptcy as TDRs which are written down to collateral value and placed on nonaccrual status no later than the time of discharge. For more information on the regulatory guidance on loans discharged in Chapter 7 bankruptcy, see Nonperforming Loans and Leases in this Note.

The table below provides the unpaid principal balance, carrying value and related allowance at December 31, 2018 and 2017, and the average carrying value for 2018, 2017 and 2016 on TDRs within the Credit Card and Other Consumer portfolio segment.

Impaired Loans – Credit Card and Other Consumer

	Unpaid Principal Balance	Carrying Value (1)	Related Allowance	Unpaid Principal Balance	Carrying Value (1)	Related Allowance	Average Carrying Value (2)		
(Dollars in millions)	December 31, 2018			December 31, 2017			2018	2017	2016
With no recorded allowance									
Direct/Indirect consumer	\$ 72	\$ 33	\$ —	\$ 58	\$ 28	\$ —	\$ 30	\$ 21	\$ 20
With an allowance recorded									
U.S. credit card	\$ 522	\$ 533	\$ 154	\$ 454	\$ 461	\$ 125	\$ 491	\$ 464	\$ 556
Non-U.S. credit card (3)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	47	111
Direct/Indirect consumer	—	—	—	1	1	—	1	2	10
Total									
U.S. credit card	\$ 522	\$ 533	\$ 154	\$ 454	\$ 461	\$ 125	\$ 491	\$ 464	\$ 556
Non-U.S. credit card (3)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	47	111
Direct/Indirect consumer	72	33	—	59	29	—	31	23	30

(1) Includes accrued interest and fees.

(2) The related interest income recognized, which included interest accrued and collected on the outstanding balances of accruing impaired loans as well as interest cash collections on nonaccruing impaired loans for which the principal was considered collectible, was not significant in 2018, 2017 and 2016.

(3) In 2017, the Corporation sold its non-U.S. consumer credit card business.

n/a = not applicable

The table below provides information on the Corporation's primary modification programs for the Credit Card and Other Consumer TDR portfolio at December 31, 2018 and 2017.

Credit Card and Other Consumer – TDRs by Program Type at December 31

	U.S. Credit Card		Direct/Indirect Consumer		Total TDRs by Program Type	
(Dollars in millions)	2018	2017	2018	2017	2018	2017
Internal programs	\$ 259	\$ 203	\$ —	\$ 1	\$ 259	\$ 204
External programs	273	257	—	—	273	257
Other	1	1	33	28	34	29
Total	\$ 533	\$ 461	\$ 33	\$ 29	\$ 566	\$ 490
Percent of balances current or less than 30 days past due	85%	87%	81%	88%	85%	87%

The table below provides information on the Corporation's Credit Card and Other Consumer TDR portfolio including the December 31, 2018, 2017 and 2016 unpaid principal balance, carrying value, and average pre- and post-modification interest rates of loans that were modified in TDRs during 2018, 2017 and 2016.

Credit Card and Other Consumer – TDRs Entered Into During 2018, 2017 and 2016

	Unpaid Principal Balance	Carrying Value (1)	Pre- Modification Interest Rate	Post- Modification Interest Rate
(Dollars in millions)	December 31, 2018			
U.S. credit card	\$ 278	\$ 292	19.49%	5.24%
Direct/Indirect consumer	42	23	5.10	4.95
Total	\$ 320	\$ 315	18.45	5.22
	December 31, 2017			
U.S. credit card	\$ 203	\$ 213	16.47%	5.32%
Direct/Indirect consumer	37	22	4.61	4.30
Total	\$ 240	\$ 235	17.17	5.22
	December 31, 2016			
U.S. credit card	\$ 153	\$ 172	17.54%	5.47%
Non-U.S. credit card	66	75	23.99	0.52

Direct/indirect consumer	21	13	3.44	3.29
Total	\$ 250	\$ 260	18.73	3.93
(1) Includes accrued interest and fees.				

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Credit card and other consumer loans are deemed to be in payment default during the quarter in which a borrower misses the second of two consecutive payments. Payment defaults are one of the factors considered when projecting future cash flows in the calculation of the allowance for loan and lease losses for impaired credit card and other consumer loans. Based on historical experience, the Corporation estimates that 13 percent of new U.S. credit card TDRs and 14 percent of new direct/indirect consumer TDRs may be in payment default within 12 months after modification.

Commercial Loans

Impaired commercial loans include nonperforming loans and TDRs (both performing and nonperforming). Modifications of loans to commercial borrowers that are experiencing financial difficulty are designed to reduce the Corporation's loss exposure while providing the borrower with an opportunity to work through financial difficulties, often to avoid foreclosure or bankruptcy. Each modification is unique and reflects the individual circumstances of the borrower. Modifications that result in a TDR may include extensions of maturity at a concessionary (below market) rate of interest, payment forbearances or other actions designed to benefit the customer while mitigating the Corporation's risk exposure. Reductions in interest rates are rare. Instead, the interest rates are typically increased, although the increased rate may not represent a market rate of interest. Infrequently,

concessions may also include principal forgiveness in connection with foreclosure, short sale or other settlement agreements leading to termination or sale of the loan.

At the time of restructuring, the loans are remeasured to reflect the impact, if any, on projected cash flows resulting from the modified terms. If there was no forgiveness of principal and the interest rate was not decreased, the modification may have little or no impact on the allowance established for the loan. If a portion of the loan is deemed to be uncollectible, a charge-off may be recorded at the time of restructuring. Alternatively, a charge-off may have already been recorded in a previous period such that no charge-off is required at the time of modification. For more information on modifications for the U.S. small business commercial portfolio, see Credit Card and Other Consumer in this Note.

At December 31, 2018 and 2017, remaining commitments to lend additional funds to debtors whose terms have been modified in a commercial loan TDR were \$297 million and \$205 million.

The table below provides information on impaired loans in the Commercial loan portfolio segment including the unpaid principal balance, carrying value and related allowance at December 31, 2018 and 2017, and the average carrying value for 2018, 2017 and 2016. Certain impaired commercial loans do not have a related allowance because the valuation of these impaired loans exceeded the carrying value, which is not of previously recorded charge-offs.

Impaired Loans – Commercial

	Unpaid Principal Balance			Carrying Value	Related Allowance	Unpaid Principal Balance			Carrying Value	Related Allowance	Average Carrying Value (4)							
(Dollars in millions)	December 31, 2018					December 31, 2017					2018	2017	2016					
With no recorded allowance																		
U.S. commercial	\$	638	\$	616	\$	—	\$	576	\$	571	\$	—	\$	655	\$	772	\$	787
Non-U.S. commercial		93		93		—		14		11		—		43		46		34
Commercial real estate		—		—		—		83		80		—		44		69		67
Commercial lease financing		—		—		—		—		—		—		3		—		—
With an allowance recorded																		
U.S. commercial	\$	1,437	\$	1,270	\$	121	\$	1,393	\$	1,109	\$	98	\$	1,162	\$	1,260	\$	1,569
Non-U.S. commercial		155		149		30		528		507		58		327		463		409
Commercial real estate		247		162		16		133		41		4		46		73		92
Commercial lease financing		71		71		—		20		18		3		42		8		2
U.S. small business commercial (2)		83		72		29		84		70		27		73		73		87
Total																		
U.S. commercial	\$	2,075	\$	1,886	\$	121	\$	1,969	\$	1,680	\$	98	\$	1,817	\$	2,032	\$	2,356
Non-U.S. commercial		248		242		30		542		518		58		370		509		443
Commercial real estate		247		162		16		216		121		4		90		142		159
Commercial lease financing		71		71		—		20		18		3		45		8		2
U.S. small business commercial (2)		83		72		29		84		70		27		73		73		87

(1) The related interest income recognized, which included interest accrued and collected on the outstanding balances of accruing impaired loans as well as interest cash collections on nonaccruing impaired loans for which the principal was considered collectible, was not significant in 2018, 2017 and 2016.

(2) Includes U.S. small business commercial renegotiated TDR loans and related allowance.

The table below presents the December 31, 2018, 2017 and 2016 unpaid principal balance and carrying value of commercial loans that were modified as TDRs during 2018, 2017 and 2016. The table below includes loans that were initially classified as TDRs during the period and also loans that had previously been classified as TDRs and were modified again during the period.

Commercial – TDRs Entered Into During 2018, 2017 and 2016

(Dollars in millions)	Unpaid Principal Balance		Carrying Value	
	December 31, 2018		December 31, 2017	
U.S. commercial	\$	1,154	\$	1,098
Non-U.S. commercial		166		165
Commercial real estate		115		115
Commercial lease financing		68		68
U.S. small business commercial (1)		9		8
Total	\$	1,512	\$	1,454
December 31, 2017				
U.S. commercial	\$	1,033	\$	922
Non-U.S. commercial		105		105
Commercial real estate		35		24
Commercial lease financing		20		17
U.S. small business commercial (1)		13		13
Total	\$	1,206	\$	1,081
December 31, 2016				
U.S. commercial	\$	1,556	\$	1,482
Non-U.S. commercial		255		253
Commercial real estate		77		77
Commercial lease financing		6		4
U.S. small business commercial (1)		1		1
Total	\$	1,895	\$	1,817

(1) U.S. small business commercial TDRs are comprised of renegotiated small business card loans.

A commercial TDR is generally deemed to be in payment default when the loan is 90 days or more past due, including delinquencies that were not resolved as part of the modification. U.S. small business commercial TDRs are deemed to be in payment default during the quarter in which a borrower misses the second of two consecutive payments. Payment defaults are one of the factors considered when projecting future cash flows, along with observable market prices or fair value of collateral when measuring the allowance for loan and lease losses. TDRs that were in payment default had a carrying value of \$150 million, \$64 million and \$140

million for U.S. commercial and \$3 million, \$19 million and \$34 million for commercial real estate at December 31, 2018, 2017 and 2016, respectively.

Purchased Credit-impaired Loans

The table below shows activity for the accretable yield on PCI loans, which includes the Countrywide Financial Corporation (Countrywide) portfolio and loans repurchased in connection with the 2013 settlement with FNMA. The amount of accretable yield is affected by changes in credit outlooks, including metrics such as default rates and loss severities, prepayment speeds, which can change the amount and period of time over which interest payments are expected to be received, and the interest rates on variable rate loans. The reclassifications from nonaccretable difference during 2018 and 2017 were primarily due to an increase in the expected principal and interest cash flows due to lower default estimates and the rising interest rate environment.

Rollforward of Accretable Yield

(Dollars in millions)		
Accretable yield, January 1, 2017	\$	3,805
Accretion		(601)
Disposals/transfers		(634)
Reclassifications from nonaccretable difference		219
Accretable yield, December 31, 2017		2,789
Accretion		(457)
Disposals/transfers		(1,456)
Reclassifications from nonaccretable difference		368
Accretable yield, December 31, 2018	\$	1,244

During 2018 and 2017, the Corporation sold PCI loans with a carrying value of \$4.4 billion and \$803 million. For more information on PCI loans, see Note 1 – Summary of Significant Accounting Principles and for the carrying value and valuation allowance for PCI loans, see Note 6 – Allowance for Credit Losses.

Loans Held-for-sale

The Corporation had LHFS of \$10.4 billion and \$11.4 billion at December 31, 2018 and 2017. Cash and non-cash proceeds from sales and paydowns of loans originally classified as LHFS were \$29.2 billion, \$41.3 billion and \$32.6 billion for 2018, 2017 and 2016, respectively. Cash used for originations and purchases of LHFS totaled \$28.1 billion, \$43.5 billion and \$33.1 billion for 2018, 2017 and 2016, respectively.

NOTE 6 Allowance for Credit Losses

The table below summarizes the changes in the allowance for credit losses by portfolio segment for 2018, 2017 and 2016.

	Consumer Real Estate (1)	Credit Card and Other Consumer	Commercial	Total
(Dollars in millions)	2018			
Allowance for loan and lease losses, January 1	\$ 1,720	\$ 3,663	\$ 5,010	\$ 10,393
Loans and leases charged off	(690)	(4,037)	(675)	(5,402)
Recoveries of loans and leases previously charged off	664	823	152	1,639
Net charge-offs	(26)	(3,214)	(523)	(3,763)
Write-offs of PCI loans (2)	(273)	—	—	(273)
Provision for loan and lease losses	(492)	3,441	313	3,262
Other (3)	(1)	(16)	(1)	(18)
Allowance for loan and lease losses, December 31	928	3,874	4,799	9,601
Reserve for unfunded lending commitments, January 1	—	—	777	777
Provision for unfunded lending commitments	—	—	20	20
Reserve for unfunded lending commitments, December 31	—	—	797	797
Allowance for credit losses, December 31	\$ 928	\$ 3,874	\$ 5,596	\$ 10,398
	2017			
Allowance for loan and lease losses, January 1	\$ 2,750	\$ 3,229	\$ 5,258	\$ 11,237
Loans and leases charged off	(770)	(3,774)	(1,075)	(5,619)
Recoveries of loans and leases previously charged off	657	809	174	1,640
Net charge-offs	(113)	(2,965)	(901)	(3,979)
Write-offs of PCI loans (2)	(207)	—	—	(207)
Provision for loan and lease losses	(710)	3,437	654	3,381
Other (3)	—	(38)	(1)	(39)
Allowance for loan and lease losses, December 31	1,720	3,663	5,010	10,393
Reserve for unfunded lending commitments, January 1	—	—	762	762
Provision for unfunded lending commitments	—	—	15	15
Reserve for unfunded lending commitments, December 31	—	—	777	777
Allowance for credit losses, December 31	\$ 1,720	\$ 3,663	\$ 5,787	\$ 11,170
	2016			
Allowance for loan and lease losses, January 1	\$ 3,914	\$ 3,471	\$ 4,849	\$ 12,234
Loans and leases charged off	(1,155)	(3,553)	(740)	(5,448)
Recoveries of loans and leases previously charged off	619	770	238	1,627
Net charge-offs	(536)	(2,783)	(502)	(3,821)
Write-offs of PCI loans (2)	(340)	—	—	(340)
Provision for loan and lease losses	(258)	2,826	1,013	3,581
Other (3)	(30)	(42)	(102)	(174)
Total allowance for loan and lease losses, December 31	2,750	3,472	5,258	11,480
Less: Allowance included in assets of business held for sale (4)	—	(243)	—	(243)
Allowance for loan and lease losses, December 31	2,750	3,229	5,258	11,237
Reserve for unfunded lending commitments, January 1	—	—	646	646
Provision for unfunded lending commitments	—	—	16	16
Other (3)	—	—	100	100
Reserve for unfunded lending commitments, December 31	—	—	762	762
Allowance for credit losses, December 31	\$ 2,750	\$ 3,229	\$ 6,020	\$ 11,999

(1) Includes valuation allowance associated with the PCI loan portfolio.

(2) Includes write-offs associated with the sale of PCI loans of \$167 million, \$67 million and \$66 million in 2018, 2017 and 2016, respectively.

(3) Primarily represents the net impact of portfolio sales, consolidations and deconsolidations, foreign currency translation adjustments, transfers to held for sale and other reclassifications.

(4) Represents allowance for loan and lease losses related to the non-U.S. consumer credit card loan portfolio, which was sold in 2017.

The table below presents the allowance and the carrying value of outstanding loans and leases by portfolio segment at December 31, 2018 and 2017.

Allowance and Carrying Value by Portfolio Segment

	Consumer Real Estate	Credit Card and Other Consumer	Commercial	Total
(Dollars in millions)	December 31, 2018			
Impaired loans and troubled debt restructurings ⁽¹⁾				
Allowance for loan and lease losses	\$ 258	\$ 154	\$ 196	\$ 608
Carrying value ⁽²⁾	8,556	566	2,433	11,555
Allowance as a percentage of carrying value	3.02%	27.21%	8.06%	5.26%
Loans collectively evaluated for impairment				
Allowance for loan and lease losses	\$ 579	\$ 3,720	\$ 4,603	\$ 8,902
Carrying value ^(2, 3)	243,642	189,140	493,564	926,346
Allowance as a percentage of carrying value ⁽³⁾	0.24%	1.97%	0.93%	0.96%
Purchased credit-impaired loans				
Valuation allowance	\$ 91	n/a	n/a	\$ 91
Carrying value gross of valuation allowance	4,645	n/a	n/a	4,645
Valuation allowance as a percentage of carrying value	1.96%	n/a	n/a	1.96%
Total				
Allowance for loan and lease losses	\$ 928	\$ 3,874	\$ 4,799	\$ 9,601
Carrying value ^(2, 3)	256,843	189,706	495,997	942,546
Allowance as a percentage of carrying value ⁽³⁾	0.36%	2.04%	0.97%	1.02%
	December 31, 2017			
Impaired loans and troubled debt restructurings ⁽¹⁾				
Allowance for loan and lease losses	\$ 348	\$ 125	\$ 190	\$ 663
Carrying value ⁽²⁾	12,554	490	2,407	15,451
Allowance as a percentage of carrying value	2.77%	25.51%	7.89%	4.29%
Loans collectively evaluated for impairment				
Allowance for loan and lease losses	\$ 1,083	\$ 3,538	\$ 4,820	\$ 9,441
Carrying value ^(2, 3)	238,284	192,303	474,284	904,871
Allowance as a percentage of carrying value ⁽³⁾	0.45%	1.84%	1.02%	1.04%
Purchased credit-impaired loans				
Valuation allowance	\$ 289	n/a	n/a	\$ 289
Carrying value gross of valuation allowance	10,717	n/a	n/a	10,717
Valuation allowance as a percentage of carrying value	2.70%	n/a	n/a	2.70%
Total				
Allowance for loan and lease losses	\$ 1,720	\$ 3,663	\$ 5,010	\$ 10,393
Carrying value ^(2, 3)	261,555	192,793	476,691	931,039
Allowance as a percentage of carrying value ⁽³⁾	0.66%	1.90%	1.05%	1.12%

⁽¹⁾ Impaired loans include nonperforming commercial loans and all TDRs, including both commercial and consumer TDRs. Impaired loans exclude nonperforming consumer loans unless they are TDRs, and all consumer and commercial loans accounted for under the fair value option.

⁽²⁾ Amounts are presented gross of the allowance for loan and lease losses.

⁽³⁾ Outstanding loan and lease balances and ratios do not include loans accounted for under the fair value option of \$4.3 billion and \$5.7 billion at December 31, 2018 and 2017.

n/a = not applicable

NOTE 7 Securitizations and Other Variable Interest Entities

The Corporation utilizes VIEs in the ordinary course of business to support its own and its customers' financing and investing needs. The Corporation routinely securitizes loans and debt securities using VIEs as a source of funding for the Corporation and as a means of transferring the economic risk of the loans or debt securities to third parties. The assets are transferred into a trust or other securitization vehicle such that the assets are legally isolated from the creditors of the Corporation and are not available to satisfy its obligations. These assets can only be used to settle obligations of the trust or other securitization vehicle. The Corporation also administers, structures or invests in other VIEs including CDOs, investment vehicles and other entities. For more information on the Corporation's use of VIEs, see *Note 1 – Summary of Significant Accounting Principles*.

The tables in this Note present the assets and liabilities of consolidated and unconsolidated VIEs at December 31, 2018 and 2017 in situations where the Corporation has continuing involvement with transferred assets or if the Corporation otherwise has a variable interest in the VIE. The tables also present the Corporation's maximum loss exposure at December 31, 2018 and 2017 resulting from its involvement with consolidated VIEs and unconsolidated VIEs in which the Corporation holds a variable interest. The Corporation's maximum loss exposure is based on the unlikely event that all of the assets in the VIEs become worthless and incorporates not only potential losses associated with assets recorded on the Consolidated Balance Sheet but also potential losses associated with off-balance sheet commitments, such as unfunded liquidity commitments and other contractual arrangements. The Corporation's maximum loss exposure does not include losses previously recognized through write-downs of assets.

The Corporation invests in ABS issued by third-party VIEs with which it has no other form of involvement and enters into certain commercial lending arrangements that may also incorporate the use of VIEs, for example to hold collateral. These securities and loans are included in *Note 4 – Securities* or *Note 5 – Outstanding Loans and Leases*. In addition, the Corporation has used VIEs such as trust preferred securities trusts in connection with its funding activities. In 2018, the Corporation redeemed trust preferred securities with a total carrying value of \$3.1 billion resulting in the extinguishment of the related junior subordinated notes issued by the Corporation. In connection therewith, the Corporation recorded a charge to other income of \$729 million primarily due to the difference between the carrying and redemption values of the trust preferred securities, the majority of which relates to the discount on the junior subordinated notes resulting from prior acquisitions. For more information on trust preferred securities, see *Note 11 – Long-term Debt*. These VIEs, which are generally not consolidated by the Corporation, as applicable, are not included in the tables herein.

The Corporation did not provide financial support to consolidated or unconsolidated VIEs during 2018, 2017 and 2016 that it was not previously contractually required to provide, nor does it intend to do so.

The Corporation had liquidity commitments, including written put options and collateral value guarantees, with certain

unconsolidated VIEs of \$218 million and \$442 million at December 31, 2018 and 2017.

First-lien Mortgage Securitizations

As part of its mortgage banking activities, the Corporation securitizes a portion of the first-lien residential mortgage loans it originates or purchases from third parties, generally in the form of RMBS guaranteed by government-sponsored enterprises, FNMA and FHLMC (collectively the GSEs), or the Government National Mortgage Association (GNMA) primarily in the case of FHA-insured and U.S. Department of Veterans Affairs (VA)-guaranteed mortgage loans. Securitization usually occurs in conjunction with or shortly after origination or purchase, and the Corporation may also securitize loans held in its residential mortgage portfolio. In addition, the Corporation may, from time to time, securitize commercial mortgages it originates or purchases from other entities. The Corporation typically services the loans it securitizes. Further, the Corporation may retain beneficial interests in the securitization trusts including senior and subordinate securities and equity tranches issued by the trusts. Except as described in *Note 12 – Commitments and Contingencies*, the Corporation does not provide guarantees or recourse to the securitization trusts other than standard representations and warranties.

The table below summarizes select information related to first-lien mortgage securitizations for 2018, 2017 and 2016.

First-lien Mortgage Securitizations

(Dollars in millions)	Residential Mortgage - Agency			Commercial Mortgage		
	2018	2017	2016	2018	2017	2016
Cash proceeds from new securitizations ⁽¹⁾	\$ 5,369	\$ 14,467	\$ 24,201	\$ 6,713	\$ 5,641	\$ 3,887
Gains on securitizations ⁽²⁾	62	158	370	101	91	38
Repurchases from securitization trusts ⁽³⁾	1,485	2,713	3,611	—	—	—

⁽¹⁾ The Corporation transfers residential mortgage loans to securitizations sponsored by the GSEs or GNMA in the normal course of business and receives RMBS in exchange which may then be sold into the market to third-party investors for cash proceeds.

⁽²⁾ A majority of the first-lien residential mortgage loans securitized are initially classified as LHFS and accounted for under the fair value option. Gains recognized on these LHFS prior to securitization, which totaled \$71 million, \$243 million and \$487 million, net of hedges, during 2018, 2017 and 2016, respectively, are not included in the table above.

⁽³⁾ The Corporation may have the option to repurchase delinquent loans out of securitization trusts, which reduces the amount of servicing advances it is required to make. The Corporation may also repurchase loans from securitization trusts to perform modifications. Repurchased loans include FHA-insured mortgages collateralizing GNMA securities.

In addition to cash proceeds as reported in the table above, the Corporation received securities with an initial fair value of \$711 million, \$1.9 billion and \$4.2 billion in connection with first-lien mortgage securitizations in 2018, 2017 and 2016, respectively. Substantially all of these securities are classified as Level 2 assets within the fair value hierarchy.

The Corporation recognizes consumer MSR from the sale or securitization of consumer real estate loans. The unpaid principal balance of loans serviced for investors, including residential mortgage and home equity loans, totaled \$226.6 billion and \$277.6 billion at December 31, 2018 and 2017. Servicing fee and ancillary fee income on serviced loans was \$710 million, \$893 million and \$1.2 billion in 2018, 2017 and 2016, respectively. Servicing advances on serviced loans, including loans serviced for others and loans held for investment, were \$3.3 billion and \$4.5 billion at December 31, 2018 and 2017. For more information on MSRs, see *Note 20 – Fair Value Measurements*.

There were no significant deconsolidations of agency residential mortgage securitizations in 2018 or 2017. During 2016, the Corporation deconsolidated agency residential mortgage securitization vehicles with total assets of \$3.8 billion and total liabilities of \$628 million following the sale of retained interests to third parties, after which the Corporation no longer had the unilateral ability to liquidate the vehicles. Of the balances deconsolidated in 2016, \$706 million of assets and \$628 million of liabilities represent non-cash investing and financing activities and, accordingly, are not reflected on the Consolidated Statement of Cash Flows. A gain on sale of \$125 million in 2016 related to the deconsolidation was recorded in other income in the Consolidated Statement of Income.

The following table summarizes select information related to first-lien mortgage securitization trusts in which the Corporation held a variable interest at December 31, 2018 and 2017.

First-Ilen Mortgage VIEs

	Residential Mortgage									
	Agency		Prime		Non-agency		Alt-A		Commercial Mortgage	
					Subprime					
					December 31					
(Dollars in millions)	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017
Unconsolidated VIEs										
Maximum loss exposure (1) \$	16,011	\$ 19,110	\$ 448	\$ 689	\$ 1,897	\$ 2,643	\$ 217	\$ 403	\$ 767	\$ 585
On-balance sheet assets										
Senior securities										
Trading account assets	\$ 460	\$ 716	\$ 30	\$ 6	\$ 36	\$ 10	\$ 90	\$ 50	\$ 97	\$ 108
Debt securities carried at fair value	9,381	15,036	246	477	1,470	2,221	125	351	—	—
Held-to-maturity securities	6,170	3,348	—	—	—	—	—	—	528	274
All other assets	—	10	3	5	37	38	2	2	40	88
Total retained positions	\$ 16,011	\$ 19,110	\$ 279	\$ 488	\$ 1,543	\$ 2,269	\$ 217	\$ 403	\$ 665	\$ 470
Principal balance outstanding (2)	\$ 187,512	\$ 232,761	\$ 8,954	\$ 10,549	\$ 8,719	\$ 10,254	\$ 23,467	\$ 28,129	\$ 43,593	\$ 26,504
Consolidated VIEs										
Maximum loss exposure (1) \$	13,296	\$ 14,502	\$ 7	\$ 571	\$ —	\$ —	\$ —	\$ —	\$ 76	\$ —
On-balance sheet assets										
Trading account assets	\$ 1,318	\$ 232	\$ 150	\$ 571	\$ —	\$ —	\$ —	\$ —	\$ 76	\$ —
Loans and leases, net	11,858	14,030	—	—	—	—	—	—	—	—
All other assets	143	240	—	—	—	—	—	—	—	—
Total assets	\$ 13,319	\$ 14,502	\$ 150	\$ 571	\$ —	\$ —	\$ —	\$ —	\$ 76	\$ —
Total liabilities	\$ 26	\$ 3	\$ 143	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —

(1) Maximum loss exposure includes obligations under loss-sharing reinsurance and other arrangements for non-agency residential mortgage and commercial mortgage securitizations, but excludes the reserve for representations and warranties obligations and corporate guarantees and also excludes servicing advances and other servicing rights and obligations. For additional information, see Note 12 - Commitments and Contingencies and Note 20 - Fair Value Measurements.

(2) Principal balance outstanding includes loans where the Corporation was the transferor to securitization VIEs with which it has continuing involvement, which may include servicing the loans.

Other Asset-backed Securitizations

The table below summarizes select information related to home equity, credit card and other asset-backed VIEs in which the Corporation held a variable interest at December 31, 2018 and 2017.

Home Equity Loan, Credit Card and Other Asset-backed VIEs

	Home Equity (1)		Credit Card (2, 3)		Re securitization Trusts		Municipal Bond Trusts	
					December 31			
					2018			
	2018	2017	2018	2017	2018	2017	2018	2017
(Dollars in millions)								
Unconsolidated VIEs								
Maximum loss exposure	\$ 908	\$ 1,522	\$ —	\$ —	\$ 7,647	\$ 8,204	\$ 2,150	\$ 1,631
On-balance sheet assets								
Senior securities (4):								
Trading account assets	\$ —	\$ —	\$ —	\$ —	\$ 1,419	\$ 869	\$ 26	\$ 33
Debt securities carried at fair value	27	36	—	—	1,337	1,661	—	—
Held-to-maturity securities	—	—	—	—	4,891	5,644	—	—
All other assets (4)	—	—	—	—	—	30	—	—
Total retained positions	\$ 27	\$ 36	\$ —	\$ —	\$ 7,647	\$ 8,204	\$ 26	\$ 33
Total assets of VIEs (5)	\$ 1,813	\$ 2,432	\$ —	\$ —	\$ 16,949	\$ 19,281	\$ 2,829	\$ 2,287
Consolidated VIEs								
Maximum loss exposure	\$ 85	\$ 112	\$ 18,800	\$ 24,327	\$ 128	\$ 628	\$ 1,540	\$ 1,453

On-balance sheet assets

Trading account assets	\$	—	\$	—	\$	—	\$	—	\$	366	\$	1,557	\$	1,553	\$	1,452
Loans and leases		133		177		29,906		32,554		—		—		—		—
Allowance for loan and lease losses		(5)		(9)		(901)		(988)		—		—		—		—
All other assets		4		6		136		1,385		—		—		1		1
Total assets	\$	132	\$	174	\$	29,141	\$	32,951	\$	366	\$	1,557	\$	1,554	\$	1,453

On-balance sheet liabilities

Short-term borrowings	\$	—	\$	—	\$	—	\$	—	\$	—	\$	—	\$	742	\$	312
Long-term debt		55		76		10,321		8,598		238		929		12		—
All other liabilities		—		—		20		16		—		—		—		—
Total liabilities	\$	55	\$	76	\$	10,341	\$	8,614	\$	238	\$	929	\$	754	\$	312

(1) For unconsolidated home equity loan VIEs, the maximum loss exposure includes outstanding trust certificates issued by trusts in rapid amortization, net of recorded reserves. For both consolidated and unconsolidated home equity loan VIEs, the maximum loss exposure excludes the reserve for representations and warranties obligations and corporate guarantees. For additional information, see Note 12 – Commitments and Contingencies.

(2) At December 31, 2018 and 2017, loans and leases in the consolidated credit card trust included \$11.0 billion and \$15.6 billion of seller's interest.

(3) At December 31, 2018 and 2017, all other assets in the consolidated credit card trust included certain short-term investments and unbilled accrued interest and fees.

(4) All other assets includes subordinate securities. The retained senior and subordinate securities were valued using quoted market prices or observable market inputs (Level 2 of the fair value hierarchy).

(5) Total assets of VIEs includes loans the Corporation transferred with which it has continuing involvement, which may include servicing the loan.

Home Equity Loans

The Corporation retains interests in home equity securitization trusts, primarily senior securities, to which it transferred home equity loans. In addition, the Corporation may be obligated to provide subordinate funding to the trusts during a rapid amortization event. This obligation is included in the maximum loss exposure in the table above. The charges that will ultimately be recorded as a result of the rapid amortization events depend on the undrawn portion of the home equity lines of credit (HELOCs), performance of the loans, the amount of subsequent draws and the timing of related cash flows.

Credit Card Securitizations

The Corporation securitizes originated and purchased credit card loans. The Corporation's continuing involvement with the securitization trust includes servicing the receivables, retaining an undivided interest (seller's interest) in the receivables, and holding certain retained interests including subordinate interests in accrued interest and fees on the securitized receivables and cash reserve accounts.

During 2018, 2017 and 2016, new senior debt securities issued to third-party investors from the credit card securitization trust were \$4.0 billion, \$3.1 billion and \$750 million, respectively.

At December 31, 2018 and 2017, the Corporation held subordinate securities issued by the credit card securitization trust with a notional principal amount of \$7.7 billion and \$7.4 billion. These securities serve as a form of credit enhancement to the senior debt securities and have a stated interest rate of zero percent. During 2018, 2017 and 2016, the credit card securitization trust issued \$650 million, \$500 million and \$121 million, respectively, of these subordinate securities.

Resecuritization Trusts

The Corporation transfers securities, typically MBS, into resecuritization VIEs at the request of customers seeking

securities with specific characteristics. Generally, there are no significant ongoing activities performed in a resecuritization trust, and no single investor has the unilateral ability to liquidate the trust.

The Corporation resecuritized \$22.8 billion, \$25.1 billion and \$23.4 billion of securities in 2018, 2017 and 2016, respectively. Securities transferred into resecuritization VIEs were measured at fair value with changes in fair value recorded in trading account profits prior to the resecuritization and no gain or loss on sale was recorded. During 2018, 2017 and 2016, resecuritization proceeds included securities with an initial fair value of \$4.1 billion, \$3.3 billion and \$3.3 billion, respectively. Substantially all of the other securities received as resecuritization proceeds were classified as trading securities and were categorized as Level 2 within the fair value hierarchy.

Municipal Bond Trusts

The Corporation administers municipal bond trusts that hold highly-rated, long-term, fixed-rate municipal bonds. The trusts obtain financing by issuing floating-rate trust certificates that reprice on a weekly or other short-term basis to third-party investors.

The Corporation's liquidity commitments to unconsolidated municipal bond trusts, including those for which the Corporation was transferor, totaled \$2.1 billion and \$1.6 billion at December 31, 2018 and 2017. The weighted-average remaining life of bonds held in the trusts at December 31, 2018 was 7.3 years. There were no material write-downs or downgrades of assets or issuers during 2018, 2017 and 2016.

Other Variable Interest Entities

The table below summarizes select information related to other VIEs in which the Corporation held a variable interest at December 31, 2018 and 2017.

Other VIEs

	Consolidated		Unconsolidated		Total		Consolidated		Unconsolidated		Total	
	December 31											
(Dollars in millions)	2018						2017					
Maximum loss exposure	\$	4,177	\$	24,498	\$	28,675	\$	4,660	\$	19,785	\$	24,445
On-balance sheet assets												
Trading account assets	\$	2,335	\$	860	\$	3,195	\$	2,709	\$	346	\$	3,055
Debt securities carried at fair value		—		84		84		—		160		160
Loans and leases		1,949		3,940		5,889		2,152		3,596		5,748
Allowance for loan and lease losses		(2)		(30)		(32)		(3)		(32)		(35)
All other assets		53		18,885		18,938		89		15,216		15,305
Total	\$	4,335	\$	23,739	\$	28,074	\$	4,947	\$	19,286	\$	24,233
On-balance sheet liabilities												
Long-term debt	\$	152	\$	—	\$	152	\$	270	\$	—	\$	270
All other liabilities		7		4,231		4,238		18		3,417		3,435
Total	\$	159	\$	4,231	\$	4,390	\$	288	\$	3,417	\$	3,705
Total assets of VIEs	\$	4,335	\$	94,746	\$	99,081	\$	4,947	\$	69,746	\$	74,693

Customer VIEs

Customer VIEs include credit-linked, equity-linked and commodity-linked note VIEs, repackaging VIEs and asset acquisition VIEs, which are typically created on behalf of customers who wish to obtain market or credit exposure to a specific company, index, commodity or financial instrument.

The Corporation's maximum loss exposure to consolidated and unconsolidated customer VIEs totaled \$2.1 billion and \$2.3 billion at December 31, 2018 and 2017, including the notional amount of derivatives to which the Corporation is a counterparty,

net of losses previously recorded, and the Corporation's investment, if any, in securities issued by the VIEs.

Collateralized Debt Obligation VIEs

The Corporation receives fees for structuring CDO VIEs, which hold diversified pools of fixed-income securities, typically corporate debt or ABS, which the CDO VIEs fund by issuing multiple tranches of debt and equity securities. CDOs are generally managed by third-party portfolio managers. The Corporation typically transfers assets to these CDOs, holds securities issued by the CDOs and may be a derivative counterparty to the CDOs. The Corporation's maximum loss exposure to consolidated and

unconsolidated CDOs totaled \$421 million and \$358 million at December 31, 2018 and 2017.

Investment VIEs

The Corporation sponsors, invests in or provides financing, which may be in connection with the sale of assets, to a variety of investment VIEs that hold loans, real estate, debt securities or other financial instruments and are designed to provide the desired investment profile to investors or the Corporation. At December 31, 2018 and 2017, the Corporation's consolidated investment VIEs had total assets of \$270 million and \$249 million. The Corporation also held investments in unconsolidated VIEs with total assets of \$37.7 billion and \$20.3 billion at December 31, 2018 and 2017. The Corporation's maximum loss exposure associated with both consolidated and unconsolidated investment VIEs totaled \$7.2 billion and \$5.7 billion at December 31, 2018 and 2017 comprised primarily of on-balance sheet assets less non-recourse liabilities.

Leveraged Lease Trusts

The Corporation's net investment in consolidated leveraged lease trusts totaled \$1.8 billion and \$2.0 billion at December 31, 2018 and 2017. The trusts hold long-lived equipment such as rail cars, power generation and distribution equipment, and commercial aircraft. The Corporation structures the trusts and holds a significant residual interest. The net investment represents the Corporation's maximum loss exposure to the trusts in the unlikely event that the leveraged lease investments become worthless. Debt issued by the leveraged lease trusts is non-recourse to the Corporation.

Tax Credit VIEs

The Corporation holds investments in unconsolidated limited partnerships and similar entities that construct, own and operate affordable housing, wind and solar projects. An unrelated third party is typically the general partner or managing member and has control over the significant activities of the VIE. The Corporation earns a return primarily through the receipt of tax credits allocated to the projects. The maximum loss exposure included in the Other VIEs table was \$17.0 billion and \$13.8 billion at December 31, 2018 and 2017. The Corporation's risk of loss is generally mitigated by policies requiring that the project qualify for the expected tax credits prior to making its investment.

The Corporation's investments in affordable housing partnerships, which are reported in other assets on the Consolidated Balance Sheet, totaled \$8.9 billion and \$8.0 billion, including unfunded commitments to provide capital contributions of \$3.8 billion and \$3.1 billion at December 31, 2018 and 2017. The unfunded commitments are expected to be paid over the next five years. During 2018, 2017 and 2016, the Corporation recognized tax credits and other tax benefits from investments in affordable housing partnerships of \$981 million, \$1.0 billion and \$1.1 billion and reported pretax losses in other income of \$798 million, \$766 million and \$789 million, respectively. Tax credits are recognized as part of the Corporation's annual effective tax rate used to determine tax expense in a given quarter. Accordingly, the portion of a year's expected tax benefits recognized in any given quarter may differ from 25 percent. The Corporation may from time to time be asked to invest additional amounts to support a troubled affordable housing project. Such additional investments have not been and are not expected to be significant.

NOTE 8 Goodwill and Intangible Assets

Goodwill

The table below presents goodwill balances by reporting unit and *All Other* at December 31, 2018 and 2017. The reporting units utilized for goodwill impairment testing are the operating segments or one level below.

Goodwill

(Dollars in millions)	December 31	
	2018	2017
Deposits	\$ 18,414	\$ 18,414
Consumer Lending	11,709	11,709
Consumer Banking	30,123	30,123
U.S. Trust	2,917	2,917
Merrill Lynch Global Wealth Management	6,760	6,760
Global Wealth & Investment Management	9,677	9,677
Global Commercial Banking	16,146	16,146
Global Corporate and Investment Banking	6,231	6,231
Business Banking	1,546	1,546
Global Banking	23,923	23,923
Global Markets	5,182	5,182
All Other	46	46
Total goodwill	\$ 68,951	\$ 68,951

During 2018, the Corporation completed its annual goodwill impairment test as of June 30, 2018 using qualitative assessments for all applicable reporting units. Based on the results of the annual goodwill impairment test, the Corporation determined there was no impairment. For more information on the use of qualitative assessments, see Note 1 – *Summary of Significant Accounting Principles*.

Intangible Assets

The table below presents the gross and net carrying values and accumulated amortization for intangible assets at December 31, 2018 and 2017.

Intangible Assets (1, 2)

	Gross Carrying Value	Accumulated Amortization	Net Carrying Value	Gross Carrying Value	Accumulated Amortization	Net Carrying Value
(Dollars in millions)	December 31, 2018			December 31, 2017		
Purchased credit card and affinity relationships	\$ 5,919	\$ 5,759	\$ 160	\$ 5,919	\$ 5,604	\$ 315
Core deposit and other intangibles (3)	3,835	2,221	1,614	3,835	2,140	1,695
Customer relationships	—	—	—	3,886	3,584	302
Total Intangible assets	\$ 9,754	\$ 7,980	\$ 1,774	\$ 13,640	\$ 11,328	\$ 2,312

(1) Excludes fully amortized intangible assets.

(2) At December 31, 2018 and 2017, none of the intangible assets were impaired.

(3) Includes \$1.6 billion at both December 31, 2018 and 2017 of intangible assets associated with trade names that have an indefinite life and, accordingly, are not amortized.

Amortization of intangibles expense was \$538 million, \$621 million and \$730 million for 2018, 2017 and 2016, respectively. The Corporation estimates aggregate amortization expense will be \$105 million for 2019, \$55 million for 2020 and none for the years thereafter.

NOTE 9 Deposits

The table below presents information about the Corporation's time deposits of \$100 thousand or more at December 31, 2018 and 2017. The Corporation also had aggregate time deposits of \$16.4 billion and \$17.0 billion in denominations that met or exceeded the Federal Deposit Insurance Corporation (FDIC) insurance limit at December 31, 2018 and 2017.

Time Deposits of \$100 Thousand or More

	December 31, 2018				December 31 2017
(Dollars in millions)	Three Months or Less	Over Three Months to Twelve Months	Thereafter	Total	Total
U.S. certificates of deposit and other time deposits	\$ 14,441	\$ 11,855	\$ 3,209	\$ 29,505	\$ 25,192
Non-U.S. certificates of deposit and other time deposits	7,317	2,655	820	10,792	15,472

The scheduled contractual maturities for total time deposits at December 31, 2018 are presented in the table below.

Contractual Maturities of Total Time Deposits

(Dollars in millions)	U.S.	Non-U.S.	Total
Due in 2019	\$ 43,452	\$ 10,030	\$ 53,482
Due in 2020	4,580	164	4,744
Due in 2021	725	8	733
Due in 2022	560	11	571
Due in 2023	270	632	902
Thereafter	570	37	607
Total time deposits	\$ 50,157	\$ 10,882	\$ 61,039

NOTE 10 Federal Funds Sold or Purchased, Securities Financing Agreements, Short-term Borrowings and Restricted Cash

The table below presents federal funds sold or purchased, securities financing agreements (which include securities borrowed or purchased under agreements to resell and securities loaned or sold under agreements to repurchase) and short-term borrowings. The Corporation elects to account for certain securities financing agreements and short-term borrowings under the fair value option. For more information on the fair value option, see Note 21 – Fair Value Option.

	Amount	Rate	Amount	Rate
(Dollars in millions)	2018		2017	
Federal funds sold and securities borrowed or purchased under agreements to resell				
Average during year	\$ 251,328	1.26%	\$ 222,818	0.81%

Maximum month-end balance during year	279,350	n/a	237,064	n/a
Federal funds purchased and securities loaned or sold under agreements to repurchase				
Average during year	\$ 193,681	1.80%	\$ 199,501	1.30%
Maximum month-end balance during year	201,089	n/a	218,017	n/a
Short-term borrowings				
Average during year	36,021	2.69	37,337	2.48
Maximum month-end balance during year	52,480	n/a	46,202	n/a
n/a - not applicable				

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Bank of America, N.A. maintains a global program to offer up to a maximum of \$75 billion outstanding at any one time, of bank notes with fixed or floating rates and maturities of at least seven days from the date of issue. Short-term bank notes outstanding under this program totaled \$12.1 billion and \$14.2 billion at December 31, 2018 and 2017. These short-term bank notes, along with FHLB advances, U.S. Treasury tax and loan notes, and term federal funds purchased, are included in short-term borrowings on the Consolidated Balance Sheet.

Offsetting of Securities Financing Agreements

The Corporation enters into securities financing agreements to accommodate customers (also referred to as "matched-book transactions"), obtain securities to cover short positions, and to finance inventory positions. Substantially all of the Corporation's securities financing activities are transacted under legally enforceable master repurchase agreements or legally enforceable master securities lending agreements that give the Corporation,

in the event of default by the counterparty, the right to liquidate securities held and to offset receivables and payables with the same counterparty. The Corporation offsets securities financing transactions with the same counterparty on the Consolidated Balance Sheet where it has such a legally enforceable master netting agreement and the transactions have the same maturity date.

The Securities Financing Agreements table presents securities financing agreements included on the Consolidated Balance Sheet in federal funds sold and securities borrowed or purchased under agreements to resell, and in federal funds purchased and securities loaned or sold under agreements to repurchase at December 31, 2018 and 2017. Balances are presented on a gross basis, prior to the application of counterparty netting. Gross assets and liabilities are adjusted on an aggregate basis to take into consideration the effects of legally enforceable master netting agreements. For more information on the offsetting of derivatives, see Note 3 - Derivatives.

Securities Financing Agreements

	Gross Assets/Liabilities (1)	Amounts Offset	Net Balance Sheet Amount	Financial Instruments (2)	Net Assets/Liabilities
December 31, 2018					
(Dollars in millions)					
Securities borrowed or purchased under agreements to resell (3)	\$ 366,274	\$ (106,865)	\$ 259,409	\$ (240,790)	\$ 18,619
Securities loaned or sold under agreements to repurchase	\$ 293,853	\$ (106,865)	\$ 186,988	\$ (176,740)	\$ 10,248
Other (4)	19,906	—	19,906	(19,906)	—
Total	\$ 313,759	\$ (106,865)	\$ 206,894	\$ (196,646)	\$ 10,248
December 31, 2017					
Securities borrowed or purchased under agreements to resell (3)	\$ 348,472	\$ (135,725)	\$ 212,747	\$ (165,720)	\$ 47,027
Securities loaned or sold under agreements to repurchase	\$ 312,582	\$ (135,725)	\$ 176,857	\$ (146,205)	\$ 30,652
Other (4)	22,711	—	22,711	(22,711)	—
Total	\$ 335,293	\$ (135,725)	\$ 199,568	\$ (168,916)	\$ 30,652

(1) Includes activity where uncertainty exists as to the enforceability of certain master netting agreements under bankruptcy laws in some countries or industries.

(2) Includes securities collateral received or pledged under repurchase or securities lending agreements where there is a legally enforceable master netting agreement. These amounts are not offset on the Consolidated Balance Sheet, but are shown as a reduction to derive a net asset or liability. Securities collateral received or pledged where the legal enforceability of the master netting agreements is uncertain is excluded from the table.

(3) Excludes repurchase activity of \$11.5 billion and \$10.2 billion reported in loans and leases on the Consolidated Balance Sheet at December 31, 2018 and 2017.

(4) Balance is reported in accrued expenses and other liabilities on the Consolidated Balance Sheet and relates to transactions where the Corporation acts as the lender in a securities lending agreement and receives securities that can be pledged as collateral or sold. In these transactions, the Corporation recognizes an asset at fair value, representing the securities received, and a liability representing the obligation to return those securities.

Repurchase Agreements and Securities Loaned Transactions Accounted for as Secured Borrowings

The following tables present securities sold under agreements to repurchase and securities loaned by remaining contractual term to maturity and class of collateral pledged. Included in "Other" are transactions where the Corporation acts as the lender

in a securities lending agreement and receives securities that can be pledged as collateral or sold. Certain agreements contain a right to substitute collateral and/or terminate the agreement prior to maturity at the option of the Corporation or the counterparty. Such agreements are included in the table below based on the remaining contractual term to maturity.

Remaining Contractual Maturity

	Overnight and Continuous	30 Days or Less	After 30 Days Through 90 Days	Greater than 90 Days (1)	Total
December 31, 2018					
(Dollars in millions)					
Securities sold under agreements to repurchase	\$ 139,017	\$ 81,917	\$ 34,204	\$ 21,476	\$ 276,614
Securities loaned	7,753	4,197	1,783	3,506	17,239
Other	19,906	—	—	—	19,906
Total	\$ 166,676	\$ 86,114	\$ 35,987	\$ 24,982	\$ 313,759
December 31, 2017					
Securities sold under agreements to repurchase	\$ 125,956	\$ 79,913	\$ 46,091	\$ 38,935	\$ 290,895
Securities loaned	9,853	5,658	2,043	4,133	21,687
Other	22,711	—	—	—	22,711

Total	\$	158,520	\$	85,571	\$	48,134	\$	43,068	\$	335,293
(1) No agreements have matured in excess of three years										

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Class of Collateral Pledged

	Securities Sold Under Agreements to Repurchase	Securities Loaned	Other	Total
(Dollars in millions)	December 31, 2018			
U.S. government and agency securities	\$ 164,664	\$ —	\$ —	\$ 164,664
Corporate securities, trading loans and other	11,400	2,163	287	13,850
Equity securities	14,090	10,869	19,572	44,531
Non-U.S. sovereign debt	81,329	4,207	47	85,583
Mortgage trading loans and ABS	5,131	—	—	5,131
Total	\$ 276,614	\$ 17,239	\$ 19,906	\$ 313,759
	December 31, 2017			
U.S. government and agency securities	\$ 158,299	\$ —	\$ 409	\$ 158,708
Corporate securities, trading loans and other	12,787	2,669	624	16,080
Equity securities	23,975	13,523	21,628	59,126
Non-U.S. sovereign debt	90,857	5,495	50	96,402
Mortgage trading loans and ABS	4,977	—	—	4,977
Total	\$ 290,895	\$ 21,687	\$ 22,711	\$ 335,293

Under repurchase agreements, the Corporation is required to post collateral with a market value equal to or in excess of the principal amount borrowed. For securities loaned transactions, the Corporation receives collateral in the form of cash, letters of credit or other securities. To determine whether the market value of the underlying collateral remains sufficient, collateral is generally valued daily, and the Corporation may be required to deposit additional collateral or may receive or return collateral pledged when appropriate. Repurchase agreements and securities loaned transactions are generally either overnight, continuous (i.e., no stated term) or short-term. The Corporation manages liquidity risks related to these agreements by sourcing funding from a diverse

group of counterparties, providing a range of securities collateral and pursuing longer durations, when appropriate.

Restricted Cash

At December 31, 2018 and 2017, the Corporation held restricted cash included within cash and cash equivalents on the Consolidated Balance Sheet of \$22.6 billion and \$18.8 billion, predominantly related to cash held on deposit with the Federal Reserve Bank and non-U.S. central banks to meet reserve requirements and cash segregated in compliance with securities regulations.

NOTE 11 Long-term Debt

Long-term debt consists of borrowings having an original maturity of one year or more. The table below presents the balance of long-term debt at December 31, 2018 and 2017, and the related contractual rates and maturity dates as of December 31, 2018.

				December 31	
(Dollars in millions)	Weighted-average Rate	Interest Rates	Maturity Dates	2018	2017
Notes Issued by Bank of America Corporation					
Senior notes:					
Fixed	3.39 %	0.39 - 8.40 %	2019 - 2049	\$ 120,548	\$ 119,548
Floating	2.09	0.06 - 7.26	2019 - 2044	25,574	21,048
Senior structured notes (1)				13,768	15,460
Subordinated notes:					
Fixed	4.91	2.94 - 8.57	2019 - 2045	20,843	22,004
Floating	2.16	1.14 - 3.65	2019 - 2026	1,742	4,058
Junior subordinated notes (2):					
Fixed	6.71	6.45 - 8.05	2027 - 2066	732	3,282
Floating	3.54	3.54	2056	1	553
Total notes issued by Bank of America Corporation				183,208	185,953
Notes issued by Bank of America, N.A.					
Senior notes:					
Fixed				—	4,686
Floating	2.96	2.90 - 2.96	2020 - 2041	1,770	1,033
Subordinated notes	6.00	6.00	2036	1,617	1,679
Advances from Federal Home Loan Banks:					
Fixed	5.10	0.01 - 7.72	2019 - 2034	130	146
Floating	2.49	2.24 - 2.80	2019 - 2020	14,751	5,000
Securitizations and other BANA VIEs (3)				10,326	8,641
Other				442	433
Total notes issued by Bank of America, N.A.				29,036	21,618
Other debt					
Structured liabilities				16,478	18,574
Nonbank VIEs (3)				618	1,232
Other				—	25
Total other debt				17,096	19,831
Total long-term debt				\$ 229,340	\$ 227,402

(1) Includes total loss-absorbing capacity compliant debt.

(2) Includes amounts related to trust preferred securities. For additional information, see Trust Preferred Securities in this Note.

(3) Represents the total long term debt included in the liabilities of consolidated VIEs on the Consolidated Balance Sheet.

Bank of America Corporation and Bank of America, N.A. maintain various U.S. and non-U.S. debt programs to offer both senior and subordinated notes. The notes may be denominated in U.S. dollars or foreign currencies. At December 31, 2018 and 2017, the amount of foreign currency-denominated debt translated into U.S. dollars included in total long-term debt was \$48.6 billion and \$51.8 billion. Foreign currency contracts may be used to convert certain foreign currency-denominated debt into U.S. dollars.

At December 31, 2018, long-term debt of consolidated VIEs in the table above included debt from credit card and all other VIEs of \$10.3 billion and \$623 million. Long-term debt of VIEs is collateralized by the assets of the VIEs. For additional information, see Note 7 - *Securitizations and Other Variable Interest Entities*.

The weighted-average effective interest rates for total long-term debt (excluding senior structured notes), total fixed-rate debt and total floating-rate debt were 3.29 percent, 3.66 percent and 2.26 percent, respectively, at December 31, 2018, and 3.44 percent, 3.87 percent and 1.49 percent, respectively, at December 31, 2017. The Corporation's ALM activities maintain an overall interest rate risk management strategy that incorporates the use of interest rate contracts to manage fluctuations in earnings that are caused by interest rate volatility. The Corporation's goal is to manage interest rate sensitivity so that movements in interest rates do not significantly adversely affect earnings and capital. The weighted-average rates are the contractual interest rates on the debt and do not reflect the impacts of derivative transactions.

Debt outstanding of \$3.8 billion at December 31, 2018 was issued by BofA Finance LLC, a 100 percent owned finance subsidiary of Bank of America Corporation, the parent company, and is fully and unconditionally guaranteed by the parent company.

During 2018, the Corporation had total long-term debt maturities and redemptions in the aggregate of \$53.3 billion consisting of \$29.8 billion for Bank of America Corporation, \$11.2 billion for Bank of America, N.A. and \$12.3 billion of other debt. During 2017, the Corporation had total long-term debt maturities and redemptions in the aggregate of \$48.8 billion consisting of \$29.1 billion for Bank of America Corporation, \$13.3 billion for Bank of America, N.A. and \$6.4 billion of other debt.

The following table shows the carrying value for aggregate annual contractual maturities of long-term debt as of December 31, 2018. Included in the table are certain structured notes issued by the Corporation that contain provisions whereby the borrowings are redeemable at the option of the holder (put options) at specified dates prior to maturity. Other structured notes have coupon or repayment terms linked to the performance of debt or equity securities, indices, currencies or commodities, and the maturity may be accelerated based on the value of a referenced index or security. In both cases, the Corporation or a subsidiary may be required to settle the obligation for cash or other securities prior to the contractual maturity date. These borrowings are reflected in the table as maturing at their contractual maturity date.

Long-term Debt by Maturity

(Dollars in millions)	2019	2020	2021	2022	2023	Thereafter	Total
Bank of America Corporation							
Senior notes	\$ 14,831	\$ 10,308	\$ 15,883	\$ 14,882	\$ 22,570	\$ 67,648	\$ 146,122
Senior structured notes	1,337	875	482	1,914	323	8,837	13,768
Subordinated notes	1,501	—	346	364	—	20,374	22,585
Junior subordinated notes	—	—	—	—	—	733	733
Total Bank of America Corporation	17,669	11,183	16,711	17,160	22,893	97,592	183,208
Bank of America, N.A.							
Senior notes	—	1,750	—	—	—	20	1,770
Subordinated notes	—	—	—	—	—	1,617	1,617
Advances from Federal Home Loan Banks	11,762	3,010	2	3	1	103	14,881
Securitizations and other Bank VIEs (1)	3,200	3,100	4,022	—	—	4	10,326
Other	224	83	—	2	133	—	442
Total Bank of America, N.A.	15,186	7,943	4,024	5	134	1,744	29,036
Other debt							
Structured liabilities	5,085	2,712	1,112	558	830	6,181	16,478
Nonbank VIEs (1)	35	—	—	—	23	560	618
Total other debt	5,120	2,712	1,112	558	853	6,741	17,096
Total long-term debt	\$ 37,975	\$ 21,838	\$ 21,847	\$ 17,723	\$ 23,880	\$ 106,077	\$ 229,340

(1) Represents the total long-term debt included in the liabilities of consolidated VIEs on the Consolidated Balance Sheet.

Trust Preferred Securities

Trust preferred securities (Trust Securities) are primarily issued by trust companies (the Trusts) that are not consolidated. These Trust Securities are mandatorily redeemable preferred security obligations of the Trusts. The sole assets of the Trusts generally are junior subordinated deferrable interest notes of the Corporation or its subsidiaries (the Notes). The Trusts generally are 100 percent owned finance subsidiaries of the Corporation.

Periodic cash payments and payments upon liquidation or redemption with respect to Trust Securities are guaranteed by the Corporation or its subsidiaries to the extent of funds held by the Trusts (the Preferred Securities Guarantee). The Preferred Securities Guarantee, when taken together with the Corporation's other obligations including its obligations under the Notes, generally will constitute a full and unconditional guarantee, on a subordinated basis, by the Corporation of payments due on the Trust Securities.

During 2018, the Corporation redeemed Trust Securities of 11 Trusts with a carrying value of \$3.1 billion. At December 31, 2018, the Corporation had one remaining floating-rate junior subordinated note held in trust.

NOTE 12 Commitments and Contingencies

In the normal course of business, the Corporation enters into a number of off-balance sheet commitments. These commitments expose the Corporation to varying degrees of credit and market risk and are subject to the same credit and market risk limitation reviews as those instruments recorded on the Consolidated Balance Sheet.

Credit Extension Commitments

The Corporation enters into commitments to extend credit such as loan commitments, SBLCs and commercial letters of credit to meet the financing needs of its customers. The following table includes the notional amount of unfunded legally binding lending commitments net of amounts distributed (i.e., syndicated or participated) to other financial institutions. The distributed amounts were \$10.7 billion and \$11.0 billion at December 31, 2018 and 2017. At December 31, 2018, the carrying value of these commitments, excluding commitments accounted for under the fair value option, was \$813 million, including deferred revenue of \$16 million and a reserve for unfunded lending commitments of \$797 million. At December 31, 2017, the comparable amounts were \$793 million, \$16 million and \$777 million, respectively. The carrying value of these commitments is classified in accrued expenses and other liabilities on the Consolidated Balance Sheet.

Legally binding commitments to extend credit generally have specified rates and maturities. Certain of these commitments have adverse change clauses that help to protect the Corporation against deterioration in the borrower's ability to pay.

The table below also includes the notional amount of commitments of \$3.1 billion and \$4.8 billion at December 31, 2018 and 2017 that are accounted for under the fair value option. However, the following table excludes cumulative net fair value of \$169 million and \$120 million at December 31, 2018 and 2017 on these commitments, which is classified in accrued expenses and other liabilities. For more information regarding the Corporation's loan commitments accounted for under the fair value option, see Note 21 - Fair Value Option.

Credit Extension Commitments

	Expire In One Year or Less	Expire After One Year Through Three Years	Expire After Three Years Through Five Years	Expire After Five Years	Total
(Dollars in millions)					
December 31, 2018					
Notional amount of credit extension commitments					
Loan commitments	\$ 84,910	\$ 142,271	\$ 155,298	\$ 22,683	\$ 405,162
Home equity lines of credit	2,578	2,249	3,530	34,702	43,059
Standby letters of credit and financial guarantees (1)	22,571	9,702	2,457	1,074	35,804
Letters of credit (2)	1,168	84	69	57	1,378
Legally binding commitments	111,227	154,306	161,354	58,616	485,403
Credit card lines (3)	371,658	—	—	—	371,658
Total credit extension commitments	\$ 482,885	\$ 154,306	\$ 161,354	\$ 58,616	\$ 857,061
December 31, 2017					
Notional amount of credit extension commitments					
Loan commitments	\$ 85,804	\$ 140,942	\$ 147,043	\$ 21,342	\$ 395,131
Home equity lines of credit	6,172	4,457	2,288	31,250	44,167
Standby letters of credit and financial guarantees (1)	19,976	11,261	3,420	1,144	35,801
Letters of credit	1,291	117	129	87	1,624
Legally binding commitments	113,243	156,777	152,880	53,823	476,723
Credit card lines (3)	362,030	—	—	—	362,030
Total credit extension commitments	\$ 475,273	\$ 156,777	\$ 152,880	\$ 53,823	\$ 838,753

(1) The notional amounts of SBLCs and financial guarantees classified as investment grade and non-investment grade based on the credit quality of the underlying reference name within the instrument were \$28.3 billion and \$7.1 billion at December 31, 2018, and \$27.3 billion and \$8.1 billion at December 31, 2017. Amounts in the table include consumer SBLCs of \$372 million and \$421 million at December 31, 2018 and 2017.

(2) At December 31, 2018, included letters of credit of \$422 million related to certain liquidity commitments of VIEs. For additional information, see .

(3) Includes business card unused lines of credit.

Other Commitments

At December 31, 2018 and 2017, the Corporation had commitments to purchase loans (e.g., residential mortgage and commercial real estate) of \$329 million and \$344 million, which upon settlement will be included in loans or LHFS, and commitments to purchase commercial loans of \$463 million and \$994 million, which upon settlement will be included in trading account assets.

At December 31, 2018 and 2017, the Corporation had commitments to purchase commodities, primarily liquefied natural gas, of \$1.3 billion and \$1.5 billion, which upon settlement will be included in trading account assets.

At December 31, 2018 and 2017, the Corporation had commitments to enter into resale and forward-dated resale and securities borrowing agreements of \$59.7 billion and \$56.8 billion, and commitments to enter into forward-dated repurchase and securities lending agreements of \$21.2 billion and \$34.3 billion. These commitments expire primarily within the next 12 months.

At both December 31, 2018 and 2017, the Corporation had a commitment to originate or purchase up to \$3.0 billion, on a rolling 12-month basis, of auto loans and leases from a strategic partner. This commitment extends through November 2022 and can be terminated with 12 months prior notice.

The Corporation is a party to operating leases for certain of its premises and equipment. Commitments under these leases are approximately \$2.4 billion, \$2.2 billion, \$2.0 billion, \$1.7 billion and \$1.3 billion for 2019 and the years through 2023, respectively, and \$6.2 billion in the aggregate for all years thereafter.

Other Guarantees

Bank-owned Life Insurance Book Value Protection

The Corporation sells products that offer book value protection to insurance carriers who offer group life insurance policies to corporations, primarily banks. At December 31, 2018 and 2017, the notional amount of these guarantees totaled \$9.8 billion and

\$10.4 billion. At December 31, 2018 and 2017, the Corporation's maximum exposure related to these guarantees totaled \$1.5 billion and \$1.6 billion, with estimated maturity dates between 2033 and 2039.

Indemnifications

In the ordinary course of business, the Corporation enters into various agreements that contain indemnifications, such as tax indemnifications, whereupon payment may become due if certain external events occur, such as a change in tax law. The indemnification clauses are often standard contractual terms and were entered into in the normal course of business based on an assessment that the risk of loss would be remote. These agreements typically contain an early termination clause that permits the Corporation to exit the agreement upon these events. The maximum potential future payment under indemnification agreements is difficult to assess for several reasons, including the occurrence of an external event, the inability to predict future changes in tax and other laws, the difficulty in determining how such laws would apply to parties in contracts, the absence of exposure limits contained in standard contract language and the timing of any early termination clauses. Historically, any payments made under these guarantees have been de minimis. The Corporation has assessed the probability of making such payments in the future as remote.

Merchant Services

In accordance with credit and debit card association rules, the Corporation sponsors merchant processing servicers that process credit and debit card transactions on behalf of various merchants. If the merchant processor fails to meet its obligation to reimburse the cardholder for disputed transactions, then the Corporation, as the sponsor, could be held liable for the disputed amount. In 2018 and 2017, the sponsored entities processed and settled \$874.3 billion and \$812.2 billion of transactions and recorded losses of \$31 million and \$28 million. A significant portion of this activity was processed by a joint venture in which the Corporation holds

a 49 percent ownership. The carrying value of the Corporation's investment in the merchant services joint venture was \$2.8 billion and \$2.9 billion at December 31, 2018 and 2017, and is recorded in other assets on the Consolidated Balance Sheet and in *All Other*.

At December 31, 2018 and 2017, the maximum potential exposure for sponsored transactions totaled \$348.1 billion and \$346.4 billion. However, the Corporation believes that the maximum potential exposure is not representative of the actual potential loss exposure and does not expect to make material payments in connection with these guarantees.

Exchange and Clearing House Member Guarantees

The Corporation is a member of various securities and derivative exchanges and clearinghouses, both in the U.S. and other countries. As a member, the Corporation may be required to pay a pro-rata share of the losses incurred by some of these organizations as a result of another member default and under other loss scenarios. The Corporation's potential obligations may be limited to its membership interests in such exchanges and clearinghouses, to the amount (or multiple) of the Corporation's contribution to the guarantee fund or, in limited instances, to the full pro-rata share of the residual losses after applying the guarantee fund. The Corporation's maximum potential exposure under these membership agreements is difficult to estimate; however, the Corporation has assessed the probability of making any such payments as remote.

Prime Brokerage and Securities Clearing Services

In connection with its prime brokerage and clearing businesses, the Corporation performs securities clearance and settlement services with other brokerage firms and clearinghouses on behalf of its clients. Under these arrangements, the Corporation stands ready to meet the obligations of its clients with respect to securities transactions. The Corporation's obligations in this respect are secured by the assets in the clients' accounts and the accounts of their customers as well as by any proceeds received from the transactions cleared and settled by the firm on behalf of clients or their customers. The Corporation's maximum potential exposure under these arrangements is difficult to estimate; however, the potential for the Corporation to incur material losses pursuant to these arrangements is remote.

Other Guarantees

The Corporation has entered into additional guarantee agreements and commitments, including sold risk participation swaps, liquidity facilities, lease-end obligation agreements, partial credit guarantees on certain leases, real estate joint venture guarantees, divested business commitments and sold put options that require gross settlement. The maximum potential future payment under these agreements was approximately \$5.9 billion at both December 31, 2018 and 2017. The estimated maturity dates of these obligations extend up to 2040. The Corporation has made no material payments under these guarantees. For more information on maximum potential future payments under VIE-related liquidity commitments at December 31, 2018, see Note 7 - *Securitizations and Other Variable Interest Entities*.

In the normal course of business, the Corporation periodically guarantees the obligations of its affiliates in a variety of transactions including ISDA-related transactions and non-ISDA related transactions such as commodities trading, repurchase agreements, prime brokerage agreements and other transactions.

Payment Protection Insurance

On June 1, 2017, the Corporation sold its non-U.S. consumer credit card business. Included in the calculation of the gain on sale, the

Corporation recorded an obligation to indemnify the purchaser for substantially all payment protection insurance exposure above reserves assumed by the purchaser.

Representations and Warranties Obligations and Corporate Guarantees

The Corporation securitizes first-lien residential mortgage loans generally in the form of RMBS guaranteed by the GSEs or by GNMA in the case of FHA-insured, VA-guaranteed and Rural Housing Service-guaranteed mortgage loans, and sells pools of first-lien residential mortgage loans in the form of whole loans. In addition, in prior years, legacy companies and certain subsidiaries sold pools of first-lien residential mortgage loans and home equity loans as private-label securitizations or in the form of whole loans. In connection with these transactions, the Corporation or certain of its subsidiaries or legacy companies make and have made various representations and warranties. Breaches of these representations and warranties have resulted in and may continue to result in the requirement to repurchase mortgage loans or to otherwise make whole or provide indemnification or other remedies to sponsors, investors, securitization trusts, guarantors, insurers or other parties (collectively, repurchases).

Unresolved Repurchase Claims

Unresolved representations and warranties repurchase claims represent the notional amount of repurchase claims made by counterparties, typically the outstanding principal balance or the unpaid principal balance at the time of default. In the case of first-lien mortgages, the claim amount is often significantly greater than the expected loss amount due to the benefit of collateral and, in some cases, mortgage insurance or mortgage guarantee payments. Claims received from a counterparty remain outstanding until the underlying loan is repurchased, the claim is rescinded by the counterparty, the Corporation determines that the applicable statute of limitations has expired, or representations and warranties claims with respect to the applicable trust are settled, and fully and finally released.

The notional amount of unresolved repurchase claims at December 31, 2018 and 2017 was \$14.4 billion and \$17.6 billion. This balance included \$6.2 billion and \$6.9 billion of claims related to loans in specific private-label securitization groups or tranches where the Corporation owns substantially all of the outstanding securities or will otherwise realize the benefit of any repurchase claims paid. The balance also includes \$1.5 billion of repurchase claims related to a single monoline insurer and is the subject of litigation.

During 2018, the Corporation received \$283 million in new repurchase claims, including \$201 million in claims that were deemed time-barred. During 2018, \$3.5 billion in claims were resolved, including \$2.2 billion of claims that were deemed time-barred and \$1.1 billion related to settlements. Although the pace of new claims has declined, it is possible the Corporation will receive additional claims or file requests in the future.

Reserve and Related Provision

The reserve for representations and warranties obligations and corporate guarantees at December 31, 2018 and 2017 was \$2.0 billion and \$1.9 billion and is included in accrued expenses and other liabilities on the Consolidated Balance Sheet and the related provision is included in other income in the Consolidated Statement of Income. The representations and warranties reserve represents the Corporation's best estimate of probable incurred losses. This reserve considers a number of provisional settlements with sponsors, investors and trustees, some of which

are subject to trustee approval processes, which may include court proceedings. Future representations and warranties losses may occur in excess of the amounts recorded for these exposures, however, the Corporation does not expect such amounts to be material. Future provisions for representations and warranties may be significantly impacted if actual experiences are different from the Corporation's assumptions in predictive models. The Corporation has combined the range of reasonably possible losses that are in excess of the representations and warranties reserve with the litigation range of possible loss in excess of litigation reserves, as discussed in *Litigation and Regulatory Matters* in this Note. This is consistent with the reduction in outstanding representations and warranties exposure in comparison to prior periods resulting from the resolution of prior matters along with changes in the Corporation's business model.

The reserve for representations and warranties exposures does not consider certain losses related to servicing, including foreclosure and related costs, fraud, indemnity, or claims (including for RMBS) related to securities law or monoline insurance litigation. Losses with respect to one or more of these matters could be material to the Corporation's results of operations or liquidity for any particular reporting period.

Litigation and Regulatory Matters

In the ordinary course of business, the Corporation and its subsidiaries are routinely defendants in or parties to many pending and threatened legal, regulatory and governmental actions and proceedings. In view of the inherent difficulty of predicting the outcome of such matters, particularly where the claimants seek very large or indeterminate damages or where the matters present novel legal theories or involve a large number of parties, the Corporation generally cannot predict the eventual outcome of the pending matters, timing of the ultimate resolution of these matters, or eventual loss, fines or penalties related to each pending matter.

In accordance with applicable accounting guidance, the Corporation establishes an accrued liability when those matters present loss contingencies that are both probable and estimable. In such cases, there may be an exposure to loss in excess of any amounts accrued. As a matter develops, the Corporation, in conjunction with any outside counsel handling the matter, evaluates on an ongoing basis whether such matter presents a loss contingency that is probable and estimable. Once the loss contingency is deemed to be both probable and estimable, the Corporation will establish an accrued liability and record a corresponding amount of litigation-related expense. The Corporation continues to monitor the matter for further developments that could affect the amount of the accrued liability that has been previously established. Excluding expenses of internal and external legal service providers, litigation-related expense of \$469 million and \$753 million was recognized in 2018 and 2017.

For a limited number of the matters disclosed in this Note for which a loss, whether in excess of a related accrued liability or where there is no accrued liability, is reasonably possible in future periods, the Corporation is able to estimate a range of possible loss. In determining whether it is possible to estimate a range of possible loss, the Corporation reviews and evaluates its matters on an ongoing basis, in conjunction with any outside counsel handling the matter, in light of potentially relevant factual and legal developments. With respect to the matters disclosed in this Note, in cases in which the Corporation possesses sufficient appropriate information to estimate a range of possible loss, that estimate is aggregated and disclosed below. There may be other disclosed matters for which a loss is probable or reasonably possible but

such an estimate of the range of possible loss may not be possible. For such matters disclosed in this Note, where an estimate of the range of possible loss is possible, as well as for representations and warranties exposures, management currently estimates the aggregate range of reasonably possible loss for these exposures is \$0 to \$1.9 billion in excess of the accrued liability, if any. This estimated range of possible loss is based upon currently available information and is subject to significant judgment and a variety of assumptions and known and unknown uncertainties. The matters underlying the estimated range will change from time to time, and actual results may vary significantly from the current estimate. Therefore, this estimated range of possible loss represents what the Corporation believes to be an estimate of possible loss only for certain matters meeting these criteria. It does not represent the Corporation's maximum loss exposure.

Information is provided below regarding the nature of the litigation contingencies and, where specified, the amount of the claim associated with these loss contingencies. Based on current knowledge, management does not believe that loss contingencies arising from pending matters, including the matters described herein, will have a material adverse effect on the consolidated financial position or liquidity of the Corporation. However, in light of the inherent uncertainties involved in these matters, some of which are beyond the Corporation's control, and the very large or indeterminate damages sought in some of these matters, an adverse outcome in one or more of these matters could be material to the Corporation's results of operations or liquidity for any particular reporting period.

Ambac Bond Insurance Litigation

Ambac Assurance Corporation and the Segregated Account of Ambac Assurance Corporation (together, Ambac) have filed four separate lawsuits against the Corporation and its subsidiaries relating to bond insurance policies Ambac provided on certain securitized pools of HELOCs, first-lien subprime home equity loans, fixed-rate second-lien mortgage loans and negative amortization pay option adjustable-rate mortgage loans. Ambac alleges that they have paid or will pay claims as a result of defaults in the underlying loans and asserts that the defendants misrepresented the characteristics of the underlying loans and/or breached certain contractual representations and warranties regarding the underwriting and servicing of the loans. In those actions where the Corporation is named as a defendant, Ambac contends the Corporation is liable on various successor and vicarious liability theories.

Ambac v. Countrywide I

The Corporation, Countrywide and other Countrywide entities are named as defendants in an action filed on September 28, 2010 in New York Supreme Court. Ambac asserts claims for fraudulent inducement as well as breach of contract and seeks damages in excess of \$2.2 billion, plus punitive damages.

On May 16, 2017, the First Department issued its decisions on the parties' cross-appeals of the trial court's October 22, 2015 summary judgment rulings. Ambac appealed the First Department's rulings requiring Ambac to prove all of the elements of its fraudulent inducement claim, including justifiable reliance and loss causation; restricting Ambac's sole remedy for its breach of contract claims to the repurchase protocol of cure, repurchase or substitution of any materially defective loan; and dismissing Ambac's claim for reimbursements of attorneys' fees. On June 27, 2018, the New York Court of Appeals affirmed the First Department rulings that Ambac appealed.

Ambac v. Countrywide II

On December 30, 2014, Ambac filed a complaint in New York Supreme Court against the same defendants, claiming fraudulent inducement against Countrywide, and successor and vicarious liability against the Corporation. Ambac seeks damages in excess of \$600 million, plus punitive damages. On December 19, 2016, the Court granted in part and denied in part Countrywide's motion to dismiss the complaint.

Ambac v. Countrywide IV

On July 21, 2015, Ambac filed an action in New York Supreme Court against Countrywide asserting the same claims for fraudulent inducement that Ambac asserted in the now-dismissed *Ambac v. Countrywide III*. The complaint seeks damages in excess of \$350 million, plus punitive damages.

Ambac v. First Franklin

On April 16, 2012, Ambac filed an action against BANA, First Franklin and various Merrill Lynch entities, including Merrill Lynch, Pierce, Fenner & Smith Incorporated (MLPF&S), in New York Supreme Court relating to guaranty insurance Ambac provided on a First Franklin securitization sponsored by Merrill Lynch. The complaint alleges fraudulent inducement and breach of contract, including breach of contract claims against BANA based upon its servicing of the loans in the securitization. Ambac seeks as damages hundreds of millions of dollars that Ambac alleges it has paid or will pay in claims.

Deposit Insurance Assessment

On January 9, 2017, the FDIC filed suit against BANA in U.S. District Court for the District of Columbia alleging failure to pay a December 15, 2016 invoice for additional deposit insurance assessments and interest in the amount of \$542 million for the quarters ending June 30, 2013 through December 31, 2014. On April 7, 2017, the FDIC amended its complaint to add a claim for additional deposit insurance and interest in the amount of \$583 million for the quarters ending March 31, 2012 through March 31, 2013. The FDIC asserts these claims based on BANA's alleged underreporting of counterparty exposures that resulted in underpayment of assessments for those quarters. BANA disagrees with the FDIC's interpretation of the regulations as they existed during the relevant time period and is defending itself against the FDIC's claims. Pending final resolution, BANA has pledged security satisfactory to the FDIC related to the disputed additional assessment amounts.

On March 27, 2018, the U.S. District Court for the District of Columbia denied BANA's partial motion to dismiss certain of the FDIC's claims.

Interchange and Related Litigation

In 2005, a group of merchants filed a series of putative class actions and individual actions directed at interchange fees associated with Visa and MasterCard payment card transactions. These actions, which were consolidated in the U.S. District Court for the Eastern District of New York under the caption *In re Payment Card Interchange Fee and Merchant Discount Anti-Trust Litigation* (Interchange), named Visa, MasterCard and several banks and bank holding companies, including the Corporation, as defendants. Plaintiffs alleged that defendants conspired to fix the level of default interchange rates and that certain rules of Visa and MasterCard were unreasonable restraints of trade. Plaintiffs sought compensatory and treble damages and injunctive relief.

On October 19, 2012, defendants reached a settlement with respect to the putative class actions that the U.S. Court of Appeals for the Second Circuit rejected. In 2018, defendants reached a

settlement with the representatives of the putative Rule 23(b)(3) damages class to contribute an additional \$900 million to the approximately \$5.3 billion held in escrow from the prior settlement. The Corporation's additional contribution is not material to the Corporation. The District Court granted preliminary approval of the settlement with the putative Rule 23(b)(3) damages class in January 2019.

In addition, the putative Rule 23(b)(2) class action seeking injunctive relief is pending, and a number of individual merchant actions continue against the defendants, including one against the Corporation. As a result of various loss-sharing agreements, however, the Corporation remains liable for a portion of any settlement or judgment in individual suits where it is not named as a defendant.

LIBOR, Other Reference Rates, Foreign Exchange (FX) and Bond Trading Matters

Government authorities in the U.S. and various international jurisdictions continue to conduct investigations, to make inquiries of, and to pursue proceedings against, the Corporation and its subsidiaries regarding FX and other reference rates as well as government, sovereign, supranational and agency bonds in connection with conduct and systems and controls. The Corporation is cooperating with these inquiries and investigations and responding to the proceedings.

Foreign Exchange (FX)

The Corporation, BANA and MLPF&S were named as defendants along with other FX market participants in a putative class action filed in the U.S. District Court for the Southern District of New York, in which plaintiffs allege that they sustained losses as a result of the defendants' alleged conspiracy to manipulate the prices of OTC FX transactions and FX transactions on an exchange. Plaintiffs assert antitrust claims and claims for violations of the Commodity Exchange Act (CEA) and seek compensatory and treble damages, as well as declaratory and injunctive relief. On October 1, 2015, the Corporation, BANA and MLPF&S executed a final settlement agreement, in which they agreed to pay participating class members \$187.5 million to settle the litigation. In 2018, the District Court granted final approval to the settlement.

LIBOR

The Corporation, BANA and certain Merrill Lynch entities have been named as defendants along with most of the other London InterBank Offered Rate (LIBOR) panel banks in a number of individual and putative class actions by persons alleging they sustained losses on U.S. dollar LIBOR-based financial instruments as a result of collusion or manipulation by defendants regarding the setting of U.S. dollar LIBOR. Plaintiffs assert a variety of claims, including antitrust, CEA, Racketeer Influenced and Corrupt Organizations (RICO), Securities Exchange Act of 1934, common law fraud and breach of contract claims, and seek compensatory, treble and punitive damages, and injunctive relief. All cases naming the Corporation and its affiliates relating to U.S. dollar LIBOR are pending in the U.S. District Court for the Southern District of New York.

The District Court has dismissed all RICO claims, and dismissed all manipulation claims based on alleged trader conduct against Bank of America entities. The District Court has also substantially limited the scope of antitrust, CEA and various other claims, including by dismissing in their entirety certain individual and putative class plaintiffs' antitrust claims for lack of standing and/or personal jurisdiction. Plaintiffs whose antitrust claims were dismissed by the District Court are pursuing appeals in the Second Circuit. Certain individual and putative class actions remain

pending in the District Court against the Corporation, BANA and certain Merrill Lynch entities.

On February 28, 2018, the District Court denied certification of proposed classes of lending institutions and persons that transacted in eurodollar futures, and the U.S. Court of Appeals for the Second Circuit subsequently denied petitions filed by those plaintiffs for interlocutory appeals of those rulings. Also on February 28, 2018, the District Court granted certification of a class of persons that purchased OTC swaps and notes that referenced U.S. dollar LIBOR from one of the U.S. dollar LIBOR panel banks, limited to claims under Section 1 of the Sherman Act. The U.S. Court of Appeals for the Second Circuit subsequently denied a petition filed by the defendants for interlocutory appeal of that ruling.

Mortgage Appraisal Litigation

The Corporation and certain subsidiaries are named as defendants in two putative class action lawsuits filed in U.S. District Court for the Central District of California (*Waldrup and Williams, et al.*). In November 2016, the actions were consolidated for pre-trial purposes. Plaintiffs allege that in fulfilling orders made by Countrywide for residential mortgage appraisal services, a former Countrywide subsidiary, LandSafe Appraisal Services, Inc., arranged for and completed appraisals that were not in compliance with applicable laws and appraisal standards. Plaintiffs seek, among other forms of relief, compensatory and treble damages.

On February 8, 2018, the District Court granted plaintiffs' motion for class certification. On May 22, 2018, the U.S. Court of Appeals for the Ninth Circuit denied Defendants' petition for permission to file an interlocutory appeal of the District Court's ruling granting class certification.

Mortgage-backed Securities Litigation

The Corporation and its affiliates, Countrywide entities and their affiliates, and Merrill Lynch entities and their affiliates have been named as defendants in cases relating to their various roles in MBS offerings and, in certain instances, have received claims for contractual indemnification related to the MBS securities actions. Plaintiffs in these cases generally sought unspecified

compensatory and/or rescissory damages, unspecified costs and legal fees and generally alleged false and misleading statements. The indemnification claims include claims from underwriters of MBS that were issued by these entities, and from underwriters and issuers of MBS backed by loans originated by these entities.

Mortgage Repurchase Litigation

U.S. Bank - Harborview Repurchase Litigation

On August 29, 2011, U.S. Bank, National Association (U.S. Bank), as trustee for the HarborView Mortgage Loan Trust 2005-10 (the Trust), a mortgage pool backed by loans originated by Countrywide Home Loans, Inc. (CHL), filed a complaint in New York Supreme Court against the Corporation and various subsidiaries alleging breaches of representations and warranties. This litigation has been stayed since March 23, 2017, pending finalization of the settlement discussed below.

On December 5, 2016, the defendants and certain certificate-holders in the Trust agreed to settle the litigation in an amount not material to the Corporation, subject to acceptance by U.S. Bank.

U.S. Bank - SURF/OWNIT Repurchase Litigation

On August 29, 2014 and September 2, 2014, U.S. Bank, as trustee for seven securitization trusts (the Trusts), served seven summonses with notice commencing actions against various subsidiaries of the Corporation in New York Supreme Court. The summonses advance breach of contract claims alleging that defendants breached representations and warranties related to loans securitized in the Trusts. The summonses allege that defendants failed to repurchase breaching mortgage loans from the Trusts, and seek specific performance of defendants' alleged obligation to repurchase breaching loans, declaratory judgment, compensatory, rescissory and other damages, and indemnity.

U.S. Bank has served complaints regarding six of the seven Trusts. In 2018, for those six Trusts, the defendants and certain certificate-holders agreed to settle the respective litigations in amounts not material to the Corporation, subject to acceptance by U.S. Bank.

NOTE 13 Shareholders' Equity

Common Stock

Declared Quarterly Cash Dividends on Common Stock (1)

Declaration Date	Record Date	Payment Date	Dividend Per Share
January 30, 2019	March 1, 2019	March 29, 2019	\$ 0.15
October 24, 2018	December 7, 2018	December 28, 2018	0.15
July 26, 2018	September 7, 2018	September 28, 2018	0.15
April 25, 2018	June 1, 2018	June 29, 2018	0.12
January 31, 2018	March 2, 2018	March 30, 2018	0.12

(1) In 2018, and through February 26, 2019.

The cash dividends paid per share of common stock were \$0.54, \$0.39 and \$0.25 for 2018, 2017 and 2016, respectively.

The following table summarizes common stock repurchases during 2018, 2017 and 2016.

Common Stock Repurchase Summary

(in millions)	2018	2017	2016
Total share repurchases, including CCAR capital plan repurchases	676	509	333
Purchase price of shares repurchased and retired (1)			
CCAR capital plan repurchases	\$ 16,754	\$ 9,347	\$ 4,312
Other authorized repurchases	3,340	3,467	800
Total shares repurchased	\$ 20,094	\$ 12,814	\$ 5,112

(1) Represents reductions to shareholders' equity due to common stock repurchases.

On June 28, 2018, following the non-objection of the Board of Governors of the Federal Reserve System (Federal Reserve) to the Corporation's 2018 Comprehensive Capital Analysis and Review (CCAR) capital plan, the Board of Directors (Board) authorized the repurchase of approximately \$20.6 billion in common stock from July 1, 2018 through June 30, 2019, which includes approximately \$600 million in repurchases to offset shares awarded under equity-based compensation plans during the same period. The common stock repurchase authorization includes both common stock and warrants.

During 2018, the Corporation repurchased \$20.1 billion of common stock in connection with the 2018 and 2017 CCAR capital plans and pursuant to a December 5, 2017 authorization to repurchase an additional \$5.0 billion in common stock.

At December 31, 2018, the Corporation had warrants outstanding and exercisable to purchase 121 million shares of common stock. These warrants, substantially all of which were exercised on or before the expiration date of January 16, 2019, were originally issued in connection with a preferred stock issuance to the U.S. Department of the Treasury in 2009 and were listed on the New York Stock Exchange.

On August 24, 2017, the holders of the Corporation's Series T 6% Non-cumulative preferred stock (Series T) exercised warrants to acquire 700 million shares of the Corporation's common stock. The carrying value of the preferred stock was \$2.9 billion and, upon conversion, was recorded as additional paid-in capital. For more information, see Note 15 - Earnings Per Common Share.

In connection with employee stock plans, in 2018, the Corporation issued 75 million shares of its common stock and, to

satisfy tax withholding obligations, repurchased 29 million shares of its common stock. At December 31, 2018, the Corporation had reserved 781 million unissued shares of common stock for future issuances under employee stock plans, common stock warrants, convertible notes and preferred stock

Preferred Stock

The cash dividends declared on preferred stock were \$1.5 billion, \$1.6 billion and \$1.7 billion for 2018, 2017 and 2016, respectively.

On March 15, 2018, the Corporation issued 94,000 shares of 5.875% Fixed-to-Floating Rate Non-Cumulative Preferred Stock, Series FF for \$2.35 billion. On May 16, 2018, the Corporation issued 54,000 shares of 6.000% Fixed Rate Non-Cumulative Preferred Stock, Series GG for \$1.35 billion. On July 24, 2018, the Corporation issued 34,160 shares of 5.875% Non-Cumulative Preferred Stock, Series HH for \$854 million.

In 2018, the Corporation fully redeemed Series D, Series I, Series K, Series M and Series 3 preferred stock for a total of \$4.5 billion.

All series of preferred stock in the Preferred Stock Summary table have a par value of \$0.01 per share, are not subject to the operation of a sinking fund, have no participation rights, and with the exception of the Series L Preferred Stock, are not convertible. The holders of the Series B Preferred Stock and Series 1 through 5 Preferred Stock have general voting rights and vote together with the common stock. The holders of the other series included in the table have no general voting rights. All outstanding series of preferred stock of the Corporation have preference over the Corporation's common stock with respect to the payment of dividends and distribution of the Corporation's assets in the event of a liquidation or dissolution. With the exception of the Series B, F, G and T Preferred Stock, if any dividend payable on these series is in arrears for three or more semi-annual or six or more quarterly dividend periods, as applicable (whether consecutive or not), the holders of these series and any other class or series of preferred stock ranking equally as to payment of dividends and upon which equivalent voting rights have been conferred and are exercisable (voting as a single class) will be entitled to vote for the election of two additional directors. These voting rights terminate when the Corporation has paid in full dividends on these series for at least two semi-annual or four quarterly dividend periods, as applicable, following the dividend arrearage.

The 7.25% Non-Cumulative Perpetual Convertible Preferred Stock, Series L (Series L Preferred Stock) does not have early redemption/call rights. Each share of the Series L Preferred Stock may be converted at any time, at the option of the holder, into 20 shares of the Corporation's common stock plus cash in lieu of fractional shares. The Corporation may cause some or all of the Series L Preferred Stock, at its option, at any time or from time to time, to be converted into shares of common stock at the then-applicable conversion rate if, for 20 trading days during any period of 30 consecutive trading days, the closing price of common stock exceeds 130 percent of the then-applicable conversion price of the Series L Preferred Stock. If a conversion of Series L Preferred Stock occurs at the option of the holder, subsequent to a dividend record date but prior to the dividend payment date, the Corporation will still pay any accrued dividends payable.

The table on the following page presents a summary of perpetual preferred stock outstanding at December 31, 2018.

Preferred Stock Summary

(Dollars in millions, except as noted)

Series	Description	Initial Issuance Date	Total Shares Outstanding	Liquidation Preference per Share (in dollars)	Carrying Value	Per Annum Dividend Rate	Dividend per Share (in dollars)	Annual Dividend	Redemption Period (1)
Series B	7% Cumulative Redeemable	June 1997	7,110	\$ 100	\$ 1	7.00%	\$ 7.00	\$ --	n/a
Series E (2)	Floating Rate Non-Cumulative	November 2006	12,691	25,000	317	3-mo. LIBOR + 35 bps (3)	1.01	13	On or after November 15, 2011
Series F	Floating Rate Non-Cumulative	March 2012	1,409	100,000	141	3-mo. LIBOR + 40 bps (3)	4,055.56	6	On or after March 15, 2012
Series G	Adjustable Rate Non-Cumulative	March 2012	4,926	100,000	493	3-mo. LIBOR + 40 bps (3)	4,055.56	20	On or after March 15, 2012
Series L	7.25% Non-Cumulative Perpetual Convertible	January 2008	3,080,182	1,000	3,080	7.25%	72.50	223	n/a
Series T	6% Non-cumulative	September 2011	354	100,000	35	6.00%	6,000.00	2	After May 7, 2019
Series U (4)	Fixed-to-Floating Rate Non-Cumulative	May 2013	40,000	25,000	1,000	5.2% to, but excluding, 6/1/23; 3-mo. LIBOR + 333.5 bps thereafter	52.00	52	On or after June 1, 2023
Series V (4)	Fixed-to-Floating Rate Non-Cumulative	June 2014	60,000	25,000	1,500	5.125% to, but excluding, 6/17/19; 3-mo. LIBOR + 338.7 bps thereafter	51.25	77	On or after June 17, 2019
Series W (2)	6.625% Non-Cumulative	September 2014	44,000	25,000	1,100	6.625%	1.66	73	On or after September 9, 2019
Series X (4)	Fixed-to-Floating Rate Non-Cumulative	September 2014	60,000	25,000	2,000	6.250% to, but excluding, 9/5/24; 3-mo. LIBOR + 370.5 bps thereafter	62.50	125	On or after September 5, 2024
Series Y (2)	6.500% Non-Cumulative	January 2015	44,000	25,000	1,100	6.500%	1.63	72	On or after January 27, 2020
Series Z (4)	Fixed-to-Floating Rate Non-Cumulative	October 2014	56,000	25,000	1,400	6.500% to, but excluding, 10/23/24; 3-mo. LIBOR + 417.4 bps thereafter	65.00	91	On or after October 23, 2024
Series AA (4)	Fixed-to-Floating Rate Non-Cumulative	March 2015	76,000	25,000	1,900	6.100% to, but excluding, 3/17/25; 3-mo. LIBOR + 369.8 bps thereafter	61.00	116	On or after March 17, 2025
Series CC (2)	6.200% Non-Cumulative	January 2016	44,000	25,000	1,100	6.200%	1.55	68	On or after January 29, 2021
Series DD (4)	Fixed-to-Floating Rate Non-Cumulative	March 2016	40,000	25,000	1,000	6.300% to, but excluding, 3/15/26; 3-mo. LIBOR + 455.3 bps thereafter	63.00	63	On or after March 10, 2026
Series EE (2)	6.000% Non-Cumulative	April 2016	36,000	25,000	900	6.000%	1.50	54	On or after April 5, 2021
Series FF (4)	Fixed-to-Floating Rate Non-Cumulative	March 2018	94,000	25,000	2,350	5.875% to, but excluding, 3/15/28; 3-mo. LIBOR + 293.1 bps thereafter	29.38	09	On or after March 15, 2028
Series GG (2)	6.000% Non-Cumulative	May 2018	54,000	25,000	1,350	6.000%	0.75	41	On or after May 16, 2023
Series HH (2)	5.875% Non-Cumulative	July 2018	34,160	25,000	854	5.875%	0.73	25	On or after July 24, 2023
Series 1 (5)	Floating Rate Non-Cumulative	November 2004	3,275	30,000	98	3-mo. LIBOR + 75 bps (6)	0.76	3	On or after November 28, 2009
Series 2 (5)	Floating Rate Non-Cumulative	March 2005	9,967	30,000	299	3-mo. LIBOR + 65 bps (6)	0.76	9	On or after November 28, 2009
Series 4 (5)	Floating Rate Non-Cumulative	November 2005	7,010	30,000	210	3-mo. LIBOR + 75 bps (3)	1.01	9	On or after November 28, 2010
Series 5 (5)	Floating Rate Non-Cumulative	March 2007	14,056	30,000	422	3-mo. LIBOR + 50 bps (3)	1.01	17	On or after May 21, 2012
Issuance costs and certain adjustments					(324)				
Total			3,843,140		\$ 22,326				

(1) The Corporation may redeem series of preferred stock on or after the redemption date in whole or in part at its option, at the liquidation preference plus declared and unpaid dividends. Series B and Series L Preferred Stock do not have early redemption/call rights.

(2) Ownership is held in the form of depositary shares, each representing a 1/1,000th interest in a share of preferred stock, paying a quarterly cash dividend, if and when declared.

(3) Subject to 4.00% minimum rate per annum.

(4) Ownership is held in the form of depositary shares, each representing a 1/25th interest in a share of preferred stock, paying a semi-annual cash dividend, if and when declared, until the first redemption date at which time, it adjusts to a quarterly cash dividend, if and when declared, thereafter.

(5) Ownership is held in the form of depositary shares, each representing a 1/1,200th interest in a share of preferred stock, paying a quarterly cash dividend, if and when declared.

(6) Subject to 3.00% minimum rate per annum.

n/a = not applicable.

NOTE 14 Accumulated Other Comprehensive Income (Loss)

The table below presents the changes in accumulated OCI after-tax for 2016, 2017 and 2018.

(Dollars in millions)	Debt and Equity Securities	Debit Valuation Adjustments	Derivatives	Employee Benefit Plans	Foreign Currency	Total
Balance, December 31, 2015	\$ 78	\$ (611)	\$ (1,077)	\$ (2,956)	\$ (792)	\$ (5,358)
Net change	(1,345)	(156)	182	(524)	(87)	(1,930)
Balance, December 31, 2016	\$ (1,267)	\$ (767)	\$ (895)	\$ (3,480)	\$ (879)	\$ (7,288)
Net change	61	(293)	64	288	86	206
Balance, December 31, 2017	\$ (1,206)	\$ (1,060)	\$ (831)	\$ (3,192)	\$ (793)	\$ (7,082)
Accounting change related to certain tax effects (1)	(393)	(220)	(189)	(707)	239	(1,270)
Cumulative adjustment for hedge accounting change (2)	—	—	57	—	—	57
Net change	(3,953)	749	(53)	(405)	(254)	(3,916)
Balance, December 31, 2018	\$ (5,552)	\$ (531)	\$ (1,016)	\$ (4,304)	\$ (808)	\$ (12,211)

(1) Effective January 1, 2018, the Corporation adopted the accounting standard on tax effects in accumulated OCI related to the Tax Act. Accordingly, certain tax effects were reclassified from accumulated OCI to retained earnings. For additional information, see Note 1 - Summary of Significant Accounting Principles.

(2) Reflects the Corporation's adoption of the new hedge accounting standard. For additional information, see Note 1 - Summary of Significant Accounting Principles.

The table below presents the net change in fair value recorded in accumulated OCI, net realized gains and losses reclassified into earnings and other changes for each component of OCI pre- and after-tax for 2018, 2017 and 2016.

Changes in OCI Components Pre- and After-tax

(Dollars in millions)	Pretax	Tax effect	After- tax	Pretax	Tax effect	After- tax	Pretax	Tax effect	After- tax
	2018			2017			2016		
Debt and equity securities:									
Net increase (decrease) in fair value	\$ (5,189)	\$ 1,329	\$ (3,860)	\$ 240	\$ 14	\$ 254	\$ (1,694)	\$ 641	\$ (1,053)
Net realized (gains) reclassified into earnings (1)	(123)	30	(93)	(304)	111	(193)	(471)	179	(292)
Net change	(5,312)	1,359	(3,953)	(64)	125	61	(2,165)	820	(1,345)
Debit valuation adjustments:									
Net increase (decrease) in fair value	952	(224)	728	(490)	171	(319)	(271)	104	(167)
Net realized losses reclassified into earnings (1)	26	(5)	21	42	(16)	26	17	(6)	11
Net change	978	(229)	749	(448)	155	(293)	(254)	98	(156)
Derivatives:									
Net (decrease) in fair value	(232)	74	(158)	(50)	1	(49)	(299)	113	(186)
Reclassifications into earnings:									
Net interest income	165	(40)	125	327	(122)	205	553	(205)	348
Personnel expense	(27)	7	(20)	(148)	56	(92)	32	(12)	20
Net realized losses reclassified into earnings	138	(33)	105	179	(66)	113	585	(217)	368
Net change	(94)	41	(53)	129	(65)	64	286	(104)	182
Employee benefit plans:									
Net increase (decrease) in fair value	(703)	164	(539)	223	(55)	168	(921)	329	(592)
Net actuarial losses and other reclassified into earnings (2)	171	(46)	125	179	(61)	118	97	(36)	61
Settlements, curtailments and other	11	(2)	9	3	(1)	2	15	(8)	7
Net change	(521)	116	(405)	405	(117)	288	(809)	285	(524)
Foreign currency:									
Net (decrease) in fair value	(8)	(195)	(203)	(439)	430	(9)	514	(601)	(87)
Net realized (gains) losses reclassified into earnings (1)	(149)	98	(51)	(606)	701	95	—	—	—
Net change	(157)	(97)	(254)	(1,045)	1,131	86	514	(601)	(87)
Total other comprehensive income (loss)	\$ (5,106)	\$ 1,190	\$ (3,916)	\$ (1,023)	\$ 1,229	\$ 206	\$ (2,428)	\$ 498	\$ (1,930)

(1) Reclassifications of pretax debt and equity securities, DVA and foreign currency (gains) losses are recorded in other income in the Consolidated Statement of Income.

(2) Reclassifications of pretax employee benefit plan costs are recorded in other general operating expense in the Consolidated Statement of Income.

NOTE 15 Earnings Per Common Share

The calculation of EPS and diluted EPS for 2018, 2017 and 2016 is presented below. For more information on the calculation of EPS, see Note 1 - Summary of Significant Accounting Principles.

(In millions, except per share information)	2018	2017	2016
Earnings per common share			
Net income	\$ 28,147	\$ 18,232	\$ 17,822
Preferred stock dividends	(1,451)	(1,614)	(1,682)
Net income applicable to common shareholders	\$ 26,696	\$ 16,618	\$ 16,140
Average common shares issued and outstanding	10,096.5	10,195.6	10,284.1
Earnings per common share	\$ 2.64	\$ 1.63	\$ 1.57
Diluted earnings per common share			
Net income applicable to common shareholders	\$ 26,696	\$ 16,618	\$ 16,140
Add preferred stock dividends due to assumed conversions (1)	—	186	300
Net income allocated to common shareholders	\$ 26,696	\$ 16,804	\$ 16,440
Average common shares issued and outstanding	10,096.5	10,195.6	10,284.1
Dilutive potential common shares (2)	140.4	582.8	762.7
Total diluted average common shares issued and outstanding	10,236.9	10,778.4	11,046.8
Diluted earnings per common share	\$ 2.61	\$ 1.56	\$ 1.49

(1) Represents the Series T dividends under the "if-converted" method prior to conversion.

(2) Includes incremental dilutive shares from RSUs, restricted stock and warrants

The Corporation previously issued warrants to purchase 700 million shares of the Corporation's common stock to the holders of the Series T 6% Non-cumulative preferred stock (Series T) at an exercise price of \$7.142857 per share. On August 24, 2017, the Series T holders exercised the warrants and acquired the 700 million shares of the Corporation's common stock using the Series T preferred stock as consideration for the exercise price, which increased common shares outstanding, but had no effect on diluted earnings per share as this conversion was included in the Corporation's diluted earnings per share calculation under the applicable accounting guidance. For 2016, the average dilutive impact of the 700 million potential common shares was included in the diluted share count under the "if-converted" method.

For 2018, 2017 and 2016, 62 million average dilutive potential common shares associated with the Series L preferred stock were not included in the diluted share count because the result would have been antidilutive under the "if-converted" method. For 2018, 2017 and 2016, average options to purchase 4 million, 21 million and 45 million shares of common stock, respectively, were outstanding but not included in the computation of EPS because the result would have been antidilutive under the treasury stock method. For 2017 and 2016, average warrants to purchase 122 million shares of common stock were outstanding but not included in the computation of EPS because the result would have been antidilutive under the treasury stock method. These warrants expired on October 29, 2018. For 2018, 2017 and 2016, average warrants to purchase 136 million, 143 million and 150 million shares of common stock, respectively, were included in the diluted EPS calculation under the treasury stock method. Substantially all of the outstanding warrants were exercised on or before the expiration date of January 16, 2019.

NOTE 16 Regulatory Requirements and Restrictions

The Federal Reserve, Office of the Comptroller of the Currency (OCC) and FDIC (collectively, U.S. banking regulators) jointly establish regulatory capital adequacy guidelines, including Basel 3, for U.S. banking organizations. As a financial holding company, the Corporation is subject to capital adequacy rules issued by the Federal Reserve. The Corporation's banking entity affiliates are subject to capital adequacy rules issued by the OCC.

The Corporation and its primary banking entity affiliate, BANA, are Advanced approaches institutions under Basel 3. As Advanced approaches institutions, the Corporation and its banking entity affiliates are required to report regulatory risk-based capital ratios and risk-weighted assets under both the Standardized and Advanced approaches. The approach that yields the lower ratio is used to assess capital adequacy, including under the Prompt Corrective Action (PCA) framework. At December 31, 2018, Common equity tier 1 and Tier 1 capital ratios were lower under the Standardized approach whereas the Advanced approaches yielded a lower result for the Total capital ratio. All three ratios were lower under the Advanced approaches method at December 31, 2017.

Effective January 1, 2018, the Corporation is required to maintain a minimum supplementary leverage ratio (SLR) of 3.0 percent plus a leverage buffer of 2.0 percent in order to avoid certain restrictions on capital distributions and discretionary bonus payments. The Corporation's insured depository institution subsidiaries are required to maintain a minimum 6.0 percent SLR to be considered well capitalized under the PCA framework.

The following table presents capital ratios and related information in accordance with Basel 3 Standardized and Advanced approaches as measured at December 31, 2018 and 2017 for the Corporation and BANA.

Regulatory Capital under Basel 3 (1)

	Bank of America Corporation			Bank of America, N.A.		
	Standardized Approach	Advanced Approaches	Regulatory Minimum (2)	Standardized Approach	Advanced Approaches	Regulatory Minimum (3)
December 31, 2018						
(Dollars in millions, except as noted)						
Risk-based capital metrics:						
Common equity tier 1 capital	\$ 167,272	\$ 167,272		\$ 149,824	\$ 149,824	
Tier 1 capital	169,038	189,038		149,824	149,824	
Total capital (4)	221,304	212,878		161,760	153,627	
Risk-weighted assets (in billions)	1,437	1,409		1,195	959	
Common equity tier 1 capital ratio	11.6%	11.9%	8.25%	12.5%	15.6%	6.5%
Tier 1 capital ratio	13.2	13.4	9.75	12.5	15.6	8.0
Total capital ratio	15.4	15.1	11.75	13.5	16.0	10.0
Leverage-based metrics:						
Adjusted quarterly average assets (in billions) (5)	\$ 2,258	\$ 2,258		\$ 1,719	\$ 1,719	
Tier 1 leverage ratio	8.4%	8.4%	4.0	8.7%	8.7%	5.0
SLR leverage exposure (in billions)		\$ 2,791			\$ 2,112	
SLR		6.8%	5.0		7.1%	6.0
December 31, 2017						
Risk-based capital metrics:						
Common equity tier 1 capital	\$ 171,063	\$ 171,063		\$ 150,552	\$ 150,552	
Tier 1 capital	191,496	191,496		150,552	150,552	
Total capital (4)	227,427	218,529		163,243	154,675	
Risk-weighted assets (in billions)	1,434	1,449		1,201	1,007	
Common equity tier 1 capital ratio	11.9%	11.8%	7.25%	12.5%	14.9%	6.5%
Tier 1 capital ratio	13.4	13.2	8.75	12.5	14.9	8.0
Total capital ratio	15.9	15.1	10.75	13.6	15.4	10.0
Leverage-based metrics:						
Adjusted quarterly average assets (in billions) (5)	\$ 2,224	\$ 2,224		\$ 1,672	\$ 1,672	
Tier 1 leverage ratio	8.6%	8.6%	4.0	9.0%	9.0%	5.0

(1) Regulatory capital metrics at December 31, 2017 reflect Basel 3 transition provisions for regulatory capital adjustments and deductions, which were fully phased-in as of January 1, 2018.

(2) The December 31, 2018 and 2017 amounts include a transition capital conservation buffer of 1.875 percent and 1.25 percent and a transition global systemically important bank surcharge of 1.875 percent and 1.5 percent. The countercyclical capital buffer for both periods is zero.

(3) Percent required to meet guidelines to be considered "well capitalized" under the PCA framework.

(4) Total capital under the Advanced approaches differs from the Standardized approach due to differences in the amount permitted in Tier 2 capital related to the qualifying allowance for credit losses.

(5) Reflects adjusted average total assets for the three months ended December 31, 2018 and 2017.

The capital adequacy rules issued by the U.S. banking regulators require institutions to meet the established minimums outlined in the table above. Failure to meet the minimum requirements can lead to certain mandatory and discretionary actions by regulators that could have a material adverse impact on the Corporation's financial position. At December 31, 2018 and 2017, the Corporation and its banking entity affiliates were "well capitalized."

Other Regulatory Matters

The Federal Reserve requires the Corporation's bank subsidiaries to maintain reserve requirements based on a percentage of certain deposit liabilities. The average daily reserve balance requirements, in excess of vault cash, maintained by the Corporation with the Federal Reserve Bank were \$11.4 billion and \$8.9 billion for 2018 and 2017. At December 31, 2018 and 2017, the Corporation had cash and cash equivalents in the amount of \$5.8 billion and \$4.1 billion, and securities with a fair value of \$16.6 billion and \$17.3 billion that were segregated in compliance with securities regulations. Cash held on deposit with the Federal Reserve Bank to meet reserve requirements and cash and cash equivalents segregated in compliance with securities regulations are components of restricted cash. For additional information, see Note 10 - *Federal Funds Sold or Purchased, Securities Financing Agreements, Short-term Borrowings and Restricted Cash*. In

addition, at December 31, 2018 and 2017, the Corporation had cash deposited with clearing organizations of \$8.1 billion and \$11.9 billion primarily recorded in other assets on the Consolidated Balance Sheet.

Bank Subsidiary Distributions

The primary sources of funds for cash distributions by the Corporation to its shareholders are capital distributions received from its bank subsidiaries, BANA and Bank of America California, N.A. In 2018, the Corporation received dividends of \$26.1 billion from BANA and \$320 million from Bank of America California, N.A. In addition, Bank of America California, N.A. returned capital of \$1.4 billion to the Corporation in 2018.

The amount of dividends that a subsidiary bank may declare in a calendar year without OCC approval is the subsidiary bank's net profits for that year combined with its retained net profits for the preceding two years. Retained net profits, as defined by the OCC, consist of net income less dividends declared during the period. In 2019, BANA can declare and pay dividends of approximately \$3.1 billion to the Corporation plus an additional amount equal to its retained net profits for 2019 up to the date of any such dividend declaration. Bank of America California, N.A. can pay dividends of \$40 million in 2019 plus an additional amount equal to its retained net profits for 2019 up to the date of any such dividend declaration.

NOTE 17 Employee Benefit Plans

Pension and Postretirement Plans

The Corporation sponsors a qualified noncontributory trustee pension plan (Qualified Pension Plan), a number of noncontributory nonqualified pension plans, and postretirement health and life plans that cover eligible employees. Non-U.S. pension plans sponsored by the Corporation vary based on the country and local practices.

The Qualified Pension Plan has a balance guarantee feature for account balances with participant-selected investments, applied at the time a benefit payment is made from the plan that effectively provides principal protection for participant balances transferred and certain compensation credits. The Corporation is responsible for funding any shortfall on the guarantee feature.

Benefits earned under the Qualified Pension Plan have been frozen. Thereafter, the cash balance accounts continue to earn investment credits or interest credits in accordance with the terms of the plan document.

The Corporation has an annuity contract that guarantees the payment of benefits vested under a terminated U.S. pension plan (Other Pension Plan). The Corporation, under a supplemental agreement, may be responsible for, or benefit from actual experience and investment performance of the annuity assets. The Corporation made no contribution under this agreement in 2018 or 2017. Contributions may be required in the future under this agreement.

The Corporation's noncontributory, nonqualified pension plans are unfunded and provide supplemental defined pension benefits to certain eligible employees.

In addition to retirement pension benefits, certain benefits-eligible employees may become eligible to continue participation as retirees in health care and/or life insurance plans sponsored by the Corporation. These plans are referred to as the Postretirement Health and Life Plans. During 2017, the Corporation established and funded a Voluntary Employees' Beneficiary Association trust in the amount of \$300 million for the Postretirement Health and Life Plans.

The Pension and Postretirement Plans table summarizes the changes in the fair value of plan assets, changes in the projected benefit obligation (PBO), the funded status of both the accumulated benefit obligation (ABO) and the PBO, and the weighted-average assumptions used to determine benefit obligations for the pension plans and postretirement plans at December 31, 2018 and 2017. The estimate of the Corporation's PBO associated with these plans considers various actuarial assumptions, including assumptions for mortality rates and discount rates. The discount rate assumptions are derived from a cash flow matching technique that utilizes rates that are based on Aa-rated corporate bonds with cash flows that match estimated benefit payments of each of the plans. The increases in the weighted-average discount rates in 2018 resulted in decreases to the PBO of approximately \$1.3 billion at December 31, 2018. The decreases in the weighted-average discount rates in 2017 resulted in increases to the PBO of approximately \$1.1 billion at December 31, 2017. Significant gains and losses related to changes in the PBO for 2018 and 2017 primarily resulted from changes in the discount rate.

Pension and Postretirement Plans (1)

(Dollars in millions)	Qualified Pension Plan		Non-U.S. Pension Plans		Nonqualified and Other Pension Plans		Postretirement Health and Life Plans	
	2018	2017	2018	2017	2018	2017	2018	2017
Fair value, January 1	\$ 19,708	\$ 18,239	\$ 2,943	\$ 2,789	\$ 2,724	\$ 2,744	\$ 300	\$ -
Actual return on plan assets	(550)	2,285	(181)	118	8	128	5	-
Company contributions	-	-	22	23	91	98	43	393
Plan participant contributions	-	-	1	1	-	-	115	125
Settlements and curtailments	-	-	(107)	(190)	-	-	-	-
Benefits paid	(980)	(816)	(52)	(54)	(239)	(246)	(214)	(230)
Federal subsidy on benefits paid	n/a	n/a	n/a	n/a	n/a	n/a	3	12
Foreign currency exchange rate changes	n/a	n/a	(165)	256	n/a	n/a	n/a	n/a
Fair value, December 31	\$ 18,178	\$ 19,708	\$ 2,461	\$ 2,943	\$ 2,584	\$ 2,724	\$ 252	\$ 300
Change in projected benefit obligation								
Projected benefit obligation, January 1	\$ 15,706	\$ 14,982	\$ 2,814	\$ 2,763	\$ 3,047	\$ 3,047	\$ 1,056	\$ 1,125
Service cost	-	-	19	24	1	1	6	6
Interest cost	563	606	65	72	105	117	36	43
Plan participant contributions	-	-	1	1	-	-	115	125
Plan amendments	-	-	13	-	-	-	-	(19)
Settlements and curtailments	-	-	(107)	(200)	-	-	-	-
Actuarial loss (gain)	(1,145)	934	(29)	(26)	(135)	128	(73)	(7)
Benefits paid	(980)	(816)	(52)	(54)	(239)	(246)	(214)	(230)
Federal subsidy on benefits paid	n/a	n/a	n/a	n/a	n/a	n/a	3	12
Foreign currency exchange rate changes	n/a	n/a	(135)	234	n/a	n/a	(1)	1
Projected benefit obligation, December 31	\$ 14,144	\$ 15,706	\$ 2,589	\$ 2,814	\$ 2,779	\$ 3,047	\$ 923	\$ 1,056
Amounts recognized on Consolidated Balance Sheet								
Other assets	\$ 4,034	\$ 4,002	\$ 316	\$ 610	\$ 754	\$ 730	\$ -	\$ -
Accrued expenses and other liabilities	-	-	(444)	(481)	(949)	(1,053)	(676)	(756)
Net amount recognized, December 31	\$ 4,034	\$ 4,002	\$ (128)	\$ 129	\$ (195)	\$ (323)	\$ (676)	\$ (756)

Funded status, December 31

Accumulated benefit obligation	\$	14,144	\$	15,706	\$	2,542	\$	2,731	\$	2,778	\$	3,046	n/a	n/a		
Overfunded (unfunded) status of ABO		4,034		4,002		(81)		212		(194)		(322)	n/a	n/a		
Provision for future salaries		—		—		47		63		1		1	n/a	n/a		
Projected benefit obligation		14,144		15,706		2,589		2,814		2,779		3,047	\$	928	\$	1,056

Weighted-average assumptions, December 31

Discount rate	4.32%	3.68%	2.60%	2.39%	4.26%	3.58%	4.25%	3.58%
Rate of compensation increase	n/a	n/a	4.49	4.31	4.00	4.00	n/a	n/a
Interest-crediting rate	5.18	5.08	1.47	1.49	4.50	4.53	n/a	n/a

(1) The measurement date for the Qualified Pension Plan, Non-U.S. Pension Plans, Nonqualified and Other Pension Plans, and Postretirement Health and Life Plans was December 31 of each year reported.
n/a = not applicable

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The Corporation's estimate of its contributions to be made to the Non-U.S. Pension Plans, Nonqualified and Other Pension Plans, and Postretirement Health and Life Plans in 2019 is \$21 million, \$91 million and \$15 million, respectively. The Corporation does not expect to make a contribution to the Qualified Pension Plan in 2019. It is the policy of the Corporation to fund no less than the

minimum funding amount required by the Employee Retirement Income Security Act of 1974 (ERISA).

Pension Plans with ABO and PBO in excess of plan assets as of December 31, 2018 and 2017 are presented in the table below. For these plans, funding strategies vary due to legal requirements and local practices.

Plans with ABO and PBO in Excess of Plan Assets

(Dollars in millions)	Non-U.S. Pension Plans		Nonqualified and Other Pension Plans	
	2018	2017	2018	2017
PBO	\$ 615	\$ 671	\$ 950	\$ 1,054
ABO	605	644	949	1,053
Fair value of plan assets	173	191	1	1

Components of Net Periodic Benefit Cost

(Dollars in millions)	Qualified Pension Plan			Non-U.S. Pension Plans		
	2018	2017	2016	2018	2017	2016
Components of net periodic benefit cost (Income)						
Service cost	\$ —	\$ —	\$ —	\$ 19	\$ 24	\$ 25
Interest cost	563	606	634	65	72	86
Expected return on plan assets	(1,136)	(1,068)	(1,038)	(126)	(136)	(123)
Amortization of net actuarial loss	147	154	139	10	8	6
Other	—	—	—	12	(7)	2
Net periodic benefit cost (Income)	\$ (426)	\$ (308)	\$ (265)	\$ (20)	\$ (39)	\$ (4)

Weighted-average assumptions used to determine net cost for years ended December 31

Discount rate	3.68%	4.16%	4.51%	2.39%	2.56%	3.59%
Expected return on plan assets	6.00	6.00	6.00	4.37	4.73	4.84
Rate of compensation increase	n/a	n/a	n/a	4.31	4.51	4.67

(Dollars in millions)	Nonqualified and Other Pension Plans			Postretirement Health and Life Plans		
	2018	2017	2016	2018	2017	2016
Components of net periodic benefit cost (Income)						
Service cost	\$ 1	\$ 1	\$ —	\$ 6	\$ 6	\$ 7
Interest cost	105	117	127	36	43	47
Expected return on plan assets	(84)	(95)	(101)	(6)	—	—
Amortization of net actuarial loss (gain)	43	34	25	(27)	(21)	(81)
Other	—	—	3	(3)	4	4
Net periodic benefit cost (Income)	\$ 65	\$ 57	\$ 54	\$ 6	\$ 32	\$ (23)

Weighted-average assumptions used to determine net cost for years ended December 31

Discount rate	3.58%	4.01%	4.34%	3.58%	3.99%	4.32%
Expected return on plan assets	3.19	3.50	3.66	2.00	n/a	n/a
Rate of compensation increase	4.00	4.00	4.00	n/a	n/a	n/a

n/a - not applicable

The asset valuation method used to calculate the expected return on plan assets component of net periodic benefit cost for the Qualified Pension Plan recognizes 60 percent of the prior year's market gains or losses at the next measurement date with the remaining 40 percent spread equally over the subsequent four years.

Gains and losses for all benefit plans except postretirement health care are recognized in accordance with the standard amortization provisions of the applicable accounting guidance. Net periodic postretirement health and life expense was determined using the "projected unit credit" actuarial method. For the Postretirement Health and Life Plans, 50 percent of the unrecognized gain or loss at the beginning of the fiscal year (or at subsequent remeasurement) is recognized on a level basis during the year.

Assumed health care cost trend rates affect the postretirement benefit obligation and benefit cost reported for the Postretirement Health and Life Plans. The assumed health care cost trend rate used to measure the expected cost of benefits covered by the Postretirement Health and Life Plans is 6.50 percent for 2019, reducing in steps to 5.00 percent in 2023 and later years.

The Corporation's net periodic benefit cost (income) recognized for the plans is sensitive to the discount rate and expected return on plan assets. For the Qualified Pension Plan, Non-U.S. Pension Plans, Nonqualified and Other Pension Plans, and Postretirement Health and Life Plans, a 25 bp decline in discount rates and expected return on assets would not have a significant impact on the net periodic benefit cost for 2018.

Pretax Amounts Included In Accumulated OCI

	Qualified Pension Plan		Non-U.S. Pension Plans		Nonqualified and Other Pension Plans		Postretirement Health and Life Plans		Total	
(Dollars in millions)	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017
Net actuarial loss (gain)	\$ 4,386	\$ 3,992	\$ 454	\$ 196	\$ 912	\$ 1,014	\$ (75)	\$ (30)	\$ 5,677	\$ 5,172
Prior service cost (credits)	—	—	18	4	—	—	(9)	(11)	9	(7)
Amounts recognized in accumulated OCI	\$ 4,386	\$ 3,992	\$ 472	\$ 200	\$ 912	\$ 1,014	\$ (84)	\$ (41)	\$ 5,686	\$ 5,165

Pretax Amounts Recognized In OCI

	Qualified Pension Plan		Non-U.S. Pension Plans		Nonqualified and Other Pension Plans		Postretirement Health and Life Plans		Total	
(Dollars in millions)	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017
Current year actuarial loss (gain)	\$ 541	\$ (283)	\$ 270	\$ (12)	\$ (59)	\$ 95	\$ (73)	\$ (7)	\$ 679	\$ (207)
Amortization of actuarial gain (loss) and prior service cost	(147)	(154)	(11)	(8)	(43)	(34)	30	21	(171)	(175)
Current year prior service cost (credit)	—	—	13	—	—	—	—	(23)	13	(23)
Amounts recognized in OCI	\$ 394	\$ (437)	\$ 272	\$ (20)	\$ (102)	\$ 61	\$ (43)	\$ (9)	\$ 521	\$ (405)

Plan Assets

The Qualified Pension Plan has been established as a retirement vehicle for participants, and trusts have been established to secure benefits promised under the Qualified Pension Plan. The Corporation's policy is to invest the trust assets in a prudent manner for the exclusive purpose of providing benefits to participants and defraying reasonable expenses of administration. The Corporation's investment strategy is designed to provide a total return that, over the long term, increases the ratio of assets to liabilities. The strategy attempts to maximize the investment return on assets at a level of risk deemed appropriate by the Corporation while complying with ERISA and any applicable regulations and laws. The investment strategy utilizes asset allocation as a principal determinant for establishing the risk/return profile of the assets. Asset allocation ranges are established, periodically reviewed and adjusted as funding levels and liability characteristics change. Active and passive investment managers are employed to help enhance the risk/return profile of the assets. An additional aspect of the investment strategy used to minimize risk (part of the asset allocation plan) includes matching the exposure of participant-selected investment measures.

The assets of the Non-U.S. Pension Plans are primarily attributable to a U.K. pension plan. This U.K. pension plan's assets are invested prudently so that the benefits promised to members are provided with consideration given to the nature and the duration

of the plan's liabilities. The selected asset allocation strategy is designed to achieve a higher return than the lowest risk strategy.

The expected rate of return on plan assets assumption was developed through analysis of historical market returns, historical asset class volatility and correlations, current market conditions, anticipated future asset allocations, the funds' past experience, and expectations on potential future market returns. The expected return on plan assets assumption is determined using the calculated market-related value for the Qualified Pension Plan and the Other Pension Plan and the fair value for the Non-U.S. Pension Plans and Postretirement Health and Life Plans. The expected return on plan assets assumption represents a long-term average view of the performance of the assets in the Qualified Pension Plan, the Non-U.S. Pension Plans, the Other Pension Plan, and Postretirement Health and Life Plans, a return that may or may not be achieved during any one calendar year. The Other Pension Plan is invested solely in an annuity contract which is primarily invested in fixed-income securities structured such that asset maturities match the duration of the plan's obligations.

The target allocations for 2019 by asset category for the Qualified Pension Plan, Non-U.S. Pension Plans, and Nonqualified and Other Pension Plans are presented in the following table. Equity securities for the Qualified Pension Plan include common stock of the Corporation in the amounts of \$221 million (1.22 percent of total plan assets) and \$261 million (1.33 percent of total plan assets) at December 31, 2018 and 2017.

2019 Target Allocation

Asset Category	Qualified Pension Plan	Non-U.S. Pension Plans	Nonqualified and Other Pension Plans
Equity securities	20-50	5-35	0-5
Debt securities	45-75	40-80	95-100
Real estate	0-10	0-15	0-5
Other	0-5	5-30	0-5

Fair Value Measurements

For more information on fair value measurements, including descriptions of Level 1, 2 and 3 of the fair value hierarchy and the valuation methods employed by the Corporation, see *Note 1 – Summary of Significant Accounting Principles* and *Note 20 – Fair Value Measurements*. Combined plan investment assets measured at fair value by level and in total at December 31, 2018 and 2017 are summarized in the Fair Value Measurements table.

Fair Value Measurements

	Level 1	Level 2	Level 3	Total
(Dollars in millions)	December 31, 2018			
Cash and short-term investments				
Money market and interest-bearing cash	\$ 1,530	\$ —	\$ —	\$ 1,530
Cash and cash equivalent commingled/mutual funds	—	644	—	644
Fixed income				
U.S. government and agency securities	3,637	805	9	4,451
Corporate debt securities	—	2,852	—	2,852
Asset-backed securities	—	2,119	—	2,119
Non-U.S. debt securities	539	961	—	1,500
Fixed income commingled/mutual funds	933	1,177	—	2,110
Equity				
Common and preferred equity securities	4,414	—	—	4,414
Equity commingled/mutual funds	288	1,275	—	1,563
Public real estate investment trusts	104	—	—	104
Real estate				
Private real estate	—	—	5	5
Real estate commingled/mutual funds	—	13	885	898
Limited partnerships	—	158	82	240
Other investments (1)	93	364	588	1,045
Total plan investment assets, at fair value	\$ 11,538	\$ 10,368	\$ 1,569	\$ 23,475
	December 31, 2017			
Cash and short-term investments				
Money market and interest-bearing cash	\$ 2,190	\$ —	\$ —	\$ 2,190
Cash and cash equivalent commingled/mutual funds	—	1,004	—	1,004
Fixed income				
U.S. government and agency securities	3,331	854	9	4,194
Corporate debt securities	—	2,417	—	2,417
Asset-backed securities	—	1,832	—	1,832
Non-U.S. debt securities	693	898	—	1,591
Fixed income commingled/mutual funds	775	1,676	—	2,451
Equity				
Common and preferred equity securities	5,833	—	—	5,833
Equity commingled/mutual funds	271	1,753	—	2,024
Public real estate investment trusts	138	—	—	138
Real estate				
Private real estate	—	—	93	93
Real estate commingled/mutual funds	—	13	831	844
Limited partnerships	—	155	85	240
Other investments (1)	101	649	74	824
Total plan investment assets, at fair value	\$ 13,332	\$ 11,251	\$ 1,092	\$ 25,675

(1) Other investments include commodity and balanced funds of \$305 million and \$451 million, insurance annuity contracts of \$562 million and \$50 million and other various investments of \$178 million and \$323 million at December 31, 2018 and 2017.

The Level 3 Fair Value Measurements table presents a reconciliation of all plan investment assets measured at fair value using significant unobservable inputs (Level 3) during 2018, 2017 and 2016.

Level 3 Fair Value Measurements

	Balance January 1	Actual Return on Plan Assets Still Held at the Reporting Date	Purchases, Sales and Settlements	Balance December 31
(Dollars in millions)	2018			
Fixed Income				
U.S. government and agency securities	\$ 9	\$ —	\$ —	\$ 9
Real estate				
Private real estate	93	(7)	(81)	5
Real estate commingled/mutual funds	831	52	2	885
Limited partnerships	85	(12)	9	82
Other Investments	74	—	514	588
Total	\$ 1,092	\$ 33	\$ 444	\$ 1,569
	2017			
Fixed Income				
U.S. government and agency securities	\$ 10	\$ —	\$ (1)	\$ 9
Real estate				
Private real estate	150	8	(65)	93
Real estate commingled/mutual funds	748	63	20	831
Limited partnerships	38	14	33	85
Other Investments	83	5	(14)	74
Total	\$ 1,029	\$ 90	\$ (27)	\$ 1,092
	2016			
Fixed Income				
U.S. government and agency securities	\$ 11	\$ —	\$ (1)	\$ 10
Real estate				
Private real estate	144	1	5	150
Real estate commingled/mutual funds	731	21	(4)	748
Limited partnerships	49	(2)	(9)	38
Other Investments	102	4	(23)	83
Total	\$ 1,037	\$ 24	\$ (32)	\$ 1,029

Projected Benefit Payments

Benefit payments projected to be made from the Qualified Pension Plan, Non-U.S. Pension Plans, Nonqualified and Other Pension Plans, and Postretirement Health and Life Plans are presented in the table below.

Projected Benefit Payments

	Qualified Pension Plan (1)	Non-U.S. Pension Plans (2)	Nonqualified and Other Pension Plans (2)	Postretirement Health and Life Plans (3)
(Dollars in millions)				
2019	\$ 905	\$ 98	\$ 241	\$ 85
2020	932	103	244	82
2021	920	110	239	79
2022	925	119	234	77
2023	915	125	228	74
2024 - 2028	4,451	671	1,046	323

(1) Benefit payments expected to be made from the plan's assets

(2) Benefit payments expected to be made from a combination of the plans' and the Corporation's assets.

(3) Benefit payments (net of retiree contributions) expected to be made from a combination of the plans' and the Corporation's assets

Defined Contribution Plans

The Corporation maintains qualified and non-qualified defined contribution retirement plans. The Corporation recorded expense of \$1.0 billion in each of 2018, 2017, and 2016 related to the qualified defined contribution plans. At December 31, 2018 and 2017, 212 million and 218 million shares of the Corporation's

common stock were held by these plans. Payments to the plans for dividends on common stock were \$115 million, \$86 million and \$60 million in 2018, 2017 and 2016, respectively.

Certain non-U.S. employees are covered under defined contribution pension plans that are separately administered in accordance with local laws.

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NOTE 18 Stock-based Compensation Plans

The Corporation administers a number of equity compensation plans, with awards being granted predominantly from the Bank of America Key Employee Equity Plan (KEEP). Under this plan, 450 million shares of the Corporation's common stock are authorized to be used for grants of awards.

During 2018 and 2017, the Corporation granted 71 million and 85 million RSU awards to certain employees under the KEEP. The RSUs were authorized to settle predominantly in shares of common stock of the Corporation. Certain RSUs will be settled in cash or contain settlement provisions that subject these awards to variable accounting whereby compensation expense is adjusted to fair value based on changes in the share price of the Corporation's common stock up to the settlement date. Of the RSUs granted in 2018 and 2017, 63 million and 85 million will vest in one-third increments on each of the first three anniversaries of the grant date provided that the employee remains continuously employed with the Corporation during that time, and will be expensed ratably over the vesting period, net of estimated forfeitures, for non-retirement eligible employees based on the grant-date fair value of the shares. Additionally, eight million of the RSUs granted in 2018 will vest in one-fourth increments on each of the first four anniversaries of the grant date provided that the employee remains continuously employed with the Corporation during that time, and will be expensed ratably over the vesting period, net of estimated forfeitures, based on the grant-date fair value of the shares. Awards granted in years prior to 2016 were predominantly cash settled.

Effective October 1, 2017, the Corporation changed its accounting method for determining when stock-based compensation awards granted to retirement-eligible employees are deemed authorized, changing from the grant date to the beginning of the year preceding the grant date when the incentive award plans are generally approved. As a result, the estimated value of the awards is expensed ratably over the year preceding the grant date. The compensation cost for all periods prior to this change presented herein has been restated.

The compensation cost for the stock-based plans was \$1.8 billion, \$2.2 billion and \$2.2 billion and the related income tax benefit was \$433 million, \$829 million and \$835 million for 2018, 2017 and 2016, respectively.

Restricted Stock/Units

The table below presents the status at December 31, 2018 of the share-settled restricted stock/units and changes during 2018.

Stock-settled Restricted Stock/Units

	Shares/Units	Weighted-average Grant Date Fair Value
Outstanding at January 1, 2018	179,273,243	\$ 17.53
Granted	68,899,627	30.53
Vested	(74,357,624)	16.31
Canceled	(8,194,000)	22.84
Outstanding at December 31, 2018	165,621,246	23.22

The table below presents the status at December 31, 2018 of the cash-settled RSUs granted under the KEEP and changes during 2018.

Cash-settled Restricted Units

	Units
Outstanding at January 1, 2018	42,209,626
Granted	2,195,025
Vested	(41,434,793)
Canceled	(360,736)
Outstanding at December 31, 2018	2,609,122

At December 31, 2018, there was an estimated \$1.1 billion of total unrecognized compensation cost related to certain share-based compensation awards that is expected to be recognized over a period of up to four years, with a weighted-average period of 1.9 years. The total fair value of restricted stock vested in 2018, 2017 and 2016 was \$2.3 billion, \$1.3 billion and \$358 million, respectively. In 2018, 2017 and 2016, the amount of cash paid to settle equity-based awards for all equity compensation plans was \$1.3 billion, \$1.9 billion and \$1.7 billion, respectively.

Stock Options

Of the 16.6 million stock options with a weighted-average exercise price of \$43.44 outstanding at January 1, 2018, 2.1 million and 14.5 million were exercised and forfeited during 2018 at weighted-average exercise prices of \$30.71 and \$45.29. There were no outstanding stock options at December 31, 2018.

NOTE 19 Income Taxes

The components of income tax expense for 2018, 2017 and 2016 are presented in the table below.

Income Tax Expense

(Dollars in millions)

	2018	2017	2016
Current income tax expense			
U.S. federal	\$ 816	\$ 1,310	\$ 302
U.S. state and local	1,377	557	120
Non-U.S.	1,203	939	984
Total current expense	3,396	2,806	1,406
Deferred income tax expense			
U.S. federal	2,579	7,238	5,416
U.S. state and local	240	835	(279)
Non U.S.	222	102	656

Total deferred expense	3,041	8,175	5,793
Total income tax expense	\$ 6,437	\$ 10,931	\$ 7,199

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Total income tax expense does not reflect the tax effects of items that are included in OCI each period. For more information, see Note 14 - *Accumulated Other Comprehensive Income (Loss)*. Other tax effects included in OCI each period resulted in a benefit of \$1.2 billion, \$1.2 billion and \$498 million in 2018, 2017 and 2016, respectively. In addition, prior to 2017, total income tax expense did not reflect tax effects associated with the Corporation's employee stock plans which decreased common stock and additional paid-in capital \$41 million in 2016.

Income tax expense for 2018, 2017 and 2016 varied from the amount computed by applying the statutory income tax rate to income before income taxes. The Corporation's federal statutory tax rate was 21 percent for 2018 and 35 percent for 2017 and 2016. A reconciliation of the expected U.S. federal income tax expense, calculated by applying the federal statutory tax rate, to the Corporation's actual income tax expense, and the effective tax rates for 2018, 2017 and 2016 are presented in the table below.

On December 22, 2017, the President signed into law the Tax Act which made significant changes to federal income tax law including, among other things, reducing the statutory corporate income tax rate to 21 percent from 35 percent and changing the taxation of the Corporation's non-U.S. business activities. The impact on net income in 2017 was \$2.9 billion, driven by \$2.3 billion in income tax expense, largely from a lower valuation of certain U.S. deferred tax assets and liabilities. The change in the statutory tax rate also impacted the Corporation's tax-advantaged energy investments, resulting in a downward valuation adjustment of \$946 million recorded in other income and a related income tax benefit of \$347 million, which when netted against the \$2.3 billion, resulted in a net impact on income tax expense of \$1.9 billion. The Corporation has completed its analysis and accounting under Staff Accounting Bulletin No. 118 for the effects of the Tax Act.

Reconciliation of Income Tax Expense

	Amount	Percent	Amount	Percent	Amount	Percent
	2018		2017		2016	
(Dollars in millions)						
Expected U.S. federal income tax expense	\$ 7,263	21.0 %	\$ 10,225	35.0 %	\$ 8,757	35.0 %
Increase (decrease) in taxes resulting from:						
State tax expense, net of federal benefit	1,367	4.0	881	3.0	420	1.7
Affordable housing/energy/other credits	(1,888)	(5.5)	(1,406)	(4.8)	(1,203)	(4.8)
Tax-exempt income, including dividends	(413)	(1.2)	(672)	(2.3)	(562)	(2.2)
Share-based compensation	(267)	(0.7)	(236)	(0.6)	-	-
Nondeductible expenses	302	0.9	97	0.3	180	0.7
Changes in prior-period UTBs, including interest	144	0.4	133	0.5	(328)	(1.3)
Rate differential on non-US earnings	98	0.3	(272)	(0.9)	(307)	(1.2)
Tax law changes ⁽¹⁾	-	-	2,281	7.8	348	1.4
Other	(179)	(0.6)	(50)	(0.2)	(106)	(0.5)
Total income tax expense	\$ 6,437	18.6 %	\$ 10,981	37.6 %	\$ 7,199	28.8 %

(1) Amounts for 2016 are for non-U.S. tax law changes.

The reconciliation of the beginning unrecognized tax benefits (UTB) balance to the ending balance is presented in the following table.

Reconciliation of the Change in Unrecognized Tax Benefits

	2018	2017	2016
(Dollars in millions)			
Balance, January 1	\$ 1,773	\$ 875	\$ 1,095
Increases related to positions taken during the current year	395	292	104
Increases related to positions taken during prior years	406	750	1,318
Decreases related to positions taken during prior years	(371)	(122)	(1,091)
Settlements	(6)	(17)	(503)
Expiration of statute of limitations	-	(5)	(48)
Balance, December 31	\$ 2,197	\$ 1,773	\$ 875

At December 31, 2018, 2017 and 2016, the balance of the Corporation's UTBs which would, if recognized, affect the Corporation's effective tax rate was \$1.6 billion, \$1.2 billion and \$0.6 billion, respectively. Included in the UTB balance are some items the recognition of which would not affect the effective tax rate, such as the tax effect of certain temporary differences, the portion of gross state UTBs that would be offset by the tax benefit of the associated federal deduction and the portion of gross non-U.S. UTBs that would be offset by tax reductions in other jurisdictions.

The Corporation files income tax returns in more than 100 state and non-U.S. jurisdictions each year. The IRS and other tax authorities in countries and states in which the Corporation has significant business operations examine tax returns periodically (continuously in some jurisdictions). The following table

summarizes the status of examinations by major jurisdiction for the Corporation and various subsidiaries at December 31, 2018.

Tax Examination Status

	Years under Examination ⁽¹⁾	Status at December 31, 2018
United States	2012 - 2013	IRS Appeals
United States	2014 - 2016	Field examination
New York	2015	Field examination
United Kingdom	2017	To begin in 2019

⁽¹⁾ All tax years subsequent to the years shown remain subject to examination.

It is reasonably possible that the UTB balance may decrease by as much as \$1.2 billion during the next 12 months, since

resolved items will be removed from the balance whether their resolution results in payment or recognition.

The Corporation recognized interest expense of \$43 million, \$1 million and \$56 million in 2018, 2017 and 2016, respectively. At December 31, 2018 and 2017, the Corporation's accrual for interest and penalties that related to income taxes, net of taxes and remittances, was \$218 million and \$185 million.

Significant components of the Corporation's net deferred tax assets and liabilities at December 31, 2018 and 2017 are presented in the following table.

Deferred Tax Assets and Liabilities

(Dollars in millions)	December 31	
	2018	2017
Deferred tax assets		
Net operating loss carryforwards	\$ 7,993	\$ 8,506
Allowance for credit losses	2,400	2,598
Accrued expenses	1,875	2,021
Available-for-sale securities	1,854	510
Security, loan and debt valuations	1,818	2,939
Employee compensation and retirement benefits	1,564	1,705
Credit carryforwards	623	1,793
Other	1,037	1,034
Gross deferred tax assets	19,164	21,106
Valuation allowance	(1,569)	(1,644)
Total deferred tax assets, net of valuation allowance	17,595	19,462
Deferred tax liabilities		
Equipment lease financing	2,684	2,492
Fixed assets	1,104	840
Tax credit investments	940	734
Other	2,126	2,771
Gross deferred tax liabilities	6,854	6,837
Net deferred tax assets, net of valuation allowance	\$ 10,741	\$ 12,625

The table below summarizes the deferred tax assets and related valuation allowances recognized for the net operating loss (NOL) and tax credit carryforwards at December 31, 2018.

Net Operating Loss and Tax Credit Carryforward Deferred Tax Assets

(Dollars in millions)	Deferred Tax Asset	Valuation Allowance	Net Deferred Tax Asset	First Year Expiring
Net operating losses - U.S.	\$ 592	\$ --	\$ 592	After 2027
Net operating losses - U.K. (1)	5,294	--	5,294	None
Net operating losses - other non-U.S.	633	(517)	116	Various
Net operating losses - U.S. states (2)	1,474	(517)	957	Various
General business credits	612	--	612	After 2038
Foreign tax credits	11	(11)	--	n/a

(1) Represents U.K. broker dealer net operating losses that may be carried forward indefinitely.

(2) The net operating losses and related valuation allowances for U.S. states before considering the benefit of federal deductions were \$1.9 billion and \$554 million.

n/a = not applicable

Management concluded that no valuation allowance was necessary to reduce the deferred tax assets related to the U.K. NOL carryforwards and U.S. NOL and general business credit carryforwards since

consist primarily of NOLs, are expected to be realized by certain subsidiaries over an extended number of years. Management's conclusion is supported by financial results, profit forecasts for the relevant entities and the indefinite period to carry forward NOLs. However, a material change in those estimates could lead management to reassess such valuation allowance conclusions.

At December 31, 2018, U.S. federal income taxes had not been provided on approximately \$5 billion of temporary differences associated with investments in non-U.S. subsidiaries that are essentially permanent in duration. If the Corporation were to record the associated deferred tax liability, the amount would be approximately \$1 billion.

NOTE 20 Fair Value Measurements

Under applicable accounting standards, fair value is defined as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. The Corporation determines the fair values of its financial instruments under applicable accounting standards that require an entity to maximize the use of observable inputs and minimize the use of unobservable inputs. The Corporation categorizes its financial instruments into three levels based on the established fair value hierarchy. The Corporation conducts a review of its fair value hierarchy classifications on a quarterly basis. Transfers into or out of fair value hierarchy classifications are made if the significant inputs used in the financial models measuring the fair values of the assets and liabilities became unobservable or observable in the current marketplace. For more information regarding the fair value hierarchy and how the Corporation measures fair value, see Note 1 - Summary of Significant Accounting Principles. The Corporation accounts for certain financial instruments under the fair value option. For additional information, see Note 21 - Fair Value Option.

Valuation Techniques

The following sections outline the valuation methodologies for the Corporation's assets and liabilities. While the Corporation believes its valuation methods are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine the fair value of certain financial instruments could result in a different estimate of fair value at the reporting date.

During 2018, there were no changes to valuation approaches or techniques that had, or are expected to have, a material impact on the Corporation's consolidated financial position or results of operations.

Trading Account Assets and Liabilities and Debt Securities

The fair values of trading account assets and liabilities are primarily based on actively traded markets where prices are based on either direct market quotes or observed transactions. The fair values of debt securities are generally based on quoted market prices or market prices for similar assets. Liquidity is a significant factor in the determination of the fair values of trading account assets and liabilities and debt securities. Market price quotes may not be readily available for some positions such as positions within a market sector where trading activity has slowed significantly or ceased. Some of these instruments are valued using a discounted cash flow model, which estimates the fair value of the securities using internal credit risk, interest rate and prepayment risk models that incorporate management's best estimate of current key assumptions such as default rates, loss severity and prepayment.

rates. Principal and interest cash flows are discounted using an observable discount rate for similar instruments with adjustments that management believes a market participant would consider in determining fair value for the specific security. Other instruments are valued using a net asset value approach which considers the value of the underlying securities. Underlying assets are valued using external pricing services, where available, or matrix pricing based on the vintages and ratings. Situations of illiquidity generally are triggered by the market's perception of credit uncertainty regarding a single company or a specific market sector. In these instances, fair value is determined based on limited available market information and other factors, principally from reviewing the issuer's financial statements and changes in credit ratings made by one or more rating agencies.

Derivative Assets and Liabilities

The fair values of derivative assets and liabilities traded in the OTC market are determined using quantitative models that utilize multiple market inputs including interest rates, prices and indices to generate continuous yield or pricing curves and volatility factors to value the position. The majority of market inputs are actively quoted and can be validated through external sources, including brokers, market transactions and third-party pricing services. When third-party pricing services are used, the methods and assumptions are reviewed by the Corporation. Estimation risk is greater for derivative asset and liability positions that are either option-based or have longer maturity dates where observable market inputs are less readily available, or are unobservable, in which case, quantitative-based extrapolations of rate, price or index scenarios are used in determining fair values. The fair values of derivative assets and liabilities include adjustments for market liquidity, counterparty credit quality and other instrument-specific factors, where appropriate. In addition, the Corporation incorporates within its fair value measurements of OTC derivatives a valuation adjustment to reflect the credit risk associated with the net position. Positions are netted by counterparty, and fair value for net long exposures is adjusted for counterparty credit risk while the fair value for net short exposures is adjusted for the Corporation's own credit risk. The Corporation also incorporates FVA within its fair value measurements to include funding costs on uncollateralized derivatives and derivatives where the Corporation is not permitted to use the collateral it receives. An estimate of severity of loss is also used in the determination of fair value, primarily based on market data.

Loans and Loan Commitments

The fair values of loans and loan commitments are based on market prices, where available, or discounted cash flow analyses using market-based credit spreads of comparable debt instruments or credit derivatives of the specific borrower or comparable borrowers. Results of discounted cash flow analyses may be adjusted, as appropriate, to reflect other market conditions or the perceived credit risk of the borrower.

Mortgage Servicing Rights

The fair values of MSRs are primarily determined using an option-adjusted spread (OAS) valuation approach, which factors in prepayment risk to determine the fair value of MSRs. This approach consists of projecting servicing cash flows under multiple interest rate scenarios and discounting these cash flows using risk-adjusted discount rates.

Loans Held-for-sale

The fair values of LHFS are based on quoted market prices, where available, or are determined by discounting estimated cash flows using interest rates approximating the Corporation's current origination rates for similar loans adjusted to reflect the inherent credit risk. The borrower-specific credit risk is embedded within the quoted market prices or is implied by considering loan performance when selecting comparables.

Short-term Borrowings and Long-term Debt

The Corporation issues structured liabilities that have coupons or repayment terms linked to the performance of debt or equity securities, indices, currencies or commodities. The fair values of these structured liabilities are estimated using quantitative models for the combined derivative and debt portions of the notes. These models incorporate observable and, in some instances, unobservable inputs including security prices, interest rate yield curves, option volatility, currency, commodity or equity rates and correlations among these inputs. The Corporation also considers the impact of its own credit spread in determining the discount rate used to value these liabilities. The credit spread is determined by reference to observable spreads in the secondary bond market.

Securities Financing Agreements

The fair values of certain reverse repurchase agreements, repurchase agreements and securities borrowed transactions are determined using quantitative models, including discounted cash flow models that require the use of multiple market inputs including interest rates and spreads to generate continuous yield or pricing curves, and volatility factors. The majority of market inputs are actively quoted and can be validated through external sources, including brokers, market transactions and third-party pricing services.

Deposits

The fair values of deposits are determined using quantitative models, including discounted cash flow models that require the use of multiple market inputs including interest rates and spreads to generate continuous yield or pricing curves, and volatility factors. The majority of market inputs are actively quoted and can be validated through external sources, including brokers, market transactions and third-party pricing services. The Corporation considers the impact of its own credit spread in the valuation of these liabilities. The credit risk is determined by reference to observable credit spreads in the secondary cash market.

Asset-backed Secured Financings

The fair values of asset-backed secured financings are based on external broker bids, where available, or are determined by discounting estimated cash flows using interest rates approximating the Corporation's current origination rates for similar loans adjusted to reflect the inherent credit risk.

Recurring Fair Value

Assets and liabilities carried at fair value on a recurring basis at December 31, 2018 and 2017, including financial instruments which the Corporation accounts for under the fair value option, are summarized in the following tables.

	December 31, 2018					
	Fair Value Measurements					
(Dollars in millions)	Level 1	Level 2	Level 3	Netting Adjustments (1)	Assets/Liabilities at Fair Value	
Assets						
Time deposits placed and other short-term investments	\$ 1,214	\$ —	\$ —	\$ —	\$ —	1,214
Federal funds sold and securities borrowed or purchased under agreements to resell	—	56,399	—	—	—	56,399
Trading account assets:						
U.S. Treasury and agency securities (2)	53,131	1,593	—	—	—	54,724
Corporate securities, trading loans and other	—	24,630	1,558	—	—	26,188
Equity securities	53,840	23,163	276	—	—	77,279
Non-U.S. sovereign debt	5,818	19,210	465	—	—	25,493
Mortgage trading loans, MBS and ABS:						
U.S. government-sponsored agency guaranteed	—	19,586	—	—	—	19,586
Mortgage trading loans, ABS and other MBS	—	9,443	1,635	—	—	11,078
Total trading account assets (3)	112,789	97,625	3,934	—	—	214,348
Derivative assets	9,967	315,413	3,466	(285,121)	—	43,725
AFS debt securities:						
U.S. Treasury and agency securities	53,663	1,260	—	—	—	54,923
Mortgage-backed securities:						
Agency	—	121,826	—	—	—	121,826
Agency-collateralized mortgage obligations	—	5,530	—	—	—	5,530
Non-agency residential	—	1,320	597	—	—	1,917
Commercial	—	14,078	—	—	—	14,078
Non-U.S. securities	—	9,304	2	—	—	9,306
Other taxable securities	—	4,403	7	—	—	4,410
Tax-exempt securities	—	17,376	—	—	—	17,376
Total AFS debt securities	53,663	176,097	806	—	—	229,366
Other debt securities carried at fair value:						
U.S. Treasury and agency securities	1,282	—	—	—	—	1,282
Mortgage backed securities:						
Non-agency residential	—	1,434	172	—	—	1,606
Non-U.S. securities	490	5,354	—	—	—	5,844
Other taxable securities	—	3	—	—	—	3
Total other debt securities carried at fair value	1,772	6,791	172	—	—	8,735
Loans and leases	—	4,011	338	—	—	4,349
Loans held-for-sale	—	2,400	542	—	—	2,942
Other assets (4)	15,032	1,775	2,932	—	—	19,739
Total assets (5)	\$ 194,437	\$ 659,511	\$ 11,990	\$ (285,121)	\$ —	580,817
Liabilities						
Interest-bearing deposits in U.S. offices	\$ —	\$ 492	\$ —	\$ —	\$ —	492
Federal funds purchased and securities loaned or sold under agreements to repurchase	—	28,875	—	—	—	28,875
Trading account liabilities:						
U.S. Treasury and agency securities	7,894	761	—	—	—	8,655
Equity securities	33,739	4,070	—	—	—	37,809
Non U.S. sovereign debt	7,452	9,182	—	—	—	16,634
Corporate securities and other	—	5,104	18	—	—	5,122
Total trading account liabilities	49,085	19,117	18	—	—	68,220
Derivative liabilities	9,931	303,441	4,401	(279,882)	—	37,891
Short-term borrowings	—	1,648	—	—	—	1,648
Accrued expenses and other liabilities	18,096	1,979	—	—	—	20,075

Long-term debt	—	26,820	817	—	27,637
Total liabilities (5)	\$ 77,112	\$ 382,372	\$ 5,236	\$ (279,882)	\$ 184,838

(1) Amounts represent the impact of legally enforceable master netting agreements and also cash collateral held or placed with the same counterparties.

(2) Includes \$20.2 billion of GSE obligations.

(3) Includes securities with a fair value of \$16.6 billion that were segregated in compliance with securities regulations or deposited with clearing organizations. This amount is included in the parenthetical disclosure on the Consolidated Balance Sheet.

(4) Includes MSRs of \$2.0 billion which are classified as Level 3 assets.

(5) Total recurring Level 3 assets were 0.51 percent of total consolidated assets, and total recurring Level 3 liabilities were 0.25 percent of total consolidated liabilities.

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	December 31, 2017					
	Fair Value Measurements					
(Dollars in millions)	Level 1	Level 2	Level 3	Netting Adjustments (1)	Assets/Liabilities at Fair Value	
Assets						
Time deposits placed and other short-term investments	\$ 2,234	\$ —	\$ —	\$ —	\$ 2,234	
Federal funds sold and securities borrowed or purchased under agreements to resell	—	52,906	—	—	52,906	
Trading account assets:						
U.S. Treasury and agency securities (2)	38,720	1,922	—	—	40,642	
Corporate securities, trading loans and other	—	28,714	1,864	—	30,578	
Equity securities	60,747	23,958	235	—	84,940	
Non-U.S. sovereign debt	6,545	15,839	556	—	22,940	
Mortgage trading loans, MBS and ABS:						
U.S. government-sponsored agency guaranteed	—	20,586	—	—	20,586	
Mortgage trading loans, ABS and other MBS	—	8,174	1,498	—	9,672	
Total trading account assets (3)	106,012	99,193	4,153	—	209,358	
Derivative assets	6,305	341,178	4,067	(313,788)	37,762	
AFS debt securities:						
U.S. Treasury and agency securities	51,915	1,608	—	—	53,523	
Mortgage-backed securities:						
Agency	—	192,929	—	—	192,929	
Agency-collateralized mortgage obligations	—	6,804	—	—	6,804	
Non-agency residential	—	2,669	—	—	2,669	
Commercial	—	13,684	—	—	13,684	
Non-U.S. securities	772	5,880	25	—	6,677	
Other taxable securities	—	5,261	509	—	5,770	
Tax exempt securities	—	20,106	469	—	20,575	
Total AFS debt securities	52,687	248,941	1,003	—	302,631	
Other debt securities carried at fair value:						
Mortgage-backed securities:						
Non-agency residential	—	2,769	—	—	2,769	
Non-U.S. securities	8,191	1,297	—	—	9,488	
Other taxable securities	—	229	—	—	229	
Total other debt securities carried at fair value	8,191	4,295	—	—	12,486	
Loans and leases	—	5,139	571	—	5,710	
Loans held-for-sale	—	1,466	690	—	2,156	
Other assets (4)	19,367	789	2,425	—	22,581	
Total assets (5)	\$ 194,196	\$ 753,907	\$ 12,909	\$ (313,788)	\$ 647,824	
Liabilities						
Interest-bearing deposits in U.S. offices	\$ —	\$ 449	\$ —	\$ —	\$ 449	
Federal funds purchased and securities loaned or sold under agreements to repurchase	—	36,182	—	—	36,182	
Trading account liabilities:						
U.S. Treasury and agency securities	17,266	734	—	—	18,000	
Equity securities	33,019	3,885	—	—	36,904	
Non-U.S. sovereign debt	11,976	7,382	—	—	19,358	
Corporate securities and other	—	6,901	24	—	6,925	
Total trading account liabilities	62,261	18,902	24	—	81,187	
Derivative liabilities	6,029	334,261	5,781	(311,771)	34,300	
Short-term borrowings	—	1,494	—	—	1,494	
Accrued expenses and other liabilities	21,887	945	8	—	22,840	

Long-term debt	—	29,923	1,863	—	31,786
Total liabilities (5)	\$ 90,177	\$ 422,156	\$ 7,676	\$ (311,771)	\$ 208,238

(1) Amounts represent the impact of legally enforceable master netting agreements and also cash collateral held or placed with the same counterparties.

(2) Includes \$21.3 billion of GSE obligations.

(3) Includes securities with a fair value of \$16.8 billion that were segregated in compliance with securities regulations or deposited with clearing organizations. This amount is included in the parenthetical disclosure on the Consolidated Balance Sheet.

(4) Includes MSRs of \$2.3 billion which are classified as Level 3 assets.

(5) Total recurring Level 3 assets were 0.57 percent of total consolidated assets, and total recurring Level 3 liabilities were 0.38 percent of total consolidated liabilities.

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The following tables present a reconciliation of all assets and liabilities measured at fair value on a recurring basis using significant unobservable inputs (Level 3) during 2018, 2017 and 2016, including net realized and unrealized gains (losses) included in earnings and accumulated OCI.

Level 3 – Fair Value Measurements in 2018 (1)

(Dollars in millions)	Gross								Gross Transfers into Level 3	Gross Transfers out of Level 3	Balance December 31 2018	Change In Unrealized Gains (Losses) In Net Income Related to Financial Instruments Still Held (2)
	Balance January 1 2018	Total Realized/Unrealized Gains (Losses) In Net Income (2)	Gains (Losses) In OCI (3)	Purchases	Sales	Issuances	Settlements					
Trading account assets:												
Corporate securities, trading loans and other	\$ 1,864	\$ (32)	\$ (1)	\$ 436	\$ (403)	\$ 5	\$ (568)	\$ 804	\$ (547)	\$ 1,558	\$ (117)	
Equity securities	235	(17)	—	44	(11)	—	(4)	78	(49)	276	(22)	
Non-U.S. sovereign debt	556	47	(44)	13	(57)	—	(30)	117	(137)	465	48	
Mortgage trading loans, ABS and other MBS	1,498	148	3	585	(910)	—	(158)	705	(236)	1,635	97	
Total trading account assets	4,153	146	(42)	1,078	(1,381)	5	(760)	1,704	(969)	3,934	6	
Net derivative assets (4)	(1,714)	106	—	531	(1,179)	—	778	39	504	(935)	(116)	
AFS debt securities:												
Non-agency residential MBS	—	27	(33)	—	(71)	—	(25)	774	(75)	597	—	
Non-U.S. securities	26	—	(1)	—	(10)	—	(15)	3	—	2	—	
Other taxable securities	509	1	(3)	—	(23)	—	(11)	60	(526)	7	—	
Tax-exempt securities	469	—	—	—	—	—	(1)	1	(469)	—	—	
Total AFS debt securities (5)	1,003	28	(37)	—	(104)	—	(52)	838	(1,070)	606	—	
Other debt securities carried at fair value - Non-agency residential MBS	—	(18)	—	—	(8)	—	(34)	365	(133)	172	(18)	
Loans and leases (6, 7)	571	(16)	—	—	(134)	—	(83)	—	—	338	(9)	
Loans held-for-sale (6)	690	44	(26)	71	—	1	(201)	23	(60)	542	31	
Other assets (5, 7, 8)	2,425	414	(38)	2	(69)	96	(792)	929	(35)	2,932	149	
Trading account liabilities - Corporate securities and other	(24)	11	—	9	(12)	(2)	—	—	—	(18)	(7)	
Accrued expenses and other liabilities (6)	(8)	—	—	—	—	—	8	—	—	—	—	
Long-term debt (6)	(1,863)	103	4	9	—	(141)	486	(262)	847	(817)	95	

(1) Assets (liabilities) For assets, increase (decrease) to Level 3 and for liabilities, (increase) decrease to Level 3.

(2) Includes gains (losses) reported in earnings in the following income statement line items: Trading account assets/liabilities – predominantly trading account profits, Net derivative assets – primarily trading account profits and other income; Other debt securities carried at fair value – other income; Loans and leases – other income; Loans held-for-sale – other income; Other assets – primarily other income related to MSRs. Long-term debt – primarily trading account profits. For MSRs, the amounts reflect the changes in modeled MSR fair value due to observed changes in interest rates, volatility, spreads and the shape of the forward swap curve, and periodic adjustments to the valuation model to reflect changes in the modeled relationships between inputs and projected cash flows, as well as changes in cash flow assumptions including cost to service.

(3) Includes unrealized gains (losses) in OCI on AFS debt securities, foreign currency translation adjustments and the impact of changes in the Corporation's credit spreads on long-term debt accounted for under the fair value option. Total gains (losses) in OCI include net unrealized losses of \$105 million related to financial instruments still held at December 31, 2018. For additional information, see Note 1 – Summary of Significant Accounting Principles.

(4) Net derivative assets include derivative assets of \$3.5 billion and derivative liabilities of \$4.4 billion.

(5) Transfers out of AFS debt securities and into other assets primarily relate to the reclassification of certain securities.

(6) Amounts represent instruments that are accounted for under the fair value option.

(7) Issuances represent loan originations and MSRs recognized following securitizations or whole loan sales.

(8) Settlements primarily represent the net change in fair value of the MSR asset due to the recognition of modeled cash flows and the passage of time.

Transfers into Level 3, primarily due to decreased price observability, during 2018 included \$1.7 billion of trading account assets, \$838 million of AFS debt securities, \$365 million of other debt securities carried at fair value and \$262 million of long-term debt. Transfers occur on a regular basis for long-term debt instruments due to changes in the impact of unobservable inputs

on the value of the embedded derivative in relation to the instrument as a whole.

Transfers out of Level 3, primarily due to increased price observability, during 2018 included \$969 million of trading account assets, \$504 million of net derivatives assets, \$1.1 billion of AFS debt securities and \$847 million of long-term debt.

Level 3 – Fair Value Measurements In 2017 (1)

	Balance January 1 2017	Total Realized/Unrealized Gains (Losses) in Net Income (2)	Gains (Losses) in OCI (3)	Gross				Gross Transfers into Level 3	Gross Transfers out of Level 3	Balance December 31 2017	Change in Unrealized Gains (Losses) in Net Income Related to Financial Instruments Still Held (2)
(Dollars in millions)				Purchases	Sales	Issuances	Settlements				
Trading account assets											
Corporate securities, trading loans and other	\$ 2,777	\$ 229	\$ —	\$ 547	\$ (702)	\$ 5	\$ (666)	\$ 728	\$ (1,054)	\$ 1,864	\$ 2
Equity securities	281	18	—	55	(70)	—	(10)	146	(185)	235	(1)
Non-U.S. sovereign debt	510	74	(8)	53	(59)	—	(73)	72	(13)	556	70
Mortgage trading loans, ABS and other MBS	1,211	165	(2)	1,210	(990)	—	(233)	218	(81)	1,498	72
Total trading account assets	4,779	486	(10)	1,865	(1,821)	5	(982)	1,164	(1,333)	4,153	143
Net derivative assets (4)	(1,313)	(984)	—	664	(979)	—	949	48	(99)	(1,714)	(409)
AFS debt securities:											
Non-U.S. securities	229	2	16	49	—	—	(271)	—	—	25	—
Other taxable securities	594	4	8	5	—	—	(42)	34	(94)	509	—
Tax-exempt securities	542	1	3	14	(70)	—	(11)	35	(45)	469	—
Total AFS debt securities	1,365	7	27	68	(70)	—	(324)	69	(139)	1,003	—
Other debt securities carried at fair value –											
Non agency residential MBS	25	(1)	—	—	(21)	—	(3)	—	—	—	—
Loans and leases (5)	720	15	—	3	(34)	—	(126)	—	(7)	571	11
Loans held-for-sale (5, 6)	656	100	(3)	3	(189)	—	(346)	501	(32)	690	14
Other assets (6, 7)	2,986	144	(57)	2	(214)	258	(758)	64	—	2,425	(226)
Federal funds purchased and securities loaned or sold under agreements to repurchase (5)	(359)	(5)	—	—	—	(12)	171	(58)	263	—	—
Trading account liabilities – Corporate securities and other	(27)	14	—	8	(17)	(2)	—	—	—	(24)	2
Accrued expenses and other liabilities (5)	(9)	—	—	—	—	—	1	—	—	(8)	—
Long-term debt (5)	(1,514)	(135)	(31)	84	—	(288)	514	(711)	218	(1,863)	(196)

(1) Assets (liabilities). For assets, increase (decrease) to Level 3 and for liabilities, (increase) decrease to Level 3.

(2) Includes gains (losses) reported in earnings in the following income statement line items: Trading account assets/liabilities - predominantly trading account profits, Net derivative assets - primarily trading account profits and other income; Other debt securities carried at fair value - other income; Loans and leases - other income; Loans held-for-sale - other income; Other assets - primarily other income related to MSRs; Long-term debt - trading account profits. For MSRs, the amounts reflect the changes in modeled MSR fair value due to observed changes in interest rates, volatility, spreads and the shape of the forward swap curve, and periodic adjustments to the valuation model to reflect changes in the modeled relationships between inputs and projected cash flows, as well as changes in cash flow assumptions including cost to service.

(3) Includes unrealized gains (losses) in OCI on AFS debt securities, foreign currency translation adjustments and the impact of changes in the Corporation's credit spreads on long-term debt accounted for under the fair value option. For additional information, see Note 1 – Summary of Significant Accounting Principles.

(4) Net derivative assets include derivative assets of \$4.1 billion and derivative liabilities of \$5.8 billion.

(5) Amounts represent instruments that are accounted for under the fair value option.

(6) Issuances represent loan originations and MSRs recognized following securitizations or whole-loan sales.

(7) Settlements primarily represent the net change in fair value of the MSR asset due to the recognition of modeled cash flows and the passage of time.

Transfers into Level 3, primarily due to decreased price observability, during 2017 included \$1.2 billion of trading account assets, \$501 million of LHFS and \$711 million of long-term debt. Transfers occur on a regular basis for long-term debt instruments due to changes in the impact of unobservable inputs on the value of the embedded derivative in relation to the instrument as a whole.

Transfers out of Level 3, primarily due to increased price observability, during 2017 included \$1.3 billion of trading account assets, \$139 million of AFS debt securities, \$263 million of federal funds purchased and securities loaned or sold under agreements to repurchase and \$218 million of long-term debt.

Level 3 – Fair Value Measurements In 2016 (1)

(Dollars in millions)	Balance January 1 2016	Total Realized/Unrealized Gains/(Losses) in Net Income (2)	Gains/ (Losses) in OCI (3)	Gross				Gross Transfers into Level 3	Gross Transfers out of Level 3	Balance December 31 2016	Change in Unrealized Gains/(Losses) in Net Income Related to Financial Instruments Still Held (2)
				Purchases	Sales	Issuances	Settlements				
Trading account assets											
Corporate securities, trading loans and other	\$ 2,838	\$ 78	\$ 2	\$ 1,508	\$ (847)	\$ —	\$ (725)	\$ 728	\$ (805)	\$ 2,777	\$ (82)
Equity securities	407	74	—	73	(169)	—	(82)	70	(92)	281	(59)
Non-U.S. sovereign debt	521	122	91	12	(146)	—	(90)	—	—	510	120
Mortgage trading loans, ABS and other MBS	1,868	188	(2)	988	(1,491)	—	(344)	158	(154)	1,211	64
Total trading account assets	5,634	462	91	2,581	(2,653)	—	(1,241)	956	(1,051)	4,779	43
Net derivative assets (4)	(441)	265	—	470	(1,155)	—	76	(186)	(362)	(1,313)	(376)
AFS debt securities:											
Non-agency residential MBS	106	—	—	—	(106)	—	—	—	—	—	—
Non-U.S. securities	—	—	(6)	584	(92)	—	(263)	6	—	229	—
Other taxable securities	757	4	(2)	—	—	—	(83)	—	(82)	594	—
Tax-exempt securities	569	—	(1)	1	—	—	(2)	10	(35)	542	—
Total AFS debt securities	1,432	4	(9)	585	(198)	—	(348)	16	(117)	1,365	—
Other debt securities carried at fair value - Non-agency residential MBS	30	(5)	—	—	—	—	—	—	—	25	—
Loans and leases (5, 6)	1,620	(44)	—	69	(553)	50	(194)	6	(234)	720	17
Loans held-for-sale (5)	787	79	50	22	(256)	—	(93)	173	(106)	856	70
Other assets (6, 7)	3,461	136	—	38	(191)	411	(872)	3	—	2,986	(143)
Federal funds purchased and securities loaned or sold under agreements to repurchase (5)	(335)	(11)	—	—	—	(22)	27	(19)	1	(359)	4
Trading account liabilities - Corporate securities and other	(21)	5	—	—	(11)	—	—	—	—	(27)	4
Short-term borrowings (5)	(30)	1	—	—	—	—	29	—	—	—	—
Accrued expenses and other liabilities (5)	(9)	—	—	—	—	—	—	—	—	(9)	—
Long-term debt (5)	(1,513)	(74)	(20)	140	—	(521)	948	(939)	465	(1,514)	(184)

(1) Assets (liabilities) For assets, increase (decrease) to Level 3 and for liabilities, (increase) decrease to Level 3.

(2) Includes gains/losses reported in earnings in the following income statement line items: Trading account assets/liabilities - trading account profits, Net derivative assets - primarily trading account profits and other income; Other debt securities carried at fair value - other income; Loans and leases - other income; Loans held-for-sale - other income; Other assets - primarily other income related to MSRs, Long-term debt - predominantly trading account profits. For MSRs, the amounts reflect the changes in modeled MSR fair value due to observed changes in interest rates, volatility, spreads and the shape of the forward swap curve, and periodic adjustments to the valuation model to reflect changes in the modeled relationships between inputs and projected cash flows, as well as changes in cash flow assumptions including cost to service.

(3) Includes unrealized gains/losses in OCI on AFS debt securities, foreign currency translation adjustments and the impact of changes in the Corporation's credit spreads on long-term debt accounted for under the fair value option. For more information, see Note 1 - Summary of Significant Accounting Principles.

(4) Net derivatives include derivative assets of \$3.9 billion and derivative liabilities of \$5.2 billion.

(5) Amounts represent instruments that are accounted for under the fair value option.

(6) Issuances represent loan originations and MSRs recognized following securitizations or whole-loan sales.

(7) Settlements represent the net change in fair value of the MSR asset due to the recognition of modeled cash flows and the passage of time.

Transfers into Level 3, primarily due to decreased price observability, during 2016 included \$956 million of trading account assets, \$186 million of net derivative assets, \$173 million of LHFS and \$939 million of long-term debt. Transfers occur on a regular basis for long-term debt instruments due to changes in the impact of unobservable inputs on the value of the embedded derivative in relation to the instrument as a whole.

Transfers out of Level 3, primarily due to increased price observability, during 2016 included \$1.1 billion of trading account assets, \$362 million of net derivative assets, \$117 million of AFS debt securities, \$234 million of loans and leases, \$106 million of LHFS and \$465 million of long-term debt.

The following tables present information about significant unobservable inputs related to the Corporation's material categories of Level 3 financial assets and liabilities at December 31, 2018 and 2017.

Quantitative Information about Level 3 Fair Value Measurements at December 31, 2018

(Dollars in millions)			Inputs		
Financial Instrument	Fair Value	Valuation Technique	Significant Unobservable Inputs	Ranges of Inputs	Weighted Average (%)
Loans and Securities (2)					
Instruments backed by residential real estate assets	\$ 1,536	Discounted cash flow, Market comparables	Yield	0% to 25%	8%
Trading account assets - Mortgage trading loans, ABS and other MBS	419		Prepayment speed	0% to 21% CPR	12%
Loans and leases	338		Default rate	0% to 3% CDR	1%
Loans held-for-sale	1		Loss severity	0% to 51%	17%
AFS debt securities, primarily non-agency residential	606		Price	\$0 to \$128	\$72
Other debt securities carried at fair value - Non-agency residential	172				
Instruments backed by commercial real estate assets	\$ 291	Discounted cash flow	Yield	0% to 25%	7%
Trading account assets - Corporate securities, trading loans and other	200		Price	\$0 to \$100	\$79
Trading account assets - Mortgage trading loans, ABS and other MBS	91				
Commercial loans, debt securities and other	\$ 3,489	Discounted cash flow, Market comparables	Yield	1% to 16%	13%
Trading account assets - Corporate securities, trading loans and other	1,358		Prepayment speed	10% to 20%	15%
Trading account assets - Non U.S. sovereign debt	465		Default rate	3% to 4%	4%
Trading account assets - Mortgage trading loans, ABS and other MBS	1,125		Loss severity	35% to 40%	38%
Loans held-for-sale	541		Price	\$0 to \$141	\$68
Other assets, primarily auction rate securities	\$ 890	Discounted cash flow, Market comparables	Price	\$10 to \$100	\$95
MSRs					
	\$ 2,042	Discounted cash flow	Weighted-average life, fixed rate (5)	0 to 14 years	5 years
			Weighted-average life, variable rate (5)	0 to 10 years	3 years
			Option-adjusted spread, fixed rate	7% to 14%	9%
			Option-adjusted spread, variable rate	9% to 15%	12%
Structured liabilities					
Long-term debt	\$ (817)	Discounted cash flow, Market comparables, Industry standard derivative pricing (3)	Equity correlation	11% to 100%	67%
			Long-dated equity volatilities	4% to 84%	32%
			Yield	7% to 18%	16%
			Price	\$0 to \$100	\$72
Net derivative assets					
Credit derivatives	\$ (565)	Discounted cash flow, Stochastic recovery correlation model	Yield	0% to 5%	4%
			Upfront points	0 points to 100 points	70 points
			Credit correlation	70%	n/a
			Prepayment speed	15% to 20% CPR	15%
			Default rate	1% to 4% CDR	2%
			Loss severity	35%	n/a
			Price	\$0 to \$138	\$93
Equity derivatives	\$ (348)	Industry standard derivative pricing (3)	Equity correlation	11% to 100%	67%
			Long-dated equity volatilities	4% to 84%	32%
Commodity derivatives	\$ 10	Discounted cash flow, Industry standard derivative pricing (3)	Natural gas forward price	\$1/MMBtu to \$12/MMBtu	\$3/MMBtu
			Correlation	38% to 87%	71%
			Volatilities	15% to 132%	38%
Interest rate derivatives	\$ (32)	Industry standard derivative pricing (4)	Correlation (IR/IR)	15% to 70%	61%
			Correlation (FX/IR)	0% to 46%	1%
			Long-dated inflation rates	20% to 38%	2%
			Long-dated inflation volatilities	0% to 1%	1%
Total net derivative assets	\$ (935)				

(1) For loans and securities, structured liabilities and net derivative assets, the weighted average is calculated based upon the absolute fair value of the instruments.

(2) The categories are aggregated based upon product type which differs from financial statement classification. The following is a reconciliation to the line items in the table on page 152: Trading account assets - Corporate securities, trading loans and other of \$1.6 billion, Trading account assets - Non U.S. sovereign debt of \$465 million, Trading account assets - Mortgage trading loans, ABS and other MBS of \$1.6 billion, AFS debt securities of \$606 million, Other debt securities carried at fair value - Non-agency residential of \$172 million, Other assets, including MSRs, of \$2.9 billion, Loans and leases of \$338 million and LI FS of \$542 million.

(3) Includes models such as Monte Carlo simulation and Black-Scholes.

(4) Includes models such as Monte Carlo simulation, Black-Scholes and other methods that model the joint dynamics of interest, inflation and foreign exchange rates.

(5) The weighted-average life is a product of changes in market rates of interest, prepayment rates and other model and cash flow assumptions.

CPR = Constant Prepayment Rate

CDR = Constant Default Rate
MMBtu = Million British thermal units
IR = Interest Rate
FX = Foreign Exchange
n/a = not applicable

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Quantitative Information about Level 3 Fair Value Measurements at December 31, 2017

(Dollars in millions)		Inputs			
Financial Instrument	Fair Value	Valuation Technique	Significant Unobservable inputs	Ranges of inputs	Weighted Average (1)
Loans and Securities (2)					
Instruments backed by residential real estate assets	\$ 871	Discounted cash flow	Yield	0% to 25%	6%
Trading account assets - Mortgage trading loans, ABS and other MBS	298		Prepayment speed	0% to 22% CPR	12%
Loans and leases	570		Default rate	0% to 3% CDH	1%
Loans held for sale	3		Loss severity	0% to 53%	17%
Instruments backed by commercial real estate assets	\$ 286	Discounted cash flow	Yield	0% to 25%	9%
Trading account assets - Corporate securities, trading loans and other	244		Price	\$0 to \$100	\$67
Trading account assets - Mortgage trading loans, ABS and other MBS	42				
Commercial loans, debt securities and other	\$ 4,023	Discounted cash flow, Market comparables	Yield	0% to 12%	5%
Trading account assets - Corporate securities, trading loans and other	1,613		Prepayment speed	10% to 20%	16%
Trading account assets - Non-U.S. sovereign debt	556		Default rate	3% to 4%	4%
Trading account assets - Mortgage trading loans, ABS and other MBS	1,158		Loss severity	35% to 40%	37%
AFS debt securities - Other taxable securities	8		Price	\$0 to \$145	\$63
Loans and leases	1				
Loans held for sale	687				
Auction rate securities	\$ 977	Discounted cash flow, Market comparables	Price	\$10 to \$100	\$94
Trading account assets - Corporate securities, trading loans and other	7				
AFS debt securities - Other taxable securities	501				
AFS debt securities - Tax exempt securities	469				
MSRs	\$ 2,302	Discounted cash flow	Weighted-average life, fixed rate (5)	0 to 14 years	5 years
			Weighted-average life, variable rate (5)	0 to 10 years	3 years
			Option-adjusted spread, fixed rate	9% to 14%	10%
			Option-adjusted spread, variable rate	9% to 15%	12%
Structured liabilities					
Long-term debt	\$ (1,863)	Discounted cash flow, Market comparables, Industry standard derivative pricing (3)	Equity correlation	15% to 100%	63%
			Long dated equity volatilities	4% to 84%	22%
			Yield	7.5%	n/a
			Price	\$0 to \$100	\$66
Net derivative assets					
Credit derivatives	\$ (282)	Discounted cash flow, Stochastic recovery correlation model	Yield	1% to 5%	3%
			Upfront points	3 points to 100 points	71 points
			Credit correlation	35% to 63%	42%
			Prepayment speed	15% to 20% CPR	15%
			Default rate	1% to 4% CDP	2%
			Loss severity	35%	n/a
			Price	\$0 to \$102	\$82
Equity derivatives	\$ (2,059)	Industry standard derivative pricing (3)	Equity correlation	15% to 100%	63%
			Long dated equity volatilities	4% to 84%	22%
Commodity derivatives	\$ (3)	Discounted cash flow, Industry standard derivative pricing (3)	Natural gas forward price	\$1/MMBtu to \$5/MMBtu	\$3/MMBtu
			Correlation	71% to 87%	81%
			Volatilities	26% to 132%	57%
Interest rate derivatives	\$ 630	Industry standard derivative pricing (4)	Correlation (IR/IR)	15% to 92%	50%
			Correlation (FX/IR)	0% to 46%	1%
			Long dated inflation rates	14% to 38%	4%
			Long dated inflation volatilities	0% to 1%	1%
Total net derivative assets	\$ (1,714)				

(1) For loans and securities, structured liabilities and net derivative assets, the weighted average is calculated based upon the absolute fair value of the instruments.

(2) The categories are aggregated based upon product type which differs from financial statement classification. The following is a reconciliation to the line items in the table on page 153: Trading account assets - Corporate securities, trading loans and other of \$1.9 billion; Trading account assets - Non U.S. sovereign debt of \$556 million; Trading account assets - Mortgage trading loans, ABS and other MBS of \$1.5 billion; AFS debt securities - Other taxable securities of \$509 million; AFS debt securities - Tax exempt securities of \$469 million; Loans and leases of \$571 million and LHS of \$690 million.

(3) Includes models such as Monte Carlo simulation and Black Scholes.

(4) Includes models such as Monte Carlo simulation, Black Scholes and other methods that model the joint dynamics of interest, inflation and foreign exchange rates.

(5) The weighted-average life is a product of changes in market rates of interest, prepayment rates and other model and cash flow assumptions.

CPR = Constant Prepayment Rate.

CDR = Constant Default Rate
MMBtu = Million British thermal units
IR = Interest Rate
FX = Foreign Exchange
n/a = not applicable

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In the previous tables, instruments backed by residential and commercial real estate assets include RMBS, commercial MBS, whole loans and mortgage CDOs. Commercial loans, debt securities and other include corporate CLOs and CDOs, commercial loans and bonds, and securities backed by non-real estate assets. Structured liabilities primarily include equity-linked notes that are accounted for under the fair value option.

The Corporation uses multiple market approaches in valuing certain of its Level 3 financial instruments. For example, market comparables and discounted cash flows are used together. For a given product, such as corporate debt securities, market comparables may be used to estimate some of the unobservable inputs and then these inputs are incorporated into a discounted cash flow model. Therefore, the balances disclosed encompass both of these techniques.

The level of aggregation and diversity within the products disclosed in the tables results in certain ranges of inputs being wide and unevenly distributed across asset and liability categories.

Uncertainty of Fair Value Measurements from Unobservable Inputs

Loans and Securities

A significant increase in market yields, default rates, loss severities or duration would have resulted in a significantly lower fair value for long positions. Short positions would have been impacted in a directionally opposite way. The impact of changes in prepayment speeds would have resulted in differing impacts depending on the seniority of the instrument and, in the case of CLOs, whether prepayments can be reinvested. A significant increase in price would have resulted in a significantly higher fair value for long positions, and short positions would have been impacted in a directionally opposite way.

Structured Liabilities and Derivatives

For credit derivatives, a significant increase in market yield, upfront points (i.e., a single upfront payment made by a protection buyer at inception), credit spreads, default rates or loss severities would have resulted in a significantly lower fair value for protection sellers and higher fair value for protection buyers. The impact of changes in prepayment speeds would have resulted in differing impacts depending on the seniority of the instrument.

Structured credit derivatives are impacted by credit correlation. Default correlation is a parameter that describes the degree of

dependence among credit default rates within a credit portfolio that underlies a credit derivative instrument. The sensitivity of this input on the fair value varies depending on the level of subordination of the tranche. For senior tranches that are net purchasers of protection, a significant increase in default correlation would have resulted in a significantly higher fair value. Net short protection positions would have been impacted in a directionally opposite way.

For equity derivatives, commodity derivatives, interest rate derivatives and structured liabilities, a significant change in long-dated rates and volatilities and correlation inputs (i.e., the degree of correlation between an equity security and an index, between two different commodities, between two different interest rates, or between interest rates and foreign exchange rates) would have resulted in a significant impact to the fair value; however, the magnitude and direction of the impact depend on whether the Corporation is long or short the exposure. For structured liabilities, a significant increase in yield or decrease in price would have resulted in a significantly lower fair value. A significant decrease in duration would have resulted in a significantly higher fair value.

Sensitivity of Fair Value Measurements for Mortgage Servicing Rights

The weighted-average lives and fair value of MSRs are sensitive to changes in modeled assumptions. The weighted-average life is a product of changes in market rates of interest, prepayment rates and other model and cash flow assumptions. The weighted-average life represents the average period of time that the MSRs' cash flows are expected to be received. Absent other changes, an increase (decrease) to the weighted-average life would generally result in an increase (decrease) in the fair value of the MSRs. For example, a 10 percent or 20 percent decrease in prepayment rates, which impacts the weighted-average life, could result in an increase in fair value of \$64 million or \$133 million, while a 10 percent or 20 percent increase in prepayment rates could result in a decrease in fair value of \$59 million or \$115 million. A 100 bp or 200 bp decrease in OAS levels could result in an increase in fair value of \$63 million or \$131 million, while a 100 bp or 200 bp increase in OAS levels could result in a decrease in fair value of \$59 million or \$115 million. These sensitivities are hypothetical and actual amounts may vary materially.

Nonrecurring Fair Value

The Corporation holds certain assets that are measured at fair value, but only in certain situations (e.g., impairment) and these measurements are referred to herein as nonrecurring. The amounts below represent assets still held as of the reporting date for which a nonrecurring fair value adjustment was recorded during 2018, 2017 and 2016.

Assets Measured at Fair Value on a Nonrecurring Basis

(Dollars in millions)	December 31, 2018		December 31, 2017	
	Level 2	Level 3	Level 2	Level 3
Assets				
Loans held-for-sale	\$ 274	\$ —	\$ —	\$ 2
Loans and leases (1)	—	474	—	894
Foreclosed properties (2, 3)	—	42	—	83
Other assets	331	14	425	—
			Gains (Losses)	
			2018	2017
Assets				2016
Loans held-for-sale	\$	(18)	\$	(6)
Loans and leases (1)		(202)		(336)
Foreclosed properties		(24)		(41)
Other assets		(64)		(124)

(1) Includes \$83 million, \$135 million and \$150 million of losses on loans that were written down to a collateral value of zero during 2018, 2017 and 2016, respectively.

(2) Amounts are included in other assets on the Consolidated Balance Sheet and represent the carrying value of foreclosed properties that were written down subsequent to their initial classification as foreclosed properties. Losses on foreclosed properties include losses recorded during the first 90 days after transfer of a loan to foreclosed properties.

(3) Excludes \$488 million and \$801 million of properties acquired upon foreclosure of certain government-guaranteed loans (principally FHA-insured loans) at December 31, 2018 and 2017.

The table below presents information about significant unobservable inputs related to the Corporation's nonrecurring Level 3 financial assets and liabilities at December 31, 2018 and 2017. Loans and leases backed by residential real estate assets represent residential mortgages where the loan has been written down to the fair value of the underlying collateral.

Quantitative Information about Nonrecurring Level 3 Fair Value Measurements

Financial Instrument (Dollars in millions)	Fair Value	Valuation Technique	Inputs		
			Significant Unobservable Inputs	Ranges of Inputs	Weighted Average (1)
			December 31, 2018		
Loans and leases backed by residential real estate assets	\$ 474	Market comparables	OREO discount	13% to 59%	25%
			Costs to sell	8% to 26%	9%
			December 31, 2017		
Loans and leases backed by residential real estate assets	\$ 894	Market comparables	OREO discount	15% to 58%	23%
			Costs to sell	5% to 49%	7%

(1) The weighted average is calculated based upon the fair value of the loans.

NOTE 21 Fair Value Option**Loans and Loan Commitments**

The Corporation elects to account for certain loans and loan commitments that exceed the Corporation's single-name credit risk concentration guidelines under the fair value option. Lending commitments are actively managed and, as appropriate, credit risk for these lending relationships may be mitigated through the use of credit derivatives, with the Corporation's public side credit view and market perspectives determining the size and timing of the hedging activity. These credit derivatives do not meet the requirements for designation as accounting hedges and therefore are carried at fair value with changes in fair value recorded in other income. The fair value option allows the Corporation to carry these loans and loan commitments at fair value, which is more consistent with management's view of the underlying economics and the manner in which they are managed. In addition, the fair value option allows the Corporation to reduce the accounting volatility that would otherwise result from the asymmetry created by accounting for the financial instruments at historical cost and the credit derivatives at fair value.

Loans Held-for-sale

The Corporation elects to account for residential mortgage LHFS, commercial mortgage LHFS and certain other LHFS under the fair value option with interest income on these LHFS recorded in other interest income. These loans are actively managed and monitored and, as appropriate, certain market risks of the loans may be mitigated through the use of derivatives. The Corporation has elected not to designate the derivatives as qualifying accounting hedges and therefore they are carried at fair value with changes in fair value recorded in other income. The changes in fair value of the loans are largely offset by changes in the fair value of the derivatives. The fair value option allows the Corporation to reduce the accounting volatility that would otherwise result from the asymmetry created by accounting for the financial instruments at the lower of cost or fair value and the derivatives at fair value. The Corporation has not elected to account for certain other LHFS under the fair value option primarily because these loans are floating-rate loans that are not hedged using derivative instruments.

Loans Reported as Trading Account Assets

The Corporation elects to account for certain loans that are held for the purpose of trading and are risk-managed on a fair value basis under the fair value option.

Other Assets

The Corporation elects to account for certain long-term fixed-rate margin loans that are hedged with derivatives under the fair value option. Election of the fair value option allows the Corporation to reduce the accounting volatility that would otherwise result from the asymmetry created by accounting for the financial instruments at historical cost and the derivatives at fair value.

Securities Financing Agreements

The Corporation elects to account for certain securities financing agreements, including resale and repurchase agreements, under the fair value option based on the tenor of the agreements, which reflects the magnitude of the interest rate risk. The majority of securities financing agreements collateralized by U.S. government securities are not accounted for under the fair value option as these contracts are generally short-dated and therefore the interest rate risk is not significant.

Long-term Deposits

The Corporation elects to account for certain long-term fixed-rate and rate-linked deposits that are hedged with derivatives that do not qualify for hedge accounting under the fair value option. Election of the fair value option allows the Corporation to reduce

the accounting volatility that would otherwise result from the asymmetry created by accounting for the financial instruments at historical cost and the derivatives at fair value. The Corporation has not elected to carry other long-term deposits at fair value because they are not hedged using derivatives.

Short-term Borrowings

The Corporation elects to account for certain short-term borrowings, primarily short-term structured liabilities, under the fair value option because this debt is risk-managed on a fair value basis.

The Corporation elects to account for certain asset-backed secured financings, which are also classified in short-term borrowings, under the fair value option. Election of the fair value option allows the Corporation to reduce the accounting volatility that would otherwise result from the asymmetry created by accounting for the asset-backed secured financings at historical cost and the corresponding mortgage LHS securing these financings at fair value.

Long-term Debt

The Corporation elects to account for certain long-term debt, primarily structured liabilities, under the fair value option. This long-term debt is either risk-managed on a fair value basis or the related hedges do not qualify for hedge accounting.

Fair Value Option Elections

The table below provides information about the fair value carrying amount and the contractual principal outstanding of assets and liabilities accounted for under the fair value option at December 31, 2018 and 2017.

Fair Value Option Elections

	December 31, 2018			December 31, 2017		
	Fair Value Carrying Amount	Contractual Principal Outstanding	Fair Value Carrying Amount Less Unpaid Principal	Fair Value Carrying Amount	Contractual Principal Outstanding	Fair Value Carrying Amount Less Unpaid Principal
(Dollars in millions)						
Federal funds sold and securities borrowed or purchased under agreements to resell	\$ 56,399	\$ 56,376	\$ 23	\$ 52,906	\$ 52,907	\$ (1)
Loans reported as trading account assets (1)	6,195	13,088	(6,893)	5,735	11,804	(6,069)
Trading inventory - other	13,778	n/a	n/a	12,027	n/a	n/a
Consumer and commercial loans	4,349	4,399	(50)	5,710	5,744	(34)
Loans held-for-sale (1)	2,942	4,749	(1,807)	2,156	3,717	(1,561)
Other assets	3	n/a	n/a	3	n/a	n/a
Long-term deposits	492	454	38	449	421	28
Federal funds purchased and securities loaned or sold under agreements to repurchase	28,875	28,881	(6)	36,182	36,187	(5)
Short-term borrowings	1,648	1,648	—	1,494	1,494	—
Unfunded loan commitments	169	n/a	n/a	120	n/a	n/a
Long-term debt (2)	27,637	29,147	(1,510)	31,786	31,512	274

(1) A significant portion of the loans reported as trading account assets, and LHS are distressed loans that were purchased at a deep discount to par, and the remainder are loans with a fair value near contractual principal outstanding.

(2) Includes structured liabilities with a fair value of \$27.3 billion and \$31.4 billion, and contractual principal outstanding of \$28.8 billion and \$31.1 billion at December 31, 2018 and 2017.

n/a = not applicable

The following tables provide information about where changes in the fair value of assets and liabilities accounted for under the fair value option are included in the Consolidated Statement of Income for 2018, 2017 and 2016.

Gains (Losses) Relating to Assets and Liabilities Accounted for Under the Fair Value Option

	Trading Account Profits	Other Income	Total
	2018		
(Dollars in millions)			
Loans reported as trading account assets (1)	\$ 8	\$ —	\$ 8
Trading inventory – other (2)	1,750	—	1,750
Consumer and commercial loans (1)	(422)	(53)	(475)
Loans held-for-sale (1, 3)	1	24	25
Unfunded loan commitments	—	(49)	(49)
Long-term debt (4, 5)	2,167	(93)	2,064
Other (6)	8	18	26
Total	\$ 3,602	\$ (153)	\$ 3,349
	2017		
Loans reported as trading account assets (1)	\$ 318	\$ —	\$ 318
Trading inventory – other (2)	3,821	—	3,821
Consumer and commercial loans (1)	(9)	35	26
Loans held-for-sale (1, 3)	—	298	298
Unfunded loan commitments	—	36	36
Long-term debt (4, 5)	(1,044)	(146)	(1,190)
Other (6)	(93)	13	(80)
Total	\$ 2,993	\$ 236	\$ 3,229
	2016		
Loans reported as trading account assets (1)	\$ 301	\$ —	\$ 301
Trading inventory – other (2)	57	—	57
Consumer and commercial loans (1)	49	(37)	12
Loans held-for-sale (1, 3)	11	524	535
Unfunded loan commitments	—	487	487
Long-term debt (4, 5)	(489)	(97)	(586)
Other (6)	(85)	53	(32)
Total	\$ (156)	\$ 930	\$ 774

(1) Gains (losses) related to borrower-specific credit risk were not significant.

(2) The gains in trading account profits are primarily offset by losses on trading liabilities that hedge these assets.

(3) Includes the value of IRLCs on funded loans, including those sold during the period.

(4) The majority of the net gains (losses) in trading account profits relate to the embedded derivatives in structured liabilities and are offset by gains (losses) on derivatives and securities that hedge these liabilities.

(5) For the cumulative impact of changes in the Corporation's own credit spreads and the amount recognized in accumulated OCI, see . For more information on how the Corporation's own credit spread is determined, see .

(6) Includes gains (losses) on federal funds sold and securities borrowed or purchased under agreements to resell, other assets, long-term deposits, federal funds purchased and securities loaned or sold under agreements to repurchase and short-term borrowings.

NOTE 22 Fair Value of Financial Instruments

Financial instruments are classified within the fair value hierarchy using the methodologies described in Note 20 – Fair Value Measurements. Certain loans, deposits, long-term debt and unfunded lending commitments are accounted for under the fair value option. For additional information, see Note 21 – Fair Value Option. The following disclosures include financial instruments that are not carried at fair value or only a portion of the ending balance is carried at fair value on the Consolidated Balance Sheet.

Short-term Financial Instruments

The carrying value of short-term financial instruments, including cash and cash equivalents, certain time deposits placed and other short-term investments, federal funds sold and purchased, certain resale and repurchase agreements and short-term borrowings,

approximates the fair value of these instruments. These financial instruments generally expose the Corporation to limited credit risk and have no stated maturities or have short-term maturities and carry interest rates that approximate market. The Corporation accounts for certain resale and repurchase agreements under the fair value option.

Under the fair value hierarchy, cash and cash equivalents are classified as Level 1. Time deposits placed and other short-term investments, such as U.S. government securities and short-term commercial paper, are classified as Level 1 or Level 2. Federal funds sold and purchased are classified as Level 2. Resale and repurchase agreements are classified as Level 2 because they are generally short-dated and/or variable-rate instruments collateralized by U.S. government or agency securities. Short-term borrowings are classified as Level 2.

Fair Value of Financial Instruments

The carrying values and fair values by fair value hierarchy of certain financial instruments where only a portion of the ending balance was carried at fair value at December 31, 2018 and 2017 are presented in the following table.

Fair Value of Financial Instruments

	Carrying Value	Fair Value		
		Level 2	Level 3	Total
(Dollars in millions)		December 31, 2018		
Financial assets				
Loans	\$ 911,520	\$ 58,228	\$ 859,160	\$ 917,388
Loans held-for-sale	10,367	9,592	775	10,367
Financial liabilities				
Deposits (1)	1,381,476	1,381,239	—	1,381,239
Long-term debt	229,340	229,967	817	230,784
Commercial unfunded lending commitments (2)	966	169	5,558	5,727
		December 31, 2017		
Financial assets				
Loans	\$ 904,399	\$ 68,586	\$ 849,576	\$ 918,162
Loans held-for-sale	11,430	10,521	909	11,430
Financial liabilities				
Deposits (1)	1,309,545	1,309,398	—	1,309,398
Long-term debt	227,402	235,126	1,863	236,989
Commercial unfunded lending commitments (2)	897	120	3,908	4,028

(1) Includes demand deposits of \$531.9 billion and \$519.6 billion with no stated maturities at December 31, 2018 and 2017.

(2) The carrying value of commercial unfunded lending commitments is included in accrued expenses and other liabilities on the Consolidated Balance Sheet. The Corporation does not estimate the fair value of consumer unfunded lending commitments because, in many instances, the Corporation can reduce or cancel these commitments by providing notice to the borrower. For more information on commitments, see

NOTE 23 Business Segment Information

The Corporation reports its results of operations through the following four business segments: *Consumer Banking*, *GWIM*, *Global Banking* and *Global Markets*, with the remaining operations recorded in *All Other*.

Consumer Banking

Consumer Banking offers a diversified range of credit, banking and investment products and services to consumers and small businesses. *Consumer Banking* product offerings include traditional savings accounts, money market savings accounts, CDs and IRAs, checking accounts, and investment accounts and products, as well as credit and debit cards, residential mortgages and home equity loans, and direct and indirect loans to consumers and small businesses in the U.S. *Consumer Banking* includes the impact of servicing residential mortgages and home equity loans in the core portfolio.

Global Wealth & Investment Management

GWIM provides a high-touch client experience through a network of financial advisors focused on clients with over \$250,000 in total investable assets, including tailored solutions to meet clients' needs through a full set of investment management, brokerage, banking and retirement products. *GWIM* also provides comprehensive wealth management solutions targeted to high net worth and ultra high net worth clients, as well as customized solutions to meet clients' wealth

management, trust and banking needs, including specialty asset management services.

Global Banking

Global Banking provides a wide range of lending-related products and services, integrated working capital management and treasury solutions, and underwriting and advisory services through the Corporation's network of offices and client relationship teams. *Global Banking* also provides investment banking products to clients. The economics of certain investment banking and underwriting activities are shared primarily between *Global Banking* and *Global Markets* under an internal revenue-sharing arrangement. *Global Banking* clients generally include middle-market companies, commercial real estate firms, not-for-profit companies, large global corporations, financial institutions, leasing clients, and mid-sized U.S.-based businesses requiring customized and integrated financial advice and solutions.

Global Markets

Global Markets offers sales and trading services and research services to institutional clients across fixed-income, credit, currency, commodity and equity businesses. *Global Markets* provides market-making, financing, securities clearing, settlement and custody services globally to institutional investor clients in support of their investing and trading activities. *Global Markets* product coverage includes securities and derivative products in both the primary and secondary markets. *Global Markets* also works with commercial and corporate clients to provide risk management products. As a result of market-making activities, *Global Markets* may be required to manage risk in a broad range of financial products. In addition, the economics of certain investment banking and underwriting activities are shared primarily between *Global Markets* and *Global Banking* under an internal revenue-sharing arrangement.

All Other

All Other consists of ALM activities, equity investments, non-core mortgage loans and servicing activities, the net impact of periodic revisions to the MSR valuation model for core and non-core MSRs and the related economic hedge results, liquidating businesses and residual expense allocations. ALM activities encompass certain residential mortgages, debt securities, interest rate and foreign currency risk management activities, the impact of certain allocation methodologies and hedge ineffectiveness. The results of certain ALM activities are allocated to the business segments. Equity investments include the merchant services joint venture as well as a portfolio of equity, real estate and other alternative investments.

Basis of Presentation

The management accounting and reporting process derives segment and business results by utilizing allocation methodologies for revenue and expense. The net income derived for the businesses is dependent upon revenue and cost allocations using an activity-based costing model, funds transfer pricing, and other methodologies and assumptions management believes are appropriate to reflect the results of the business.

Total revenue, net of interest expense, includes net interest income on an FTE basis and noninterest income. The adjustment of net interest income to an FTE basis results in a corresponding increase in income tax expense. The segment results also reflect certain revenue and expense methodologies that are utilized to determine net income. The net interest income of the businesses includes the results of a funds transfer pricing process that

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matches assets and liabilities with similar interest rate sensitivity and maturity characteristics. In segments where the total of liabilities and equity exceeds assets, which are generally deposit-taking segments, the Corporation allocates assets to match liabilities. Net interest income of the business segments also includes an allocation of net interest income generated by certain of the Corporation's ALM activities.

The Corporation's ALM activities include an overall interest rate risk management strategy that incorporates the use of various derivatives and cash instruments to manage fluctuations in earnings and capital that are caused by interest rate volatility. The Corporation's goal is to manage interest rate sensitivity so that movements in interest rates do not significantly adversely affect earnings and capital. The results of a majority of the Corporation's ALM activities are allocated to the business segments and

fluctuate based on the performance of the ALM activities. ALM activities include external product pricing decisions including deposit pricing strategies, the effects of the Corporation's internal funds transfer pricing process and the net effects of other ALM activities.

Certain expenses not directly attributable to a specific business segment are allocated to the segments. The costs of certain centralized or shared functions are allocated based on methodologies that reflect utilization.

The following table presents net income (loss) and the components thereto (with net interest income on an FTE basis for the business segments, *All Other* and the total Corporation) for 2018, 2017 and 2016, and total assets at December 31, 2018 and 2017 for each business segment, as well as *All Other*.

Results of Business Segments and All Other

At and for the year ended December 31

(Dollars in millions)

	Total Corporation ⁽¹⁾			Consumer Banking		
	2018	2017	2016	2018	2017	2016
Net interest income	\$ 48,042	\$ 45,592	\$ 41,996	\$ 27,123	\$ 24,307	\$ 21,290
Noninterest income	43,815	42,685	42,605	10,400	10,214	10,441
Total revenue, net of interest expense	91,857	88,277	84,601	37,523	34,521	31,731
Provision for credit losses	3,282	3,396	3,597	3,664	3,525	2,715
Noninterest expense	53,381	54,743	55,083	17,713	17,795	17,664
Income before income taxes	35,194	30,138	25,921	16,146	13,201	11,352
Income tax expense	7,047	11,906	8,099	4,117	4,999	4,186
Net income	\$ 28,147	\$ 18,232	\$ 17,822	\$ 12,029	\$ 8,202	\$ 7,166
Year-end total assets	\$2,354,507	\$2,281,234		\$ 768,877	\$ 749,325	

	Global Wealth & Investment Management			Global Banking		
	2018	2017	2016	2018	2017	2016
Net interest income	\$ 6,294	\$ 6,173	\$ 5,759	\$ 10,881	\$ 10,504	\$ 9,471
Noninterest income	13,044	12,417	11,891	8,763	9,495	8,974
Total revenue, net of interest expense	19,338	18,590	17,650	19,644	19,999	18,445
Provision for credit losses	86	56	68	8	212	883
Noninterest expense	13,777	13,556	13,166	8,591	8,596	8,486
Income before income taxes	5,476	4,978	4,416	11,045	11,191	9,076
Income tax expense	1,396	1,885	1,635	2,872	4,238	3,347
Net income	\$ 4,079	\$ 3,093	\$ 2,781	\$ 8,173	\$ 6,953	\$ 5,729
Year-end total assets	\$ 305,906	\$ 284,321		\$ 441,477	\$ 424,533	

	Global Markets			All Other		
	2018	2017	2016	2018	2017	2016
Net interest income	\$ 3,171	\$ 3,744	\$ 4,557	\$ 573	\$ 864	\$ 919
Noninterest income	12,892	12,207	11,533	(1,284)	(1,648)	(234)
Total revenue, net of interest expense	16,063	15,951	16,090	(711)	(784)	685
Provision for credit losses	—	164	31	(476)	(561)	(100)
Noninterest expense	10,686	10,731	10,171	2,614	4,065	5,596
Income (loss) before income taxes	5,377	5,056	5,888	(2,849)	(4,288)	(4,811)
Income tax expense (benefit)	1,398	1,763	2,071	(2,736)	(979)	(3,140)
Net income (loss)	\$ 3,979	\$ 3,293	\$ 3,817	\$ (113)	\$ (3,309)	\$ (1,671)
Year-end total assets	\$ 641,922	\$ 629,013		\$ 196,325	\$ 194,042	

(1) There were no material intersegment revenues.

The table below presents noninterest income and the components thereto for 2018, 2017 and 2016 for each business segment, as well as All Other. For more information, see Note 1 – Summary of Significant Accounting Principles and Note 2 – Noninterest Income.

NonInterest Income by Business Segment and All Other

(Dollars in millions)	Total Corporation			Consumer Banking			Global Wealth & Investment Management		
	2018	2017	2016	2018	2017	2016	2018	2017	2016
Card Income									
Interchange fees	\$ 4,093	\$ 3,942	\$ 3,960	\$ 3,383	\$ 3,224	\$ 3,271	\$ 82	\$ 109	\$ 106
Other card income	1,958	1,960	1,891	1,906	1,846	1,664	46	44	44
Total card income	6,051	5,902	5,851	5,289	5,070	4,935	128	153	150
Service charges									
Deposit-related fees	6,667	6,708	6,545	4,300	4,266	4,142	73	76	74
Lending-related fees	1,100	1,110	1,093	—	—	—	—	—	—
Total service charges	7,767	7,818	7,638	4,300	4,266	4,142	73	76	74
Investment and brokerage services									
Asset management fees	10,189	9,310	8,328	147	133	120	10,042	9,177	8,208
Brokerage fees	3,971	4,526	5,021	172	184	200	1,917	2,217	2,666
Total investment and brokerage services	14,160	13,836	13,349	319	317	320	11,959	11,394	10,874
Investment banking income									
Underwriting income	2,722	2,821	2,585	(1)	—	2	335	316	225
Syndication fees	1,347	1,499	1,388	—	—	—	—	—	1
Financial advisory services	1,258	1,691	1,268	—	—	—	2	2	1
Total investment banking income	5,327	6,011	5,241	(1)	—	2	337	318	227
Trading account profits	8,540	7,277	6,902	8	3	—	112	144	175
Other income	1,970	1,841	3,624	485	558	1,042	435	332	391
Total noninterest income	\$ 43,815	\$ 42,685	\$ 42,605	\$ 10,400	\$ 10,214	\$ 10,441	\$ 13,044	\$ 12,417	\$ 11,891

	Global Banking			Global Markets			All Other (1)		
	2018	2017	2016	2018	2017	2016	2018	2017	2016
Card Income									
Interchange fees	\$ 533	\$ 506	\$ 483	\$ 95	\$ 94	\$ 79	\$ —	\$ 9	\$ 21
Other card income	8	12	20	(2)	(2)	(5)	—	60	168
Total card income	541	518	503	93	92	74	—	69	189
Service charges									
Deposit-related fees	2,111	2,197	2,170	161	147	143	22	22	16
Lending-related fees	916	928	924	184	182	169	—	—	—
Total service charges	3,027	3,125	3,094	345	329	312	22	22	16
Investment and brokerage services									
Asset management fees	—	—	—	—	—	—	—	—	—
Brokerage fees	94	97	74	1,780	2,049	2,102	8	(21)	(21)
Total investment and brokerage services	94	97	74	1,780	2,049	2,102	8	(21)	(21)
Investment banking income									
Underwriting income	502	511	426	2,084	2,249	2,100	(198)	(255)	(168)
Syndication fees	1,237	1,403	1,302	109	95	85	1	1	—
Financial advisory services	1,162	1,557	1,166	103	132	111	1	—	—
Total investment banking income	2,891	3,471	2,884	2,296	2,476	2,296	(196)	(254)	(168)
Trading account profits	260	134	133	7,932	6,110	6,550	228	288	44
Other income	1,950	2,150	2,286	446	551	199	(1,346)	(1,750)	(294)
Total noninterest income	\$ 8,763	\$ 9,495	\$ 8,974	\$ 12,892	\$ 12,207	\$ 11,533	\$ (1,284)	\$ (1,648)	\$ (234)

(1) All Other includes eliminations of intercompany transactions.

The tables below present a reconciliation of the four business segments' total revenue, net of interest expense, on an FTE basis, and net income to the Consolidated Statement of Income, and total assets to the Consolidated Balance Sheet.

(Dollars in millions)	2018	2017	2016
Segments' total revenue, net of interest expense	\$ 92,568	\$ 89,061	\$ 83,916
Adjustments (1):			
ALM activities	588	312	(299)
Liquidating businesses, eliminations and other	(1,299)	(1,096)	984
FTE basis adjustment	(610)	(925)	(900)
Consolidated revenue, net of interest expense	\$ 91,247	\$ 87,352	\$ 83,701
Segments' total net income	28,260	21,541	19,493
Adjustments, net of tax (1):			
ALM activities	(46)	(355)	(651)
Liquidating businesses, eliminations and other	(67)	(2,954)	(1,020)
Consolidated net income	\$ 28,147	\$ 18,232	\$ 17,822

(1) Adjustments include consolidated income, expense and asset amounts not specifically allocated to individual business segments.

(Dollars in millions)	December 31	
	2018	2017
Segments' total assets	\$ 2,158,182	\$ 2,087,192
Adjustments (1):		
ALM activities, including securities portfolio	670,057	625,483
Elimination of segment asset allocations to match liabilities	(540,801)	(520,448)
Other	67,069	89,007
Consolidated total assets	\$ 2,354,507	\$ 2,281,234
(1) Adjustments include consolidated income, expense and asset amounts not specifically allocated to individual business segments		

NOTE 24 Parent Company Information

The following tables present the Parent Company-only financial information. This financial information is presented in accordance with bank regulatory reporting requirements.

Condensed Statement of Income

(Dollars in millions)	2018	2017	2016
Income			
Dividends from subsidiaries:			
Bank holding companies and related subsidiaries	\$ 28,575	\$ 12,088	\$ 4,127
Nonbank companies and related subsidiaries	91	202	77
Interest from subsidiaries	8,425	7,043	2,996
Other income (loss)	(1,025)	28	111
Total income	36,066	19,361	7,311
Expense			
Interest on borrowed funds from related subsidiaries	235	189	969
Other interest expense	6,425	5,555	5,096
Noninterest expense	1,600	1,672	2,704
Total expense	8,260	7,416	8,769
Income (loss) before income taxes and equity in undistributed earnings of subsidiaries	27,806	11,945	(1,458)
Income tax expense (benefit)	(281)	950	(2,311)
Income before equity in undistributed earnings of subsidiaries	28,087	10,995	853
Equity in undistributed earnings (losses) of subsidiaries:			
Bank holding companies and related subsidiaries	306	8,725	16,817
Nonbank companies and related subsidiaries	(246)	(1,488)	152
Total equity in undistributed earnings of subsidiaries	60	7,237	16,969
Net income	\$ 28,147	\$ 18,232	\$ 17,822

Condensed Balance Sheet

(Dollars in millions)	December 31	
	2018	2017
Assets		
Cash held at bank subsidiaries (1)	\$ 5,141	\$ 4,747
Securities	628	596
Receivables from subsidiaries:		
Bank holding companies and related subsidiaries	152,905	146,566
Banks and related subsidiaries	195	146
Nonbank companies and related subsidiaries	969	4,745
Investments in subsidiaries:		
Bank holding companies and related subsidiaries	293,045	296,506

Nonbank companies and related subsidiaries	3,432	5,225
Other assets	14,696	14,554
Total assets	\$ 471,011	\$ 473,085
Liabilities and shareholders' equity		
Accrued expenses and other liabilities	\$ 8,828	\$ 10,286
Payables to subsidiaries:		
Banks and related subsidiaries	349	359
Nonbank companies and related subsidiaries	13,301	9,341
Long-term debt	183,208	185,953
Total liabilities	205,686	205,939
Shareholders' equity	265,325	267,146
Total liabilities and shareholders' equity	\$ 471,011	\$ 473,085

(1) Balance includes third party cash held of \$359 million and \$193 million at December 31, 2018 and 2017.

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Condensed Statement of Cash Flows

(Dollars in millions)	2018	2017	2016
Operating activities			
Net income	\$ 28,147	\$ 18,232	\$ 17,822
Reconciliation of net income to net cash used in operating activities:			
Equity in undistributed earnings of subsidiaries	(60)	(7,237)	(16,969)
Other operating activities, net	(3,706)	(2,593)	(2,860)
Net cash provided by (used in) operating activities	24,381	8,402	(2,007)
Investing activities			
Net sales of securities	51	312	--
Net payments to subsidiaries	(2,262)	(7,087)	(65,481)
Other investing activities, net	48	(1)	(308)
Net cash used in investing activities	(2,163)	(6,776)	(65,789)
Financing activities			
Net decrease in short-term borrowings	--	--	(136)
Net increase (decrease) in other advances	3,867	(6,672)	(44)
Proceeds from issuance of long-term debt	30,708	37,704	27,363
Retirement of long-term debt	(29,413)	(29,645)	(30,804)
Proceeds from issuance of preferred stock	4,515	--	2,947
Redemption of preferred stock	(4,512)	--	--
Common stock repurchased	(20,094)	(12,814)	(5,112)
Cash dividends paid	(6,895)	(5,700)	(4,194)
Net cash used in financing activities	(21,824)	(17,127)	(9,980)
Net increase (decrease) in cash held at bank subsidiaries	394	(15,501)	(77,776)
Cash held at bank subsidiaries at January 1	4,747	20,248	98,024
Cash held at bank subsidiaries at December 31	\$ 5,141	\$ 4,747	\$ 20,248

NOTE 25 Performance by Geographical Area

The Corporation's operations are highly integrated with operations in both U.S. and non-U.S. markets. The non-U.S. business activities are largely conducted in Europe, the Middle East and Africa and in Asia. The Corporation identifies its geographic performance based on the business unit structure used to manage the capital or expense deployed in the region as applicable. This requires certain judgments related to the allocation of revenue so that revenue can be appropriately matched with the related capital or expense deployed in the region. Certain asset, liability, income and expense amounts have been allocated to arrive at total assets, total revenue, net of interest expense, income before income taxes and net income by geographic area as presented below.

(Dollars in millions)		Total Assets at Year End (1)	Total Revenue, Net of Interest Expense (2)	Income Before Income Taxes	Net Income
U.S. (3)	2018	\$ 2,051,182	\$ 81,004	\$ 31,904	\$ 26,407
	2017	1,965,490	74,830	25,108	15,550
	2016		72,418	22,282	16,183
Asia	2018	94,865	3,507	865	520
	2017	103,255	3,405	676	464
	2016		3,365	674	488
Europe, Middle East and Africa	2018	185,285	5,632	1,543	1,126
	2017	189,661	7,907	2,990	1,926
	2016		6,608	1,705	925
Latin America and the Caribbean	2018	23,175	1,104	272	94
	2017	22,828	1,210	439	292
	2016		1,310	350	226
Total Non-U.S.	2018	303,325	10,243	2,680	1,740

	2017	315,744	12,522	4,105	2,682
	2016		11,283	2,739	1,639
Total Consolidated	2018	\$ 2,354,507	\$ 91,247	\$ 34,584	\$ 28,147
	2017	2,281,234	87,352	29,213	18,232
	2016		83,701	25,021	17,822

(1) Total assets include long-lived assets, which are primarily located in the U.S.

(2) There were no material intercompany revenues between geographic regions for any of the periods presented.

(3) Substantially reflects the U.S.

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Glossary

Alt-A Mortgage - A type of U.S. mortgage that is considered riskier than A-paper, or "prime," and less risky than "subprime," the riskiest category. Typically, Alt-A mortgages are characterized by borrowers with less than full documentation, lower credit scores and higher LTVs.

Assets Under Management (AUM) - The total market value of assets under the investment advisory and/or discretion of GWIM which generate asset management fees based on a percentage of the assets' market values. AUM reflects assets that are generally managed for institutional, high net worth and retail clients, and are distributed through various investment products including mutual funds, other commingled vehicles and separate accounts.

Banking Book - All on- and off-balance sheet financial instruments of the Corporation except for those positions that are held for trading purposes.

Brokerage and Other Assets - Non-discretionary client assets which are held in brokerage accounts or held for safekeeping.

Committed Credit Exposure - Any funded portion of a facility plus the unfunded portion of a facility on which the lender is legally bound to advance funds during a specified period under prescribed conditions.

Credit Derivatives - Contractual agreements that provide protection against a specified credit event on one or more referenced obligations.

Credit Valuation Adjustment (CVA) - A portfolio adjustment required to properly reflect the counterparty credit risk exposure as part of the fair value of derivative instruments.

Debit Valuation Adjustment (DVA) - A portfolio adjustment required to properly reflect the Corporation's own credit risk exposure as part of the fair value of derivative instruments and/or structured liabilities.

Funding Valuation Adjustment (FVA) - A portfolio adjustment required to include funding costs on uncollateralized derivatives and derivatives where the Corporation is not permitted to use the collateral it receives.

Interest Rate Lock Commitment (IRLC) - Commitment with a loan applicant in which the loan terms are guaranteed for a designated period of time subject to credit approval.

Letter of Credit - A document issued on behalf of a customer to a third party promising to pay the third party upon presentation of specified documents. A letter of credit effectively substitutes the issuer's credit for that of the customer.

Loan-to-value (LTV) - A commonly used credit quality metric. LTV is calculated as the outstanding carrying value of the loan divided by the estimated value of the property securing the loan.

Margin Receivable - An extension of credit secured by eligible securities in certain brokerage accounts.

Matched Book - Repurchase and resale agreements or securities borrowed and loaned transactions where the overall asset and liability position is similar in size and/or maturity. Generally, these are entered into to accommodate customers where the Corporation earns the interest rate spread.

Mortgage Servicing Rights (MSR) - The right to service a mortgage loan when the underlying loan is sold or securitized. Servicing includes collections for principal, interest and escrow payments from borrowers and accounting for and remitting principal and interest payments to investors.

Net Interest Yield - Net interest income divided by average total interest-earning assets

Nonperforming Loans and Leases - Includes loans and leases that have been placed on nonaccrual status, including nonaccruing loans whose contractual terms have been restructured in a manner that grants a concession to a borrower experiencing financial difficulties.

Operating Margin - Income before income taxes divided by total revenue, net of interest expense.

Prompt Corrective Action (PCA) - A framework established by the U.S. banking regulators requiring banks to maintain certain levels of regulatory capital ratios, comprised of five categories of capitalization: "well capitalized," "adequately capitalized," "undercapitalized," "significantly undercapitalized" and "critically undercapitalized." Insured depository institutions that fail to meet certain of these capital levels are subject to increasingly strict limits on their activities, including their ability to make capital distributions, pay management compensation, grow assets and take other actions.

Subprime Loans - Although a standard industry definition for subprime loans (including subprime mortgage loans) does not exist, the Corporation defines subprime loans as specific product offerings for higher risk borrowers.

Troubled Debt Restructurings (TDRs) - Loans whose contractual terms have been restructured in a manner that grants a concession to a borrower experiencing financial difficulties. Certain consumer loans for which a binding offer to restructure has been extended are also classified as TDRs.

Value-at-Risk (VaR) - VaR is a model that simulates the value of a portfolio under a range of hypothetical scenarios in order to generate a distribution of potential gains and losses. VaR represents the loss the portfolio is expected to experience with a given confidence level based on historical data. A VaR model is an effective tool in estimating ranges of potential gains and losses on our trading portfolios.

Acronyms

ABS	Asset-backed securities	HTM	Held-to-maturity
AFS	Available-for-sale	ICAAP	Internal Capital Adequacy Assessment Process
ALM	Asset and liability management	IRM	Independent Risk Management
AUM	Assets under management	IRLC	Interest rate lock commitment
AVM	Automated valuation model	ISDA	International Swaps and Derivatives Association, Inc.
BANA	Bank of America, National Association	LCR	Liquidity Coverage Ratio
BHC	Bank holding company	LGD	Loss given default
bps	basis points	LHFS	Loans held-for-sale
CCAR	Comprehensive Capital Analysis and Review	LIBOR	London InterBank Offered Rate
CDO	Collateralized debt obligation	LTV	Loan-to-value
CDS	Credit default swap	MBS	Mortgage-backed securities
CET1	Common equity tier 1	MD&A	Management's Discussion and Analysis of Financial Condition and Results of Operations
CGA	Corporate General Auditor	MLGWM	Merrill Lynch Global Wealth Management
CLO	Collateralized loan obligation	MLI	Merrill Lynch International
CLTV	Combined loan-to-value	MLPCC	Merrill Lynch Professional Clearing Corp
CVA	Credit valuation adjustment	MLPF&S	Merrill Lynch, Pierce, Fenner & Smith Incorporated
DIF	Deposit Insurance Fund	MRC	Management Risk Committee
DVA	Debit valuation adjustment	MSA	Metropolitan Statistical Area
EAD	Exposure at default	MSR	Mortgage servicing right
EPS	Earnings per common share	NSFR	Net Stable Funding Ratio
ERC	Enterprise Risk Committee	OAS	Option-adjusted spread
EU	European Union	OCC	Office of the Comptroller of the Currency
FCA	Financial Conduct Authority	OCI	Other comprehensive income
FDIC	Federal Deposit Insurance Corporation	OREO	Other real estate owned
FHA	Federal Housing Administration	OTC	Over-the-counter
FHLB	Federal Home Loan Bank	OTTI	Other-than-temporary impairment
FHLMC	Freddie Mac	PCA	Prompt Corrective Action
FICC	Fixed-income, currencies and commodities	PCI	Purchased credit-impaired
FICO	Fair Isaac Corporation (credit score)	RMBS	Residential mortgage-backed securities
FLUs	Front line units	RSU	Restricted stock unit
FNMA	Fannie Mae	SBLC	Standby letter of credit
FTE	Fully taxable-equivalent	SCCL	Single-counterparty credit limits
FVA	Funding valuation adjustment	SEC	Securities and Exchange Commission
GAAP	Accounting principles generally accepted in the United States of America	SLR	Supplementary leverage ratio
GDPR	General Data Protection Regulation	TDR	Troubled debt restructurings
GLS	Global Liquidity Sources	TLAC	Total loss-absorbing capacity
GM&CA	Global Marketing and Corporate Affairs	VA	U.S. Department of Veterans Affairs
GNMA	Government National Mortgage Association	VaR	Value-at-Risk
GSE	Government-sponsored enterprise	VIE	Variable interest entity
G-SIB	Global systemically important bank		
GWIM	Global Wealth & Investment Management		
HELOC	Home equity line of credit		
HQLA	High Quality Liquid Assets		

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure
None

Item 9A. Controls and Procedures

Disclosure Controls and Procedures

As of the end of the period covered by this report and pursuant to Rule 13a-15 of the Securities Exchange Act of 1934, as amended (Exchange Act), Bank of America's management, including the Chief Executive Officer and Chief Financial Officer, conducted an evaluation of the effectiveness and design of our disclosure controls and procedures (as that term is defined in Rule 13a-15(e) of the Exchange Act). Based upon that evaluation, Bank of America's Chief Executive Officer and Chief Financial Officer concluded that Bank of America's disclosure controls and procedures were effective, as of the end of the period covered by this report.

Report of Management on Internal Control Over Financial Reporting

The Report of Management on Internal Control over Financial Reporting is set forth on page 86 and incorporated herein by reference. The Report of Independent Registered Public Accounting Firm with respect to the Corporation's internal control over financial reporting is set forth on page 87 and incorporated herein by reference.

Changes In Internal Control Over Financial Reporting

There have been no changes in our internal control over financial reporting (as defined in Rule 13a-15(f) of the Exchange Act) during the quarter ended December 31, 2018, that materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. Other Information

None

Part III

Bank of America Corporation and Subsidiaries

Item 10. Directors, Executive Officers and Corporate Governance

Executive Officers of The Registrant

The name, age, position and office, and business experience during the last five years of our current executive officers are:

Dean C. Athanasia (52) President, Retail and Preferred & Small Business Banking since December 2018; President, Preferred & Small Business Banking, and Co-Head – Consumer Banking from September 2014 to December 2018; and Preferred and Small Business Banking Executive from April 2011 to September 2014.

Catherine P. Bessant (58) Chief Operations and Technology Officer since July 2015; Global Technology & Operations Executive from January 2010 to July 2015.

Sheri Bronstein (50) Chief Human Resources Officer since July 2015; and HR Executive for Global Banking & Markets from March 2010 to July 2015.

Paul M. Donofrio (58) Chief Financial Officer since August 2015; Strategic Finance Executive from April 2015 to August 2015; and Global Head of Corporate Credit and Transaction Banking from January 2012 to April 2015.

Geoffrey S. Greener (54) Chief Risk Officer since April 2014; Head of Enterprise Capital Management from April 2011 to April 2014.

Kathleen A. Knox (55) President, U.S. Trust since November 2017; Head of Business Banking from October 2014 to November 2017; and Retail Banking & Distribution Executive from June 2011 to October 2014.

David G. Leitch (58) Global General Counsel since January 2016; General Counsel of Ford Motor Company from April 2005 to December 2015.

Thomas K. Montag (62) Chief Operating Officer since September 2014; Co-Chief Operating Officer from September 2011 to September 2014.

Brian T. Moynihan (59) Chairman of the Board since October 2014, and President, and Chief Executive Officer and member of the Board of Directors since January 2010.

Thong M. Nguyen (60) Vice Chairman, Bank of America since December 2018; President, Retail Banking and Co-Head – Consumer Banking from September 2014 to December 2018; Retail Banking Executive from April 2014 to September 2014; and Retail Strategy, and Operations & Digital Banking Executive from September 2012 to April 2014.

Andrew M. Sleg (51) President, Merrill Lynch Wealth Management since January 2017; and Head of Global Wealth & Retirement Solutions from October 2011 to January 2017.

Andrea B. Smith (52) Chief Administrative Officer since July 2015, Global Head of Human Resources from January 2010 to July 2015.

Information included under the following captions in the Corporation's proxy statement relating to its 2019 annual meeting of stockholders (the 2019 Proxy Statement), is incorporated herein by reference:

- "Proposal 1: Electing Directors – Our Director Nominees;"
- "Corporate Governance – Additional Corporate Governance Information;"
- "Corporate Governance – Board Meetings, Committee Membership, and Attendance;" and
- "Section 16(a) Beneficial Ownership Reporting Compliance."

Item 11. Executive Compensation

Information included under the following captions in the 2019 Proxy Statement is incorporated herein by reference:

- "Compensation Discussion and Analysis;"
- "Compensation and Benefits Committee Report;"
- "Executive Compensation;"
- "Corporate Governance;" and
- "Director Compensation."

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

Information included under the following caption in the 2019 Proxy Statement is incorporated herein by reference:

- "Stock Ownership of Directors, Executive Officers, and Certain Beneficial Owners."

The table below presents information on equity compensation plans at December 31, 2018:

Plan Category (1)	(a) Number of Shares to be Issued Under Outstanding Options, Warrants and Rights (2)	(b) Weighted-average Exercise Price of Outstanding Options, Warrants and Rights (3)	(c) Number of Shares Remaining for Future Issuance Under Equity Compensation Plans (excluding securities reflected in column (a)) (4)
Plans approved by shareholders	165,953,835	—	239,064,952
Plans not approved by shareholders	—	—	—
Total	165,953,835	—	239,064,952

(1) This table does not include 873,557 vested restricted stock units and stock option gain deferrals at December 31, 2018 that were assumed by the Corporation in connection with prior acquisitions under whose plans the awards were originally granted.

(2) Consists of outstanding restricted stock units.

(3) Restricted stock units do not have an exercise price and are delivered without any payment or consideration.

(4) Includes 239,005,498 shares of common stock available for future issuance under the Bank of America Corporation Key Employee Equity Plan and 59,454 shares of common stock which are available for future issuance under the Bank of America Corporation Directors' Stock Plan. As of January 1, 2019, grants of stock awards to the Corporation's non employee directors will be made under the Bank of America Corporation Key Employee Equity Plan.

Item 13. Certain Relationships and Related Transactions, and Director Independence

Information included under the following captions in the 2019 Proxy Statement is incorporated herein by reference:

- "Related Person and Certain Other Transactions;" and
- "Corporate Governance - Director Independence."

Item 14. Principal Accounting Fees and Services

Information included under the following caption in the 2019 Proxy Statement is incorporated herein by reference:

- "Proposal 3: Ratifying the Appointment of our Independent Registered Public Accounting Firm for 2019."

Part IV

Bank of America Corporation and Subsidiaries

Item 15. Exhibits, Financial Statement Schedules

The following documents are filed as part of this report:

(1) Financial Statements:

Report of Independent Registered Public Accounting Firm
 Consolidated Statement of Income for the years ended December 31, 2018, 2017 and 2016
 Consolidated Statement of Comprehensive Income for the years ended December 31, 2018, 2017 and 2016
 Consolidated Balance Sheet at December 31, 2018 and 2017
 Consolidated Statement of Changes in Shareholders' Equity for the years ended December 31, 2018, 2017 and 2016
 Consolidated Statement of Cash Flows for the years ended December 31, 2018, 2017 and 2016
 Notes to Consolidated Financial Statements

(2) Schedules:

None

(3) Index to Exhibits

With the exception of the information expressly incorporated herein by reference, the 2019 Proxy Statement shall not be deemed filed as part of this Annual Report on Form 10-K.

Exhibit No.	Description	Notes	Incorporated by Reference			
			Form	Exhibit	Filing Date	File No.
3(a)	<u>Amended and Restated Certificate of Incorporation as in effect on the date hereof</u>		10-Q	3(a)	7/30/18	1-6523
(b)	<u>Amended and Restated Bylaws of the Corporation as in effect on the date hereof</u>		8-K	3.1	3/20/15	1-6523
4(a)	<u>Indenture dated as of January 1, 1995 between registrant (successor to NationsBank Corporation) and BankAmerica National Trust Company</u>		S-3	4.1	2/1/95	33-57533
	<u>* First Supplemental Indenture thereto dated as of September 18, 1998 between registrant and U.S. Bank Trust National Association (successor to BankAmerica National Trust Company)</u>		8-K	4.3	11/18/98	1-6523
	<u>* Second Supplemental Indenture thereto dated as of May 7, 2001 between registrant, U.S. Bank Trust National Association, as Prior Trustee, and The Bank of New York, as Successor Trustee</u>		8-K	4.4	6/14/01	1-6523
	<u>* Third Supplemental Indenture thereto dated as of July 28, 2004 between registrant and The Bank of New York</u>		8-K	4.2	8/27/04	1-6523
	<u>* Fourth Supplemental Indenture thereto dated as of April 28, 2006 between the registrant and The Bank of New York</u>		S-3	4.6	5/5/06	333-133852
	<u>* Fifth Supplemental Indenture thereto dated as of December 1, 2008 between registrant and The Bank of New York Mellon Trust Company, N.A. (successor to The Bank of New York)</u>		8-K	4.1	12/5/08	1-6523
	<u>* Sixth Supplemental Indenture thereto dated as of February 23, 2011 between registrant and The Bank of New York Mellon Trust Company, N.A.</u>		10-K	4(ee)	2/25/11	1-6523
	<u>* Seventh Supplemental Indenture thereto dated as of January 13, 2017 between registrant and The Bank of New York Mellon Trust Company, N.A.</u>		8-K	4.1	1/13/17	1-6523
	<u>* Eighth Supplemental Indenture thereto dated as of February 23, 2017 between registrant and the Bank of New York Mellon Trust Company, N.A.</u>		10-K	4(a)	2/23/17	1-6523
(b)	<u>Successor Trustee Agreement effective December 15, 1995 between registrant (successor to NationsBank Corporation) and First Trust of New York, National Association, as successor trustee to BankAmerica National Trust Company</u>		S-3	4.2	6/28/96	333-07229
(c)	<u>Agreement of Appointment and Acceptance dated as of December 29, 2006 between registrant and The Bank of New York Trust Company, N.A.</u>		10-K	4(aaa)	2/28/07	1-6523
(d)	<u>Form of Senior Registered Note</u>		S-3	4.12	5/1/15	333-202354
(e)	<u>Form of Global Senior Medium-Term Note, Series L</u>		S-3	4.13	5/1/15	333-202354
(f)	<u>Form of Master Global Senior Medium-Term Note, Series L</u>		S-3	4.14	5/1/15	333-202354
(g)	<u>Form of Global Senior Medium-Term Note, Series M</u>		8-K	4.2	1/13/17	1-6523
(h)	<u>Form of Master Global Senior Medium-Term Note, Series M</u>		8-K	4.3	1/13/17	1-6523
(i)	<u>Indenture dated as of January 1, 1995 between registrant (successor to NationsBank Corporation) and The Bank of New York</u>		S-3	4.5	2/1/95	33-57533
	<u>* First Supplemental Indenture thereto dated as of August 26, 1998 between registrant and The Bank of New York</u>		8-K	4.8	11/18/98	1-6523
	<u>* Second Supplemental Indenture thereto dated as of January 25, 2007 between registrant and The Bank of New York Trust Company, N.A. (successor to The Bank of New York)</u>		S-4	4.3	3/1/07	333-141361
	<u>* Third Supplemental Indenture thereto dated as of February 23, 2011 between registrant and The Bank of New York Mellon Trust Company, N.A. (formerly The Bank of New York Trust Company, N.A.)</u>		10-K	4(ff)	2/25/11	1-6523

Exhibit No.	Description	Notes	Incorporated by Reference			
			Form	Exhibit	Filing Date	File No.
	• <u>Fourth Supplemental Indenture thereto dated as of February 23, 2017 between registrant and The Bank of New York Mellon Trust Company, N.A.</u>		10-K	4(i)	2/23/17	1-6523
(j)	<u>Indenture dated as of June 27, 2018 between the registrant and The Bank of New York Mellon Trust Company, N.A.</u>		S-3	4.3	6/27/18	333-224523
(k)	<u>Form of Global Senior Medium-Term Note, Series N</u>		S-3	4.4	6/27/18	333-224523
(l)	<u>Form of Master Global Senior Medium-Term Note, Series N</u>		S-3	4.5	6/27/18	333-224523
(m)	<u>Indenture dated as of June 27, 2018 between the registrant and The Bank of New York Mellon Trust Company, N.A.</u>		S-3	4.6	6/27/18	333-224523
(n)	<u>Form of Global Subordinated Medium-Term Note, Series H</u>		S-3	4.7	6/27/18	333-224523
	Registrant and its subsidiaries have other long-term debt agreements, but these are omitted pursuant to item 601(b)(4)(iii) of Regulation S-K. Copies of these agreements will be furnished to the Commission on request.					
10(a)	<u>Bank of America Pension Restoration Plan, as amended and restated effective January 1, 2009</u>	1	10-K	10(c)	2/27/09	1-6523
	• <u>Amendment thereto dated December 18, 2009</u>	1	10-K	10(c)	2/26/10	1-6523
	• <u>Amendment thereto dated December 16, 2010</u>	1	10-K	10(c)	2/25/11	1-6523
	• <u>Amendment thereto dated June 29, 2012</u>	1	10-K	10(a)	2/28/13	1-6523
(b)	<u>NationsBank Corporation Benefit Security Trust dated as of June 27, 1990</u>	1	10-K	10(f)	3/27/91	1-6523
	• <u>First Supplement thereto dated as of November 30, 1992</u>	1	10-K	10(v)	3/24/93	1-6523
	• <u>Trustee Removal/Appointment Agreement dated as of December 19, 1995</u>	1	10-K	10(o)	3/29/96	1-6523
(c)	<u>Bank of America Deferred Compensation Plan (formerly known as the Bank of America 401(k) Restoration Plan) as amended and restated effective January 1, 2015</u>	1	10-K	10(c)	2/25/15	1-6523
(d)	<u>Bank of America Executive Incentive Compensation Plan, as amended and restated effective December 10, 2002</u>	1	10-K	10(g)	3/3/03	1-6523
	<u>Amendment to Bank of America Executive Incentive Compensation Plan, dated January 23, 2013</u>	1	10-K	10(d)	2/28/13	1-6523
(e)	<u>Bank of America Director Deferral Plan, as amended and restated effective January 1, 2005</u>	1	10-K	10(i)	2/28/07	1-6523
(f)	<u>Bank of America Director Deferral Plan, as amended and restated effective January 1, 2019</u>	1, 2				
(g)	<u>Bank of America Corporation Directors' Stock Plan as amended and restated effective April 26, 2006, and the following forms of award agreements:</u>	1	8-K	10.2	12/14/05	1-6523
	• <u>Form of Restricted Stock Award Agreement</u>	1	10-K	10(h)	3/1/05	1-6523
	• <u>Form of Directors' Stock Plan Conditional Restricted Stock Award Agreement for Non-U.S. Director</u>	1	10-Q	10(a)	8/4/11	1-6523
(h)	<u>Bank of America Corporation Key Associate Stock Plan, as amended and restated effective April 28, 2010 and the following forms of award agreement under the plan:</u>	1	8-K	10.2	5/3/10	1-6523
	• <u>Form of Stock Option Award Agreement for non-executives (February 2008 grant)</u>	1	10-K	10(l)	2/26/10	1-6523
	• <u>Form of Restricted Stock Units Award Agreement (February 2013 and subsequent grants), including grants to named executive officers</u>	1	10-Q	10(a)	5/5/13	1-6523
	• <u>Form of Performance Restricted Stock Units Award Agreement (February 2014 and subsequent grants), including grants to named executive officers</u>	1	10-Q	10(a)	5/1/14	1-6523
	<u>Bank of America Corporation Key Employee Equity Plan (formerly known as the Key Associate Stock Plan), as amended and restated effective May 6, 2015</u>	1	8-K	10.2	5/7/15	1-6523
	• <u>Form of Cash settled Restricted Stock Units Award Agreement (February 2016 and subsequent grants)</u>	1	10-Q	10(e)	5/2/16	1-6523
	• <u>Form of Time-based Restricted Stock Units Award Agreement (February 2016)</u>	1	10-Q	10(b)	5/2/16	1-6523
	• <u>Form of Performance Restricted Stock Units Award Agreement (February 2016)</u>	1	10-Q	10(c)	5/2/16	1-6523
	• <u>Form of Time-based Restricted Stock Units Award Agreement (February 2017 and subsequent grants)</u>	1	10-Q	10(a)	5/2/17	1-6523
	• <u>Form of Performance Restricted Stock Units Award Agreement (February 2017)</u>	1	10-Q	10(b)	5/2/17	1-6523
	• <u>Form of Performance Restricted Stock Units Award Agreement (February 2018)</u>	1	10-Q	10	4/30/18	1-6523
	• <u>Form of Restricted Stock Award Agreement for Non-Employee Directors</u>	1, 2				
(i)	<u>Amendment to various plans in connection with FleetBoston Financial Corporation merger dated October 27, 2003</u>	1	10-K	10(v)	3/1/04	1-6523
(j)	<u>FleetBoston Supplemental Executive Retirement Plan effective December 31, 2004</u>	1	10-K	10(r)	3/1/05	1-6523
(k)	<u>FleetBoston Executive Deferred Compensation Plan No. 2 effective December 16, 2003</u>	1	10-K	10(u)	3/1/05	1-6523
(l)	<u>FleetBoston Executive Supplemental Plan effective December 31, 2004</u>	1	10-K	10(w)	3/1/05	1-6523
(m)	<u>Retirement Income Assurance Plan for Legacy Fleet, as amended and restated effective January 1, 2009</u>	1	10-K	10(p)	2/26/10	1-6523

Exhibit No.	Description	Notes	Incorporated by Reference			
			Form	Exhibit	Filing Date	File No
	<u>* Amendment thereto dated December 16, 2010, incorporated by reference to Exhibit 10(i) of the 2010 10-K</u>	1	10-K	10(i)	2/25/11	1-6523
	<u>* Amendment thereto dated June 29, 2012, incorporated by reference to Exhibit 10(i) of the 2012 10-K</u>	1	10-K	10(i)	2/28/13	1-6523
(n)	<u>Trust Agreement for the FleetBoston Executive Deferred Compensation Plans No. 1 and 2 dated December 17, 1997</u>	1	10-K	10(x)	3/1/05	1-6523
(o)	<u>Trust Agreement for the FleetBoston Executive Supplemental Plan dated June 19, 1996</u>	1	10-K	10(y)	3/1/05	1-6523
(p)	<u>Trust Agreement for the FleetBoston Retirement Income Assurance Plan and the FleetBoston Supplemental Executive Retirement Plan dated June 19, 1996</u>	1	10-K	10(z)	3/1/05	1-6523
(q)	<u>FleetBoston Directors Deferred Compensation and Stock Unit Plan effective January 1, 2004</u>	1	10-K	10(aa)	3/1/05	1-6523
(r)	<u>BankBoston Corporation and its Subsidiaries Deferred Compensation Plan dated December 26, 2001</u>	1	10-K	10(cc)	3/1/05	1-6523
(s)	<u>BankBoston Director Stock Award Plan effective July 1, 1998</u>	1	10-K	10(dd)	3/1/05	1-6523
(t)	<u>BankBoston Corporation Directors' Deferred Compensation Plan effective March 1, 1988</u>	1	10-K	10(fff)	3/1/05	1-6523
(u)	<u>BankBoston, N.A. Directors' Deferred Compensation Plan effective March 1, 1988</u>	1	10-K	10(gg)	3/1/05	1-6523
(v)	<u>Description of BankBoston Director Retirement Benefits Exchange Program</u>	1	10-K	10(hh)	3/1/05	1-6523
(w)	<u>Global amendment to definition of "change in control" or "change of control," together with a list of plans affected by such amendment</u>	1	10-K	10(ii)	3/1/05	1-6523
(x)	<u>Employment Agreement dated October 27, 2003 between registrant and Brian T. Moynihan</u>	1	S-A	10(d)	12/4/03	333-10924
(y)	<u>Cancellation Agreement dated October 26, 2005 between registrant and Brian T. Moynihan</u>	1	8-K	10.1	10/26/05	1-6523
(z)	<u>Agreement Regarding Participation in the Fleet Boston Supplemental Executive Retirement Plan dated October 26, 2005 between registrant and Brian T. Moynihan</u>	1	8-K	10.2	10/26/05	1-6523
(aa)	<u>Bank of America Corporation Equity Incentive Plan amended and restated effective January 1, 2008</u>	1	10-K	10(zz)	2/26/10	1-6523
(bb)	<u>Merill Lynch & Co., Inc. Long-Term Incentive Compensation Plan amended as of January 1, 2009 and 2008 Restricted Units/Stock Option Grant Document for Thomas K. Montag</u>	1	10-K	10(aaa)	2/26/10	1-6523
(cc)	<u>Employment Letter dated May 1, 2008 between Merrill Lynch & Co., Inc. and Thomas K. Montag and Summary of Agreement with respect to Post-Employment Medical Coverage</u>	1	10-K	10(bbb)	2/26/10	1-6523
(dd)	<u>Aircraft Time Sharing Agreement (Multiple Aircraft) dated February 24, 2011 between Bank of America, N.A. and Brian T. Moynihan</u>	1	10-K	10(ddd)	2/25/11	1-6523
(ee)	<u>Securities Purchase Agreement dated August 25, 2011 between registrant and Berkshire Hathaway Inc. (including forms of the Certificate of Designations, Warrant and Registration Rights Agreement)</u>		8-K	1.1	8/25/11	1-6523
(ff)	<u>First Amendment to Aircraft Time Sharing Agreement dated June 15, 2015 between Bank of America, N.A. and Brian T. Moynihan</u>	1	10-Q	10	7/29/15	1-6523
(gg)	<u>First Amendment to the Bank of America Deferred Compensation Plan (formerly known as the Bank of America 401(k) Restoration Plan), as amended and restated effective January 1, 2015</u>	1	10-K	10(vv)	2/24/16	1-6523
(hh)	<u>Tax Equalization Program Guidelines</u>	1	10-K	10(uu)	2/24/16	1-6523
(ii)	<u>Second Amendment to Aircraft Time Sharing Agreement dated June 8, 2016 between Bank of America, N.A. and Brian T. Moynihan</u>	1	10-Q	10	8/1/16	1-6523
(jj)	<u>Form of Waiver of Certain Incremental Payouts from Performance Restricted Stock Units</u>		10-K	10(rr)	2/23/17	1-6523
(kk)	<u>Third Amendment to Aircraft Time Sharing Agreement dated July 10, 2017 between Bank of America, N.A. and Brian T. Moynihan</u>	1	10-Q	10	7/31/17	1-6523
(ll)	<u>Amended and Restated Aircraft Time Sharing Agreement (Multiple Aircraft) dated June 25, 2018 between Bank of America, N.A. and Brian T. Moynihan</u>	1	10-Q	10	7/30/18	1-6523
(mm)	<u>First Amendment to the Bank of America Corporation Key Employee Equity Plan (formerly known as the Key Associate Stock Plan), as amended and restated effective May 6, 2015</u>	1,2				
21	<u>List of Subsidiaries</u>	2				
23	<u>Consent of PricewaterhouseCoopers LLP</u>	2				
24	<u>Power of Attorney</u>	2				
31(a)	<u>Certification of the Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002</u>	2				
(b)	<u>Certification of the Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002</u>	2				
32(a)	<u>Certification of the Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002</u>	2				
(b)	<u>Certification of the Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002</u>	2				

Exhibit No.	Description	Notes	Incorporated by Reference			
			Form	Exhibit	Filing Date	File No.
101.INS	XBRL Instance Document	3				
101.SCH	XBRL Taxonomy Extension Schema Document	2				
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document	2				
101.LAB	XBRL Taxonomy Extension Label Linkbase Document	2				
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document	2				
101.DEF	XBRL Taxonomy Extension Definitions Linkbase Document	2				

(1) Exhibit is a management contract or compensatory plan or arrangement.

(2) Filed Herewith.

(3) The instance document does not appear in the interactive data file because its XBRL tags are embedded within the inline XBRL document.

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Item 16. Form 10-K Summary

Not applicable.

Signatures

Pursuant to the requirements of Section 13 of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Date: February 26, 2019

Bank of America CorporationBy: /s/ Brian T. Moynihan

Brian T. Moynihan

Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Signature	Title	Date
<u>/s/ Brian T. Moynihan</u> Brian T. Moynihan	Chief Executive Officer, Chairman and Director (Principal Executive Officer)	February 26, 2019
<u>*s/ Paul M. Donofrio</u> Paul M. Donofrio	Chief Financial Officer (Principal Financial Officer)	February 26, 2019
<u>*s/ Rudolf A. Bless</u> Rudolf A. Bless	Chief Accounting Officer (Principal Accounting Officer)	February 26, 2019
<u>*s/ Sharon L. Allen</u> Sharon L. Allen	Director	February 26, 2019
<u>*s/ Susan S. Bies</u> Susan S. Bies	Director	February 26, 2019
<u>*s/ Jack O. Bovender, Jr.</u> Jack O. Bovender, Jr.	Director	February 26, 2019
<u>*s/ Frank P. Bramble, Sr.</u> Frank P. Bramble, Sr.	Director	February 26, 2019
<u>*s/ Pierre de Weck</u> Pierre de Weck	Director	February 26, 2019
<u>*s/ Arnold W. Donald</u> Arnold W. Donald	Director	February 26, 2019
<u>*s/ Linda P. Hudson</u> Linda P. Hudson	Director	February 26, 2019
<u>*s/ Monica C. Lozano</u> Monica C. Lozano	Director	February 26, 2019

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Signature	Title	Date
<u>*/s/ Thomas J. May</u> Thomas J. May	Director	February 26, 2019
<u>*/s/ Lionel L. Nowell, III</u> Lionel L. Nowell, III	Director	February 26, 2019
<u>*/s/ Clayton S. Rose</u> Clayton S. Rose	Director	February 26, 2019
<u>*/s/ Michael D. White</u> Michael D. White	Director	February 26, 2019
<u>*/s/ Thomas D. Woods</u> Thomas D. Woods	Director	February 26, 2019
<u>*/s/ R. David Yost</u> R. David Yost	Director	February 26, 2019
<u>*/s/ Maria T. Zuber</u> Maria T. Zuber	Director	February 26, 2019
<u>*By /s/ Ross E. Jeffries, Jr.</u> Ross E. Jeffries, Jr. Attorney-in-Fact		

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BMO HARRIS BANK
NA

02019-9946

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT
AND AFFIDAVIT**

SECTION I -- GENERAL INFORMATION

A. Legal name of the Disclosing Party submitting this EDS. Include d/b/a/ if applicable:

BMO Harris Bank NA

Check ONE of the following three boxes:

Indicate whether the Disclosing Party submitting this EDS is:

1. ☒ the Applicant

OR

2. ☐ a legal entity currently holding, or anticipated to hold within six months after City action on the contract, transaction or other undertaking to which this EDS pertains (referred to below as the "Matter"), a direct or indirect interest in excess of 7.5% in the Applicant. State the Applicant's legal name: _____

OR

3. ☐ a legal entity with a direct or indirect right of control of the Applicant (see Section II(B)(1)) State the legal name of the entity in which the Disclosing Party holds a right of control: _____

B. Business address of the Disclosing Party: 111 W. Monroe St.
Chicago, IL 60603

C. Telephone: (312) 461-6538 Fax: (312) 293-5811 Email: mark.mitrovich@bmo.com

D. Name of contact person: Mark Mitrovich

E. Federal Employer Identification No. (if you have one): _____

F. Brief description of the Matter to which this EDS pertains. (Include project number and location of property, if applicable): City of Chicago 2020 Municipal Depository RFP

G. Which City agency or department is requesting this EDS? Finance

If the Matter is a contract being handled by the City's Department of Procurement Services, please complete the following:

Specification # _____ and Contract # _____

SECTION II -- DISCLOSURE OF OWNERSHIP INTERESTS

A. NATURE OF THE DISCLOSING PARTY

1. Indicate the nature of the Disclosing Party:

- | | |
|---|--|
| <input type="checkbox"/> Person | <input type="checkbox"/> Limited liability company |
| <input type="checkbox"/> Publicly registered business corporation | <input type="checkbox"/> Limited liability partnership |
| <input type="checkbox"/> Privately held business corporation | <input type="checkbox"/> Joint venture |
| <input type="checkbox"/> Sole proprietorship | <input type="checkbox"/> Not-for-profit corporation |
| <input type="checkbox"/> General partnership | (Is the not-for-profit corporation also a 501(c)(3))? |
| <input type="checkbox"/> Limited partnership | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| <input type="checkbox"/> Trust | <input checked="" type="checkbox"/> Other (please specify) |
| | <u>National Association</u> |

2. For legal entities, the state (or foreign country) of incorporation or organization, if applicable:

United States

3. For legal entities not organized in the State of Illinois: Has the organization registered to do business in the State of Illinois as a foreign entity?

☐ Yes ☒ No ☐ Organized in Illinois

B. IF THE DISCLOSING PARTY IS A LEGAL ENTITY:

1. List below the full names and titles, if applicable, of: (i) all executive officers and all directors of the entity; (ii) **for not-for-profit corporations**, all members, if any, which are legal entities (if there are no such members, write "no members which are legal entities"); (iii) **for trusts, estates or other similar entities**, the trustee, executor, administrator, or similarly situated party; (iv) **for general or limited partnerships, limited liability companies, limited liability partnerships or joint ventures**, each general partner, managing member, manager or any other person or legal entity that directly or indirectly controls the day-to-day management of the Applicant.

NOTE: Each legal entity listed below must submit an EDS on its own behalf.

Name	Title
------	-------

See attached list of Officers and Directors

2. Please provide the following information concerning each person or legal entity having a direct or indirect, current or prospective (i.e. within 6 months after City action) beneficial interest (including ownership) in excess of 7.5% of the Applicant. Examples of such an interest include shares in a corporation, partnership interest in a partnership or joint venture, interest of a member or manager in a

limited liability company, or interest of a beneficiary of a trust, estate or other similar entity. If none, state "None."

NOTE: Each legal entity listed below may be required to submit an EDS on its own behalf.

Name	Business Address	Percentage Interest in the Applicant
BMO Financial Corp	111 W. Monroe St., Chicago, IL 60603	100%

SECTION III -- INCOME OR COMPENSATION TO, OR OWNERSHIP BY, CITY ELECTED OFFICIALS

Has the Disclosing Party provided any income or compensation to any City elected official during the 12-month period preceding the date of this EDS? ☒ Yes ☐ No

Does the Disclosing Party reasonably expect to provide any income or compensation to any City elected official during the 12-month period following the date of this EDS? ☐ Yes ☒ No, to the best of the Disclosing Party's knowledge

If "yes" to either of the above, please identify below the name(s) of such City elected official(s) and describe such income or compensation: The law firm of Klafter & Burke (Ald. Burke) has performed real estate work for the bank. The bank has ended this relationship Feb 2019. Note: BMO Harris Bank NA as a Commercial & Corporate bank from time to time offers and provides services to the City of Chicago's elected officials and employees. In those instances, BMO Harris charges normal and customary fees.

Does any City elected official or, to the best of the Disclosing Party's knowledge after reasonable inquiry, any City elected official's spouse or domestic partner, have a financial interest (as defined in Chapter 2-156 of the Municipal Code of Chicago ("MCC")) in the Disclosing Party?

☐ Yes ☒ No, to the best of the Disclosing Party's knowledge

SECTION IV -- DISCLOSURE OF SUBCONTRACTORS AND OTHER RETAINED PARTIES

The Disclosing Party must disclose the name and business address of each subcontractor, attorney, lobbyist (as defined in MCC Chapter 2-156), accountant, consultant and any other person or entity whom the Disclosing Party has retained or expects to retain in connection with the Matter, as well as the nature of the relationship, and the total amount of the fees paid or estimated to be paid. The Disclosing Party is not required to disclose employees who are paid solely through the Disclosing Party's regular payroll. If the Disclosing Party is uncertain whether a disclosure is required under this Section, the Disclosing Party must either ask the City whether disclosure is required or make the disclosure.

Name (indicate whether retained or anticipated to be retained)	Business Address	Relationship to Disclosing Party (subcontractor, attorney, lobbyist, etc.)	Fees (<u>indicate whether paid or estimated.</u>) NOTE: "hourly rate" or "t.b.d." is not an acceptable response.
--	------------------	--	---

(Add sheets if necessary)

[X] Check here if the Disclosing Party has not retained, nor expects to retain, any such persons or entities.

SECTION V -- CERTIFICATIONS

A. COURT-ORDERED CHILD SUPPORT COMPLIANCE

Under MCC Section 2-92-415, substantial owners of business entities that contract with the City must remain in compliance with their child support obligations throughout the contract's term.

Has any person who directly or indirectly owns 10% or more of the Disclosing Party been declared in arrearage on any child support obligations by any Illinois court of competent jurisdiction?

[] Yes [] No [X] No person directly or indirectly owns 10% or more of the Disclosing Party.

If "Yes," has the person entered into a court-approved agreement for payment of all support owed and is the person in compliance with that agreement?

[] Yes [] No

B. FURTHER CERTIFICATIONS

1. [This paragraph 1 applies only if the Matter is a contract being handled by the City's Department of Procurement Services.] In the 5-year period preceding the date of this EDS, neither the Disclosing Party nor any Affiliated Entity [see definition in (5) below] has engaged, in connection with the performance of any public contract, the services of an integrity monitor, independent private sector inspector general, or integrity compliance consultant (i.e., an individual or entity with legal, auditing, investigative, or other similar skills, designated by a public agency to help the agency monitor the activity of specified agency vendors as well as help the vendors reform their business practices so they can be considered for agency contracts in the future, or continue with a contract in progress).

2. The Disclosing Party and its Affiliated Entities are not delinquent in the payment of any fine, fee, tax or other source of indebtedness owed to the City of Chicago, including, but not limited to, water and sewer charges, license fees, parking tickets, property taxes and sales taxes, nor is the Disclosing Party delinquent in the payment of any tax administered by the Illinois Department of Revenue.

3. The Disclosing Party and, if the Disclosing Party is a legal entity, all of those persons or entities identified in Section II(B)(1) of this EDS:

- a. are not presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from any transactions by any federal, state or local unit of government;
- b. have not, during the 5 years before the date of this EDS, been convicted of a criminal offense, adjudged guilty, or had a civil judgment rendered against them in connection with: obtaining, attempting to obtain, or performing a public (federal, state or local) transaction or contract under a public transaction; a violation of federal or state antitrust statutes; fraud; embezzlement; theft; forgery; bribery; falsification or destruction of records; making false statements; or receiving stolen property;
- c. are not presently indicted for, or criminally or civilly charged by, a governmental entity (federal, state or local) with committing any of the offenses set forth in subparagraph (b) above;
- d. have not, during the 5 years before the date of this EDS, had one or more public transactions (federal, state or local) terminated for cause or default; and
- e. have not, during the 5 years before the date of this EDS, been convicted, adjudged guilty, or found liable in a civil proceeding, or in any criminal or civil action, including actions concerning environmental violations, instituted by the City or by the federal government, any state, or any other unit of local government.

4. The Disclosing Party understands and shall comply with the applicable requirements of MCC Chapters 2-56 (Inspector General) and 2-156 (Governmental Ethics).

5. Certifications (5), (6) and (7) concern:

- the Disclosing Party;
- any "Contractor" (meaning any contractor or subcontractor used by the Disclosing Party in connection with the Matter, including but not limited to all persons or legal entities disclosed under Section IV, "Disclosure of Subcontractors and Other Retained Parties");
- any "Affiliated Entity" (meaning a person or entity that, directly or indirectly: controls the Disclosing Party, is controlled by the Disclosing Party, or is, with the Disclosing Party, under common control of another person or entity). Indicia of control include, without limitation: interlocking management or ownership; identity of interests among family members, shared facilities and equipment; common use of employees; or organization of a business entity following the ineligibility of a business entity to do business with federal or state or local government, including the City, using substantially the same management, ownership, or principals as the ineligible entity. With respect to Contractors, the term Affiliated Entity means a person or entity that directly or indirectly controls the Contractor, is controlled by it, or, with the Contractor, is under common control of another person or entity;
- any responsible official of the Disclosing Party, any Contractor or any Affiliated Entity or any other official, agent or employee of the Disclosing Party, any Contractor or any Affiliated Entity, acting pursuant to the direction or authorization of a responsible official of the Disclosing Party, any Contractor or any Affiliated Entity (collectively "Agents").

Neither the Disclosing Party, nor any Contractor, nor any Affiliated Entity of either the Disclosing Party or any Contractor, nor any Agents have, during the 5 years before the date of this EDS, or, with respect to a Contractor, an Affiliated Entity, or an Affiliated Entity of a Contractor during the 5 years before the date of such Contractor's or Affiliated Entity's contract or engagement in connection with the Matter:

- a. bribed or attempted to bribe, or been convicted or adjudged guilty of bribery or attempting to bribe, a public officer or employee of the City, the State of Illinois, or any agency of the federal government or of any state or local government in the United States of America, in that officer's or employee's official capacity;
- b. agreed or colluded with other bidders or prospective bidders, or been a party to any such agreement, or been convicted or adjudged guilty of agreement or collusion among bidders or prospective bidders, in restraint of freedom of competition by agreement to bid a fixed price or otherwise; or
- c. made an admission of such conduct described in subparagraph (a) or (b) above that is a matter of record, but have not been prosecuted for such conduct; or
- d. violated the provisions referenced in MCC Subsection 2-92-320(a)(4)(Contracts Requiring a Base Wage); (a)(5)(Debarment Regulations); or (a)(6)(Minimum Wage Ordinance).

6. Neither the Disclosing Party, nor any Affiliated Entity or Contractor, or any of their employees, officials, agents or partners, is barred from contracting with any unit of state or local government as a result of engaging in or being convicted of (1) bid-rigging in violation of 720 ILCS 5/33E-3; (2) bid-rotating in violation of 720 ILCS 5/33E-4; or (3) any similar offense of any state or of the United States of America that contains the same elements as the offense of bid-rigging or bid-rotating.

7. Neither the Disclosing Party nor any Affiliated Entity is listed on a Sanctions List maintained by the United States Department of Commerce, State, or Treasury, or any successor federal agency.

8. [FOR APPLICANT ONLY] (i) Neither the Applicant nor any "controlling person" [see MCC Chapter 1-23, Article I for applicability and defined terms] of the Applicant is currently indicted or charged with, or has admitted guilt of, or has ever been convicted of, or placed under supervision for, any criminal offense involving actual, attempted, or conspiracy to commit bribery, theft, fraud, forgery, perjury, dishonesty or deceit against an officer or employee of the City or any "sister agency"; and (ii) the Applicant understands and acknowledges that compliance with Article I is a continuing requirement for doing business with the City. NOTE: If MCC Chapter 1-23, Article I applies to the Applicant, that Article's permanent compliance timeframe supersedes 5-year compliance timeframes in this Section V.

9. [FOR APPLICANT ONLY] The Applicant and its Affiliated Entities will not use, nor permit their subcontractors to use, any facility listed as having an active exclusion by the U.S. EPA on the federal System for Award Management ("SAM").

10. [FOR APPLICANT ONLY] The Applicant will obtain from any contractors/subcontractors hired or to be hired in connection with the Matter certifications equal in form and substance to those in Certifications (2) and (9) above and will not, without the prior written consent of the City, use any such

contractor/subcontractor that does not provide such certifications or that the Applicant has reason to believe has not provided or cannot provide truthful certifications.

11. If the Disclosing Party is unable to certify to any of the above statements in this Part B (Further Certifications), the Disclosing Party must explain below:

see attached BMO supplemental information

If the letters "NA," the word "None," or no response appears on the lines above, it will be conclusively presumed that the Disclosing Party certified to the above statements.

12. To the best of the Disclosing Party's knowledge after reasonable inquiry, the following is a complete list of all current employees of the Disclosing Party who were, at any time during the 12-month period preceding the date of this EDS, an employee, or elected or appointed official, of the City of Chicago (if none, indicate with "N/A" or "none").

None

13. To the best of the Disclosing Party's knowledge after reasonable inquiry, the following is a complete list of all gifts that the Disclosing Party has given or caused to be given, at any time during the 12-month period preceding the execution date of this EDS, to an employee, or elected or appointed official, of the City of Chicago. For purposes of this statement, a "gift" does not include: (i) anything made generally available to City employees or to the general public, or (ii) food or drink provided in the course of official City business and having a retail value of less than \$25 per recipient, or (iii) a political contribution otherwise duly reported as required by law (if none, indicate with "N/A" or "none"). As to any gift listed below, please also list the name of the City recipient.

None

C. CERTIFICATION OF STATUS AS FINANCIAL INSTITUTION

1. The Disclosing Party certifies that the Disclosing Party (check one)

☒ [X] is ☐ [] is not

a "financial institution" as defined in MCC Section 2-32-455(b).

2. If the Disclosing Party IS a financial institution, then the Disclosing Party pledges:

"We are not and will not become a predatory lender as defined in MCC Chapter 2-32. We further pledge that none of our affiliates is, and none of them will become, a predatory lender as defined in MCC Chapter 2-32. We understand that becoming a predatory lender or becoming an affiliate of a predatory lender may result in the loss of the privilege of doing business with the City."

If the Disclosing Party is unable to make this pledge because it or any of its affiliates (as defined in MCC Section 2-32-455(b)) is a predatory lender within the meaning of MCC Chapter 2-32, explain here (attach additional pages if necessary):

N/A _____

If the letters "NA," the word "None," or no response appears on the lines above, it will be conclusively presumed that the Disclosing Party certified to the above statements.

D. CERTIFICATION REGARDING FINANCIAL INTEREST IN CITY BUSINESS

Any words or terms defined in MCC Chapter 2-156 have the same meanings if used in this Part D.

1. In accordance with MCC Section 2-156-110: To the best of the Disclosing Party's knowledge after reasonable inquiry, does any official or employee of the City have a financial interest in his or her own name or in the name of any other person or entity in the Matter?

☐ Yes ☒ No

NOTE: If you checked "Yes" to Item D(1), proceed to Items D(2) and D(3). If you checked "No" to Item D(1), skip Items D(2) and D(3) and proceed to Part E.

2. Unless sold pursuant to a process of competitive bidding, or otherwise permitted, no City elected official or employee shall have a financial interest in his or her own name or in the name of any other person or entity in the purchase of any property that (i) belongs to the City, or (ii) is sold for taxes or assessments, or (iii) is sold by virtue of legal process at the suit of the City (collectively, "City Property Sale"). Compensation for property taken pursuant to the City's eminent domain power does not constitute a financial interest within the meaning of this Part D.

Does the Matter involve a City Property Sale?

☐ Yes ☒ No

3. If you checked "Yes" to Item D(1), provide the names and business addresses of the City officials or employees having such financial interest and identify the nature of the financial interest:

Name	Business Address	Nature of Financial Interest
_____	_____	_____
_____	_____	_____
_____	_____	_____

4. The Disclosing Party further certifies that no prohibited financial interest in the Matter will be acquired by any City official or employee.

E. CERTIFICATION REGARDING SLAVERY ERA BUSINESS

Please check either (1) or (2) below. If the Disclosing Party checks (2), the Disclosing Party must disclose below or in an attachment to this EDS all information required by (2). Failure to comply with these disclosure requirements may make any contract entered into with the City in connection with the Matter voidable by the City.

X 1. The Disclosing Party verifies that the Disclosing Party has searched any and all records of the Disclosing Party and any and all predecessor entities regarding records of investments or profits from slavery or slaveholder insurance policies during the slavery era (including insurance policies issued to slaveholders that provided coverage for damage to or injury or death of their slaves), and the Disclosing Party has found no such records.

2. The Disclosing Party verifies that, as a result of conducting the search in step (1) above, the Disclosing Party has found records of investments or profits from slavery or slaveholder insurance policies. The Disclosing Party verifies that the following constitutes full disclosure of all such records, including the names of any and all slaves or slaveholders described in those records:

SECTION VI -- CERTIFICATIONS FOR FEDERALLY FUNDED MATTERS

NOTE: If the Matter is federally funded, complete this Section VI. **If the Matter is not federally funded**, proceed to Section VII. For purposes of this Section VI, tax credits allocated by the City and proceeds of debt obligations of the City are not federal funding.

A. CERTIFICATION REGARDING LOBBYING

1. List below the names of all persons or entities registered under the federal Lobbying Disclosure Act of 1995, as amended, who have made lobbying contacts on behalf of the Disclosing Party with respect to the Matter: (Add sheets if necessary):

N/A

(If no explanation appears or begins on the lines above, or if the letters "NA" or if the word "None" appear, it will be conclusively presumed that the Disclosing Party means that NO persons or entities registered under the Lobbying Disclosure Act of 1995, as amended, have made lobbying contacts on behalf of the Disclosing Party with respect to the Matter.)

2. The Disclosing Party has not spent and will not expend any federally appropriated funds to pay any person or entity listed in paragraph A(1) above for his or her lobbying activities or to pay any person or entity to influence or attempt to influence an officer or employee of any agency, as defined by applicable federal law, a member of Congress, an officer or employee of Congress, or an employee

of a member of Congress, in connection with the award of any federally funded contract, making any federally funded grant or loan, entering into any cooperative agreement, or to extend, continue, renew, amend, or modify any federally funded contract, grant, loan, or cooperative agreement.

3. The Disclosing Party will submit an updated certification at the end of each calendar quarter in which there occurs any event that materially affects the accuracy of the statements and information set forth in paragraphs A(1) and A(2) above.

4. The Disclosing Party certifies that either: (i) it is not an organization described in section 501(c)(4) of the Internal Revenue Code of 1986; or (ii) it is an organization described in section 501(c)(4) of the Internal Revenue Code of 1986 but has not engaged and will not engage in "Lobbying Activities," as that term is defined in the Lobbying Disclosure Act of 1995, as amended.

5. If the Disclosing Party is the Applicant, the Disclosing Party must obtain certifications equal in form and substance to paragraphs A(1) through A(4) above from all subcontractors before it awards any subcontract and the Disclosing Party must maintain all such subcontractors' certifications for the duration of the Matter and must make such certifications promptly available to the City upon request.

B. CERTIFICATION REGARDING EQUAL EMPLOYMENT OPPORTUNITY

If the Matter is federally funded, federal regulations require the Applicant and all proposed subcontractors to submit the following information with their bids or in writing at the outset of negotiations.

Is the Disclosing Party the Applicant?

☐ Yes

☐ No

If "Yes," answer the three questions below:

1. Have you developed and do you have on file affirmative action programs pursuant to applicable federal regulations? (See 41 CFR Part 60-2.)

☐ Yes

☐ No

2. Have you filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance Programs, or the Equal Employment Opportunity Commission all reports due under the applicable filing requirements?

☐ Yes

☐ No

☐ Reports not required

3. Have you participated in any previous contracts or subcontracts subject to the equal opportunity clause?

☐ Yes

☐ No

If you checked "No" to question (1) or (2) above, please provide an explanation:

SECTION VII -- FURTHER ACKNOWLEDGMENTS AND CERTIFICATION

The Disclosing Party understands and agrees that:

A. The certifications, disclosures, and acknowledgments contained in this EDS will become part of any contract or other agreement between the Applicant and the City in connection with the Matter, whether procurement, City assistance, or other City action, and are material inducements to the City's execution of any contract or taking other action with respect to the Matter. The Disclosing Party understands that it must comply with all statutes, ordinances, and regulations on which this EDS is based.

B. The City's Governmental Ethics Ordinance, MCC Chapter 2-156, imposes certain duties and obligations on persons or entities seeking City contracts, work, business, or transactions. The full text of this ordinance and a training program is available on line at www.cityofchicago.org/Ethics, and may also be obtained from the City's Board of Ethics, 740 N. Sedgwick St., Suite 500, Chicago, IL 60610, (312) 744-9660. The Disclosing Party must comply fully with this ordinance.

C. If the City determines that any information provided in this EDS is false, incomplete or inaccurate, any contract or other agreement in connection with which it is submitted may be rescinded or be void or voidable, and the City may pursue any remedies under the contract or agreement (if not rescinded or void), at law, or in equity, including terminating the Disclosing Party's participation in the Matter and/or declining to allow the Disclosing Party to participate in other City transactions. Remedies at law for a false statement of material fact may include incarceration and an award to the City of treble damages.

D. It is the City's policy to make this document available to the public on its Internet site and/or upon request. Some or all of the information provided in, and appended to, this EDS may be made publicly available on the Internet, in response to a Freedom of Information Act request, or otherwise. By completing and signing this EDS, the Disclosing Party waives and releases any possible rights or claims which it may have against the City in connection with the public release of information contained in this EDS and also authorizes the City to verify the accuracy of any information submitted in this EDS.

E. The information provided in this EDS must be kept current. In the event of changes, the Disclosing Party must supplement this EDS up to the time the City takes action on the Matter. If the Matter is a contract being handled by the City's Department of Procurement Services, the Disclosing Party must update this EDS as the contract requires. **NOTE:** With respect to Matters subject to MCC Chapter 1-23, Article I (imposing **PERMANENT INELIGIBILITY** for certain specified offenses), the information provided herein regarding eligibility must be kept current for a longer period, as required by MCC Chapter 1-23 and Section 2-154-020.

CERTIFICATION

Under penalty of perjury, the person signing below: (1) warrants that he/she is authorized to execute this EDS, and all applicable Appendices, on behalf of the Disclosing Party, and (2) warrants that all certifications and statements contained in this EDS, and all applicable Appendices, are true, accurate and complete as of the date furnished to the City.

BMO Harris Bank NA

(Print or type exact legal name of Disclosing Party)

By: _____

(Sign here)

David R. Casper

(Print or type name of person signing)

President and CEO - BMO Harris Bank

(Print or type title of person signing)

Signed and sworn to before me on (date) November 12, 2019,

at Cook County, Illinois (state).

Jordan C. Ruiz
Notary Public

Commission expires: May 5, 2021

JORDAN C RUIZ
Official Seal
Notary Public - State of Illinois
My Commission Expires May 5, 2021

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
APPENDIX A**

**FAMILIAL RELATIONSHIPS WITH ELECTED CITY OFFICIALS
AND DEPARTMENT HEADS**

This Appendix is to be completed only by (a) the Applicant, and (b) any legal entity which has a direct ownership interest in the Applicant exceeding 7.5%. It is not to be completed by any legal entity which has only an indirect ownership interest in the Applicant.

Under MCC Section 2-154-015, the Disclosing Party must disclose whether such Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof currently has a "familial relationship" with any elected city official or department head. A "familial relationship" exists if, as of the date this EDS is signed, the Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof is related to the mayor, any alderman, the city clerk, the city treasurer or any city department head as spouse or domestic partner or as any of the following, whether by blood or adoption: parent, child, brother or sister, aunt or uncle, niece or nephew, grandparent, grandchild, father-in-law, mother-in-law, son-in-law, daughter-in-law, stepfather or stepmother, stepson or stepdaughter, stepbrother or stepsister or half-brother or half-sister.

"Applicable Party" means (1) all executive officers of the Disclosing Party listed in Section II.B.1.a., if the Disclosing Party is a corporation; all partners of the Disclosing Party, if the Disclosing Party is a general partnership; all general partners and limited partners of the Disclosing Party, if the Disclosing Party is a limited partnership; all managers, managing members and members of the Disclosing Party, if the Disclosing Party is a limited liability company; (2) all principal officers of the Disclosing Party; and (3) any person having more than a 7.5% ownership interest in the Disclosing Party. "Principal officers" means the president, chief operating officer, executive director, chief financial officer, treasurer or secretary of a legal entity or any person exercising similar authority.

Does the Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof currently have a "familial relationship" with an elected city official or department head?

☐ Yes ☒ No, to the best of the Disclosing Party's knowledge

If yes, please identify below (1) the name and title of such person, (2) the name of the legal entity to which such person is connected; (3) the name and title of the elected city official or department head to whom such person has a familial relationship, and (4) the precise nature of such familial relationship.

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
APPENDIX B**

BUILDING CODE SCOFFLAW/PROBLEM LANDLORD CERTIFICATION

This Appendix is to be completed only by (a) the Applicant, and (b) any legal entity which has a direct ownership interest in the Applicant exceeding 7.5% (an "Owner"). It is not to be completed by any legal entity which has only an indirect ownership interest in the Applicant.

1. Pursuant to MCC Section 2-154-010, is the Applicant or any Owner identified as a building code scofflaw or problem landlord pursuant to MCC Section 2-92-416?

☐ Yes ☒ No

2. If the Applicant is a legal entity publicly traded on any exchange, is any officer or director of the Applicant identified as a building code scofflaw or problem landlord pursuant to MCC Section 2-92-416?

☐ Yes ☐ No ☒ The Applicant is not publicly traded on any exchange.

3. If yes to (1) or (2) above, please identify below the name of each person or legal entity identified as a building code scofflaw or problem landlord and the address of each building or buildings to which the pertinent code violations apply.

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
APPENDIX C**

PROHIBITION ON WAGE & SALARY HISTORY SCREENING - CERTIFICATION

This Appendix is to be completed only by an Applicant that is completing this EDS as a “contractor” as defined in MCC Section 2-92-385. That section, which should be consulted (www.amlegal.com), generally covers a party to any agreement pursuant to which they: (i) receive City of Chicago funds in consideration for services, work or goods provided (including for legal or other professional services), or (ii) pay the City money for a license, grant or concession allowing them to conduct a business on City premises.

On behalf of an Applicant that is a contractor pursuant to MCC Section 2-92-385, I hereby certify that the Applicant is in compliance with MCC Section 2-92-385(b)(1) and (2), which prohibit: (i) screening job applicants based on their wage or salary history, or (ii) seeking job applicants’ wage or salary history from current or former employers. I also certify that the Applicant has adopted a policy that includes those prohibitions.

☒ Yes

☐ No

☐ N/A – I am not an Applicant that is a “contractor” as defined in MCC Section 2-92-385.

This certification shall serve as the affidavit required by MCC Section 2-92-385(c)(1).

If you checked “no” to the above, please explain.

List of Insiders
September 30, 2019

First Name	Middle Name	Last name	BMO Harris Bank N A		BMO Financial Corp		Bank of Montreal	
			Director	Executive Officer	Director	Executive Officer	Director	Executive Officer
Janice	May	Babiak					✓	
Daniel	David	Barclay						✓
Sophie		Brochu					✓	
Craig	Wyeth	Broderick					✓	
David	Robert	Casper	✓	✓	✓	✓		✓
Adela	Margarita	Cepeda	✓		✓			
Kevin	Michael	Connelly			✓			
Diane	Louise	Cooper	✓		✓			
George	Alexander	Cope					✓	
Patrick	Paul Frederick	Cronin						✓
John	Windom	Daniels, Jr.			✓			
Christine	Annette	Edwards	✓		✓		✓	
Martin	Stewart	Eichenbaum					✓	
Ronald	Harold	Farmer					✓	
Simon	Adrian	Fish						✓
Thomas	Earl	Flynn						✓
Cameron	McAskile	Fowler			✓			✓
Darrel	Harris	Hackett		✓		✓		
David	Edwin	Harquail					✓	
Linda	Susan	Huber					✓	

List of Insiders
September 30, 2019

First Name	Middle Name	Last name	BMO Harris Bank NA		BMO Financial Corp		Bank of Montreal	
			Director	Executive Officer	Director	Executive Officer	Director	Executive Officer
Craig	Thomas	Ingram		✓		✓		
Erminia		Johannson		✓		✓		✓
Eric	Richer	La Flèche					✓	
Kenneth	E.	Librot		✓		✓		
David	John	Lubar			✓			
Mona	Elizabeth	Malone						✓
Charles	Raymond	Matthews	✓		✓			
Daniel	John	Marszalek		✓		✓		
Cecily	Marie	Mistarz		✓		✓		
Lorraine		Mitchelmore					✓	
Tracie	D.	Morris		✓		✓		
Peter	Allan	Myers				✓		
Daniela	Anna	O'Leary-Gill				✓		
Phillip	Sonny	Orsino					✓	
Donna	L.	Parish		✓		✓		
John Robert	Stobo	Prichard			✓		✓	
John	E.	Rau			✓			
Catherine	Michelle	Roche						✓
Joanna		Rotenberg						✓

List of Insiders
September 30, 2019

First Name	Middle Name	Last name	BMO Harris Bank NA		BMO Financial Corp.		Bank of Montreal	
			Director	Executive Officer	Director	Executive Officer	Director	Executive Officer
Brad	Anders	Rothbaum				✓		
Robertson	Lucas	Seabrook						✓
John	Stephen	Shiely	✓		✓			
Stephen	Richard	Taylor		✓		✓		
Steve	Loyd	Tennyson						✓
Michael	Joseph	Van Handel	✓		✓			
George	Frederick	Walz		✓		✓		
Raymond	Clark	Whitacre		✓		✓		
William	Darryl	White			✓		✓	✓
Don	Matthew	Wilson III					✓	
Ann Marie		Wright		✓		✓		

Section V: CERTIFICATIONS

B. FURTHER CERTIFICATIONS

The Disclosing Party certifies the accuracy of the statements contained in Section V, paragraph B.2.a. through and including B.2.e. only as to itself. The Disclosing Party certifies that to the best of the Disclosing Party's knowledge such statements are accurate with respect to the executive officers and directors of the Disclosing Party. With respect to Section V, paragraph B.2.a. and B.2.e., the Disclosing Party may have been found liable in a civil judgment or proceeding(s) within the five years preceding the date of this EDS instituted by the City of by the federal government, any state, or any other unit of local government. The Disclosing Party certifies that none of these judgments, individually or in the aggregate, would have a material adverse effect on its or the Applicant's financial condition or the ability of the Applicant to perform under its contract with the City. In addition, to the best of the Disclosing Party's knowledge, the Disclosing Party has not, in the past five years, been found after a judicial or administrative hearing to be in violation of any environmental law or regulation, except for possible violations related to (i) property mortgaged to the Disclosing Party, (ii) property owned by the Disclosing Party and leased to others, (iii) foreclosed property now owned by the Disclosing Party and (iv) property owned or held by the Disclosing Party as a fiduciary or nominee. The Disclosing Party's operations are conducted at numerous owned and leased locations throughout the world. From time to time, the Disclosing Party is cited for not being in compliance with an environmental law or regulation. These matters are generally routine and are promptly addressed by the Disclosing Party.

The Disclosing Party certifies the accuracy of the statements contained in Section V, paragraphs B.3. and B.4. only as to itself. The Disclosing Party also certifies that to the best of the Disclosing Party's knowledge such statements are accurate with respect to any Affiliated Entity or any responsible official of the Disclosing Party of any Affiliated Entity or any other official, agent or employee of the Disclosing Party or any Affiliated Entity acting in such capacity pursuant to the direction or authorization of a responsible official of the Disclosing Party or any Affiliated Entity.

D. CERTIFICATION REGARDING INTEREST IN CITY BUSINESS

As to the disclosure set forth in Section V, paragraph D.1., to the best of the Disclosing Party's knowledge, no official or employee of the City of Chicago has a financial interest in his or her own name or in the name of any other person in the Matter.

As to the disclosure set forth in Section V, paragraph D.4., the Disclosing Party cannot (and does not) make the certification required because the Disclosing Party does not and will not have control over all means of acquiring a financial interest in the Matter. [BUSINESS TO CONFIRM THIS STATEMENT IS ACCURATE PRIOR TO INCLUDING IN THE DISCLOSURE ATTACHMENT]

SECTION VII - ACKNOWLEDGMENTS, CONTRACT INCORPORATION, COMPLIANCE, PENALTIES, DISCLOSURE

F.1. The Disclosing Party, to the best of its knowledge, certifies the statements contained in Section VII, paragraph F.1. that it is not delinquent in the payment of any tax administered by the Illinois Department of Revenue, except for taxes that are being contested in good faith by the Disclosing Party or any of its affiliates by appropriate legal proceedings. To the best of the Disclosing Party's knowledge,

neither the Disclosing Party nor its affiliates are delinquent in paying any fine, fee, tax or other charge owed to the City except for possible delinquencies in paying a fine, fee, tax or other charge owed to the City related to (i) property mortgaged to the Disclosing Party or its affiliates, (ii) property owned by the Disclosing Party or its affiliates and leased to others, (iii) foreclosed property now owned by the Disclosing Party or its affiliates, (iv) property owned or held by the Disclosing Party or its affiliates as a fiduciary or nominee and (v) fines, fees, taxes or other charges that are being contested in good faith by the Disclosing Party or its affiliates by appropriate legal proceeding.

BMO Harris Bank NA FIRMWIDE

Firm Name:	BMO Harris Bank
Primary Representative:	
Primary Representative Email and Telephone	
Headquarters Address:	111 W. Monroe Street
Chicago Public Finance Office Address:	111 W. Monroe Street
Total Number of Employees:	13,988
Number of Employees in Illinois:	6,657
Number of Employees in Chicago:	3,500
Capital Position:	
Minority Designation:	

Job Categories	5,926						8,062						
	Male						Female						
	Overall Totals	White (Not Hispanic)	Black (Not Hispanic)	Hispanic	Asian	Native American	White (Not Hispanic)	Black (Not Hispanic)	Hispanic	Asian	Native American	2 or More Races (Male)	2 or More Races (Female)
Officials and Managers	3,951	1,869	75	114	176	7	1,277	109	142	137	7	21	17
Professionals	4,299	1,541	111	143	249	9	1,450	318	197	213	13	19	36
Technicians	0	0	0	0	0	0	0	0	0	0	0	0	0
Sales Workers	578	319	14	27	24	3	137	13	13	14	0	8	6
Office and Clerical	5,160	659	158	252	89	4	2,347	641	637	250	15	35	73
Craft Workers (Skilled)	0											0	0
Operatives (Semi-Skilled)	0											0	0
Laborers	0											0	0
Service Workers	0											0	0
Total	13,988	4,388	358	536	538	23	5,211	1,081	989	614	35	83	132

Male	42%	Female	58%	Total	100%
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Job Categories	Overall Totals	White (Not Hispanic)	Black (Not Hispanic)	Hispanic	Asian	Native American
Officials and Managers	28%	22%	1%	2%	2%	0%
Professionals	30%	21%	3%	2%	3%	0%
Technicians	0%	0%	0%	0%	0%	0%
Sales Workers	4%	3%	0%	0%	0%	0%
Office and Clerical	36%	21%	6%	6%	2%	0%
Craft Workers (Skilled)	0%	0%	0%	0%	0%	0%
Operatives (Semi-Skilled)	0%	0%	0%	0%	0%	0%
Laborers	0%	0%	0%	0%	0%	0%
Service Workers	0%	0%	0%	0%	0%	0%
Total	98%	69%	10%	11%	8%	0%

BMO Harris Bank Chicago Employees

Firm Name:	BMO Harris Bank
Primary Representative:	
Primary Representative Email and Telephone:	
Headquarters Address:	
Chicago Public Finance Office Address:	
Total Number of Employees:	
Number of Employees in Illinois:	
Number of Employees in Chicago:	3,500
Capital Position:	
Minority Designation:	

Job Categories	1,815					1,685						
	Male					Female						
	White (Not Hispanic)	Black (Not Hispanic)	Hispanic	Asian	Native American	White (Not Hispanic)	Black (Not Hispanic)	Hispanic	Asian	Native American	2 or More Races (Male)	2 or More Races (Female)
Officials and Managers	742	38	39	91	3	482	63	59	57	3	7	8
Professionals	490	45	62	102	3	388	179	80	78	5	7	11
Technicians	0	0	0	0	0	0	0	0	0	0	0	0
Sales Workers	109	6	9	6	0	40	8	4	4	0	4	2
Office and Clerical	28	18	16	7	1	81	103	37	14	0	3	3
Craft Workers (Skilled)	0	0	0	0	0	0	0	0	0	0	0	0
Operatives (Semi-Skilled)	0	0	0	0	0	0	0	0	0	0	0	0
Laborers	0	0	0	0	0	0	0	0	0	0	0	0
Service Workers	0	0	0	0	0	0	0	0	0	0	0	0
Total	1,369	107	126	206	7	991	353	180	153	8	21	24

Male	Female	Total
52%	48%	100%

Job Categories	White (Not Hispanic)	Black (Not Hispanic)	Hispanic	Asian	Native American
Officials and Managers	35%	3%	3%	4%	0%
Professionals	25%	6%	4%	5%	0%
Technicians	0%	0%	0%	0%	0%
Sales Workers	4%	0%	0%	0%	0%
Office and Clerical	9%	3%	2%	1%	0%
Craft Workers (Skilled)	0%	0%	0%	0%	0%
Operatives (Semi-Skilled)	0%	0%	0%	0%	0%
Laborers	0%	0%	0%	0%	0%
Service Workers	0%	0%	0%	0%	0%
Total	100%	13%	9%	10%	0%

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT
AND AFFIDAVIT**

SECTION I -- GENERAL INFORMATION

A. Legal name of the Disclosing Party submitting this EDS. Include d/b/a/ if applicable:

BMO Financial Corp

Check ONE of the following three boxes:

Indicate whether the Disclosing Party submitting this EDS is:

1. ☐ the Applicant

OR

2. ☒ a legal entity currently holding, or anticipated to hold within six months after City action the contract, transaction or other undertaking to which this EDS pertains (referred to below as the "Matter"), a direct or indirect interest in excess of 7.5% in the Applicant. State the Applicant's legal name: BMO Harris Bank NA

OR

3. ☐ a legal entity with a direct or indirect right of control of the Applicant (see Section II(B)(1)) State the legal name of the entity in which the Disclosing Party holds a right of control:

B. Business address of the Disclosing Party: 111W. Monroe St.

Chicago, IL 60603

C. Telephone: (312) 461-6538 Fax: (312) 293-5811 Email: mark.mitrovich@bmo.com

D. Name of contact person: Mark Mitrovich

E. Federal Employer Identification No. (if you have one): _____

F. Brief description of the Matter to which this EDS pertains. (Include project number and location of property, if applicable): City of Chicago 2020 Municipal Depository RFP

G. Which City agency or department is requesting this EDS? Finance

If the Matter is a contract being handled by the City's Department of Procurement Services, please complete the following:

Specification # _____ and Contract # _____

SECTION II -- DISCLOSURE OF OWNERSHIP INTERESTS

A. NATURE OF THE DISCLOSING PARTY

1. Indicate the nature of the Disclosing Party:

- | | |
|---|--|
| <input type="checkbox"/> Person | <input type="checkbox"/> Limited liability company |
| <input type="checkbox"/> Publicly registered business corporation | <input type="checkbox"/> Limited liability partnership |
| <input checked="" type="checkbox"/> Privately held business corporation | <input type="checkbox"/> Joint venture |
| <input type="checkbox"/> Sole proprietorship | <input type="checkbox"/> Not-for-profit corporation |
| <input type="checkbox"/> General partnership | (Is the not-for-profit corporation also a 501(c)(3))? |
| <input type="checkbox"/> Limited partnership | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| <input type="checkbox"/> Trust | Other _____ |

2. For legal entities, the state (or foreign country) of incorporation or organization, if applicable:

Delaware

3. For legal entities not organized in the State of Illinois: Has the organization registered to do business in the State of Illinois as a foreign entity?

☒ Yes ☐ No ☐ Organized in Illinois

B. IF THE DISCLOSING PARTY IS A LEGAL ENTITY:

1. List below the full names and titles, if applicable, of: (i) all executive officers and all directors of the entity; (ii) **for not-for-profit corporations**, all members, if any, which are legal entities (if there are no such members, write "no members which are legal entities"); (iii) **for trusts, estates or other similar entities**, the trustee, executor, administrator, or similarly situated party; (iv) **for general or limited partnerships, limited liability companies, limited liability partnerships or joint ventures**, each general partner, managing member, manager or any other person or legal entity that directly or indirectly controls the day-to-day management of the Applicant.

NOTE: Each legal entity listed below must submit an EDS on its own behalf.

Name

Title

See attached list of Officers and Directors

2. Please provide the following information concerning each person or legal entity having a direct or indirect, current or prospective (i.e. within 6 months after City action) beneficial interest (including ownership) in excess of 7.5% of the Applicant. Examples of such an interest include shares in a corporation, partnership interest in a partnership or joint venture, interest of a member or manager in a

limited liability company, or interest of a beneficiary of a trust, estate or other similar entity. If none, state "None."

NOTE: Each legal entity listed below may be required to submit an EDS on its own behalf.

Name	Business Address	Percentage Interest in the Applicant
Bank of Montreal	First Canadian Place, 21st Fl, 100 King St West, Toronto, Ontario M5X 1A1	100%

SECTION III -- INCOME OR COMPENSATION TO, OR OWNERSHIP BY, CITY ELECTED OFFICIALS

Has the Disclosing Party provided any income or compensation to any City elected official during the 12-month period preceding the date of this EDS? ☐ Yes ☒ No

Does the Disclosing Party reasonably expect to provide any income or compensation to any City elected official during the 12-month period following the date of this EDS? ☐ Yes ☒ No
to the best of the Disclosing Party's knowledge

If "yes" to either of the above, please identify below the name(s) of such City elected official(s) and describe such income or compensation:

Does any City elected official or, to the best of the Disclosing Party's knowledge after reasonable inquiry, any City elected official's spouse or domestic partner, have a financial interest (as defined in Chapter 2-156 of the Municipal Code of Chicago ("MCC")) in the Disclosing Party?

☐ Yes ☒ No, to the best of the Disclosing Party's knowledge

SECTION IV -- DISCLOSURE OF SUBCONTRACTORS AND OTHER RETAINED PARTIES

The Disclosing Party must disclose the name and business address of each subcontractor, attorney, lobbyist (as defined in MCC Chapter 2-156), accountant, consultant and any other person or entity whom the Disclosing Party has retained or expects to retain in connection with the Matter, as well as the nature of the relationship, and the total amount of the fees paid or estimated to be paid. The Disclosing Party is not required to disclose employees who are paid solely through the Disclosing Party's regular payroll. If the Disclosing Party is uncertain whether a disclosure is required under this Section, the Disclosing Party must either ask the City whether disclosure is required or make the disclosure.

Name (indicate whether retained or anticipated to be retained)	Business Address	Relationship to Disclosing Party (subcontractor, attorney, lobbyist, etc.)	Fees (<u>indicate whether paid or estimated.</u>) NOTE: "hourly rate" or "t.b.d." is not an acceptable response.
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(Add sheets if necessary)

[X] Check here if the Disclosing Party has not retained, nor expects to retain, any such persons or entities.

SECTION V -- CERTIFICATIONS

A. COURT-ORDERED CHILD SUPPORT COMPLIANCE

Under MCC Section 2-92-415, substantial owners of business entities that contract with the City must remain in compliance with their child support obligations throughout the contract's term.

Has any person who directly or indirectly owns 10% or more of the Disclosing Party been declared in arrearage on any child support obligations by any Illinois court of competent jurisdiction?

[] Yes [] No [X] No person directly or indirectly owns 10% or more of the Disclosing Party.

If "Yes," has the person entered into a court-approved agreement for payment of all support owed and is the person in compliance with that agreement?

[] Yes [] No

B. FURTHER CERTIFICATIONS

1. [This paragraph 1 applies only if the Matter is a contract being handled by the City's Department of Procurement Services.] In the 5-year period preceding the date of this EDS, neither the Disclosing Party nor any Affiliated Entity [see definition in (5) below] has engaged, in connection with the performance of any public contract, the services of an integrity monitor, independent private sector inspector general, or integrity compliance consultant (i.e., an individual or entity with legal, auditing, investigative, or other similar skills, designated by a public agency to help the agency monitor the activity of specified agency vendors as well as help the vendors reform their business practices so they can be considered for agency contracts in the future, or continue with a contract in progress).

2. The Disclosing Party and its Affiliated Entities are not delinquent in the payment of any fine, fee, tax or other source of indebtedness owed to the City of Chicago, including, but not limited to, water and sewer charges, license fees, parking tickets, property taxes and sales taxes, nor is the Disclosing Party delinquent in the payment of any tax administered by the Illinois Department of Revenue.

3. The Disclosing Party and, if the Disclosing Party is a legal entity, all of those persons or entities identified in Section II(B)(1) of this EDS:

- a. are not presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from any transactions by any federal, state or local unit of government;
- b. have not, during the 5 years before the date of this EDS, been convicted of a criminal offense, adjudged guilty, or had a civil judgment rendered against them in connection with: obtaining, attempting to obtain, or performing a public (federal, state or local) transaction or contract under a public transaction; a violation of federal or state antitrust statutes; fraud; embezzlement; theft; forgery; bribery; falsification or destruction of records; making false statements; or receiving stolen property;
- c. are not presently indicted for, or criminally or civilly charged by, a governmental entity (federal, state or local) with committing any of the offenses set forth in subparagraph (b) above;
- d. have not, during the 5 years before the date of this EDS, had one or more public transactions (federal, state or local) terminated for cause or default; and
- e. have not, during the 5 years before the date of this EDS, been convicted, adjudged guilty, or found liable in a civil proceeding, or in any criminal or civil action, including actions concerning environmental violations, instituted by the City or by the federal government, any state, or any other unit of local government.

4. The Disclosing Party understands and shall comply with the applicable requirements of MCC Chapters 2-56 (Inspector General) and 2-156 (Governmental Ethics).

5. Certifications (5), (6) and (7) concern:

- the Disclosing Party;
- any "Contractor" (meaning any contractor or subcontractor used by the Disclosing Party in connection with the Matter, including but not limited to all persons or legal entities disclosed under Section IV, "Disclosure of Subcontractors and Other Retained Parties");
- any "Affiliated Entity" (meaning a person or entity that, directly or indirectly: controls the Disclosing Party, is controlled by the Disclosing Party, or is, with the Disclosing Party, under common control of another person or entity). Indicia of control include, without limitation: interlocking management or ownership; identity of interests among family members, shared facilities and equipment; common use of employees; or organization of a business entity following the ineligibility of a business entity to do business with federal or state or local government, including the City, using substantially the same management, ownership, or principals as the ineligible entity. With respect to Contractors, the term Affiliated Entity means a person or entity that directly or indirectly controls the Contractor, is controlled by it, or, with the Contractor, is under common control of another person or entity;
- any responsible official of the Disclosing Party, any Contractor or any Affiliated Entity or any other official, agent or employee of the Disclosing Party, any Contractor or any Affiliated Entity, acting pursuant to the direction or authorization of a responsible official of the Disclosing Party, any Contractor or any Affiliated Entity (collectively "Agents").

Neither the Disclosing Party, nor any Contractor, nor any Affiliated Entity of either the Disclosing Party or any Contractor, nor any Agents have, during the 5 years before the date of this EDS, or, with respect to a Contractor, an Affiliated Entity, or an Affiliated Entity of a Contractor during the 5 years before the date of such Contractor's or Affiliated Entity's contract or engagement in connection with the Matter:

- a. bribed or attempted to bribe, or been convicted or adjudged guilty of bribery or attempting to bribe, a public officer or employee of the City, the State of Illinois, or any agency of the federal government or of any state or local government in the United States of America, in that officer's or employee's official capacity;
 - b. agreed or colluded with other bidders or prospective bidders, or been a party to any such agreement, or been convicted or adjudged guilty of agreement or collusion among bidders or prospective bidders, in restraint of freedom of competition by agreement to bid a fixed price or otherwise; or
 - c. made an admission of such conduct described in subparagraph (a) or (b) above that is a matter of record, but have not been prosecuted for such conduct; or
 - d. violated the provisions referenced in MCC Subsection 2-92-320(a)(4)(Contracts Requiring a Base Wage); (a)(5)(Debarment Regulations); or (a)(6)(Minimum Wage Ordinance).
6. Neither the Disclosing Party, nor any Affiliated Entity or Contractor, or any of their employees, officials, agents or partners, is barred from contracting with any unit of state or local government as a result of engaging in or being convicted of (1) bid-rigging in violation of 720 ILCS 5/33E-3; (2) bid-rotating in violation of 720 ILCS 5/33E-4; or (3) any similar offense of any state or of the United States of America that contains the same elements as the offense of bid-rigging or bid-rotating.
7. Neither the Disclosing Party nor any Affiliated Entity is listed on a Sanctions List maintained by the United States Department of Commerce, State, or Treasury, or any successor federal agency.
8. [FOR APPLICANT ONLY] (i) Neither the Applicant nor any "controlling person" [see MCC Chapter 1-23, Article I for applicability and defined terms] of the Applicant is currently indicted or charged with, or has admitted guilt of, or has ever been convicted of, or placed under supervision for, any criminal offense involving actual, attempted, or conspiracy to commit bribery, theft, fraud, forgery, perjury, dishonesty or deceit against an officer or employee of the City or any "sister agency"; and (ii) the Applicant understands and acknowledges that compliance with Article I is a continuing requirement for doing business with the City. NOTE: If MCC Chapter 1-23, Article I applies to the Applicant, that Article's permanent compliance timeframe supersedes 5-year compliance timeframes in this Section V.
9. [FOR APPLICANT ONLY] The Applicant and its Affiliated Entities will not use, nor permit their subcontractors to use, any facility listed as having an active exclusion by the U.S. EPA on the federal System for Award Management ("SAM").
10. [FOR APPLICANT ONLY] The Applicant will obtain from any contractors/subcontractors hired or to be hired in connection with the Matter certifications equal in form and substance to those in Certifications (2) and (9) above and will not, without the prior written consent of the City, use any such

contractor/subcontractor that does not provide such certifications or that the Applicant has reason to believe has not provided or cannot provide truthful certifications.

11. If the Disclosing Party is unable to certify to any of the above statements in this Part B (Further Certifications), the Disclosing Party must explain below:

see attached BMO supplemental information

If the letters "NA," the word "None," or no response appears on the lines above, it will be conclusively presumed that the Disclosing Party certified to the above statements.

12. To the best of the Disclosing Party's knowledge after reasonable inquiry, the following is a complete list of all current employees of the Disclosing Party who were, at any time during the 12-month period preceding the date of this EDS, an employee, or elected or appointed official, of the City of Chicago (if none, indicate with "N/A" or "none").

None

13. To the best of the Disclosing Party's knowledge after reasonable inquiry, the following is a complete list of all gifts that the Disclosing Party has given or caused to be given, at any time during the 12-month period preceding the execution date of this EDS, to an employee, or elected or appointed official, of the City of Chicago. For purposes of this statement, a "gift" does not include: (i) anything made generally available to City employees or to the general public, or (ii) food or drink provided in the course of official City business and having a retail value of less than \$25 per recipient, or (iii) a political contribution otherwise duly reported as required by law (if none, indicate with "N/A" or "none"). As to any gift listed below, please also list the name of the City recipient.

None

C. CERTIFICATION OF STATUS AS FINANCIAL INSTITUTION

1. The Disclosing Party certifies that the Disclosing Party (check one)

☒ [X] is ☐ [] is not

a "financial institution" as defined in MCC Section 2-32-455(b).

2. If the Disclosing Party IS a financial institution, then the Disclosing Party pledges:

"We are not and will not become a predatory lender as defined in MCC Chapter 2-32. We further pledge that none of our affiliates is, and none of them will become, a predatory lender as defined in MCC Chapter 2-32. We understand that becoming a predatory lender or becoming an affiliate of a predatory lender may result in the loss of the privilege of doing business with the City."

If the Disclosing Party is unable to make this pledge because it or any of its affiliates (as defined in MCC Section 2-32-455(b)) is a predatory lender within the meaning of MCC Chapter 2-32, explain here (attach additional pages if necessary):

N/A _____

If the letters "NA," the word "None," or no response appears on the lines above, it will be conclusively presumed that the Disclosing Party certified to the above statements.

D. CERTIFICATION REGARDING FINANCIAL INTEREST IN CITY BUSINESS

Any words or terms defined in MCC Chapter 2-156 have the same meanings if used in this Part D.

1. In accordance with MCC Section 2-156-110: To the best of the Disclosing Party's knowledge after reasonable inquiry, does any official or employee of the City have a financial interest in his or her own name or in the name of any other person or entity in the Matter?

☐ Yes

☒ No

NOTE: If you checked "Yes" to Item D(1), proceed to Items D(2) and D(3). If you checked "No" to Item D(1), skip Items D(2) and D(3) and proceed to Part E.

2. Unless sold pursuant to a process of competitive bidding, or otherwise permitted, no City elected official or employee shall have a financial interest in his or her own name or in the name of any other person or entity in the purchase of any property that (i) belongs to the City, or (ii) is sold for taxes or assessments, or (iii) is sold by virtue of legal process at the suit of the City (collectively, "City Property Sale"). Compensation for property taken pursuant to the City's eminent domain power does not constitute a financial interest within the meaning of this Part D.

Does the Matter involve a City Property Sale?

☐ Yes

☒ No

3. If you checked "Yes" to Item D(1), provide the names and business addresses of the City officials or employees having such financial interest and identify the nature of the financial interest:

Name

Business Address

Nature of Financial Interest

4. The Disclosing Party further certifies that no prohibited financial interest in the Matter will be acquired by any City official or employee.

E. CERTIFICATION REGARDING SLAVERY ERA BUSINESS

Please check either (1) or (2) below. If the Disclosing Party checks (2), the Disclosing Party must disclose below or in an attachment to this EDS all information required by (2). Failure to comply with these disclosure requirements may make any contract entered into with the City in connection with the Matter voidable by the City.

 X 1. The Disclosing Party verifies that the Disclosing Party has searched any and all records of the Disclosing Party and any and all predecessor entities regarding records of investments or profits from slavery or slaveholder insurance policies during the slavery era (including insurance policies issued to slaveholders that provided coverage for damage to or injury or death of their slaves), and the Disclosing Party has found no such records.

 2. The Disclosing Party verifies that, as a result of conducting the search in step (1) above, the Disclosing Party has found records of investments or profits from slavery or slaveholder insurance policies. The Disclosing Party verifies that the following constitutes full disclosure of all such records, including the names of any and all slaves or slaveholders described in those records:

SECTION VI -- CERTIFICATIONS FOR FEDERALLY FUNDED MATTERS

NOTE: If the Matter is federally funded, complete this Section VI. If the Matter is not federally funded, proceed to Section VII. For purposes of this Section VI, tax credits allocated by the City and proceeds of debt obligations of the City are not federal funding.

A. CERTIFICATION REGARDING LOBBYING

1. List below the names of all persons or entities registered under the federal Lobbying Disclosure Act of 1995, as amended, who have made lobbying contacts on behalf of the Disclosing Party with respect to the Matter: (Add sheets if necessary):

N/A _____

(If no explanation appears or begins on the lines above, or if the letters "NA" or if the word "None" appear, it will be conclusively presumed that the Disclosing Party means that NO persons or entities registered under the Lobbying Disclosure Act of 1995, as amended, have made lobbying contacts on behalf of the Disclosing Party with respect to the Matter.)

2. The Disclosing Party has not spent and will not expend any federally appropriated funds to pay any person or entity listed in paragraph A(1) above for his or her lobbying activities or to pay any person or entity to influence or attempt to influence an officer or employee of any agency, as defined by applicable federal law, a member of Congress, an officer or employee of Congress, or an employee

of a member of Congress, in connection with the award of any federally funded contract, making any federally funded grant or loan, entering into any cooperative agreement, or to extend, continue, renew, amend, or modify any federally funded contract, grant, loan, or cooperative agreement.

3. The Disclosing Party will submit an updated certification at the end of each calendar quarter in which there occurs any event that materially affects the accuracy of the statements and information set forth in paragraphs A(1) and A(2) above.

4. The Disclosing Party certifies that either: (i) it is not an organization described in section 501(c)(4) of the Internal Revenue Code of 1986; or (ii) it is an organization described in section 501(c)(4) of the Internal Revenue Code of 1986 but has not engaged and will not engage in "Lobbying Activities," as that term is defined in the Lobbying Disclosure Act of 1995, as amended.

5. If the Disclosing Party is the Applicant, the Disclosing Party must obtain certifications equal in form and substance to paragraphs A(1) through A(4) above from all subcontractors before it awards any subcontract and the Disclosing Party must maintain all such subcontractors' certifications for the duration of the Matter and must make such certifications promptly available to the City upon request.

B. CERTIFICATION REGARDING EQUAL EMPLOYMENT OPPORTUNITY

If the Matter is federally funded, federal regulations require the Applicant and all proposed subcontractors to submit the following information with their bids or in writing at the outset of negotiations.

Is the Disclosing Party the Applicant?

☐ Yes

☒ No

If "Yes," answer the three questions below:

1. Have you developed and do you have on file affirmative action programs pursuant to applicable federal regulations? (See 41 CFR Part 60-2.)

☐ Yes

☐ No

2. Have you filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance Programs, or the Equal Employment Opportunity Commission all reports due under the applicable filing requirements?

☐ Yes

☐ No

☐ Reports not required

3. Have you participated in any previous contracts or subcontracts subject to the equal opportunity clause?

☐ Yes

☐ No

If you checked "No" to question (1) or (2) above, please provide an explanation:

SECTION VII -- FURTHER ACKNOWLEDGMENTS AND CERTIFICATION

The Disclosing Party understands and agrees that:

A. The certifications, disclosures, and acknowledgments contained in this EDS will become part of any contract or other agreement between the Applicant and the City in connection with the Matter, whether procurement, City assistance, or other City action, and are material inducements to the City's execution of any contract or taking other action with respect to the Matter. The Disclosing Party understands that it must comply with all statutes, ordinances, and regulations on which this EDS is based.

B. The City's Governmental Ethics Ordinance, MCC Chapter 2-156, imposes certain duties and obligations on persons or entities seeking City contracts, work, business, or transactions. The full text of this ordinance and a training program is available on line at www.cityofchicago.org/Ethics, and may also be obtained from the City's Board of Ethics, 740 N. Sedgwick St., Suite 500, Chicago, IL 60610, (312) 744-9660. The Disclosing Party must comply fully with this ordinance.

C. If the City determines that any information provided in this EDS is false, incomplete or inaccurate, any contract or other agreement in connection with which it is submitted may be rescinded or be void or voidable, and the City may pursue any remedies under the contract or agreement (if not rescinded or void), at law, or in equity, including terminating the Disclosing Party's participation in the Matter and/or declining to allow the Disclosing Party to participate in other City transactions. Remedies at law for a false statement of material fact may include incarceration and an award to the City of treble damages.

D. It is the City's policy to make this document available to the public on its Internet site and/or upon request. Some or all of the information provided in, and appended to, this EDS may be made publicly available on the Internet, in response to a Freedom of Information Act request, or otherwise. By completing and signing this EDS, the Disclosing Party waives and releases any possible rights or claims which it may have against the City in connection with the public release of information contained in this EDS and also authorizes the City to verify the accuracy of any information submitted in this EDS.

E. The information provided in this EDS must be kept current. In the event of changes, the Disclosing Party must supplement this EDS up to the time the City takes action on the Matter. If the Matter is a contract being handled by the City's Department of Procurement Services, the Disclosing Party must update this EDS as the contract requires. **NOTE:** With respect to Matters subject to MCC Chapter 1-23, Article I (imposing **PERMANENT INELIGIBILITY** for certain specified offenses), the information provided herein regarding eligibility must be kept current for a longer period, as required by MCC Chapter 1-23 and Section 2-154-020.

CERTIFICATION

Under penalty of perjury, the person signing below: (1) warrants that he/she is authorized to execute this EDS, and all applicable Appendices, on behalf of the Disclosing Party, and (2) warrants that all certifications and statements contained in this EDS, and all applicable Appendices, are true, accurate and complete as of the date furnished to the City.

BMO Financial Corp

(Print or type exact legal name of Disclosing Party)

By: _____

(Sign here)

David R. Casper

(Print or type name of person signing)

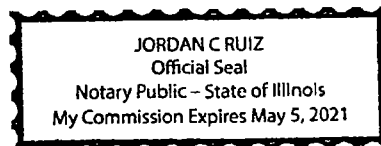
CEO & Group Head - Commercial Banking

(Print or type title of person signing)

Signed and sworn to before me on (date) November 12, 2019

at Cook County, Illinois (state).

Jordan C. Ruiz
Notary Public



Commission expires: May 5, 2021

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
APPENDIX A**

**FAMILIAL RELATIONSHIPS WITH ELECTED CITY OFFICIALS
AND DEPARTMENT HEADS**

This Appendix is to be completed only by (a) the Applicant, and (b) any legal entity which has a direct ownership interest in the Applicant exceeding 7.5%. It is not to be completed by any legal entity which has only an indirect ownership interest in the Applicant.

Under MCC Section 2-154-015, the Disclosing Party must disclose whether such Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof currently has a "familial relationship" with any elected city official or department head. A "familial relationship" exists if, as of the date this EDS is signed, the Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof is related to the mayor, any alderman, the city clerk, the city treasurer or any city department head as spouse or domestic partner or as any of the following, whether by blood or adoption: parent, child, brother or sister, aunt or uncle, niece or nephew, grandparent, grandchild, father-in-law, mother-in-law, son-in-law, daughter-in-law, stepfather or stepmother, stepson or stepdaughter, stepbrother or stepsister or half-brother or half-sister.

"Applicable Party" means (1) all executive officers of the Disclosing Party listed in Section II.B.1.a., if the Disclosing Party is a corporation; all partners of the Disclosing Party, if the Disclosing Party is a general partnership; all general partners and limited partners of the Disclosing Party, if the Disclosing Party is a limited partnership; all managers, managing members and members of the Disclosing Party, if the Disclosing Party is a limited liability company; (2) all principal officers of the Disclosing Party; and (3) any person having more than a 7.5% ownership interest in the Disclosing Party. "Principal officers" means the president, chief operating officer, executive director, chief financial officer, treasurer or secretary of a legal entity or any person exercising similar authority.

Does the Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof currently have a "familial relationship" with an elected city official or department head?

☐ Yes

☒ No, to the best of the Disclosing Party's knowledge

If yes, please identify below (1) the name and title of such person, (2) the name of the legal entity to which such person is connected; (3) the name and title of the elected city official or department head to whom such person has a familial relationship, and (4) the precise nature of such familial relationship.

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
APPENDIX B**

BUILDING CODE SCOFFLAW/PROBLEM LANDLORD CERTIFICATION

This Appendix is to be completed only by (a) the Applicant, and (b) any legal entity which has a direct ownership interest in the Applicant exceeding 7.5% (an "Owner"). It is not to be completed by any legal entity which has only an indirect ownership interest in the Applicant.

1. Pursuant to MCC Section 2-154-010, is the Applicant or any Owner identified as a building code scofflaw or problem landlord pursuant to MCC Section 2-92-416?

☐ Yes

☒ No

2. If the Applicant is a legal entity publicly traded on any exchange, is any officer or director of the Applicant identified as a building code scofflaw or problem landlord pursuant to MCC Section 2-92-416?

☐ Yes

☐ No

☒ The Applicant is not publicly traded on any exchange.

3. If yes to (1) or (2) above, please identify below the name of each person or legal entity identified as a building code scofflaw or problem landlord and the address of each building or buildings to which the pertinent code violations apply.

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
APPENDIX C**

PROHIBITION ON WAGE & SALARY HISTORY SCREENING - CERTIFICATION

This Appendix is to be completed only by an Applicant that is completing this EDS as a “contractor” as defined in MCC Section 2-92-385. That section, which should be consulted (www.amlegal.com), generally covers a party to any agreement pursuant to which they: (i) receive City of Chicago funds in consideration for services, work or goods provided (including for legal or other professional services), or (ii) pay the City money for a license, grant or concession allowing them to conduct a business on City premises.

On behalf of an Applicant that is a contractor pursuant to MCC Section 2-92-385, I hereby certify that the Applicant is in compliance with MCC Section 2-92-385(b)(1) and (2), which prohibit: (i) screening job applicants based on their wage or salary history, or (ii) seeking job applicants’ wage or salary history from current or former employers. I also certify that the Applicant has adopted a policy that includes those prohibitions.

☒ Yes

☐ No

☐ N/A – I am not an Applicant that is a “contractor” as defined in MCC Section 2-92-385.

This certification shall serve as the affidavit required by MCC Section 2-92-385(c)(1).

If you checked “no” to the above, please explain.

List of Insiders
September 30, 2019

First Name	Middle Name	Last name	BMO Harris Bank N A		BMO Financial Corp		Bank of Montreal	
			Director	Executive Officer	Director	Executive Officer	Director	Executive Officer
Janice	May	Babiak					✓	
Daniel	David	Barclay						✓
Sophie		Brochu					✓	
Craig	Wyeth	Broderick					✓	
David	Robert	Casper	✓	✓	✓	✓		✓
Adela	Margarita	Cepeda	✓		✓			
Kevin	Michael	Connelly			✓			
Diane	Louise	Cooper	✓		✓			
George	Alexander	Cope					✓	
Patrick	Paul Frederick	Cronin						✓
John	Windom	Daniels, Jr.			✓			
Christine	Annette	Edwards	✓		✓		✓	
Martin	Stewart	Eichenbaum					✓	
Ronald	Harold	Farmer					✓	
Simon	Adrian	Fish						✓
Thomas	Earl	Flynn						✓
Cameron	McAskile	Fowler			✓			✓
Darrel	Harris	Hackett		✓		✓		
David	Edwin	Harquail					✓	
Linda	Susan	Huber					✓	

List of Insiders
September 30, 2019

First Name	Middle Name	Last name	BMO Harris Bank NA		BMO Financial Corp.		Bank of Montreal	
			Director	Executive Officer	Director	Executive Officer	Director	Executive Officer
Craig	Thomas	Ingram		✓		✓		
Erminia		Johannson		✓		✓		✓
Eric	Richer	La Flèche					✓	
Kenneth	E.	Librot		✓		✓		
David	John	Lubar			✓			
Mona	Elizabeth	Malone						✓
Charles	Raymond	Matthews	✓		✓			
Daniel	John	Marszalek		✓		✓		
Cecily	Marie	Mistarz		✓		✓		
Lorraine		Mitchelmore					✓	
Tracie	D.	Morris		✓		✓		
Peter	Allan	Myers				✓		
Daniela	Anna	O'Leary-Gill				✓		
Phillip	Sonny	Orsino					✓	
Donna	L.	Parish		✓		✓		
John Robert	Stobo	Prichard			✓		✓	
John	E.	Rau			✓			
Catherine	Michelle	Roche						✓
Joanna		Rotenberg						✓

List of Insiders
September 30, 2019

First Name	Middle Name	Last name	BMO Harris Bank NA		BMO Financial Corp		Bank of Montreal	
			Director	Executive Officer	Director	Executive Officer	Director	Executive Officer
Brad	Anders	Rothbaum				✓		
Robertson	Lucas	Seabrook						✓
John	Stephen	Shiely	✓		✓			
Stephen	Richard	Taylor		✓		✓		
Steve	Loyd	Tennyson						✓
Michael	Joseph	Van Handel	✓		✓			
George	Frederick	Walz		✓		✓		
Raymond	Clark	Whitacre		✓		✓		
William	Darryl	White			✓		✓	✓
Don	Matthew	Wilson III					✓	
Ann Marie		Wright		✓		✓		

Section V: CERTIFICATIONS

B. FURTHER CERTIFICATIONS

The Disclosing Party certifies the accuracy of the statements contained in Section V, paragraph B.2.a. through and including B.2.e. only as to itself. The Disclosing Party certifies that to the best of the Disclosing Party's knowledge such statements are accurate with respect to the executive officers and directors of the Disclosing Party. With respect to Section V, paragraph B.2.a. and B.2.e., the Disclosing Party may have been found liable in a civil judgment or proceeding(s) within the five years preceding the date of this EDS instituted by the City of by the federal government, any state, or any other unit of local government. The Disclosing Party certifies that none of these judgments, individually or in the aggregate, would have a material adverse effect on its or the Applicant's financial condition or the ability of the Applicant to perform under its contract with the City. In addition, to the best of the Disclosing Party's knowledge, the Disclosing Party has not, in the past five years, been found after a judicial or administrative hearing to be in violation of any environmental law or regulation, except for possible violations related to (i) property mortgaged to the Disclosing Party, (ii) property owned by the Disclosing Party and leased to others, (iii) foreclosed property now owned by the Disclosing Party and (iv) property owned or held by the Disclosing Party as a fiduciary or nominee. The Disclosing Party's operations are conducted at numerous owned and leased locations throughout the world. From time to time, the Disclosing Party is cited for not being in compliance with an environmental law or regulation. These matters are generally routine and are promptly addressed by the Disclosing Party.

The Disclosing Party certifies the accuracy of the statements contained in Section V, paragraphs B.3. and B.4. only as to itself. The Disclosing Party also certifies that to the best of the Disclosing Party's knowledge such statements are accurate with respect to any Affiliated Entity or any responsible official of the Disclosing Party of any Affiliated Entity or any other official, agent or employee of the Disclosing Party or any Affiliated Entity acting in such capacity pursuant to the direction or authorization of a responsible official of the Disclosing Party or any Affiliated Entity.

D. CERTIFICATION REGARDING INTEREST IN CITY BUSINESS

As to the disclosure set forth in Section V, paragraph D.1., to the best of the Disclosing Party's knowledge, no official or employee of the City of Chicago has a financial interest in his or her own name or in the name of any other person in the Matter.

As to the disclosure set forth in Section V, paragraph D.4., the Disclosing Party cannot (and does not) make the certification required because the Disclosing Party does not and will not have control over all means of acquiring a financial interest in the Matter. [BUSINESS TO CONFIRM THIS STATEMENT IS ACCURATE PRIOR TO INCLUDING IN THE DISCLOSURE ATTACHMENT]

SECTION VII - ACKNOWLEDGMENTS, CONTRACT INCORPORATION, COMPLIANCE, PENALTIES, DISCLOSURE

F.1. The Disclosing Party, to the best of its knowledge, certifies the statements contained in Section VII, paragraph F.1. that it is not delinquent in the payment of any tax administered by the Illinois Department of Revenue, except for taxes that are being contested in good faith by the Disclosing Party or any of its affiliates by appropriate legal proceedings. To the best of the Disclosing Party's knowledge,

neither the Disclosing Party nor its affiliates are delinquent in paying any fine, fee, tax or other charge owed to the City except for possible delinquencies in paying a fine, fee, tax or other charge owed to the City related to (i) property mortgaged to the Disclosing Party or its affiliates, (ii) property owned by the Disclosing Party or its affiliates and leased to others, (iii) foreclosed property now owned by the Disclosing Party or its affiliates, (iv) property owned or held by the Disclosing Party or its affiliates as a fiduciary or nominee and (v) fines, fees, taxes or other charges that are being contested in good faith by the Disclosing Party or its affiliates by appropriate legal proceeding.

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT
AND AFFIDAVIT**

SECTION I -- GENERAL INFORMATION

A. Legal name of the Disclosing Party submitting this EDS. Include d/b/a/ if applicable:

Bank of Montreal

Check ONE of the following three boxes:

Indicate whether the Disclosing Party submitting this EDS is:

1. ☐ the Applicant

OR

2. ☒ a legal entity currently holding, or anticipated to hold within six months after City action the contract, transaction or other undertaking to which this EDS pertains (referred to below as the "Matter"), a direct or indirect interest in excess of 7.5% in the Applicant. State the Applicant's legal name: BMO Harris Bank through BMO Financial Corp

OR

3. ☐ a legal entity with a direct or indirect right of control of the Applicant (see Section II(B)(1)) State the legal name of the entity in which the Disclosing Party holds a right of control:

B. Business address of the Disclosing Party: First Canadian Place, 21st Floor, 100 King St. West,
Toronto, Ontario, M5X 1A1

C. Telephone: (312) 461-6538 Fax: (312) 293-5811 Email: mark.mitrovich@bmo.com

D. Name of contact person: Mark Mitrovich

E. Federal Employer Identification No. (if you have one): _____

F. Brief description of the Matter to which this EDS pertains. (Include project number and location of property, if applicable): City of Chicago 2020 Municipal Depository RFP

G. Which City agency or department is requesting this EDS? Finance

If the Matter is a contract being handled by the City's Department of Procurement Services, please complete the following:

Specification # _____ and Contract # _____

SECTION II -- DISCLOSURE OF OWNERSHIP INTERESTS

A. NATURE OF THE DISCLOSING PARTY

1. Indicate the nature of the Disclosing Party:

- | | |
|--|--|
| <input type="checkbox"/> Person | <input type="checkbox"/> Limited liability company |
| <input checked="" type="checkbox"/> Publicly registered business corporation | <input type="checkbox"/> Limited liability partnership |
| <input type="checkbox"/> Privately held business corporation | <input type="checkbox"/> Joint venture |
| <input type="checkbox"/> Sole proprietorship | <input type="checkbox"/> Not-for-profit corporation |
| <input type="checkbox"/> General partnership | (Is the not-for-profit corporation also a 501(c)(3))? |
| <input type="checkbox"/> Limited partnership | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| <input type="checkbox"/> Trust | Other _____ |

2. For legal entities, the state (or foreign country) of incorporation or organization, if applicable:

Canada

3. For legal entities not organized in the State of Illinois: Has the organization registered to do business in the State of Illinois as a foreign entity?

☐ Yes ☒ No ☐ Organized in Illinois

B. IF THE DISCLOSING PARTY IS A LEGAL ENTITY:

1. List below the full names and titles, if applicable, of: (i) all executive officers and all directors of the entity; (ii) **for not-for-profit corporations**, all members, if any, which are legal entities (if there are no such members, write "no members which are legal entities"); (iii) **for trusts, estates or other similar entities**, the trustee, executor, administrator, or similarly situated party; (iv) **for general or limited partnerships, limited liability companies, limited liability partnerships or joint ventures**, each general partner, managing member, manager or any other person or legal entity that directly or indirectly controls the day-to-day management of the Applicant.

NOTE: Each legal entity listed below must submit an EDS on its own behalf.

Name

Title

See attached list of Officers and Directors

2. Please provide the following information concerning each person or legal entity having a direct or indirect, current or prospective (i.e. within 6 months after City action) beneficial interest (including ownership) in excess of 7.5% of the Applicant. Examples of such an interest include shares in a corporation, partnership interest in a partnership or joint venture, interest of a member or manager in a

limited liability company, or interest of a beneficiary of a trust, estate or other similar entity. If none, state "None."

NOTE: Each legal entity listed below may be required to submit an EDS on its own behalf.

Name	Business Address	Percentage Interest in the Applicant
None		

SECTION III -- INCOME OR COMPENSATION TO, OR OWNERSHIP BY, CITY ELECTED OFFICIALS

Has the Disclosing Party provided any income or compensation to any City elected official during the

12-month period preceding the date of this EDS? ☐ Yes ☒ No, to the best of the Disclosing Party's knowledge

Does the Disclosing Party reasonably expect to provide any income or compensation to any City elected official during the 12-month period following the date of this EDS? ☐ Yes ☒ No

If "yes" to either of the above, please identify below the name(s) of such City elected official(s) and describe such income or compensation:

Does any City elected official or, to the best of the Disclosing Party's knowledge after reasonable inquiry, any City elected official's spouse or domestic partner, have a financial interest (as defined in Chapter 2-156 of the Municipal Code of Chicago ("MCC")) in the Disclosing Party?

☐ Yes ☒ No, to the best of the Disclosing Party's knowledge

SECTION IV -- DISCLOSURE OF SUBCONTRACTORS AND OTHER RETAINED PARTIES

The Disclosing Party must disclose the name and business address of each subcontractor, attorney, lobbyist (as defined in MCC Chapter 2-156), accountant, consultant and any other person or entity whom the Disclosing Party has retained or expects to retain in connection with the Matter, as well as the nature of the relationship, and the total amount of the fees paid or estimated to be paid. The Disclosing Party is not required to disclose employees who are paid solely through the Disclosing Party's regular payroll. If the Disclosing Party is uncertain whether a disclosure is required under this Section, the Disclosing Party must either ask the City whether disclosure is required or make the disclosure.

Name (indicate whether retained or anticipated to be retained)	Business Address	Relationship to Disclosing Party (subcontractor, attorney, lobbyist, etc.)	Fees (<u>indicate whether paid or estimated.</u>) NOTE: "hourly rate" or "t.b.d." is not an acceptable response.
--	------------------	--	---

(Add sheets if necessary)

[X] Check here if the Disclosing Party has not retained, nor expects to retain, any such persons or entities.

SECTION V -- CERTIFICATIONS

A COURT-ORDERED CHILD SUPPORT COMPLIANCE

Under MCC Section 2-92-415, substantial owners of business entities that contract with the City must remain in compliance with their child support obligations throughout the contract's term.

Has any person who directly or indirectly owns 10% or more of the Disclosing Party been declared in arrearage on any child support obligations by any Illinois court of competent jurisdiction?

[] Yes [] No [X] No person directly or indirectly owns 10% or more of the Disclosing Party.

If "Yes," has the person entered into a court-approved agreement for payment of all support owed and is the person in compliance with that agreement?

[] Yes [] No

B. FURTHER CERTIFICATIONS

1. [This paragraph 1 applies only if the Matter is a contract being handled by the City's Department of Procurement Services.] In the 5-year period preceding the date of this EDS, neither the Disclosing Party nor any Affiliated Entity [see definition in (5) below] has engaged, in connection with the performance of any public contract, the services of an integrity monitor, independent private sector inspector general, or integrity compliance consultant (i.e., an individual or entity with legal, auditing, investigative, or other similar skills, designated by a public agency to help the agency monitor the activity of specified agency vendors as well as help the vendors reform their business practices so they can be considered for agency contracts in the future, or continue with a contract in progress).

2. The Disclosing Party and its Affiliated Entities are not delinquent in the payment of any fine, fee, tax or other source of indebtedness owed to the City of Chicago, including, but not limited to, water and sewer charges, license fees, parking tickets, property taxes and sales taxes, nor is the Disclosing Party delinquent in the payment of any tax administered by the Illinois Department of Revenue.

3. The Disclosing Party and, if the Disclosing Party is a legal entity, all of those persons or entities identified in Section II(B)(1) of this EDS:

- a. are not presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from any transactions by any federal, state or local unit of government;
- b. have not, during the 5 years before the date of this EDS, been convicted of a criminal offense, adjudged guilty, or had a civil judgment rendered against them in connection with: obtaining, attempting to obtain, or performing a public (federal, state or local) transaction or contract under a public transaction; a violation of federal or state antitrust statutes; fraud; embezzlement; theft; forgery; bribery; falsification or destruction of records; making false statements; or receiving stolen property;
- c. are not presently indicted for, or criminally or civilly charged by, a governmental entity (federal, state or local) with committing any of the offenses set forth in subparagraph (b) above;
- d. have not, during the 5 years before the date of this EDS, had one or more public transactions (federal, state or local) terminated for cause or default; and
- e. have not, during the 5 years before the date of this EDS, been convicted, adjudged guilty, or found liable in a civil proceeding, or in any criminal or civil action, including actions concerning environmental violations, instituted by the City or by the federal government, any state, or any other unit of local government.

4. The Disclosing Party understands and shall comply with the applicable requirements of MCC Chapters 2-56 (Inspector General) and 2-156 (Governmental Ethics).

5. Certifications (5), (6) and (7) concern:

- the Disclosing Party;
- any "Contractor" (meaning any contractor or subcontractor used by the Disclosing Party in connection with the Matter, including but not limited to all persons or legal entities disclosed under Section IV, "Disclosure of Subcontractors and Other Retained Parties");
- any "Affiliated Entity" (meaning a person or entity that, directly or indirectly: controls the Disclosing Party, is controlled by the Disclosing Party, or is, with the Disclosing Party, under common control of another person or entity). Indicia of control include, without limitation: interlocking management or ownership; identity of interests among family members, shared facilities and equipment; common use of employees; or organization of a business entity following the ineligibility of a business entity to do business with federal or state or local government, including the City, using substantially the same management, ownership, or principals as the ineligible entity. With respect to Contractors, the term Affiliated Entity means a person or entity that directly or indirectly controls the Contractor, is controlled by it, or, with the Contractor, is under common control of another person or entity;
- any responsible official of the Disclosing Party, any Contractor or any Affiliated Entity or any other official, agent or employee of the Disclosing Party, any Contractor or any Affiliated Entity, acting pursuant to the direction or authorization of a responsible official of the Disclosing Party, any Contractor or any Affiliated Entity (collectively "Agents").

Neither the Disclosing Party, nor any Contractor, nor any Affiliated Entity of either the Disclosing Party or any Contractor, nor any Agents have, during the 5 years before the date of this EDS, or, with respect to a Contractor, an Affiliated Entity, or an Affiliated Entity of a Contractor during the 5 years before the date of such Contractor's or Affiliated Entity's contract or engagement in connection with the Matter:

- a. bribed or attempted to bribe, or been convicted or adjudged guilty of bribery or attempting to bribe, a public officer or employee of the City, the State of Illinois, or any agency of the federal government or of any state or local government in the United States of America, in that officer's or employee's official capacity;
- b. agreed or colluded with other bidders or prospective bidders, or been a party to any such agreement, or been convicted or adjudged guilty of agreement or collusion among bidders or prospective bidders, in restraint of freedom of competition by agreement to bid a fixed price or otherwise; or
- c. made an admission of such conduct described in subparagraph (a) or (b) above that is a matter of record, but have not been prosecuted for such conduct; or
- d. violated the provisions referenced in MCC Subsection 2-92-320(a)(4)(Contracts Requiring a Base Wage); (a)(5)(Debarment Regulations); or (a)(6)(Minimum Wage Ordinance).

6. Neither the Disclosing Party, nor any Affiliated Entity or Contractor, or any of their employees, officials, agents or partners, is barred from contracting with any unit of state or local government as a result of engaging in or being convicted of (1) bid-rigging in violation of 720 ILCS 5/33E-3; (2) bid-rotating in violation of 720 ILCS 5/33E-4; or (3) any similar offense of any state or of the United States of America that contains the same elements as the offense of bid-rigging or bid-rotating.

7. Neither the Disclosing Party nor any Affiliated Entity is listed on a Sanctions List maintained by the United States Department of Commerce, State, or Treasury, or any successor federal agency.

8. [FOR APPLICANT ONLY] (i) Neither the Applicant nor any "controlling person" [see MCC Chapter 1-23, Article I for applicability and defined terms] of the Applicant is currently indicted or charged with, or has admitted guilt of, or has ever been convicted of, or placed under supervision for, any criminal offense involving actual, attempted, or conspiracy to commit bribery, theft, fraud, forgery, perjury, dishonesty or deceit against an officer or employee of the City or any "sister agency"; and (ii) the Applicant understands and acknowledges that compliance with Article I is a continuing requirement for doing business with the City. NOTE: If MCC Chapter 1-23, Article I applies to the Applicant, that Article's permanent compliance timeframe supersedes 5-year compliance timeframes in this Section V.

9. [FOR APPLICANT ONLY] The Applicant and its Affiliated Entities will not use, nor permit their subcontractors to use, any facility listed as having an active exclusion by the U.S. EPA on the federal System for Award Management ("SAM").

10. [FOR APPLICANT ONLY] The Applicant will obtain from any contractors/subcontractors hired or to be hired in connection with the Matter certifications equal in form and substance to those in Certifications (2) and (9) above and will not, without the prior written consent of the City, use any such

contractor/subcontractor that does not provide such certifications or that the Applicant has reason to believe has not provided or cannot provide truthful certifications.

11. If the Disclosing Party is unable to certify to any of the above statements in this Part B (Further Certifications), the Disclosing Party must explain below:

see attached BMO supplemental information

If the letters "NA," the word "None," or no response appears on the lines above, it will be conclusively presumed that the Disclosing Party certified to the above statements.

12. To the best of the Disclosing Party's knowledge after reasonable inquiry, the following is a complete list of all current employees of the Disclosing Party who were, at any time during the 12-month period preceding the date of this EDS, an employee, or elected or appointed official, of the City of Chicago (if none, indicate with "N/A" or "none").

None

13. To the best of the Disclosing Party's knowledge after reasonable inquiry, the following is a complete list of all gifts that the Disclosing Party has given or caused to be given, at any time during the 12-month period preceding the execution date of this EDS, to an employee, or elected or appointed official, of the City of Chicago. For purposes of this statement, a "gift" does not include: (i) anything made generally available to City employees or to the general public, or (ii) food or drink provided in the course of official City business and having a retail value of less than \$25 per recipient, or (iii) a political contribution otherwise duly reported as required by law (if none, indicate with "N/A" or "none"). As to any gift listed below, please also list the name of the City recipient.

None

C. CERTIFICATION OF STATUS AS FINANCIAL INSTITUTION

1. The Disclosing Party certifies that the Disclosing Party (check one)

☒ [X] is ☐ [] is not

a "financial institution" as defined in MCC Section 2-32-455(b).

2. If the Disclosing Party IS a financial institution, then the Disclosing Party pledges:

"We are not and will not become a predatory lender as defined in MCC Chapter 2-32. We further pledge that none of our affiliates is, and none of them will become, a predatory lender as defined in MCC Chapter 2-32. We understand that becoming a predatory lender or becoming an affiliate of a predatory lender may result in the loss of the privilege of doing business with the City."

If the Disclosing Party is unable to make this pledge because it or any of its affiliates (as defined in MCC Section 2-32-455(b)) is a predatory lender within the meaning of MCC Chapter 2-32, explain here (attach additional pages if necessary):

N/A

If the letters "NA," the word "None," or no response appears on the lines above, it will be conclusively presumed that the Disclosing Party certified to the above statements.

D. CERTIFICATION REGARDING FINANCIAL INTEREST IN CITY BUSINESS

Any words or terms defined in MCC Chapter 2-156 have the same meanings if used in this Part D.

1. In accordance with MCC Section 2-156-110: To the best of the Disclosing Party's knowledge after reasonable inquiry, does any official or employee of the City have a financial interest in his or her own name or in the name of any other person or entity in the Matter?

☐ Yes

☒ No

NOTE: If you checked "Yes" to Item D(1), proceed to Items D(2) and D(3). If you checked "No" to Item D(1), skip Items D(2) and D(3) and proceed to Part E.

2. Unless sold pursuant to a process of competitive bidding, or otherwise permitted, no City elected official or employee shall have a financial interest in his or her own name or in the name of any other person or entity in the purchase of any property that (i) belongs to the City, or (ii) is sold for taxes or assessments, or (iii) is sold by virtue of legal process at the suit of the City (collectively, "City Property Sale"). Compensation for property taken pursuant to the City's eminent domain power does not constitute a financial interest within the meaning of this Part D.

Does the Matter involve a City Property Sale?

☐ Yes

☒ No

3. If you checked "Yes" to Item D(1), provide the names and business addresses of the City officials or employees having such financial interest and identify the nature of the financial interest:

Name

Business Address

Nature of Financial Interest

4. The Disclosing Party further certifies that no prohibited financial interest in the Matter will be acquired by any City official or employee.

E. CERTIFICATION REGARDING SLAVERY ERA BUSINESS

Please check either (1) or (2) below. If the Disclosing Party checks (2), the Disclosing Party must disclose below or in an attachment to this EDS all information required by (2). Failure to comply with these disclosure requirements may make any contract entered into with the City in connection with the Matter voidable by the City.

X 1. The Disclosing Party verifies that the Disclosing Party has searched any and all records of the Disclosing Party and any and all predecessor entities regarding records of investments or profits from slavery or slaveholder insurance policies during the slavery era (including insurance policies issued to slaveholders that provided coverage for damage to or injury or death of their slaves), and the Disclosing Party has found no such records.

2. The Disclosing Party verifies that, as a result of conducting the search in step (1) above, the Disclosing Party has found records of investments or profits from slavery or slaveholder insurance policies. The Disclosing Party verifies that the following constitutes full disclosure of all such records, including the names of any and all slaves or slaveholders described in those records:

SECTION VI -- CERTIFICATIONS FOR FEDERALLY FUNDED MATTERS

NOTE: If the Matter is federally funded, complete this Section VI. If the Matter is not federally funded, proceed to Section VII. For purposes of this Section VI, tax credits allocated by the City and proceeds of debt obligations of the City are not federal funding.

A. CERTIFICATION REGARDING LOBBYING

1. List below the names of all persons or entities registered under the federal Lobbying Disclosure Act of 1995, as amended, who have made lobbying contacts on behalf of the Disclosing Party with respect to the Matter: (Add sheets if necessary):

N/A

(If no explanation appears or begins on the lines above, or if the letters "NA" or if the word "None" appear, it will be conclusively presumed that the Disclosing Party means that NO persons or entities registered under the Lobbying Disclosure Act of 1995, as amended, have made lobbying contacts on behalf of the Disclosing Party with respect to the Matter.)

2. The Disclosing Party has not spent and will not expend any federally appropriated funds to pay any person or entity listed in paragraph A(1) above for his or her lobbying activities or to pay any person or entity to influence or attempt to influence an officer or employee of any agency, as defined by applicable federal law, a member of Congress, an officer or employee of Congress, or an employee

of a member of Congress, in connection with the award of any federally funded contract, making any federally funded grant or loan, entering into any cooperative agreement, or to extend, continue, renew, amend, or modify any federally funded contract, grant, loan, or cooperative agreement.

3. The Disclosing Party will submit an updated certification at the end of each calendar quarter in which there occurs any event that materially affects the accuracy of the statements and information set forth in paragraphs A(1) and A(2) above.

4. The Disclosing Party certifies that either: (i) it is not an organization described in section 501(c)(4) of the Internal Revenue Code of 1986; or (ii) it is an organization described in section 501(c)(4) of the Internal Revenue Code of 1986 but has not engaged and will not engage in "Lobbying Activities," as that term is defined in the Lobbying Disclosure Act of 1995, as amended.

5. If the Disclosing Party is the Applicant, the Disclosing Party must obtain certifications equal in form and substance to paragraphs A(1) through A(4) above from all subcontractors before it awards any subcontract and the Disclosing Party must maintain all such subcontractors' certifications for the duration of the Matter and must make such certifications promptly available to the City upon request.

B. CERTIFICATION REGARDING EQUAL EMPLOYMENT OPPORTUNITY

If the Matter is federally funded, federal regulations require the Applicant and all proposed subcontractors to submit the following information with their bids or in writing at the outset of negotiations.

Is the Disclosing Party the Applicant?

☐ Yes ☐ No

If "Yes," answer the three questions below:

1. Have you developed and do you have on file affirmative action programs pursuant to applicable federal regulations? (See 41 CFR Part 60-2.)

☐ Yes ☐ No

2. Have you filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance Programs, or the Equal Employment Opportunity Commission all reports due under the applicable filing requirements?

☐ Yes ☐ No ☐ Reports not required

3. Have you participated in any previous contracts or subcontracts subject to the equal opportunity clause?

☐ Yes ☐ No

If you checked "No" to question (1) or (2) above, please provide an explanation:

SECTION VII -- FURTHER ACKNOWLEDGMENTS AND CERTIFICATION

The Disclosing Party understands and agrees that:

A. The certifications, disclosures, and acknowledgments contained in this EDS will become part of any contract or other agreement between the Applicant and the City in connection with the Matter, whether procurement, City assistance, or other City action, and are material inducements to the City's execution of any contract or taking other action with respect to the Matter. The Disclosing Party understands that it must comply with all statutes, ordinances, and regulations on which this EDS is based.

B. The City's Governmental Ethics Ordinance, MCC Chapter 2-156, imposes certain duties and obligations on persons or entities seeking City contracts, work, business, or transactions. The full text of this ordinance and a training program is available on line at www.cityofchicago.org/Ethics, and may also be obtained from the City's Board of Ethics, 740 N. Sedgwick St., Suite 500, Chicago, IL 60610, (312) 744-9660. The Disclosing Party must comply fully with this ordinance.

C. If the City determines that any information provided in this EDS is false, incomplete or inaccurate, any contract or other agreement in connection with which it is submitted may be rescinded or be void or voidable, and the City may pursue any remedies under the contract or agreement (if not rescinded or void), at law, or in equity, including terminating the Disclosing Party's participation in the Matter and/or declining to allow the Disclosing Party to participate in other City transactions. Remedies at law for a false statement of material fact may include incarceration and an award to the City of treble damages.

D. It is the City's policy to make this document available to the public on its Internet site and/or upon request. Some or all of the information provided in, and appended to, this EDS may be made publicly available on the Internet, in response to a Freedom of Information Act request, or otherwise. By completing and signing this EDS, the Disclosing Party waives and releases any possible rights or claims which it may have against the City in connection with the public release of information contained in this EDS and also authorizes the City to verify the accuracy of any information submitted in this EDS.

E. The information provided in this EDS must be kept current. In the event of changes, the Disclosing Party must supplement this EDS up to the time the City takes action on the Matter. If the Matter is a contract being handled by the City's Department of Procurement Services, the Disclosing Party must update this EDS as the contract requires. **NOTE:** With respect to Matters subject to MCC Chapter 1-23, Article I (imposing **PERMANENT INELIGIBILITY** for certain specified offenses), the information provided herein regarding eligibility must be kept current for a longer period, as required by MCC Chapter 1-23 and Section 2-154-020.

CERTIFICATION

Under penalty of perjury, the person signing below: (1) warrants that he/she is authorized to execute this EDS, and all applicable Appendices, on behalf of the Disclosing Party, and (2) warrants that all certifications and statements contained in this EDS, and all applicable Appendices, are true, accurate and complete as of the date furnished to the City.

Bank of Montreal

(Print or type exact legal name of Disclosing Party)

By: _____

(Sign here)

David R. Casper

(Print or type name of person signing)

EVP & Group Head - Commercial Banking

(Print or type title of person signing)

Signed and sworn to before me on (date) November 12, 2019

at Cook County, Illinois (state).

Jordan C. Ruiz
Notary Public

JORDAN C RUIZ
Official Seal
Notary Public - State of Illinois
My Commission Expires May 5, 2021

Commission expires: May 5, 2021

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
APPENDIX A**

**FAMILIAL RELATIONSHIPS WITH ELECTED CITY OFFICIALS
AND DEPARTMENT HEADS**

This Appendix is to be completed only by (a) the Applicant, and (b) any legal entity which has a direct ownership interest in the Applicant exceeding 7.5%. It is not to be completed by any legal entity which has only an indirect ownership interest in the Applicant.

Under MCC Section 2-154-015, the Disclosing Party must disclose whether such Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof currently has a "familial relationship" with any elected city official or department head. A "familial relationship" exists if, as of the date this EDS is signed, the Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof is related to the mayor, any alderman, the city clerk, the city treasurer or any city department head as spouse or domestic partner or as any of the following, whether by blood or adoption: parent, child, brother or sister, aunt or uncle, niece or nephew, grandparent, grandchild, father-in-law, mother-in-law, son-in-law, daughter-in-law, stepfather or stepmother, stepson or stepdaughter, stepbrother or stepsister or half-brother or half-sister.

"Applicable Party" means (1) all executive officers of the Disclosing Party listed in Section II.B.1.a., if the Disclosing Party is a corporation; all partners of the Disclosing Party, if the Disclosing Party is a general partnership; all general partners and limited partners of the Disclosing Party, if the Disclosing Party is a limited partnership; all managers, managing members and members of the Disclosing Party, if the Disclosing Party is a limited liability company; (2) all principal officers of the Disclosing Party; and (3) any person having more than a 7.5% ownership interest in the Disclosing Party. "Principal officers" means the president, chief operating officer, executive director, chief financial officer, treasurer or secretary of a legal entity or any person exercising similar authority.

Does the Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof currently have a "familial relationship" with an elected city official or department head?

☐ Yes

☒ No, to the best of the Disclosing Party's knowledge

If yes, please identify below (1) the name and title of such person, (2) the name of the legal entity to which such person is connected; (3) the name and title of the elected city official or department head to whom such person has a familial relationship, and (4) the precise nature of such familial relationship.

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
APPENDIX B**

BUILDING CODE SCOFFLAW/PROBLEM LANDLORD CERTIFICATION

This Appendix is to be completed only by (a) the Applicant, and (b) any legal entity which has a direct ownership interest in the Applicant exceeding 7.5% (an "Owner"). It is not to be completed by any legal entity which has only an indirect ownership interest in the Applicant.

1. Pursuant to MCC Section 2-154-010, is the Applicant or any Owner identified as a building code scofflaw or problem landlord pursuant to MCC Section 2-92-416?

☐ Yes ☒ No

2. If the Applicant is a legal entity publicly traded on any exchange, is any officer or director of the Applicant identified as a building code scofflaw or problem landlord pursuant to MCC Section 2-92-416?

☐ Yes ☒ No ☐ The Applicant is not publicly traded on any exchange.

3. If yes to (1) or (2) above, please identify below the name of each person or legal entity identified as a building code scofflaw or problem landlord and the address of each building or buildings to which the pertinent code violations apply.

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
APPENDIX C**

PROHIBITION ON WAGE & SALARY HISTORY SCREENING - CERTIFICATION

This Appendix is to be completed only by an Applicant that is completing this EDS as a “contractor” as defined in MCC Section 2-92-385. That section, which should be consulted (www.amlegal.com), generally covers a party to any agreement pursuant to which they: (i) receive City of Chicago funds in consideration for services, work or goods provided (including for legal or other professional services), or (ii) pay the City money for a license, grant or concession allowing them to conduct a business on City premises.

On behalf of an Applicant that is a contractor pursuant to MCC Section 2-92-385, I hereby certify that the Applicant is in compliance with MCC Section 2-92-385(b)(1) and (2), which prohibit: (i) screening job applicants based on their wage or salary history, or (ii) seeking job applicants’ wage or salary history from current or former employers. I also certify that the Applicant has adopted a policy that includes those prohibitions.

☒ Yes

☐ No

☐ N/A – I am not an Applicant that is a “contractor” as defined in MCC Section 2-92-385.

This certification shall serve as the affidavit required by MCC Section 2-92-385(c)(1).

If you checked “no” to the above, please explain.

List of Insiders
September 30, 2019

First Name	Middle Name	Last name	BMO Harris Bank N A		BMO Financial Corp.		Bank of Montreal	
			Director	Executive Officer	Director	Executive Officer	Director	Executive Officer
Janice	May	Babrak					✓	
Daniel	David	Barclay						✓
Sophie		Brochu					✓	
Craig	Wyeth	Broderick					✓	
David	Robert	Casper	✓	✓	✓	✓		✓
Adela	Margarita	Cepeda	✓		✓			
Kevin	Michael	Connelly			✓			
Diane	Louise	Cooper	✓		✓			
George	Alexander	Cope					✓	
Patrick	Paul Frederick	Cronin						✓
John	Windom	Daniels, Jr.			✓			
Christine	Annette	Edwards	✓		✓		✓	
Martin	Stewart	Eichenbaum					✓	
Ronald	Harold	Farmer					✓	
Simon	Adrian	Fish						✓
Thomas	Earl	Flynn						✓
Cameron	McAskile	Fowler			✓			✓
Darrel	Harris	Hackett		✓		✓		
David	Edwin	Harquail					✓	
Linda	Susan	Huber					✓	

List of Insiders
September 30, 2019

First Name	Middle Name	Last name	BMO Harris Bank NA		BMO Financial Corp		Bank of Montreal	
			Director	Executive Officer	Director	Executive Officer	Director	Executive Officer
Craig	Thomas	Ingram		✓		✓		
Erminia		Johannson		✓		✓		✓
Eric	Richer	La Fleche					✓	
Kenneth	E.	Librot		✓		✓		
David	John	Lubar			✓			
Mona	Elizabeth	Malone						✓
Charles	Raymond	Matthews	✓		✓			
Daniel	John	Marszalek		✓		✓		
Cecily	Marie	Mistarz		✓		✓		
Lorraine		Mitchelmore					✓	
Tracie	D.	Morris		✓		✓		
Peter	Allan	Myers				✓		
Daniela	Anna	O'Leary-Gill				✓		
Philip	Sonny	Orsino					✓	
Donna	L.	Parish		✓		✓		
John Robert	Stobo	Prichard			✓		✓	
John	E.	Rau			✓			
Catherine	Michelle	Roche						✓
Joanna		Rotenberg						✓

List of Insiders
September 30, 2019

First Name	Middle Name	Last name	BMO Harris Bank NA		BMO Financial Corp		Bank of Montreal	
			Director	Executive Officer	Director	Executive Officer	Director	Executive Officer
Brad	Anders	Rothbaum				✓		
Robertson	Lucas	Seabrook						✓
John	Stephen	Shiely	✓		✓			
Stephen	Richard	Taylor		✓		✓		
Steve	Loyd	Tennyson						✓
Michael	Joseph	Van Handel	✓		✓			
George	Frederick	Walz		✓		✓		
Raymond	Clark	Whitacre		✓		✓		
William	Darryl	White			✓		✓	✓
Don	Matthew	Wilson III					✓	
Ann Marie		Wright		✓		✓		

Section V: CERTIFICATIONS

B. FURTHER CERTIFICATIONS

The Disclosing Party certifies the accuracy of the statements contained in Section V, paragraph B.2.a. through and including B.2.e. only as to itself. The Disclosing Party certifies that to the best of the Disclosing Party's knowledge such statements are accurate with respect to the executive officers and directors of the Disclosing Party. With respect to Section V, paragraph B.2.a. and B.2.e., the Disclosing Party may have been found liable in a civil judgment or proceeding(s) within the five years preceding the date of this EDS instituted by the City of by the federal government, any state, or any other unit of local government. The Disclosing Party certifies that none of these judgments, individually or in the aggregate, would have a material adverse effect on its or the Applicant's financial condition or the ability of the Applicant to perform under its contract with the City. In addition, to the best of the Disclosing Party's knowledge, the Disclosing Party has not, in the past five years, been found after a judicial or administrative hearing to be in violation of any environmental law or regulation, except for possible violations related to (i) property mortgaged to the Disclosing Party, (ii) property owned by the Disclosing Party and leased to others, (iii) foreclosed property now owned by the Disclosing Party and (iv) property owned or held by the Disclosing Party as a fiduciary or nominee. The Disclosing Party's operations are conducted at numerous owned and leased locations throughout the world. From time to time, the Disclosing Party is cited for not being in compliance with an environmental law or regulation. These matters are generally routine and are promptly addressed by the Disclosing Party.

The Disclosing Party certifies the accuracy of the statements contained in Section V, paragraphs B.3. and B.4. only as to itself. The Disclosing Party also certifies that to the best of the Disclosing Party's knowledge such statements are accurate with respect to any Affiliated Entity or any responsible official of the Disclosing Party of any Affiliated Entity or any other official, agent or employee of the Disclosing Party or any Affiliated Entity acting in such capacity pursuant to the direction or authorization of a responsible official of the Disclosing Party or any Affiliated Entity.

D. CERTIFICATION REGARDING INTEREST IN CITY BUSINESS

As to the disclosure set forth in Section V, paragraph D.1., to the best of the Disclosing Party's knowledge, no official or employee of the City of Chicago has a financial interest in his or her own name or in the name of any other person in the Matter.

As to the disclosure set forth in Section V, paragraph D.4., the Disclosing Party cannot (and does not) make the certification required because the Disclosing Party does not and will not have control over all means of acquiring a financial interest in the Matter. [BUSINESS TO CONFIRM THIS STATEMENT IS ACCURATE PRIOR TO INCLUDING IN THE DISCLOSURE ATTACHMENT]

SECTION VII - ACKNOWLEDGMENTS, CONTRACT INCORPORATION, COMPLIANCE, PENALTIES, DISCLOSURE

F.1. The Disclosing Party, to the best of its knowledge, certifies the statements contained in Section VII, paragraph F.1. that it is not delinquent in the payment of any tax administered by the Illinois Department of Revenue, except for taxes that are being contested in good faith by the Disclosing Party or any of its affiliates by appropriate legal proceedings. To the best of the Disclosing Party's knowledge,

neither the Disclosing Party nor its affiliates are delinquent in paying any fine, fee, tax or other charge owed to the City except for possible delinquencies in paying a fine, fee, tax or other charge owed to the City related to (i) property mortgaged to the Disclosing Party or its affiliates, (ii) property owned by the Disclosing Party or its affiliates and leased to others, (iii) foreclosed property now owned by the Disclosing Party or its affiliates, (iv) property owned or held by the Disclosing Party or its affiliates as a fiduciary or nominee and (v) fines, fees, taxes or other charges that are being contested in good faith by the Disclosing Party or its affiliates by appropriate legal proceeding.

CITIBANK, NA

02019-9946

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT
AND AFFIDAVIT**

SECTION I -- GENERAL INFORMATION

A. Legal name of the Disclosing Party submitting this EDS. Include d/b/a/ if applicable:

Citibank, NA

Check ONE of the following three boxes:

Indicate whether the Disclosing Party submitting this EDS is:

1. ☒ the
Applicant OR

2. ☐ a legal entity currently holding, or anticipated to hold within six months after City action on the contract, transaction or other undertaking to which this EDS pertains (referred to below as the "Matter"), a direct or indirect interest in excess of 7.5% in the Applicant. State the Applicant's legal name:

OR

3. ☐ a legal entity with a direct or indirect right of control of the Applicant (see Section II(B)(1))
State the legal name of the entity in which the Disclosing Party holds a right of control:

B. Business address of the Disclosing Party: 388 Greenwich St., New York, NY 10013

C. Telephone: (703) 234-7313 Fax: N/A Email: andyl.taylor@citi.com

D. Name of contact person: Andy Taylor

E. Federal Employer Identification No. (if you have one):

F. Brief description of the Matter to which this EDS pertains. (Include project number and location of property, if applicable): 2020 Municipal Depository RFP

G. Which City agency or department is requesting this EDS? Department of Finance

If the Matter is a contract being handled by the City's Department of Procurement Services, please complete the following:

Specification # _____ and Contract # _____

SECTION II -- DISCLOSURE OF OWNERSHIP INTERESTS

A. NATURE OF THE DISCLOSING PARTY

1. Indicate the nature of the Disclosing Party:

- | | |
|---|--|
| <input type="checkbox"/> Person | <input type="checkbox"/> Limited liability company |
| <input type="checkbox"/> Publicly registered business corporation | <input type="checkbox"/> Limited liability partnership |
| <input type="checkbox"/> Privately held business corporation | <input type="checkbox"/> Joint venture |
| <input type="checkbox"/> Sole proprietorship | <input type="checkbox"/> Not-for-profit corporation |
| <input type="checkbox"/> General partnership | (Is the not-for-profit corporation also a 501(c)(3))? |
| <input type="checkbox"/> Limited partnership | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| <input type="checkbox"/> Trust | <input checked="" type="checkbox"/> Other (please specify) National Association |
-

2. For legal entities, the state (or foreign country) of incorporation or organization, if applicable:

3. For legal entities not organized in the State of Illinois: Has the organization registered to do business in the State of Illinois as a foreign entity? **N/A: Citibank, NA is a federally-chartered and national banking association, and therefore is not required to register as a foreign organization in IL.**

☐ Yes ☐ No ☐ Organized in Illinois

B. IF THE DISCLOSING PARTY IS A LEGAL ENTITY:

1. List below the full names and titles, if applicable, of: (i) all executive officers and all directors of the entity; (ii) **for not-for-profit corporations**, all members, if any, which are legal entities (if there are no such members, write "no members which are legal entities"); (iii) **for trusts, estates or other similar entities**, the trustee, executor, administrator, or similarly situated party; (iv) **for general or limited partnerships, limited liability companies, limited liability partnerships or joint ventures**, each general partner, managing member, manager or any other person or legal entity that directly or indirectly controls the day-to-day management of the Applicant.

NOTE: Each legal entity listed below must submit an EDS on its own behalf.

Name

Title

See **Attachment A** for a list of Citibank, NA officers and directors

2. Please provide the following information concerning each person or legal entity having a direct or indirect, current or prospective (i.e. within 6 months after City action) beneficial interest (including ownership) in excess of 7.5% of the Applicant. Examples of such an interest include shares in a corporation, partnership interest in a partnership or joint venture, interest of a member or manager in a limited liability company, or interest of a beneficiary of a trust, estate or other similar entity. If none, state "None."

state "None."

NOTE: Each legal entity listed below may be required to submit an EDS on its own behalf.

Name	Business Address	Percentage Interest in the Applicant
Citicorp LLC	388 Greenwich St. New York, NY 10013	100%

SECTION III -- INCOME OR COMPENSATION TO, OR OWNERSHIP BY, CITY ELECTED OFFICIALS

Has the Disclosing Party provided any income or compensation to any City elected official during the 12-month period preceding the date of this EDS? ☐ Yes ☒ No

Does the Disclosing Party reasonably expect to provide any income or compensation to any City elected official during the 12-month period following the date of this EDS? ☐ Yes ☒ No

If "yes" to either of the above, please identify below the name(s) of such City elected official(s) and describe such income or compensation:

Does any City elected official or, to the best of the Disclosing Party's knowledge after reasonable inquiry, any City elected official's spouse or domestic partner, have a financial interest (as defined in Chapter 2-156 of the Municipal Code of Chicago ("MCC")) in the Disclosing Party?

☐ Yes ☒ No

If "yes," please identify below the name(s) of such City elected official(s) and/or spouse(s)/domestic partner(s) and describe the financial interest(s).

SECTION IV -- DISCLOSURE OF SUBCONTRACTORS AND OTHER RETAINED PARTIES

The Disclosing Party must disclose the name and business address of each subcontractor, attorney, lobbyist (as defined in MCC Chapter 2-156), accountant, consultant and any other person or entity whom the Disclosing Party has retained or expects to retain in connection with the Matter, as well as the nature of the relationship, and the total amount of the fees paid or estimated to be paid. The Disclosing Party is not required to disclose employees who are paid solely through the Disclosing Party's regular payroll. If the Disclosing Party is uncertain whether a disclosure is required under this Section, the Disclosing Party must either ask the City whether disclosure is required or make the disclosure.

Name (indicate whether Business Relationship to Disclosing Party Fees (indicate whether retained or anticipated Address (subcontractor, attorney, paid or estimated.) NOTE: to be retained) lobbyist, etc.) "hourly rate" or "t.b.d." is not an acceptable response.

Michael J. Kasper Marketing Consultant \$5,500 per month paid
*Fetcher, O'Brien, Kasper & Nottage, P.C., 222 North LaSalle St, Chicago, IL 60601

(Add sheets if necessary)

☐ Check here if the Disclosing Party has not retained, nor expects to retain, any such persons or entities.

SECTION V -- CERTIFICATIONS

A. COURT-ORDERED CHILD SUPPORT COMPLIANCE

Under MCC Section 2-92-415, substantial owners of business entities that contract with the City must remain in compliance with their child support obligations throughout the contract's term.

Has any person who directly or indirectly owns 10% or more of the Disclosing Party been declared in arrearage on any child support obligations by any Illinois court of competent jurisdiction?

☐ Yes ☐ No ☒ No person directly or indirectly owns 10% or more of the Disclosing Party.

If "Yes," has the person entered into a court-approved agreement for payment of all support owed and is the person in compliance with that agreement?

☐ Yes ☐ No

B. FURTHER CERTIFICATIONS

1. [This paragraph 1 applies only if the Matter is a contract being handled by the City's Department of Procurement Services.] In the 5-year period preceding the date of this EDS, neither the Disclosing Party nor any Affiliated Entity [see definition in (5) below] has engaged, in connection with the performance of any public contract, the services of an integrity monitor, independent private sector inspector general, or integrity compliance consultant (i.e., an individual or entity with legal, auditing, investigative, or other similar skills, designated by a public agency to help the agency monitor the activity of specified agency vendors as well as help the vendors reform their business practices so they can be considered for agency contracts in the future, or continue with a contract in progress).

2. The Disclosing Party and its Affiliated Entities are not delinquent in the payment of any fine, fee, tax or other source of indebtedness owed to the City of Chicago, including, but not limited to, water and sewer charges, license fees, parking tickets, property taxes and sales taxes, nor is the Disclosing Party delinquent in the payment of any tax administered by the Illinois Department of Revenue.

3. The Disclosing Party and, if the Disclosing Party is a legal entity, all of those persons or entities identified in Section II(B)(1) of this EDS:

- a. are not presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from any transactions by any federal, state or local unit of government;
- b. have not, during the 5 years before the date of this EDS, been convicted of a criminal offense, adjudged guilty, or had a civil judgment rendered against them in connection with: obtaining, attempting to obtain, or performing a public (federal, state or local) transaction or contract under a public transaction; a violation of federal or state antitrust statutes; fraud; embezzlement; theft; forgery; bribery; falsification or destruction of records; making false statements; or receiving stolen property;
- c. are not presently indicted for, or criminally or civilly charged by, a governmental entity (federal, state or local) with committing any of the offenses set forth in subparagraph (b) above;
- d. have not, during the 5 years before the date of this EDS, had one or more public transactions (federal, state or local) terminated for cause or default; and
- e. have not, during the 5 years before the date of this EDS, been convicted, adjudged guilty, or found liable in a civil proceeding, or in any criminal or civil action, including actions concerning environmental violations, instituted by the City or by the federal government, any state, or any other unit of local government.

4. The Disclosing Party understands and shall comply with the applicable requirements of MCC Chapters 2-56 (Inspector General) and 2-156 (Governmental Ethics).

5. Certifications (5), (6) and (7) concern:

- the Disclosing Party;
- any "Contractor" (meaning any contractor or subcontractor used by the Disclosing Party in connection with the Matter, including but not limited to all persons or legal entities disclosed under Section IV, "Disclosure of Subcontractors and Other Retained Parties");
- any "Affiliated Entity" (meaning a person or entity that, directly or indirectly: controls the Disclosing Party, is controlled by the Disclosing Party, or is, with the Disclosing Party, under common control of another person or entity). Indicia of control include, without limitation: interlocking management or ownership; identity of interests among family members, shared facilities and equipment; common use of employees; or organization of a business entity following the ineligibility of a business entity to do business with federal or state or local government, including the City, using substantially the same management, ownership, or principals as the ineligible entity. With respect to Contractors, the term Affiliated Entity means a person or entity that directly or indirectly controls the Contractor, is controlled by it, or, with the Contractor, is under common control of another person or entity;
- any responsible official of the Disclosing Party, any Contractor or any Affiliated Entity or any other official, agent or employee of the Disclosing Party, any Contractor or any Affiliated Entity, acting pursuant to the direction or authorization of a responsible official of the Disclosing Party, any Contractor or any Affiliated Entity (collectively "Agents").

Neither the Disclosing Party, nor any Contractor, nor any Affiliated Entity of either the Disclosing Party or any Contractor, nor any Agents have, during the 5 years before the date of this EDS, or, with respect to a Contractor, an Affiliated Entity, or an Affiliated Entity of a Contractor during the 5 years before the date of such Contractor's or Affiliated Entity's contract or engagement in connection with the Matter:

- a. bribed or attempted to bribe, or been convicted or adjudged guilty of bribery or attempting to bribe, a public officer or employee of the City, the State of Illinois, or any agency of the federal government or of any state or local government in the United States of America, in that officer's or employee's official capacity;
- b. agreed or colluded with other bidders or prospective bidders, or been a party to any such agreement, or been convicted or adjudged guilty of agreement or collusion among bidders or prospective bidders, in restraint of freedom of competition by agreement to bid a fixed price or otherwise; or
- c. made an admission of such conduct described in subparagraph (a) or (b) above that is a matter of record, but have not been prosecuted for such conduct; or

d. violated the provisions referenced in MCC Subsection 2-92-320(a)(4)(Contracts Requiring a Base Wage); (a)(5)(Debarment Regulations); or (a)(6)(Minimum Wage Ordinance).

6. Neither the Disclosing Party, nor any Affiliated Entity or Contractor, or any of their employees, officials, agents or partners, is barred from contracting with any unit of state or local government as a result of engaging in or being convicted of (1) bid-rigging in violation of 720 ILCS 5/33E-3; (2) bid-rotating in violation of 720 ILCS 5/33E-4; or (3) any similar offense of any state or of the United States of America that contains the same elements as the offense of bid-rigging or bid-rotating.

7. Neither the Disclosing Party nor any Affiliated Entity is listed on a Sanctions List maintained by the United States Department of Commerce, State, or Treasury, or any successor federal agency.

8. [FOR APPLICANT ONLY] (i) Neither the Applicant nor any "controlling person" [see MCC Chapter 1-23, Article I for applicability and defined terms] of the Applicant is currently indicted or charged with, or has admitted guilt of, or has ever been convicted of, or placed under supervision for, any criminal offense involving actual, attempted, or conspiracy to commit bribery, theft, fraud, forgery, perjury, dishonesty or deceit against an officer or employee of the City or any "sister agency"; and (ii) the Applicant understands and acknowledges that compliance with Article I is a continuing requirement for doing business with the City. NOTE: If MCC Chapter 1-23, Article I applies to the Applicant, that Article's permanent compliance timeframe supersedes 5-year compliance timeframes in this Section V.

9. [FOR APPLICANT ONLY] The Applicant and its Affiliated Entities will not use, nor permit their subcontractors to use, any facility listed as having an active exclusion by the U.S. EPA on the federal System for Award Management ("SAM").

10. [FOR APPLICANT ONLY] The Applicant will obtain from any contractors/subcontractors hired or to be hired in connection with the Matter certifications equal in form and substance to those in Certifications (2) and (9) above and will not, without the prior written consent of the City, use any such

contractor/subcontractor that does not provide such certifications or that the Applicant has reason to believe has not provided or cannot provide truthful certifications.

11. If the Disclosing Party is unable to certify to any of the above statements in this Part B (Further Certifications), the Disclosing Party must explain below:
See Attachment B in support of above

If the letters "NA," the word "None," or no response appears on the lines above, it will be conclusively presumed that the Disclosing Party certified to the above statements.

12. To the best of the Disclosing Party's knowledge after reasonable inquiry, the following is a complete list of all current employees of the Disclosing Party who were, at any time during the 12-month period preceding the date of this EDS, an employee, or elected or appointed official, of the City of Chicago (if none, indicate with "N/A" or "none").

NONE

13. To the best of the Disclosing Party's knowledge after reasonable inquiry, the following is a complete list of all gifts that the Disclosing Party has given or caused to be given, at any time during the 12-month period preceding the execution date of this EDS, to an employee, or elected or appointed official, of the City of Chicago. For purposes of this statement, a "gift" does not include: (i) anything made generally available to City employees or to the general public, or (ii) food or drink provided in the course of official City business and having a retail value of less than \$25 per recipient, or (iii) a political contribution otherwise duly reported as required by law (if none, indicate with "N/A" or "none"). As to any gift listed below, please also list the name of the City recipient.

N/A

C. CERTIFICATION OF STATUS AS FINANCIAL INSTITUTION

1. The Disclosing Party certifies that the Disclosing Party (check one)

☒ [X] is ☐ [] is not

a "financial institution" as defined in MCC Section 2-32-455(b).

2. If the Disclosing Party IS a financial institution, then the Disclosing Party pledges:

"We are not and will not become a predatory lender as defined in MCC Chapter 2-32. We further pledge that none of our affiliates is, and none of them will become, a predatory lender as defined in MCC Chapter 2-32. We understand that becoming a predatory lender or becoming an affiliate of a predatory lender may result in the loss of the privilege of doing business with the City."

If the Disclosing Party is unable to make this pledge because it or any of its affiliates (as defined in MCC Section 2-32-455(b)) is a predatory lender within the meaning of MCC Chapter 2-32, explain here (attach additional pages if necessary):

If the letters "NA," the word "None," or no response appears on the lines above, it will be conclusively presumed that the Disclosing Party certified to the above statements.

D. CERTIFICATION REGARDING FINANCIAL INTEREST IN CITY BUSINESS

Any words or terms defined in MCC Chapter 2-156 have the same meanings if used in this Part D.

1. In accordance with MCC Section 2-156-110: To the best of the Disclosing Party's knowledge after reasonable inquiry, does any official or employee of the City have a financial interest in his or her own name or in the name of any other person or entity in the Matter?

☐ Yes

☒ No

NOTE: If you checked "Yes" to Item D(1), proceed to Items D(2) and D(3). If you checked "No" to Item D(1), skip Items D(2) and D(3) and proceed to Part E.

2. Unless sold pursuant to a process of competitive bidding, or otherwise permitted, no City elected official or employee shall have a financial interest in his or her own name or in the name of any other person or entity in the purchase of any property that (i) belongs to the City, or (ii) is sold for taxes or assessments, or (iii) is sold by virtue of legal process at the suit of the City (collectively, "City Property Sale"). Compensation for property taken pursuant to the City's eminent domain power does not constitute a financial interest within the meaning of this Part D.

Does the Matter involve a City Property Sale?

☐ Yes

☐ No

3. If you checked "Yes" to Item D(1), provide the names and business addresses of the City officials or employees having such financial interest and identify the nature of the financial interest:

Name

Business Address

Nature of Financial Interest

4. The Disclosing Party further certifies that no prohibited financial interest in the Matter will be acquired by any City official or employee.

E. CERTIFICATION REGARDING SLAVERY ERA BUSINESS

Please check either (1) or (2) below. If the Disclosing Party checks (2), the Disclosing Party must disclose below or in an attachment to this EDS all information required by (2). Failure to comply with these disclosure requirements may make any contract entered into with the City in connection with the Matter voidable by the City.

 X 1. The Disclosing Party verifies that the Disclosing Party has searched any and all records of the Disclosing Party and any and all predecessor entities regarding records of investments or profits from slavery or slaveholder insurance policies during the slavery era (including insurance policies issued to slaveholders that provided coverage for damage to or injury or death of their slaves), and the Disclosing Party has found no such records.

 2. The Disclosing Party verifies that, as a result of conducting the search in step (1) above, the Disclosing Party has found records of investments or profits from slavery or slaveholder insurance policies. The Disclosing Party verifies that the following constitutes full disclosure of all such records, including the names of any and all slaves or slaveholders described in those records:

SECTION VI -- CERTIFICATIONS FOR FEDERALLY FUNDED MATTERS

NOTE: If the Matter is federally funded, complete this Section VI. If the Matter is not federally funded, proceed to Section VII. For purposes of this Section VI, tax credits allocated by the City and proceeds of debt obligations of the City are not federal funding.

A. CERTIFICATION REGARDING LOBBYING

1. List below the names of all persons or entities registered under the federal Lobbying Disclosure Act of 1995, as amended, who have made lobbying contacts on behalf of the Disclosing Party with respect to the Matter: (Add sheets if necessary):

(If no explanation appears or begins on the lines above, or if the letters "NA" or if the word "None" appear, it will be conclusively presumed that the Disclosing Party means that NO persons or entities registered under the Lobbying Disclosure Act of 1995, as amended, have made lobbying contacts on behalf of the Disclosing Party with respect to the Matter.)

2. The Disclosing Party has not spent and will not expend any federally appropriated funds to pay any person or entity listed in paragraph A(1) above for his or her lobbying activities or to pay any person or entity to influence or attempt to influence an officer or employee of any agency, as defined by applicable federal law, a member of Congress, an officer or employee of Congress, or an employee

of a member of Congress, in connection with the award of any federally funded contract, making any federally funded grant or loan, entering into any cooperative agreement, or to extend, continue, renew, amend, or modify any federally funded contract, grant, loan, or cooperative agreement.

3. The Disclosing Party will submit an updated certification at the end of each calendar quarter in which there occurs any event that materially affects the accuracy of the statements and information set forth in paragraphs A(1) and A(2) above.

4. The Disclosing Party certifies that either: (i) it is not an organization described in section 501(c)(4) of the Internal Revenue Code of 1986; or (ii) it is an organization described in section 501(c)(4) of the Internal Revenue Code of 1986 but has not engaged and will not engage in "Lobbying Activities," as that term is defined in the Lobbying Disclosure Act of 1995, as amended.

5. If the Disclosing Party is the Applicant, the Disclosing Party must obtain certifications equal in form and substance to paragraphs A(1) through A(4) above from all subcontractors before it awards any subcontract and the Disclosing Party must maintain all such subcontractors' certifications for the duration of the Matter and must make such certifications promptly available to the City upon request.

B. CERTIFICATION REGARDING EQUAL EMPLOYMENT OPPORTUNITY

If the Matter is federally funded, federal regulations require the Applicant and all proposed subcontractors to submit the following information with their bids or in writing at the outset of negotiations.

Is the Disclosing Party the Applicant?

☐ Yes

☐ No

If "Yes," answer the three questions below:

1. Have you developed and do you have on file affirmative action programs pursuant to applicable federal regulations? (See 41 CFR Part 60-2.)

☐ Yes

☐ No

2. Have you filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance Programs, or the Equal Employment Opportunity Commission all reports due under the applicable filing requirements?

☐ Yes

☐ No

☐ Reports not required

3. Have you participated in any previous contracts or subcontracts subject to the equal opportunity clause?

☐ Yes

☐ No

If you checked "No" to question (1) or (2) above, please provide an explanation:

SECTION VII -- FURTHER ACKNOWLEDGMENTS AND CERTIFICATION

The Disclosing Party understands and agrees that:

A. The certifications, disclosures, and acknowledgments contained in this EDS will become part of any contract or other agreement between the Applicant and the City in connection with the Matter, whether procurement, City assistance, or other City action, and are material inducements to the City's execution of any contract or taking other action with respect to the Matter. The Disclosing Party understands that it must comply with all statutes, ordinances, and regulations on which this EDS is based.

B. The City's Governmental Ethics Ordinance, MCC Chapter 2-156, imposes certain duties and obligations on persons or entities seeking City contracts, work, business, or transactions. The full text of this ordinance and a training program is available on line at www.cityofchicago.org/Ethics, and may also be obtained from the City's Board of Ethics, 740 N. Sedgwick St., Suite 500, Chicago, IL 60610, (312) 744-9660. The Disclosing Party must comply fully with this ordinance.

C. If the City determines that any information provided in this EDS is false, incomplete or inaccurate, any contract or other agreement in connection with which it is submitted may be rescinded or be void or voidable, and the City may pursue any remedies under the contract or agreement (if not rescinded or void), at law, or in equity, including terminating the Disclosing Party's participation in the Matter and/or declining to allow the Disclosing Party to participate in other City transactions. Remedies at law for a false statement of material fact may include incarceration and an award to the City of treble damages.

D. It is the City's policy to make this document available to the public on its Internet site and/or upon request. Some or all of the information provided in, and appended to, this EDS may be made publicly available on the Internet, in response to a Freedom of Information Act request, or otherwise. By completing and signing this EDS, the Disclosing Party waives and releases any possible rights or claims which it may have against the City in connection with the public release of information contained in this EDS and also authorizes the City to verify the accuracy of any information submitted in this EDS.

E. The information provided in this EDS must be kept current. In the event of changes, the Disclosing Party must supplement this EDS up to the time the City takes action on the Matter. If the Matter is a contract being handled by the City's Department of Procurement Services, the Disclosing Party must update this EDS as the contract requires. **NOTE:** With respect to Matters subject to MCC Chapter 1-23, Article I (imposing **PERMANENT INELIGIBILITY** for certain specified offenses), the information provided herein regarding eligibility must be kept current for a longer period, as required by MCC Chapter 1-23 and Section 2-154-020.

CERTIFICATION

Under penalty of perjury, the person signing below: (1) warrants that he/she is authorized to execute this EDS, and all applicable Appendices, on behalf of the Disclosing Party, and (2) warrants that all certifications and statements contained in this EDS, and all applicable Appendices, are true, accurate and complete as of the date furnished to the City.

Citibank, NA

(Print or type exact legal name of Disclosing Party)

By: AT
(Sign here)

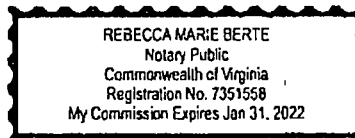
Andy Taylor
(Print or type name of person signing)

Director
(Print or type title of person signing)

Signed and sworn to before me on (date), 13 November 2019
at Loudoun County, Virginia (state).

Rebecca Marie Berte Notary Public.

Commission expires: January 31, 2022



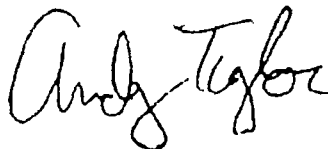
CERTIFICATE OF INCUMBENCY

CITIBANK, N. A.

I, Joseph B. Wollard, Assistant Secretary of Citibank, N.A. ("the Association or Bank") having its head office at 5800 S. Corporate Place, Sioux Falls, South Dakota and its principal place of business at 388 Greenwich Street, New York, NY, DO HEREBY CERTIFY that the following is a true and correct copy of Section 2 of Article X of the existing By-Laws of CITIBANK, N.A. in full force and effect as of the date hereof:

"Execution of Instruments. All agreements, indentures, mortgages, deeds, conveyances, transfers, certificates, declarations, receipts, discharges, releases, satisfactions, settlements, petitions, schedules, accounts, affidavits, bonds, undertakings, proxies and other instruments or documents, may be signed executed, acknowledged, verified, delivered or accepted in behalf of the Association by the Chairman, the Chief Executive Officer, the President, any Vice Chairman, or any Executive Vice President, or any Senior Vice President, or the Secretary, or the Chief Auditor, or any Vice President, or anyone holding a position equivalent to the foregoing pursuant to provisions of these By-Laws, or, if in connection with the exercise of any of the fiduciary powers of the Association, by any of said officers or by any Senior Trust Officer. Any such instruments may also be executed, acknowledged, verified, delivered or accepted in behalf of the Association in such other manner and by such other officers as the Board of Directors may from time to time direct. The provisions of this Section 2 are supplementary to any other provisions of these By-Laws."

I FURTHER CERTIFY that **Andy Taylor** is a **Vice President** of CITIBANK, N.A. and empowered to act through June 30, 2020, unless revoked earlier by an authorized officer of the Bank. The following is their specimen signature as it appears in our records:



In WITNESS WHEREOF, I have hereunto affixed my official signature and seal of the said Bank in the City of New York on this 12th day of November, 2019.


Joseph B. Wollard

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
APPENDIX A**

**FAMILIAL RELATIONSHIPS WITH ELECTED CITY OFFICIALS
AND DEPARTMENT HEADS**

This Appendix is to be completed only by (a) the Applicant, and (b) any legal entity which has a direct ownership interest in the Applicant exceeding 7.5%. It is not to be completed by any legal entity which has only an indirect ownership interest in the Applicant.

Under MCC Section 2-154-015, the Disclosing Party must disclose whether such Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof currently has a "familial relationship" with any elected city official or department head. A "familial relationship" exists if, as of the date this EDS is signed, the Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof is related to the mayor, any alderman, the city clerk, the city treasurer or any city department head as spouse or domestic partner or as any of the following, whether by blood or adoption: parent, child, brother or sister, aunt or uncle, niece or nephew, grandparent, grandchild, father-in-law, mother-in-law, son-in-law, daughter-in-law, stepfather or stepmother, stepson or stepdaughter, stepbrother or stepsister or half-brother or half-sister.

"Applicable Party" means (1) all executive officers of the Disclosing Party listed in Section II.B.1.a., if the Disclosing Party is a corporation; all partners of the Disclosing Party, if the Disclosing Party is a general partnership; all general partners and limited partners of the Disclosing Party, if the Disclosing Party is a limited partnership; all managers, managing members and members of the Disclosing Party, if the Disclosing Party is a limited liability company; (2) all principal officers of the Disclosing Party; and (3) any person having more than a 7.5% ownership interest in the Disclosing Party. "Principal officers" means the president, chief operating officer, executive director, chief financial officer, treasurer or secretary of a legal entity or any person exercising similar authority.

Does the Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof currently have a "familial relationship" with an elected city official or department head?

☐ Yes

☒ No

If yes, please identify below (1) the name and title of such person, (2) the name of the legal entity to which such person is connected; (3) the name and title of the elected city official or department head to whom such person has a familial relationship, and (4) the precise nature of such familial relationship.

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
APPENDIX B**

BUILDING CODE SCOFFLAW/PROBLEM LANDLORD CERTIFICATION

This Appendix is to be completed only by (a) the Applicant, and (b) any legal entity which has a direct ownership interest in the Applicant exceeding 7.5% (an "Owner"). It is not to be completed by any legal entity which has only an indirect ownership interest in the Applicant.

1. Pursuant to MCC Section 2-154-010, is the Applicant or any Owner identified as a building code scofflaw or problem landlord pursuant to MCC Section 2-92-416?

☐ Yes

☒ No

2. If the Applicant is a legal entity publicly traded on any exchange, is any officer or director of the Applicant identified as a building code scofflaw or problem landlord pursuant to MCC Section 2-92-416?

☐ Yes

☒ No

☐ The Applicant is not publicly traded on any exchange.

Not applicable.

3. If yes to (1) or (2) above, please identify below the name of each person or legal entity identified as a building code scofflaw or problem landlord and the address of each building or buildings to which the pertinent code violations apply.

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
APPENDIX C**

PROHIBITION ON WAGE & SALARY HISTORY SCREENING - CERTIFICATION

This Appendix is to be completed only by an Applicant that is completing this EDS as a “contractor” as defined in MCC Section 2-92-385. That section, which should be consulted (www.amlegal.com), generally covers a party to any agreement pursuant to which they: (i) receive City of Chicago funds in consideration for services, work or goods provided (including for legal or other professional services), or (ii) pay the City money for a license, grant or concession allowing them to conduct a business on City premises.

On behalf of an Applicant that is a contractor pursuant to MCC Section 2-92-385, I hereby certify that the Applicant is in compliance with MCC Section 2-92-385(b)(1) and (2), which prohibit: (i) screening job applicants based on their wage or salary history, or (ii) seeking job applicants’ wage or salary history from current or former employers. I also certify that the Applicant has adopted a policy that includes those prohibitions.

☒ Yes

☐ No

☐ N/A – I am not an Applicant that is a “contractor” as defined in MCC Section 2-92-385.

This certification shall serve as the affidavit required by MCC Section 2-92-385(c)(1).

If you checked “no” to the above, please explain.

ATTACHMENT A:
CITIBANK, N.A.
DIRECTORS & PRINCIPAL OFFICERS

AS OF NOVEMBER 8, 2019

Directors:

Costello, Ellen

Desoer, Barbara, Chair of the Board

Hennes, Duncan

Ireland, S. Leslie

McQuade, Eugene

McNiff, Mary A.

Turley, James

Wright, Deborah C.

PRINCIPAL OFFICERS

Mary McNiff	Chief Executive Officer
Ross Callan	Chief Financial Officer
Peter Mozer	Treasurer
Anita Romero	General Counsel & Secretary

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT
AND AFFIDAVIT**

ATTACHMENTS FOR CITIGROUP INC.

ATTACHMENT B	FURTHER CERTIFICATION
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In the ordinary course of business, Citigroup Inc. ("Citigroup") and its subsidiaries and affiliates are defendants or co-defendants in various litigation matters incidental to and typical of the broad range of businesses in which they are engaged. For example, typical actions in broker-dealer subsidiaries are civil suits, arbitration proceedings, and other matters related to activities occurring in the normal course of business as a broker and dealer in securities, as an underwriter of securities, as an investment banker or otherwise. From time to time Citigroup, and certain affiliated entities, are the subjects of inquiries and investigations conducted by federal or state regulatory agencies. Citigroup and its affiliated entities routinely cooperate with such investigations.

On May 20, 2015, Citigroup Inc. announced settlements with the U.S. Department of Justice (DOJ) and the Board of Governors of the Federal Reserve System (FRB) to resolve the previously disclosed investigations into Citi's foreign exchange business. Under the terms of the settlement with the DOJ, Citicorp, a financial services holding company subsidiary of Citigroup, will plead guilty to a violation of the Sherman Antitrust Act, pay a fine of \$925 million and be subject to a three-year probation period, the conditions of which include the continued implementation, remediation and strengthening of Citi's compliance and internal controls. Under the terms of the settlement with the FRB, Citi will pay a civil money penalty of \$342 million and agree to further enhance the control framework governing its foreign exchange business. The payments due under the settlements are covered by Citi's existing legal reserves and will not require a charge to earnings in the second quarter of 2015.

Citigroup is a public company, and as such files periodic and current reports with the U.S. Securities and Exchange Commission as required by the Securities Exchange Act of 1934 that include current descriptions of material regulatory proceedings, investigations and litigation. Copies of Citigroup's periodic reports are on file with the SEC, which can be located at the SEC's website (www.sec.gov).

FIRMWIDE
PLEASE POPULATE THE HIGHLIGHTED PORTIONS ONLY

Firm Name:	Citibank, NA
Primary Representative:	Andy Taylor
Primary Representative Email and Telephone:	andy.taylor@citi.com; (703) 234-7313
Headquarters Address	388 Greenwich St, New York, NY 10013
Chicago Public Finance Office Address	227 West Monroe St, 25th Floor, Chicago, IL 60606
Total Number of Employees:	65,961
Number of Employees in Illinois	1,544
Number of Employees in Chicago:	526
Capital Position:	1,917,383,000
Minority Designation:	Not Applicable

Job Categories	Male					Female				
	White (Not Hispanic)	Black (Not Hispanic)	Hispanic	Asian	Native American	White (Not Hispanic)	Black (Not Hispanic)	Hispanic	Asian	Native American
Officials and Managers	11,335	4,287	261	802	1,488	14	2,802	346	701	624
Professionals	23,399	7,160	791	1,634	3,676	29	5,455	946	1,451	2,235
Technicians	414	106	24	70	24	0	121	9	42	17
Sales Workers	6,336	2,351	185	648	764	4	970	174	604	630
Office and Clerical	24,430	3,578	978	1,677	406	23	9,328	3,150	4,171	1,042
Craft Workers (Skilled)	13	4	0	7	1	0	0	0	1	0
Operatives (Semi-Skilled)	30	11	8	4	2	0	4	1	0	0
Labors	0	0	0	0	0	0	0	0	0	0
Service Workers	4	1	0	1	0	0	2	0	0	0
Total	65,961	17,498	2,247	4,843	6,361	70	18,682	4,626	6,970	4,548

Job Categories	Male					Female				
	White (Not Hispanic)	Black (Not Hispanic)	Hispanic	Asian	Native American	White (Not Hispanic)	Black (Not Hispanic)	Hispanic	Asian	Native American
Officials and Managers	17%	11%	1%	2%	3%	0%	0%	0%	0%	0%
Professionals	35%	19%	3%	5%	9%	0%	0%	0%	0%	0%
Technicians	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Sales Workers	10%	5%	1%	2%	2%	0%	0%	0%	0%	0%
Office and Clerical	37%	20%	6%	9%	2%	0%	0%	0%	0%	0%
Craft Workers (Skilled)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Operatives (Semi-Skilled)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Labors	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Service Workers	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Total	100%	55%	10%	18%	17%	0%	0%	0%	0%	0%

CITY OF CHICAGO¹
ECONOMIC DISCLOSURE STATEMENT
AND AFFIDAVIT

SECTION I -- GENERAL INFORMATION

A. Legal name of the Disclosing Party submitting this EDS. Include d/b/a/ if applicable:

Citicorp LLC

Check ONE of the following three boxes:

Indicate whether the Disclosing Party submitting this EDS is:

1. ☐ the Applicant
OR

2. ☒ a legal entity currently holding, or anticipated to hold within six months after City action on the contract, transaction or other undertaking to which this EDS pertains (referred to below as the "Matter"), a direct or indirect interest in excess of 7.5% in the Applicant. State the Applicant's legal name: Citibank, NA
OR

3. ☐ a legal entity with a direct or indirect right of control of the Applicant (see Section II(B)(1))
State the legal name of the entity in which the Disclosing Party holds a right of control:

B. Business address of the Disclosing Party: 388 Greenwich St., New York, NY 10013

C. Telephone: (703) 234-7313 Fax: N/A Email: andy1.taylor@citi.com

D. Name of contact person: Andy Taylor

E. Federal Employer Identification No. (if you have one):

F. Brief description of the Matter to which this EDS pertains. (Include project number and location of property, if applicable): 2020 Municipal Depository RFP

G. Which City agency or department is requesting this EDS? Department of Finance

If the Matter is a contract being handled by the City's Department of Procurement Services, please complete the following:

Specification # _____ and Contract # _____

SECTION II -- DISCLOSURE OF OWNERSHIP INTERESTS

A. NATURE OF THE DISCLOSING PARTY

1. Indicate the nature of the Disclosing Party:

- | | |
|---|--|
| <input type="checkbox"/> Person | <input type="checkbox"/> Limited liability company |
| <input type="checkbox"/> Publicly registered business corporation | <input type="checkbox"/> Limited liability partnership |
| <input checked="" type="checkbox"/> Privately held business corporation | <input type="checkbox"/> Joint venture |
| <input type="checkbox"/> Sole proprietorship | <input type="checkbox"/> Not-for-profit corporation |
| <input type="checkbox"/> General partnership | (Is the not-for-profit corporation also a 501(c)(3))? |
| <input type="checkbox"/> Limited partnership | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| <input type="checkbox"/> Trust | <input type="checkbox"/> Other (please specify) |
-

2. For legal entities, the state (or foreign country) of incorporation or organization, if applicable:
Delaware

3. For legal entities not organized in the State of Illinois: Has the organization registered to do business in the State of Illinois as a foreign entity?

☐ Yes ☒ No ☐ Organized in Illinois

B. IF THE DISCLOSING PARTY IS A LEGAL ENTITY:

1. List below the full names and titles, if applicable, of: (i) all executive officers and all directors of the entity; (ii) **for not-for-profit corporations**, all members, if any, which are legal entities (if there are no such members, write "no members which are legal entities"); (iii) **for trusts, estates or other similar entities**, the trustee, executor, administrator, or similarly situated party; (iv) **for general or limited partnerships, limited liability companies, limited liability partnerships or joint ventures**, each general partner, managing member, manager or any other person or legal entity that directly or indirectly controls the day-to-day management of the Applicant.

NOTE: Each legal entity listed below must submit an EDS on its own behalf.

Name

Title

See **Attachment A** for a list of Citicorp LLC officers and directors

2. Please provide the following information concerning each person or legal entity having a direct or indirect, current or prospective (i.e. within 6 months after City action) beneficial interest (including ownership) in excess of 7.5% of the Applicant. Examples of such an interest include shares in a corporation, partnership interest in a partnership or joint venture, interest of a member or manager in a

limited liability company, or interest of a beneficiary of a trust, estate or other similar entity. If none, state "None."

NOTE: Each legal entity listed below may be required to submit an EDS on its own behalf.

Name	Business Address	Percentage Interest in the Applicant
Citigroup Inc.	388 Greenwich St., New York, NY 10013	100%

SECTION III -- INCOME OR COMPENSATION TO, OR OWNERSHIP BY, CITY ELECTED OFFICIALS

Has the Disclosing Party provided any income or compensation to any City elected official during the 12-month period preceding the date of this EDS? ☐ Yes ☒ No

Does the Disclosing Party reasonably expect to provide any income or compensation to any City elected official during the 12-month period following the date of this EDS? ☐ Yes ☒ No

If "yes" to either of the above, please identify below the name(s) of such City elected official(s) and describe such income or compensation:

Does any City elected official or, to the best of the Disclosing Party's knowledge after reasonable inquiry, any City elected official's spouse or domestic partner, have a financial interest (as defined in Chapter 2-156 of the Municipal Code of Chicago ("MCC")) in the Disclosing Party?

☐ Yes

☒ No

If "yes," please identify below the name(s) of such City elected official(s) and/or spouse(s)/domestic partner(s) and describe the financial interest(s).

SECTION IV -- DISCLOSURE OF SUBCONTRACTORS AND OTHER RETAINED PARTIES

The Disclosing Party must disclose the name and business address of each subcontractor, attorney, lobbyist (as defined in MCC Chapter 2-156), accountant, consultant and any other person or entity whom the Disclosing Party has retained or expects to retain in connection with the Matter, as well as the nature of the relationship, and the total amount of the fees paid or estimated to be paid. The Disclosing Party is not required to disclose employees who are paid solely through the Disclosing Party's regular payroll. If the Disclosing Party is uncertain whether a disclosure is required under this Section, the Disclosing Party must either ask the City whether disclosure is required or make the disclosure.

Name (indicate whether Business Relationship to Disclosing Party Fees (indicate whether retained or anticipated Address (subcontractor, attorney, paid or estimated.) **NOTE:**
to be retained) lobbyist, etc.) "hourly rate" or "t.b.d." is
not an acceptable response.

(Add sheets if necessary)

☒ Check here if the Disclosing Party has not retained, nor expects to retain, any such persons or entities.

SECTION V -- CERTIFICATIONS

A. COURT-ORDERED CHILD SUPPORT COMPLIANCE

Under MCC Section 2-92-415, substantial owners of business entities that contract with the City must remain in compliance with their child support obligations throughout the contract's term.

Has any person who directly or indirectly owns 10% or more of the Disclosing Party been declared in arrearage on any child support obligations by any Illinois court of competent jurisdiction?

☐ Yes ☐ No ☒ No person directly or indirectly owns 10% or more of the Disclosing Party.

If "Yes," has the person entered into a court-approved agreement for payment of all support owed and is the person in compliance with that agreement?

☐ Yes ☐ No

B. FURTHER CERTIFICATIONS

1. [This paragraph 1 applies only if the Matter is a contract being handled by the City's Department of Procurement Services.] In the 5-year period preceding the date of this EDS, neither the Disclosing Party nor any Affiliated Entity [see definition in (5) below] has engaged, in connection with the performance of any public contract, the services of an integrity monitor, independent private sector inspector general, or integrity compliance consultant (i.e., an individual or entity with legal, auditing, investigative, or other similar skills, designated by a public agency to help the agency monitor the activity of specified agency vendors as well as help the vendors reform their business practices so they can be considered for agency contracts in the future, or continue with a contract in progress).

2. The Disclosing Party and its Affiliated Entities are not delinquent in the payment of any fine, fee, tax or other source of indebtedness owed to the City of Chicago, including, but not limited to, water and sewer charges, license fees, parking tickets, property taxes and sales taxes, nor is the Disclosing Party delinquent in the payment of any tax administered by the Illinois Department of Revenue.

3. The Disclosing Party and, if the Disclosing Party is a legal entity, all of those persons or entities identified in Section II(B)(1) of this EDS:

- a. are not presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from any transactions by any federal, state or local unit of government;
- b. have not, during the 5 years before the date of this EDS, been convicted of a criminal offense, adjudged guilty, or had a civil judgment rendered against them in connection with: obtaining, attempting to obtain, or performing a public (federal, state or local) transaction or contract under a public transaction; a violation of federal or state antitrust statutes; fraud; embezzlement; theft; forgery; bribery; falsification or destruction of records; making false statements; or receiving stolen property;
- c. are not presently indicted for, or criminally or civilly charged by, a governmental entity (federal, state or local) with committing any of the offenses set forth in subparagraph (b) above;
- d. have not, during the 5 years before the date of this EDS, had one or more public transactions (federal, state or local) terminated for cause or default; and
- e. have not, during the 5 years before the date of this EDS, been convicted, adjudged guilty, or found liable in a civil proceeding, or in any criminal or civil action, including actions concerning environmental violations, instituted by the City or by the federal government, any state, or any other unit of local government.

4. The Disclosing Party understands and shall comply with the applicable requirements of MCC Chapters 2-56 (Inspector General) and 2-156 (Governmental Ethics).

5. Certifications (5), (6) and (7) concern:

- the Disclosing Party;
- any "Contractor" (meaning any contractor or subcontractor used by the Disclosing Party in connection with the Matter, including but not limited to all persons or legal entities disclosed under Section IV, "Disclosure of Subcontractors and Other Retained Parties");
- any "Affiliated Entity" (meaning a person or entity that, directly or indirectly: controls the Disclosing Party, is controlled by the Disclosing Party, or is, with the Disclosing Party, under common control of another person or entity). Indicia of control include, without limitation: interlocking management or ownership; identity of interests among family members, shared facilities and equipment; common use of employees; or organization of a business entity following the ineligibility of a business entity to do business with federal or state or local government, including the City, using substantially the same management, ownership, or principals as the ineligible entity. With respect to Contractors, the term Affiliated Entity means a person or entity that directly or indirectly controls the Contractor, is controlled by it, or, with the Contractor, is under common control of another person or entity;
- any responsible official of the Disclosing Party, any Contractor or any Affiliated Entity or any other official, agent or employee of the Disclosing Party, any Contractor or any Affiliated Entity, acting pursuant to the direction or authorization of a responsible official of the Disclosing Party, any Contractor or any Affiliated Entity (collectively "Agents").

- Neither the Disclosing Party, nor any Contractor, nor any Affiliated Entity of either the Disclosing Party or any Contractor, nor any Agents have, during the 5 years before the date of this EDS, or, with respect to a Contractor, an Affiliated Entity, or an Affiliated Entity of a Contractor during the 5 years before the date of such Contractor's or Affiliated Entity's contract or engagement in connection with the Matter:
- a. bribed or attempted to bribe, or been convicted or adjudged guilty of bribery or attempting to bribe, a public officer or employee of the City, the State of Illinois, or any agency of the federal government or of any state or local government in the United States of America, in that officer's or employee's official capacity;
 - b. agreed or colluded with other bidders or prospective bidders, or been a party to any such agreement, or been convicted or adjudged guilty of agreement or collusion among bidders or prospective bidders, in restraint of freedom of competition by agreement to bid a fixed price or otherwise; or
 - c. made an admission of such conduct described in subparagraph (a) or (b) above that is a matter of record, but have not been prosecuted for such conduct; or
 - d. violated the provisions referenced in MCC Subsection 2-92-320(a)(4)(Contracts Requiring a Base Wage); (a)(5)(Debarment Regulations); or (a)(6)(Minimum Wage Ordinance).
6. Neither the Disclosing Party, nor any Affiliated Entity or Contractor, or any of their employees, officials, agents or partners, is barred from contracting with any unit of state or local government as a result of engaging in or being convicted of (1) bid-rigging in violation of 720 ILCS 5/33E-3; (2) bid-rotating in violation of 720 ILCS 5/33E-4; or (3) any similar offense of any state or of the United States of America that contains the same elements as the offense of bid-rigging or bid-rotating.
7. Neither the Disclosing Party nor any Affiliated Entity is listed on a Sanctions List maintained by the United States Department of Commerce, State, or Treasury, or any successor federal agency.
8. [FOR APPLICANT ONLY] (i) Neither the Applicant nor any "controlling person" [see MCC Chapter 1-23, Article I for applicability and defined terms] of the Applicant is currently indicted or charged with, or has admitted guilt of, or has ever been convicted of, or placed under supervision for, any criminal offense involving actual, attempted, or conspiracy to commit bribery, theft, fraud, forgery, perjury, dishonesty or deceit against an officer or employee of the City or any "sister agency"; and (ii) the Applicant understands and acknowledges that compliance with Article I is a continuing requirement for doing business with the City. NOTE: If MCC Chapter 1-23, Article I applies to the Applicant, that Article's permanent compliance timeframe supersedes 5-year compliance timeframes in this Section V.
9. [FOR APPLICANT ONLY] The Applicant and its Affiliated Entities will not use, nor permit their subcontractors to use, any facility listed as having an active exclusion by the U.S. EPA on the federal System for Award Management ("SAM").
10. [FOR APPLICANT ONLY] The Applicant will obtain from any contractors/subcontractors hired or to be hired in connection with the Matter certifications equal in form and substance to those in Certifications (2) and (9) above and will not, without the prior written consent of the City, use any such

contractor/subcontractor that does not provide such certifications or that the Applicant has reason to believe has not provided or cannot provide truthful certifications.

11. If the Disclosing Party is unable to certify to any of the above statements in this Part B (Further Certifications), the Disclosing Party must explain below:
See Attachment B in support of above

If the letters "NA," the word "None," or no response appears on the lines above, it will be conclusively presumed that the Disclosing Party certified to the above statements.

12. To the best of the Disclosing Party's knowledge after reasonable inquiry, the following is a complete list of all current employees of the Disclosing Party who were, at any time during the 12-month period preceding the date of this EDS, an employee, or elected or appointed official, of the City of Chicago (if none, indicate with "N/A" or "none").
NONE

13. To the best of the Disclosing Party's knowledge after reasonable inquiry, the following is a complete list of all gifts that the Disclosing Party has given or caused to be given, at any time during the 12-month period preceding the execution date of this EDS, to an employee, or elected or appointed official, of the City of Chicago. For purposes of this statement, a "gift" does not include: (i) anything made generally available to City employees or to the general public, or (ii) food or drink provided in the course of official City business and having a retail value of less than \$25 per recipient, or (iii) a political contribution otherwise duly reported as required by law (if none, indicate with "N/A" or "none"). As to any gift listed below, please also list the name of the City recipient. **N/A**

C. CERTIFICATION OF STATUS AS FINANCIAL INSTITUTION

1. The Disclosing Party certifies that the Disclosing Party (check one)
[X] is [] is not

a "financial institution" as defined in MCC Section 2-32-455(b).

2. If the Disclosing Party IS a financial institution, then the Disclosing Party pledges:

"We are not and will not become a predatory lender as defined in MCC Chapter 2-32. We further pledge that none of our affiliates is, and none of them will become, a predatory lender as defined in MCC Chapter 2-32. We understand that becoming a predatory lender or becoming an affiliate of a predatory lender may result in the loss of the privilege of doing business with the City."

If the Disclosing Party is unable to make this pledge because it or any of its affiliates (as defined in MCC Section 2-32-455(b)) is a predatory lender within the meaning of MCC Chapter 2-32, explain here (attach additional pages if necessary):

If the letters "NA," the word "None," or no response appears on the lines above, it will be conclusively presumed that the Disclosing Party certified to the above statements.

D. CERTIFICATION REGARDING FINANCIAL INTEREST IN CITY BUSINESS

Any words or terms defined in MCC Chapter 2-156 have the same meanings if used in this Part D.

1. In accordance with MCC Section 2-156-110: To the best of the Disclosing Party's knowledge after reasonable inquiry, does any official or employee of the City have a financial interest in his or her own name or in the name of any other person or entity in the Matter?

☐ Yes

☒ No

NOTE: If you checked "Yes" to Item D(1), proceed to Items D(2) and D(3). If you checked "No" to Item D(1), skip Items D(2) and D(3) and proceed to Part E.

2. Unless sold pursuant to a process of competitive bidding, or otherwise permitted, no City elected official or employee shall have a financial interest in his or her own name or in the name of any other person or entity in the purchase of any property that (i) belongs to the City, or (ii) is sold for taxes or assessments, or (iii) is sold by virtue of legal process at the suit of the City (collectively, "City Property Sale"). Compensation for property taken pursuant to the City's eminent domain power does not constitute a financial interest within the meaning of this Part D.

Does the Matter involve a City Property Sale?

☐ Yes

☐ No

3. If you checked "Yes" to Item D(1), provide the names and business addresses of the City officials or employees having such financial interest and identify the nature of the financial interest:

Name	Business Address	Nature of Financial Interest

4. The Disclosing Party further certifies that no prohibited financial interest in the Matter will be acquired by any City official or employee.

E. CERTIFICATION REGARDING SLAVERY ERA BUSINESS

Please check either (1) or (2) below. If the Disclosing Party checks (2), the Disclosing Party must disclose below or in an attachment to this EDS all information required by (2). Failure to comply with these disclosure requirements may make any contract entered into with the City in connection with the Matter voidable by the City.

X 1. The Disclosing Party verifies that the Disclosing Party has searched any and all records of the Disclosing Party and any and all predecessor entities regarding records of investments or profits from slavery or slaveholder insurance policies during the slavery era (including insurance policies issued to slaveholders that provided coverage for damage to or injury or death of their slaves), and the Disclosing Party has found no such records.

2. The Disclosing Party verifies that, as a result of conducting the search in step (1) above, the Disclosing Party has found records of investments or profits from slavery or slaveholder insurance policies. The Disclosing Party verifies that the following constitutes full disclosure of all such records, including the names of any and all slaves or slaveholders described in those records:

SECTION VI -- CERTIFICATIONS FOR FEDERALLY FUNDED MATTERS

NOTE: If the Matter is federally funded, complete this Section VI. If the Matter is not federally funded, proceed to Section VII. For purposes of this Section VI, tax credits allocated by the City and proceeds of debt obligations of the City are not federal funding.

A. CERTIFICATION REGARDING LOBBYING

1. List below the names of all persons or entities registered under the federal Lobbying Disclosure Act of 1995, as amended, who have made lobbying contacts on behalf of the Disclosing Party with respect to the Matter: (Add sheets if necessary):

(If no explanation appears or begins on the lines above, or if the letters "NA" or if the word "None" appear, it will be conclusively presumed that the Disclosing Party means that NO persons or entities registered under the Lobbying Disclosure Act of 1995, as amended, have made lobbying contacts on behalf of the Disclosing Party with respect to the Matter.)

2. The Disclosing Party has not spent and will not expend any federally appropriated funds to pay any person or entity listed in paragraph A(1) above for his or her lobbying activities or to pay any person or entity to influence or attempt to influence an officer or employee of any agency, as defined by applicable federal law, a member of Congress, an officer or employee of Congress, or an employee

of a member of Congress, in connection with the award of any federally funded contract, making any federally funded grant or loan, entering into any cooperative agreement, or to extend, continue, renew, amend, or modify any federally funded contract, grant, loan, or cooperative agreement.

3. The Disclosing Party will submit an updated certification at the end of each calendar quarter in which there occurs any event that materially affects the accuracy of the statements and information set forth in paragraphs A(1) and A(2) above.

4. The Disclosing Party certifies that either: (i) it is not an organization described in section 501(c)(4) of the Internal Revenue Code of 1986; or (ii) it is an organization described in section 501(c)(4) of the Internal Revenue Code of 1986 but has not engaged and will not engage in "Lobbying Activities," as that term is defined in the Lobbying Disclosure Act of 1995, as amended.

5. If the Disclosing Party is the Applicant, the Disclosing Party must obtain certifications equal in form and substance to paragraphs A(1) through A(4) above from all subcontractors before it awards any subcontract and the Disclosing Party must maintain all such subcontractors' certifications for the duration of the Matter and must make such certifications promptly available to the City upon request.

B. CERTIFICATION REGARDING EQUAL EMPLOYMENT OPPORTUNITY

If the Matter is federally funded, federal regulations require the Applicant and all proposed subcontractors to submit the following information with their bids or in writing at the outset of negotiations.

Is the Disclosing Party the Applicant?

☐ Yes

☒ No

If "Yes," answer the three questions below:

1. Have you developed and do you have on file affirmative action programs pursuant to applicable federal regulations? (See 41 CFR Part 60-2.)

☐ Yes

☐ No

2. Have you filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance Programs, or the Equal Employment Opportunity Commission all reports due under the applicable filing requirements?

☐ Yes

☐ No

☐ Reports not required

3. Have you participated in any previous contracts or subcontracts subject to the equal opportunity clause?

☐ Yes

☐ No

If you checked "No" to question (1) or (2) above, please provide an explanation:

Citibank, N.A. (the applicant) is a wholly-owned subsidiary of Citicorp LLC.

SECTION VII -- FURTHER ACKNOWLEDGMENTS AND CERTIFICATION

The Disclosing Party understands and agrees that:

A. The certifications, disclosures, and acknowledgments contained in this EDS will become part of any contract or other agreement between the Applicant and the City in connection with the Matter, whether procurement, City assistance, or other City action, and are material inducements to the City's execution of any contract or taking other action with respect to the Matter. The Disclosing Party understands that it must comply with all statutes, ordinances, and regulations on which this EDS is based.

B. The City's Governmental Ethics Ordinance, MCC Chapter 2-156, imposes certain duties and obligations on persons or entities seeking City contracts, work, business, or transactions. The full text of this ordinance and a training program is available on line at www.cityofchicago.org/Ethics, and may also be obtained from the City's Board of Ethics, 740 N. Sedgwick St., Suite 500, Chicago, IL 60610, (312) 744-9660. The Disclosing Party must comply fully with this ordinance.

C. If the City determines that any information provided in this EDS is false, incomplete or inaccurate, any contract or other agreement in connection with which it is submitted may be rescinded or be void or voidable, and the City may pursue any remedies under the contract or agreement (if not rescinded or void), at law, or in equity, including terminating the Disclosing Party's participation in the Matter and/or declining to allow the Disclosing Party to participate in other City transactions. Remedies at law for a false statement of material fact may include incarceration and an award to the City of treble damages.

D. It is the City's policy to make this document available to the public on its Internet site and/or upon request. Some or all of the information provided in, and appended to, this EDS may be made publicly available on the Internet, in response to a Freedom of Information Act request, or otherwise. By completing and signing this EDS, the Disclosing Party waives and releases any possible rights or claims which it may have against the City in connection with the public release of information contained in this EDS and also authorizes the City to verify the accuracy of any information submitted in this EDS.

E. The information provided in this EDS must be kept current. In the event of changes, the Disclosing Party must supplement this EDS up to the time the City takes action on the Matter. If the Matter is a contract being handled by the City's Department of Procurement Services, the Disclosing Party must update this EDS as the contract requires. **NOTE:** With respect to Matters subject to MCC Chapter 1-23, Article I (imposing **PERMANENT INELIGIBILITY** for certain specified offenses), the information provided herein regarding eligibility must be kept current for a longer period, as required by MCC Chapter 1-23 and Section 2-154-020.

CERTIFICATION

Under penalty of perjury, the person signing below: (1) warrants that he/she is authorized to execute this EDS, and all applicable Appendices, on behalf of the Disclosing Party, and (2) warrants that all certifications and statements contained in this EDS, and all applicable Appendices, are true, accurate and complete as of the date furnished to the City.

Citicorp LLC

(Print or type exact legal name of Disclosing Party)

By: _____

(Sign here)

Eugene Kwon

(Print or type name of person signing)

Assistant Secretary

(Print or type title of person signing)

Signed and sworn to before me on (date), 11/12/2019
at New York County, New York (state).

Samantha L. Chandez Notary Public.

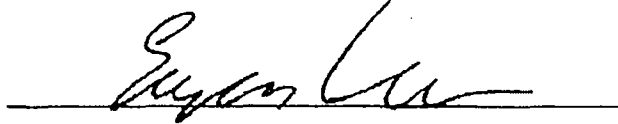
Commission expires: 10/11/2021

SAMANTHA L. CHANDEZ
Notary Public, State of New York
No. 01CH8348888
Qualified in Richmond County
My Commission Expires on 10/11/2021

ASSISTANT SECRETARY

CERTIFICATE

I, Joseph B. Wollard Assistant Secretary of Citicorp LLC ("Citicorp"), a Delaware limited liability company, DO HEREBY CERTIFY that Eugene Kwon is a duly appointed and qualified Assistant Secretary of Citicorp, and the following is his specimen signature as it appears in our records:

A handwritten signature in black ink, appearing to read "Eugene Kwon", written over a horizontal line.

IN WITNESS WHEREOF, I have affixed my official signature in the City of New York on this 12th day of November, 2019.

A handwritten signature in black ink, appearing to read "J.B. Wollard", written over a horizontal line.
Joseph B. Wollard

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
APPENDIX A**

**FAMILIAL RELATIONSHIPS WITH ELECTED CITY OFFICIALS
AND DEPARTMENT HEADS**

This Appendix is to be completed only by (a) the Applicant, and (b) any legal entity which has a direct ownership interest in the Applicant exceeding 7.5%. It is not to be completed by any legal entity which has only an indirect ownership interest in the Applicant.

Under MCC Section 2-154-015, the Disclosing Party must disclose whether such Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof currently has a "familial relationship" with any elected city official or department head. A "familial relationship" exists if, as of the date this EDS is signed, the Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof is related to the mayor, any alderman, the city clerk, the city treasurer or any city department head as spouse or domestic partner or as any of the following, whether by blood or adoption: parent, child, brother or sister, aunt or uncle, niece or nephew, grandparent, grandchild, father-in-law, mother-in-law, son-in-law, daughter-in-law, stepfather or stepmother, stepson or stepdaughter, stepbrother or stepsister or half-brother or half-sister.

"Applicable Party" means (1) all executive officers of the Disclosing Party listed in Section II.B.1.a., if the Disclosing Party is a corporation; all partners of the Disclosing Party, if the Disclosing Party is a general partnership; all general partners and limited partners of the Disclosing Party, if the Disclosing Party is a limited partnership; all managers, managing members and members of the Disclosing Party, if the Disclosing Party is a limited liability company; (2) all principal officers of the Disclosing Party; and (3) any person having more than a 7.5% ownership interest in the Disclosing Party. "Principal officers" means the president, chief operating officer, executive director, chief financial officer, treasurer or secretary of a legal entity or any person exercising similar authority.

Does the Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof currently have a "familial relationship" with an elected city official or department head?

☐ Yes

☒ No

If yes, please identify below (1) the name and title of such person, (2) the name of the legal entity to which such person is connected; (3) the name and title of the elected city official or department head to whom such person has a familial relationship, and (4) the precise nature of such familial relationship.

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
APPENDIX B**

BUILDING CODE SCOFFLAW/PROBLEM LANDLORD CERTIFICATION

This Appendix is to be completed only by (a) the Applicant, and (b) any legal entity which has a direct ownership interest in the Applicant exceeding 7.5% (an "Owner"). It is not to be completed by any legal entity which has only an indirect ownership interest in the Applicant.

1. Pursuant to MCC Section 2-154-010, is the Applicant or any Owner identified as a building code scofflaw or problem landlord pursuant to MCC Section 2-92-416?

☐ Yes

☒ No

2. If the Applicant is a legal entity publicly traded on any exchange, is any officer or director of the Applicant identified as a building code scofflaw or problem landlord pursuant to MCC Section 2-92-416?

☐ Yes

☐ No

☒ The Applicant is not publicly traded on any exchange.

3. If yes to (1) or (2) above, please identify below the name of each person or legal entity identified as a building code scofflaw or problem landlord and the address of each building or buildings to which the pertinent code violations apply.

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
APPENDIX C**

PROHIBITION ON WAGE & SALARY HISTORY SCREENING - CERTIFICATION

This Appendix is to be completed only by an Applicant that is completing this EDS as a “contractor” as defined in MCC Section 2-92-385. That section, which should be consulted (www.amlegal.com), generally covers a party to any agreement pursuant to which they: (i) receive City of Chicago funds in consideration for services, work or goods provided (including for legal or other professional services), or (ii) pay the City money for a license, grant or concession allowing them to conduct a business on City premises.

On behalf of an Applicant that is a contractor pursuant to MCC Section 2-92-385, I hereby certify that the Applicant is in compliance with MCC Section 2-92-385(b)(1) and (2), which prohibit: (i) screening job applicants based on their wage or salary history, or (ii) seeking job applicants’ wage or salary history from current or former employers. I also certify that the Applicant has adopted a policy that includes those prohibitions.

☒ Yes

☐ No

☐ N/A – I am not an Applicant that is a “contractor” as defined in MCC Section 2-92-385.

This certification shall serve as the affidavit required by MCC Section 2-92-385(c)(1).

If you checked “no” to the above, please explain.

ATTACHMENT A:
CITICORP LLC
DIRECTORS & PRINCIPAL OFFICERS
AS OF NOVEMBER 8, 2019

DIRECTORS

Michael L. Corbat
Grace E. Dailey
Ellen M. Costello
Barbara Desoer
John C. Dugan, Chair of the Board
Duncan P. Hennes
Peter B. Henry
S. Leslie Ireland
Lew Wallace (Jay) Jacobs, IV
Renee J. James
Eugene M. McQuade
Gary M. Reiner
Diana L. Taylor
James S. Turley
Deborah C. Wright
Alexander R. Wynaendts
Ernesto Zedillo Ponce de Leon

PRINCIPAL OFFICERS*

Michael L. Corbat	Chief Executive Officer
Mark Mason	Chief Financial Officer
Rohan Weerasinghe	General Counsel & Secretary
Michael Verdeschi	Treasurer

*As defined in Appendix A of the City of Chicago Economic Disclosure Statement and Affidavit.

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT
AND AFFIDAVIT**

ATTACHMENTS FOR CITIGROUP INC.

ATTACHMENT B	FURTHER CERTIFICATION
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In the ordinary course of business, Citigroup Inc. ("Citigroup") and its subsidiaries and affiliates are defendants or co-defendants in various litigation matters incidental to and typical of the broad range of businesses in which they are engaged. For example, typical actions in broker-dealer subsidiaries are civil suits, arbitration proceedings, and other matters related to activities occurring in the normal course of business as a broker and dealer in securities, as an underwriter of securities, as an investment banker or otherwise. From time to time Citigroup, and certain affiliated entities, are the subjects of inquiries and investigations conducted by federal or state regulatory agencies. Citigroup and its affiliated entities routinely cooperate with such investigations.

On May 20, 2015, Citigroup Inc. announced settlements with the U.S. Department of Justice (DOJ) and the Board of Governors of the Federal Reserve System (FRB) to resolve the previously disclosed investigations into Citi's foreign exchange business. Under the terms of the settlement with the DOJ, Citicorp, a financial services holding company subsidiary of Citigroup, will plead guilty to a violation of the Sherman Antitrust Act, pay a fine of \$925 million and be subject to a three-year probation period, the conditions of which include the continued implementation, remediation and strengthening of Citi's compliance and internal controls. Under the terms of the settlement with the FRB, Citi will pay a civil money penalty of \$342 million and agree to further enhance the control framework governing its foreign exchange business. The payments due under the settlements are covered by Citi's existing legal reserves and will not require a charge to earnings in the second quarter of 2015.

Citigroup is a public company, and as such files periodic and current reports with the U.S. Securities and Exchange Commission as required by the Securities Exchange Act of 1934 that include current descriptions of material regulatory proceedings, investigations and litigation. Copies of Citigroup's periodic reports are on file with the SEC, which can be located at the SEC's website (www.sec.gov).

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT
AND AFFIDAVIT**

SECTION I -- GENERAL INFORMATION

A. Legal name of the Disclosing Party submitting this EDS. Include d/b/a/ if applicable:

Citigroup Inc.

Check ONE of the following three boxes:

Indicate whether the Disclosing Party submitting this EDS is:

1. ☐ the Applicant
OR

2. ☒ a legal entity currently holding, or anticipated to hold within six months after City action on the contract, transaction or other undertaking to which this EDS pertains (referred to below as the "Matter"), a direct or indirect interest in excess of 7.5% in the Applicant. State the Applicant's legal name: Citibank, NA
OR

3. ☐ a legal entity with a direct or indirect right of control of the Applicant (see Section II(B)(1))
State the legal name of the entity in which the Disclosing Party holds a right of control:

B. Business address of the Disclosing Party: 388 Greenwich St., New York, NY 10013

C. Telephone: (703) 234-7313 Fax: N/A Email: andy1.taylor@citi.com

D. Name of contact person: Andy Taylor

E. Federal Employer Identification No. (if you have one):

F. Brief description of the Matter to which this EDS pertains. (Include project number and location of property, if applicable): 2020 Municipal Depository RFP

G. Which City agency or department is requesting this EDS? Department of Finance

If the Matter is a contract being handled by the City's Department of Procurement Services, please complete the following:

Specification # _____ and Contract # _____

SECTION II -- DISCLOSURE OF OWNERSHIP INTERESTS

A. NATURE OF THE DISCLOSING PARTY

1. Indicate the nature of the Disclosing Party:

- | | |
|--|--|
| <input type="checkbox"/> Person | <input type="checkbox"/> Limited liability company |
| <input checked="" type="checkbox"/> Publicly registered business corporation | <input type="checkbox"/> Limited liability partnership |
| <input type="checkbox"/> Privately held business corporation | <input type="checkbox"/> Joint venture |
| <input type="checkbox"/> Sole proprietorship | <input type="checkbox"/> Not-for-profit corporation |
| <input type="checkbox"/> General partnership | (Is the not-for-profit corporation also a 501(c)(3))? |
| <input type="checkbox"/> Limited partnership | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| <input type="checkbox"/> Trust | <input type="checkbox"/> Other (please specify) |
-

2. For legal entities, the state (or foreign country) of incorporation or organization, if applicable:
Delaware

3. For legal entities not organized in the State of Illinois: Has the organization registered to do business in the State of Illinois as a foreign entity?

☐ Yes ☒ No ☐ Organized in Illinois

B. IF THE DISCLOSING PARTY IS A LEGAL ENTITY:

1. List below the full names and titles, if applicable, of: (i) all executive officers and all directors of the entity; (ii) **for not-for-profit corporations**, all members, if any, which are legal entities (if there are no such members, write "no members which are legal entities"); (iii) **for trusts, estates or other similar entities**, the trustee, executor, administrator, or similarly situated party; (iv) **for general or limited partnerships, limited liability companies, limited liability partnerships or joint ventures**, each general partner, managing member, manager or any other person or legal entity that directly or indirectly controls the day-to-day management of the Applicant.

NOTE: Each legal entity listed below must submit an EDS on its own behalf.

Name

Title

See **Attachment A** for a list of Citigroup Inc. officers and directors

2. Please provide the following information concerning each person or legal entity having a direct or indirect, current or prospective (i.e. within 6 months after City action) beneficial interest (including ownership) in excess of 7.5% of the Applicant. Examples of such an interest include shares in a corporation, partnership interest in a partnership or joint venture, interest of a member or manager in a

limited liability company, or interest of a beneficiary of a trust, estate or other similar entity. If none, state "None."

NOTE: Each legal entity listed below may be required to submit an EDS on its own behalf.

Name	Business Address	Percentage Interest in the Applicant
NONE		

SECTION III -- INCOME OR COMPENSATION TO, OR OWNERSHIP BY, CITY ELECTED OFFICIALS

Has the Disclosing Party provided any income or compensation to any City elected official during the 12-month period preceding the date of this EDS? ☐ Yes ☒ No

Does the Disclosing Party reasonably expect to provide any income or compensation to any City elected official during the 12-month period following the date of this EDS? ☐ Yes ☒ No

If "yes" to either of the above, please identify below the name(s) of such City elected official(s) and describe such income or compensation:

Does any City elected official or, to the best of the Disclosing Party's knowledge after reasonable inquiry, any City elected official's spouse or domestic partner, have a financial interest (as defined in Chapter 2-156 of the Municipal Code of Chicago ("MCC")) in the Disclosing Party? ☐ Yes ☒ No

If "yes," please identify below the name(s) of such City elected official(s) and/or spouse(s)/domestic partner(s) and describe the financial interest(s).

SECTION IV -- DISCLOSURE OF SUBCONTRACTORS AND OTHER RETAINED PARTIES

The Disclosing Party must disclose the name and business address of each subcontractor, attorney, lobbyist (as defined in MCC Chapter 2-156), accountant, consultant and any other person or entity whom the Disclosing Party has retained or expects to retain in connection with the Matter, as well as the nature of the relationship, and the total amount of the fees paid or estimated to be paid. The Disclosing Party is not required to disclose employees who are paid solely through the Disclosing Party's regular payroll. If the Disclosing Party is uncertain whether a disclosure is required under this Section, the Disclosing Party must either ask the City whether disclosure is required or make the disclosure.

Name (indicate whether Business Relationship to Disclosing Party Fees (indicate whether retained or anticipated to be retained)	Address (subcontractor, attorney, lobbyist, etc.)	paid or estimated.) NOTE: "hourly rate" or "t.b.d." is not an acceptable response.
--	---	--

(Add sheets if necessary)

☒ Check here if the Disclosing Party has not retained, nor expects to retain, any such persons or entities.

SECTION V -- CERTIFICATIONS

A. COURT-ORDERED CHILD SUPPORT COMPLIANCE

Under MCC Section 2-92-415, substantial owners of business entities that contract with the City must remain in compliance with their child support obligations throughout the contract's term.

Has any person who directly or indirectly owns 10% or more of the Disclosing Party been declared in arrearage on any child support obligations by any Illinois court of competent jurisdiction?

☐ Yes ☐ No ☒ No person directly or indirectly owns 10% or more of the Disclosing Party.

If "Yes," has the person entered into a court-approved agreement for payment of all support owed and is the person in compliance with that agreement?

☐ Yes ☐ No

B. FURTHER CERTIFICATIONS

1. [This paragraph 1 applies only if the Matter is a contract being handled by the City's Department of Procurement Services.] In the 5-year period preceding the date of this EDS, neither the Disclosing Party nor any Affiliated Entity [see definition in (5) below] has engaged, in connection with the performance of any public contract, the services of an integrity monitor, independent private sector inspector general, or integrity compliance consultant (i.e., an individual or entity with legal, auditing, investigative, or other similar skills, designated by a public agency to help the agency monitor the activity of specified agency vendors as well as help the vendors reform their business practices so they can be considered for agency contracts in the future, or continue with a contract in progress).

2. The Disclosing Party and its Affiliated Entities are not delinquent in the payment of any fine, fee, tax or other source of indebtedness owed to the City of Chicago, including, but not limited to, water and sewer charges, license fees, parking tickets, property taxes and sales taxes, nor is the Disclosing Party delinquent in the payment of any tax administered by the Illinois Department of Revenue.

3. The Disclosing Party and, if the Disclosing Party is a legal entity, all of those persons or entities identified in Section II(B)(1) of this EDS:

- a. are not presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from any transactions by any federal, state or local unit of government;
- b. have not, during the 5 years before the date of this EDS, been convicted of a criminal offense, adjudged guilty, or had a civil judgment rendered against them in connection with: obtaining, attempting to obtain, or performing a public (federal, state or local) transaction or contract under a public transaction; a violation of federal or state antitrust statutes; fraud; embezzlement; theft; forgery; bribery; falsification or destruction of records; making false statements; or receiving stolen property;
- c. are not presently indicted for, or criminally or civilly charged by, a governmental entity (federal, state or local) with committing any of the offenses set forth in subparagraph (b) above;
- d. have not, during the 5 years before the date of this EDS, had one or more public transactions (federal, state or local) terminated for cause or default; and
- e. have not, during the 5 years before the date of this EDS, been convicted, adjudged guilty, or found liable in a civil proceeding, or in any criminal or civil action, including actions concerning environmental violations, instituted by the City or by the federal government, any state, or any other unit of local government.

4. The Disclosing Party understands and shall comply with the applicable requirements of MCC Chapters 2-56 (Inspector General) and 2-156 (Governmental Ethics).

5. Certifications (5), (6) and (7) concern:

- the Disclosing Party;
- any "Contractor" (meaning any contractor or subcontractor used by the Disclosing Party in connection with the Matter, including but not limited to all persons or legal entities disclosed under Section IV, "Disclosure of Subcontractors and Other Retained Parties");
- any "Affiliated Entity" (meaning a person or entity that, directly or indirectly: controls the Disclosing Party, is controlled by the Disclosing Party, or is, with the Disclosing Party, under common control of another person or entity). Indicia of control include, without limitation: interlocking management or ownership; identity of interests among family members, shared facilities and equipment; common use of employees; or organization of a business entity following the ineligibility of a business entity to do business with federal or state or local government, including the City, using substantially the same management, ownership, or principals as the ineligible entity. With respect to Contractors, the term Affiliated Entity means a person or entity that directly or indirectly controls the Contractor, is controlled by it, or, with the Contractor, is under common control of another person or entity;
- any responsible official of the Disclosing Party, any Contractor or any Affiliated Entity or any other official, agent or employee of the Disclosing Party, any Contractor or any Affiliated Entity, acting pursuant to the direction or authorization of a responsible official of the Disclosing Party, any Contractor or any Affiliated Entity (collectively "Agents").

Neither the Disclosing Party, nor any Contractor, nor any Affiliated Entity of either the Disclosing Party or any Contractor, nor any Agents have, during the 5 years before the date of this EDS, or, with respect to a Contractor, an Affiliated Entity, or an Affiliated Entity of a Contractor during the 5 years before the date of such Contractor's or Affiliated Entity's contract or engagement in connection with the Matter:

a. bribed or attempted to bribe, or been convicted or adjudged guilty of bribery or attempting to bribe, a public officer or employee of the City, the State of Illinois, or any agency of the federal government or of any state or local government in the United States of America, in that officer's or employee's official capacity;

b. agreed or colluded with other bidders or prospective bidders, or been a party to any such agreement, or been convicted or adjudged guilty of agreement or collusion among bidders or prospective bidders, in restraint of freedom of competition by agreement to bid a fixed price or otherwise; or

c. made an admission of such conduct described in subparagraph (a) or (b) above that is a matter of record, but have not been prosecuted for such conduct; or

d. violated the provisions referenced in MCC Subsection 2-92-320(a)(4)(Contracts Requiring a Base Wage); (a)(5)(Debarment Regulations); or (a)(6)(Minimum Wage Ordinance).

6. Neither the Disclosing Party, nor any Affiliated Entity or Contractor, or any of their employees, officials, agents or partners, is barred from contracting with any unit of state or local government as a result of engaging in or being convicted of (1) bid-rigging in violation of 720 ILCS 5/33E-3; (2) bid-rotating in violation of 720 ILCS 5/33E-4; or (3) any similar offense of any state or of the United States of America that contains the same elements as the offense of bid-rigging or bid-rotating.

7. Neither the Disclosing Party nor any Affiliated Entity is listed on a Sanctions List maintained by the United States Department of Commerce, State, or Treasury, or any successor federal agency.

8. [FOR APPLICANT ONLY] (i) Neither the Applicant nor any "controlling person" [see MCC Chapter 1-23, Article I for applicability and defined terms] of the Applicant is currently indicted or charged with, or has admitted guilt of, or has ever been convicted of, or placed under supervision for, any criminal offense involving actual, attempted, or conspiracy to commit bribery, theft, fraud, forgery, perjury, dishonesty or deceit against an officer or employee of the City or any "sister agency"; and (ii) the Applicant understands and acknowledges that compliance with Article I is a continuing requirement for doing business with the City. NOTE: If MCC Chapter 1-23, Article I applies to the Applicant, that Article's permanent compliance timeframe supersedes 5-year compliance timeframes in this Section V.

9. [FOR APPLICANT ONLY] The Applicant and its Affiliated Entities will not use, nor permit their subcontractors to use, any facility listed as having an active exclusion by the U.S. EPA on the federal System for Award Management ("SAM").

10. [FOR APPLICANT ONLY] The Applicant will obtain from any contractors/subcontractors hired or to be hired in connection with the Matter certifications equal in form and substance to those in Certifications (2) and (9) above and will not, without the prior written consent of the City, use any such

contractor/subcontractor that does not provide such certifications or that the Applicant has reason to believe has not provided or cannot provide truthful certifications.

11. If the Disclosing Party is unable to certify to any of the above statements in this Part B (Further Certifications), the Disclosing Party must explain below:
See Attachment B in support of above

If the letters "NA," the word "None," or no response appears on the lines above, it will be conclusively presumed that the Disclosing Party certified to the above statements.

12. To the best of the Disclosing Party's knowledge after reasonable inquiry, the following is a complete list of all current employees of the Disclosing Party who were, at any time during the 12-month period preceding the date of this EDS, an employee, or elected or appointed official, of the City of Chicago (if none, indicate with "N/A" or "none").

NONE

13. To the best of the Disclosing Party's knowledge after reasonable inquiry, the following is a complete list of all gifts that the Disclosing Party has given or caused to be given, at any time during the 12-month period preceding the execution date of this EDS, to an employee, or elected or appointed official, of the City of Chicago. For purposes of this statement, a "gift" does not include: (i) anything made generally available to City employees or to the general public, or (ii) food or drink provided in the course of official City business and having a retail value of less than \$25 per recipient, or (iii) a political contribution otherwise duly reported as required by law (if none, indicate with "N/A" or "none"). As to any gift listed below, please also list the name of the City recipient. N/A

C. CERTIFICATION OF STATUS AS FINANCIAL INSTITUTION

1. The Disclosing Party certifies that the Disclosing Party (check one)
[X] is [] is not

a "financial institution" as defined in MCC Section 2-32-455(b).

2. If the Disclosing Party IS a financial institution, then the Disclosing Party pledges:

"We are not and will not become a predatory lender as defined in MCC Chapter 2-32. We further pledge that none of our affiliates is, and none of them will become, a predatory lender as defined in MCC Chapter 2-32. We understand that becoming a predatory lender or becoming an affiliate of a predatory lender may result in the loss of the privilege of doing business with the City."

If the Disclosing Party is unable to make this pledge because it or any of its affiliates (as defined in MCC Section 2-32-455(b)) is a predatory lender within the meaning of MCC Chapter 2-32, explain here (attach additional pages if necessary):

If the letters "NA," the word "None," or no response appears on the lines above, it will be conclusively presumed that the Disclosing Party certified to the above statements.

D. CERTIFICATION REGARDING FINANCIAL INTEREST IN CITY BUSINESS

Any words or terms defined in MCC Chapter 2-156 have the same meanings if used in this Part D.

1. In accordance with MCC Section 2-156-110: To the best of the Disclosing Party's knowledge after reasonable inquiry, does any official or employee of the City have a financial interest in his or her own name or in the name of any other person or entity in the Matter?

☐ Yes

☒ No

NOTE: If you checked "Yes" to Item D(1), proceed to Items D(2) and D(3). If you checked "No" to Item D(1), skip Items D(2) and D(3) and proceed to Part E.

2. Unless sold pursuant to a process of competitive bidding, or otherwise permitted, no City elected official or employee shall have a financial interest in his or her own name or in the name of any other person or entity in the purchase of any property that (i) belongs to the City, or (ii) is sold for taxes or assessments, or (iii) is sold by virtue of legal process at the suit of the City (collectively, "City Property Sale"). Compensation for property taken pursuant to the City's eminent domain power does not constitute a financial interest within the meaning of this Part D.

Does the Matter involve a City Property Sale?

☐ Yes

☐ No

3. If you checked "Yes" to Item D(1), provide the names and business addresses of the City officials or employees having such financial interest and identify the nature of the financial interest:

Name

Business Address

Nature of Financial Interest

4. The Disclosing Party further certifies that no prohibited financial interest in the Matter will be acquired by any City official or employee.

E. CERTIFICATION REGARDING SLAVERY ERA BUSINESS

Please check either (1) or (2) below. If the Disclosing Party checks (2), the Disclosing Party must disclose below or in an attachment to this EDS all information required by (2). Failure to comply with these disclosure requirements may make any contract entered into with the City in connection with the Matter voidable by the City.

X 1. The Disclosing Party verifies that the Disclosing Party has searched any and all records of the Disclosing Party and any and all predecessor entities regarding records of investments or profits from slavery or slaveholder insurance policies during the slavery era (including insurance policies issued to slaveholders that provided coverage for damage to or injury or death of their slaves), and the Disclosing Party has found no such records.

2. The Disclosing Party verifies that, as a result of conducting the search in step (1) above, the Disclosing Party has found records of investments or profits from slavery or slaveholder insurance policies. The Disclosing Party verifies that the following constitutes full disclosure of all such records, including the names of any and all slaves or slaveholders described in those records:

SECTION VI -- CERTIFICATIONS FOR FEDERALLY FUNDED MATTERS

NOTE: If the Matter is federally funded, complete this Section VI. **If the Matter is not federally funded**, proceed to Section VII. For purposes of this Section VI, tax credits allocated by the City and proceeds of debt obligations of the City are not federal funding.

A. CERTIFICATION REGARDING LOBBYING

1. List below the names of all persons or entities registered under the federal Lobbying Disclosure Act of 1995, as amended, who have made lobbying contacts on behalf of the Disclosing Party with respect to the Matter: (Add sheets if necessary): **Not applicable**

(If no explanation appears or begins on the lines above, or if the letters "NA" or if the word "None" appear, it will be conclusively presumed that the Disclosing Party means that NO persons or entities registered under the Lobbying Disclosure Act of 1995, as amended, have made lobbying contacts on behalf of the Disclosing Party with respect to the Matter.)

2. The Disclosing Party has not spent and will not expend any federally appropriated funds to pay any person or entity listed in paragraph A(1) above for his or her lobbying activities or to pay any person or entity to influence or attempt to influence an officer or employee of any agency, as defined by applicable federal law, a member of Congress, an officer or employee of Congress, or an employee

of a member of Congress, in connection with the award of any federally funded contract, making any federally funded grant or loan, entering into any cooperative agreement, or to extend, continue, renew, amend, or modify any federally funded contract, grant, loan, or cooperative agreement.

3. The Disclosing Party will submit an updated certification at the end of each calendar quarter in which there occurs any event that materially affects the accuracy of the statements and information set forth in paragraphs A(1) and A(2) above.

4. The Disclosing Party certifies that either: (i) it is not an organization described in section 501(c)(4) of the Internal Revenue Code of 1986; or (ii) it is an organization described in section 501(c)(4) of the Internal Revenue Code of 1986 but has not engaged and will not engage in "Lobbying Activities," as that term is defined in the Lobbying Disclosure Act of 1995, as amended.

5. If the Disclosing Party is the Applicant, the Disclosing Party must obtain certifications equal in form and substance to paragraphs A(1) through A(4) above from all subcontractors before it awards any subcontract and the Disclosing Party must maintain all such subcontractors' certifications for the duration of the Matter and must make such certifications promptly available to the City upon request.

B. CERTIFICATION REGARDING EQUAL EMPLOYMENT OPPORTUNITY

If the Matter is federally funded, federal regulations require the Applicant and all proposed subcontractors to submit the following information with their bids or in writing at the outset of negotiations.

Is the Disclosing Party the Applicant?

☐ Yes

☒ No

If "Yes," answer the three questions below:

1. Have you developed and do you have on file affirmative action programs pursuant to applicable federal regulations? (See 41 CFR Part 60-2.)

☐ Yes

☐ No

2. Have you filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance Programs, or the Equal Employment Opportunity Commission all reports due under the applicable filing requirements?

☐ Yes

☐ No

☐ Reports not required

3. Have you participated in any previous contracts or subcontracts subject to the equal opportunity clause?

☐ Yes

☐ No

If you checked "No" to question (1) or (2) above, please provide an explanation:

Citibank, N.A. (the applicant) is an indirectly wholly-owned subsidiary of Citigroup, Inc.

SECTION VII -- FURTHER ACKNOWLEDGMENTS AND CERTIFICATION

The Disclosing Party understands and agrees that:

- A. The certifications, disclosures, and acknowledgments contained in this EDS will become part of any contract or other agreement between the Applicant and the City in connection with the Matter, whether procurement, City assistance, or other City action, and are material inducements to the City's execution of any contract or taking other action with respect to the Matter. The Disclosing Party understands that it must comply with all statutes, ordinances, and regulations on which this EDS is based.
- B. The City's Governmental Ethics Ordinance, MCC Chapter 2-156, imposes certain duties and obligations on persons or entities seeking City contracts, work, business, or transactions. The full text of this ordinance and a training program is available on line at www.cityofchicago.org/Ethics, and may also be obtained from the City's Board of Ethics, 740 N. Sedgwick St., Suite 500, Chicago, IL 60610, (312) 744-9660. The Disclosing Party must comply fully with this ordinance.
- C. If the City determines that any information provided in this EDS is false, incomplete or inaccurate, any contract or other agreement in connection with which it is submitted may be rescinded or be void or voidable, and the City may pursue any remedies under the contract or agreement (if not rescinded or void), at law, or in equity, including terminating the Disclosing Party's participation in the Matter and/or declining to allow the Disclosing Party to participate in other City transactions. Remedies at law for a false statement of material fact may include incarceration and an award to the City of treble damages.
- D. It is the City's policy to make this document available to the public on its Internet site and/or upon request. Some or all of the information provided in, and appended to, this EDS may be made publicly available on the Internet, in response to a Freedom of Information Act request, or otherwise. By completing and signing this EDS, the Disclosing Party waives and releases any possible rights or claims which it may have against the City in connection with the public release of information contained in this EDS and also authorizes the City to verify the accuracy of any information submitted in this EDS.
- E. The information provided in this EDS must be kept current. In the event of changes, the Disclosing Party must supplement this EDS up to the time the City takes action on the Matter. If the Matter is a contract being handled by the City's Department of Procurement Services, the Disclosing Party must update this EDS as the contract requires. **NOTE:** With respect to Matters subject to MCC Chapter 1-23, Article I (imposing **PERMANENT INELIGIBILITY** for certain specified offenses), the information provided herein regarding eligibility must be kept current for a longer period, as required by MCC Chapter 1-23 and Section 2-154-020.

CERTIFICATION

Under penalty of perjury, the person signing below: (1) warrants that he/she is authorized to execute this EDS, and all applicable Appendices, on behalf of the Disclosing Party, and (2) warrants that all certifications and statements contained in this EDS, and all applicable Appendices, are true, accurate and complete as of the date furnished to the City.

Citigroup Inc.

(Print or type exact legal name of Disclosing Party)

By: _____

(Sign here)

Eugene Kwon

(Print or type name of person signing)

Assistant Secretary

(Print or type ~~title~~ of person signing)

Signed and sworn to before me on (date), 11/12/2019
at New York County, New York (state).

Samantha L. Chavez Notary Public.

Commission expires: 10/11/2021

SAMANTHA L. CHAVEZ
Notary Public, State of New York
No. 01CH8348886
Qualified in Richmond County
My Commission Expires on 10/11/2021

ASSISTANT SECRETARY

CERTIFICATE

I, Joseph B. Wollard Assistant Secretary of Citigroup Inc. ("Citigroup"), a Delaware corporation,
DO HEREBY CERTIFY that Eugene Kwon is a duly appointed and qualified Assistant Secretary
of Citigroup, and the following is his specimen signature as it appears in our records:

A handwritten signature in black ink, appearing to read "Eugene Kwon", is written over a horizontal line.

IN WITNESS WHEREOF, I have affixed my official signature in the City of New York on this 12th
day of November, 2019.

A handwritten signature in black ink, appearing to read "J.B. Wollard", is written over a horizontal line.
Joseph B. Wollard

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
APPENDIX A**

**FAMILIAL RELATIONSHIPS WITH ELECTED CITY OFFICIALS
AND DEPARTMENT HEADS**

This Appendix is to be completed only by (a) the Applicant, and (b) any legal entity which has a direct ownership interest in the Applicant exceeding 7.5%. It is not to be completed by any legal entity which has only an indirect ownership interest in the Applicant.

Under MCC Section 2-154-015, the Disclosing Party must disclose whether such Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof currently has a "familial relationship" with any elected city official or department head. A "familial relationship" exists if, as of the date this EDS is signed, the Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof is related to the mayor, any alderman, the city clerk, the city treasurer or any city department head as spouse or domestic partner or as any of the following, whether by blood or adoption: parent, child, brother or sister, aunt or uncle, niece or nephew, grandparent, grandchild, father-in-law, mother-in-law, son-in-law, daughter-in-law, stepfather or stepmother, stepson or stepdaughter, stepbrother or stepsister or half-brother or half-sister.

"Applicable Party" means (1) all executive officers of the Disclosing Party listed in Section II.B.1.a., if the Disclosing Party is a corporation; all partners of the Disclosing Party, if the Disclosing Party is a general partnership; all general partners and limited partners of the Disclosing Party, if the Disclosing Party is a limited partnership; all managers, managing members and members of the Disclosing Party, if the Disclosing Party is a limited liability company; (2) all principal officers of the Disclosing Party; and (3) any person having more than a 7.5% ownership interest in the Disclosing Party. "Principal officers" means the president, chief operating officer, executive director, chief financial officer, treasurer or secretary of a legal entity or any person exercising similar authority.

Does the Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof currently have a "familial relationship" with an elected city official or department head?

☐ Yes

☒ No

If yes, please identify below (1) the name and title of such person, (2) the name of the legal entity to which such person is connected; (3) the name and title of the elected city official or department head to whom such person has a familial relationship, and (4) the precise nature of such familial relationship.

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
APPENDIX B**

BUILDING CODE SCOFFLAW/PROBLEM LANDLORD CERTIFICATION

This Appendix is to be completed only by (a) the Applicant, and (b) any legal entity which has a direct ownership interest in the Applicant exceeding 7.5% (an "Owner"). It is not to be completed by any legal entity which has only an indirect ownership interest in the Applicant.

1. Pursuant to MCC Section 2-154-010, is the Applicant or any Owner identified as a building code scofflaw or problem landlord pursuant to MCC Section 2-92-416?

☐ Yes

☒ No

2. If the Applicant is a legal entity publicly traded on any exchange, is any officer or director of the Applicant identified as a building code scofflaw or problem landlord pursuant to MCC Section 2-92-416?

☐ Yes

☒ No

☐ The Applicant is not publicly traded on any exchange.

3. If yes to (1) or (2) above, please identify below the name of each person or legal entity identified as a building code scofflaw or problem landlord and the address of each building or buildings to which the pertinent code violations apply.

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
APPENDIX C**

PROHIBITION ON WAGE & SALARY HISTORY SCREENING - CERTIFICATION

This Appendix is to be completed only by an Applicant that is completing this EDS as a “contractor” as defined in MCC Section 2-92-385. That section, which should be consulted (www.amlegal.com), generally covers a party to any agreement pursuant to which they: (i) receive City of Chicago funds in consideration for services, work or goods provided (including for legal or other professional services), or (ii) pay the City money for a license, grant or concession allowing them to conduct a business on City premises.

On behalf of an Applicant that is a contractor pursuant to MCC Section 2-92-385, I hereby certify that the Applicant is in compliance with MCC Section 2-92-385(b)(1) and (2), which prohibit: (i) screening job applicants based on their wage or salary history, or (ii) seeking job applicants’ wage or salary history from current or former employers. I also certify that the Applicant has adopted a policy that includes those prohibitions.

☒ Yes

☐ No

☐ N/A – I am not an Applicant that is a “contractor” as defined in MCC Section 2-92-385.

This certification shall serve as the affidavit required by MCC Section 2-92-385(c)(1).

If you checked “no” to the above, please explain.

ATTACHMENT A:

CITIGROUP INC.

DIRECTORS & PRINCIPAL OFFICERS

AS OF NOVEMBER 8, 2019

DIRECTORS

Michael L. Corbat
Grace E. Dailey
Ellen M. Costello
Barbara Desoer
John C. Dugan, Chair of the Board
Duncan P. Hennes
Peter B. Henry
S. Leslie Ireland
Lew Wallace (Jay) Jacobs, IV
Renee J. James
Eugene M. McQuade
Gary M. Reiner
Diana L. Taylor
James S. Turley
Deborah C. Wright
Alexander R. Wynaendts
Ernesto Zedillo Ponce de Leon

PRINCIPAL OFFICERS*

Michael L. Corbat	Chief Executive Officer
Mark Mason	Chief Financial Officer
Rohan Weerasinghe	General Counsel & Secretary
Michael Verdeschi	Treasurer

*As defined in Appendix A of the City of Chicago Economic Disclosure Statement and Affidavit.

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT
AND AFFIDAVIT**

ATTACHMENTS FOR CITIGROUP INC.

ATTACHMENT B	FURTHER CERTIFICATION
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In the ordinary course of business, Citigroup Inc. ("Citigroup") and its subsidiaries and affiliates are defendants or co-defendants in various litigation matters incidental to and typical of the broad range of businesses in which they are engaged. For example, typical actions in broker-dealer subsidiaries are civil suits, arbitration proceedings, and other matters related to activities occurring in the normal course of business as a broker and dealer in securities, as an underwriter of securities, as an investment banker or otherwise. From time to time Citigroup, and certain affiliated entities, are the subjects of inquiries and investigations conducted by federal or state regulatory agencies. Citigroup and its affiliated entities routinely cooperate with such investigations.

On May 20, 2015, Citigroup Inc. announced settlements with the U.S. Department of Justice (DOJ) and the Board of Governors of the Federal Reserve System (FRB) to resolve the previously disclosed investigations into Citi's foreign exchange business. Under the terms of the settlement with the DOJ, Citicorp, a financial services holding company subsidiary of Citigroup, will plead guilty to a violation of the Sherman Antitrust Act, pay a fine of \$925 million and be subject to a three-year probation period, the conditions of which include the continued implementation, remediation and strengthening of Citi's compliance and internal controls. Under the terms of the settlement with the FRB, Citi will pay a civil money penalty of \$342 million and agree to further enhance the control framework governing its foreign exchange business. The payments due under the settlements are covered by Citi's existing legal reserves and will not require a charge to earnings in the second quarter of 2015.

Citigroup is a public company, and as such files periodic and current reports with the U.S. Securities and Exchange Commission as required by the Securities Exchange Act of 1934 that include current descriptions of material regulatory proceedings, investigations and litigation. Copies of Citigroup's periodic reports are on file with the SEC, which can be located at the SEC's website (www.sec.gov).

FIFTH THIRD BANK,
NATIONAL
ASSOCIATION

O2019-9946

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT
AND AFFIDAVIT**

SECTION I -- GENERAL INFORMATION

A. Legal name of the Disclosing Party submitting this EDS. Include d/b/a/ if applicable:

Fifth Third Bank, National Association

Check ONE of the following three boxes:

Indicate whether the Disclosing Party submitting this EDS is:

1. ☒ the Applicant

OR

2. ☐ a legal entity currently holding, or anticipated to hold within six months after City action on the contract, transaction or other undertaking to which this EDS pertains (referred to below as the "Matter"), a direct or indirect interest in excess of 7.5% in the Applicant. State the Applicant's legal name: _____

OR

3. ☐ a legal entity with a direct or indirect right of control of the Applicant (see Section II(B)(1)) State the legal name of the entity in which the Disclosing Party holds a right of control: _____

B. Business address of the Disclosing Party: 38 Fountain Square Plaza
Cincinnati, OH 45263

C. Telephone: 312-704-7138 Fax: _____ Email: lucy.czyz@53.com

D. Name of contact person: Ms. Lucy Czyz

E. Federal Employer Identification No. (if you have one): _____

F. Brief description of the Matter to which this EDS pertains. (Include project number and location of property, if applicable):

RFP for payment of interest on the Monies of the City of Chicago & The Chicago Board of Education

G. Which City agency or department is requesting this EDS? Department of Finance

If the Matter is a contract being handled by the City's Department of Procurement Services, please complete the following:

Specification # _____ and Contract # _____

SECTION II -- DISCLOSURE OF OWNERSHIP INTERESTS

A. NATURE OF THE DISCLOSING PARTY

1. Indicate the nature of the Disclosing Party:

- | | |
|---|--|
| <input type="checkbox"/> Person | <input type="checkbox"/> Limited liability company |
| <input type="checkbox"/> Publicly registered business corporation | <input type="checkbox"/> Limited liability partnership |
| <input type="checkbox"/> Privately held business corporation | <input type="checkbox"/> Joint venture |
| <input type="checkbox"/> Sole proprietorship | <input type="checkbox"/> Not-for-profit corporation |
| <input type="checkbox"/> General partnership | (Is the not-for-profit corporation also a 501(c)(3))? |
| <input type="checkbox"/> Limited partnership | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| <input type="checkbox"/> Trust | <input checked="" type="checkbox"/> Other (please specify) |
| | <u>National Association</u> |

2. For legal entities, the state (or foreign country) of incorporation or organization, if applicable:

United States

3. For legal entities not organized in the State of Illinois: Has the organization registered to do business in the State of Illinois as a foreign entity?

☐ Yes ☒ No ☐ Organized in Illinois

B. IF THE DISCLOSING PARTY IS A LEGAL ENTITY:

1. List below the full names and titles, if applicable, of: (i) all executive officers and all directors of the entity; (ii) **for not-for-profit corporations**, all members, if any, which are legal entities (if there are no such members, write "no members which are legal entities"); (iii) **for trusts, estates or other similar entities**, the trustee, executor, administrator, or similarly situated party; (iv) **for general or limited partnerships, limited liability companies, limited liability partnerships or joint ventures**, each general partner, managing member, manager or any other person or legal entity that directly or indirectly controls the day-to-day management of the Applicant.

NOTE: Each legal entity listed below must submit an EDS on its own behalf.

Name

Title

See attached list

2. Please provide the following information concerning each person or legal entity having a direct or indirect, current or prospective (i.e. within 6 months after City action) beneficial interest (including ownership) in excess of 7.5% of the Applicant. Examples of such an interest include shares in a corporation, partnership interest in a partnership or joint venture, interest of a member or manager in a

limited liability company, or interest of a beneficiary of a trust, estate or other similar entity. If none, state "None."

NOTE: Each legal entity listed below may be required to submit an EDS on its own behalf.

Name	Business Address	Percentage Interest in the Applicant
------	------------------	--------------------------------------

Fifth Third Financial Corporation, 38 Fountain Square Plaza, Cincinnati, OH 45263	100%
---	------

SECTION III -- INCOME OR COMPENSATION TO, OR OWNERSHIP BY, CITY ELECTED OFFICIALS

Has the Disclosing Party provided any income or compensation to any City elected official during the 12-month period preceding the date of this EDS? ☐ Yes ☒ No

Does the Disclosing Party reasonably expect to provide any income or compensation to any City elected official during the 12-month period following the date of this EDS? ☐ Yes ☒ No

If "yes" to either of the above, please identify below the name(s) of such City elected official(s) and describe such income or compensation:

Does any City elected official or, to the best of the Disclosing Party's knowledge after reasonable inquiry, any City elected official's spouse or domestic partner, have a financial interest (as defined in Chapter 2-156 of the Municipal Code of Chicago ("MCC")) in the Disclosing Party?

☐ Yes ☒ No

If "yes," please identify below the name(s) of such City elected official(s) and/or spouse(s)/domestic partner(s) and describe the financial interest(s).

SECTION IV -- DISCLOSURE OF SUBCONTRACTORS AND OTHER RETAINED PARTIES

The Disclosing Party must disclose the name and business address of each subcontractor, attorney, lobbyist (as defined in MCC Chapter 2-156), accountant, consultant and any other person or entity whom the Disclosing Party has retained or expects to retain in connection with the Matter, as well as the nature of the relationship, and the total amount of the fees paid or estimated to be paid. The Disclosing Party is not required to disclose employees who are paid solely through the Disclosing Party's regular payroll. If the Disclosing Party is uncertain whether a disclosure is required under this Section, the Disclosing Party must either ask the City whether disclosure is required or make the disclosure.

Name (indicate whether retained or anticipated to be retained)	Business Address	Relationship to Disclosing Party (subcontractor, attorney, lobbyist, etc.)	Fees (indicate whether paid or estimated.) NOTE: "hourly rate" or "t.b.d." is not an acceptable response.
--	------------------	--	--

(Add sheets if necessary)

[X] Check here if the Disclosing Party has not retained, nor expects to retain, any such persons or entities.

SECTION V -- CERTIFICATIONS

A. COURT-ORDERED CHILD SUPPORT COMPLIANCE

Under MCC Section 2-92-415, substantial owners of business entities that contract with the City must remain in compliance with their child support obligations throughout the contract's term.

Has any person who directly or indirectly owns 10% or more of the Disclosing Party been declared in arrearage on any child support obligations by any Illinois court of competent jurisdiction?

[] Yes [] No [X] No person directly or indirectly owns 10% or more of the Disclosing Party.

If "Yes," has the person entered into a court-approved agreement for payment of all support owed and is the person in compliance with that agreement?

[] Yes [] No

B. FURTHER CERTIFICATIONS

1. [This paragraph 1 applies only if the Matter is a contract being handled by the City's Department of Procurement Services.] In the 5-year period preceding the date of this EDS, neither the Disclosing Party nor any Affiliated Entity [see definition in (5) below] has engaged, in connection with the performance of any public contract, the services of an integrity monitor, independent private sector inspector general, or integrity compliance consultant (i.e., an individual or entity with legal, auditing, investigative, or other similar skills, designated by a public agency to help the agency monitor the activity of specified agency vendors as well as help the vendors reform their business practices so they can be considered for agency contracts in the future, or continue with a contract in progress).

2. The Disclosing Party and its Affiliated Entities are not delinquent in the payment of any fine, fee, tax or other source of indebtedness owed to the City of Chicago, including, but not limited to, water and sewer charges, license fees, parking tickets, property taxes and sales taxes, nor is the Disclosing Party delinquent in the payment of any tax administered by the Illinois Department of Revenue.

3. The Disclosing Party and, if the Disclosing Party is a legal entity, all of those persons or entities identified in Section II(B)(1) of this EDS:

- a. are not presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from any transactions by any federal, state or local unit of government;
- b. have not, during the 5 years before the date of this EDS, been convicted of a criminal offense, adjudged guilty, or had a civil judgment rendered against them in connection with: obtaining, attempting to obtain, or performing a public (federal, state or local) transaction or contract under a public transaction; a violation of federal or state antitrust statutes; fraud; embezzlement; theft; forgery; bribery; falsification or destruction of records; making false statements; or receiving stolen property;
- c. are not presently indicted for, or criminally or civilly charged by, a governmental entity (federal, state or local) with committing any of the offenses set forth in subparagraph (b) above;
- d. have not, during the 5 years before the date of this EDS, had one or more public transactions (federal, state or local) terminated for cause or default; and
- e. have not, during the 5 years before the date of this EDS, been convicted, adjudged guilty, or found liable in a civil proceeding, or in any criminal or civil action, including actions concerning environmental violations, instituted by the City or by the federal government, any state, or any other unit of local government.

4. The Disclosing Party understands and shall comply with the applicable requirements of MCC Chapters 2-56 (Inspector General) and 2-156 (Governmental Ethics).

5. Certifications (5), (6) and (7) concern:

- the Disclosing Party;
- any "Contractor" (meaning any contractor or subcontractor used by the Disclosing Party in connection with the Matter, including but not limited to all persons or legal entities disclosed under Section IV, "Disclosure of Subcontractors and Other Retained Parties");
- any "Affiliated Entity" (meaning a person or entity that, directly or indirectly: controls the Disclosing Party, is controlled by the Disclosing Party, or is, with the Disclosing Party, under common control of another person or entity). Indicia of control include, without limitation: interlocking management or ownership; identity of interests among family members, shared facilities and equipment; common use of employees; or organization of a business entity following the ineligibility of a business entity to do business with federal or state or local government, including the City, using substantially the same management, ownership, or principals as the ineligible entity. With respect to Contractors, the term Affiliated Entity means a person or entity that directly or indirectly controls the Contractor, is controlled by it, or, with the Contractor, is under common control of another person or entity;
- any responsible official of the Disclosing Party, any Contractor or any Affiliated Entity or any other official, agent or employee of the Disclosing Party, any Contractor or any Affiliated Entity, acting pursuant to the direction or authorization of a responsible official of the Disclosing Party, any Contractor or any Affiliated Entity (collectively "Agents").

Neither the Disclosing Party, nor any Contractor, nor any Affiliated Entity of either the Disclosing Party or any Contractor, nor any Agents have, during the 5 years before the date of this EDS, or, with respect to a Contractor, an Affiliated Entity, or an Affiliated Entity of a Contractor during the 5 years before the date of such Contractor's or Affiliated Entity's contract or engagement in connection with the Matter:

- a. bribed or attempted to bribe, or been convicted or adjudged guilty of bribery or attempting to bribe, a public officer or employee of the City, the State of Illinois, or any agency of the federal government or of any state or local government in the United States of America, in that officer's or employee's official capacity;
- b. agreed or colluded with other bidders or prospective bidders, or been a party to any such agreement, or been convicted or adjudged guilty of agreement or collusion among bidders or prospective bidders, in restraint of freedom of competition by agreement to bid a fixed price or otherwise; or
- c. made an admission of such conduct described in subparagraph (a) or (b) above that is a matter of record, but have not been prosecuted for such conduct; or
- d. violated the provisions referenced in MCC Subsection 2-92-320(a)(4)(Contracts Requiring a Base Wage); (a)(5)(Debarment Regulations); or (a)(6)(Minimum Wage Ordinance).

6. Neither the Disclosing Party, nor any Affiliated Entity or Contractor, or any of their employees, officials, agents or partners, is barred from contracting with any unit of state or local government as a result of engaging in or being convicted of (1) bid-rigging in violation of 720 ILCS 5/33E-3; (2) bid-rotating in violation of 720 ILCS 5/33E-4; or (3) any similar offense of any state or of the United States of America that contains the same elements as the offense of bid-rigging or bid-rotating.

7. Neither the Disclosing Party nor any Affiliated Entity is listed on a Sanctions List maintained by the United States Department of Commerce, State, or Treasury, or any successor federal agency.

8. [FOR APPLICANT ONLY] (i) Neither the Applicant nor any "controlling person" [see MCC Chapter 1-23, Article I for applicability and defined terms] of the Applicant is currently indicted or charged with, or has admitted guilt of, or has ever been convicted of, or placed under supervision for, any criminal offense involving actual, attempted, or conspiracy to commit bribery, theft, fraud, forgery, perjury, dishonesty or deceit against an officer or employee of the City or any "sister agency"; and (ii) the Applicant understands and acknowledges that compliance with Article I is a continuing requirement for doing business with the City. NOTE: If MCC Chapter 1-23, Article I applies to the Applicant, that Article's permanent compliance timeframe supersedes 5-year compliance timeframes in this Section V.

9. [FOR APPLICANT ONLY] The Applicant and its Affiliated Entities will not use, nor permit their subcontractors to use, any facility listed as having an active exclusion by the U.S. EPA on the federal System for Award Management ("SAM").

10. [FOR APPLICANT ONLY] The Applicant will obtain from any contractors/subcontractors hired or to be hired in connection with the Matter certifications equal in form and substance to those in Certifications (2) and (9) above and will not, without the prior written consent of the City, use any such

contractor/subcontractor that does not provide such certifications or that the Applicant has reason to believe has not provided or cannot provide truthful certifications.

11. If the Disclosing Party is unable to certify to any of the above statements in this Part B (Further Certifications), the Disclosing Party must explain below:

If the letters "NA," the word "None," or no response appears on the lines above, it will be conclusively presumed that the Disclosing Party certified to the above statements.

12. To the best of the Disclosing Party's knowledge after reasonable inquiry, the following is a complete list of all current employees of the Disclosing Party who were, at any time during the 12-month period preceding the date of this EDS, an employee, or elected or appointed official, of the City of Chicago (if none, indicate with "N/A" or "none").

None

13. To the best of the Disclosing Party's knowledge after reasonable inquiry, the following is a complete list of all gifts that the Disclosing Party has given or caused to be given, at any time during the 12-month period preceding the execution date of this EDS, to an employee, or elected or appointed official, of the City of Chicago. For purposes of this statement, a "gift" does not include: (i) anything made generally available to City employees or to the general public, or (ii) food or drink provided in the course of official City business and having a retail value of less than \$25 per recipient, or (iii) a political contribution otherwise duly reported as required by law (if none, indicate with "N/A" or "none"). As to any gift listed below, please also list the name of the City recipient.

None

C. CERTIFICATION OF STATUS AS FINANCIAL INSTITUTION

1. The Disclosing Party certifies that the Disclosing Party (check one)

☒ is ☐ is not

a "financial institution" as defined in MCC Section 2-32-455(b).

2. If the Disclosing Party IS a financial institution, then the Disclosing Party pledges:

"We are not and will not become a predatory lender as defined in MCC Chapter 2-32. We further pledge that none of our affiliates is, and none of them will become, a predatory lender as defined in MCC Chapter 2-32. We understand that becoming a predatory lender or becoming an affiliate of a predatory lender may result in the loss of the privilege of doing business with the City."

If the Disclosing Party is unable to make this pledge because it or any of its affiliates (as defined in MCC Section 2-32-455(b)) is a predatory lender within the meaning of MCC Chapter 2-32, explain here (attach additional pages if necessary):

If the letters "NA," the word "None," or no response appears on the lines above, it will be conclusively presumed that the Disclosing Party certified to the above statements.

D. CERTIFICATION REGARDING FINANCIAL INTEREST IN CITY BUSINESS

Any words or terms defined in MCC Chapter 2-156 have the same meanings if used in this Part D.

1. In accordance with MCC Section 2-156-110: To the best of the Disclosing Party's knowledge after reasonable inquiry, does any official or employee of the City have a financial interest in his or her own name or in the name of any other person or entity in the Matter?

☐ Yes

☒ No

NOTE: If you checked "Yes" to Item D(1), proceed to Items D(2) and D(3). If you checked "No" to Item D(1), skip Items D(2) and D(3) and proceed to Part E.

2. Unless sold pursuant to a process of competitive bidding, or otherwise permitted, no City elected official or employee shall have a financial interest in his or her own name or in the name of any other person or entity in the purchase of any property that (i) belongs to the City, or (ii) is sold for taxes or assessments, or (iii) is sold by virtue of legal process at the suit of the City (collectively, "City Property Sale"). Compensation for property taken pursuant to the City's eminent domain power does not constitute a financial interest within the meaning of this Part D.

Does the Matter involve a City Property Sale?

☐ Yes

☒ No

3. If you checked "Yes" to Item D(1), provide the names and business addresses of the City officials or employees having such financial interest and identify the nature of the financial interest:

Name	Business Address	Nature of Financial Interest
------	------------------	------------------------------

4. The Disclosing Party further certifies that no prohibited financial interest in the Matter will be acquired by any City official or employee.

E. CERTIFICATION REGARDING SLAVERY ERA BUSINESS

Please check either (1) or (2) below. If the Disclosing Party checks (2), the Disclosing Party must disclose below or in an attachment to this EDS all information required by (2). Failure to comply with these disclosure requirements may make any contract entered into with the City in connection with the Matter voidable by the City.

X 1. The Disclosing Party verifies that the Disclosing Party has searched any and all records of the Disclosing Party and any and all predecessor entities regarding records of investments or profits from slavery or slaveholder insurance policies during the slavery era (including insurance policies issued to slaveholders that provided coverage for damage to or injury or death of their slaves), and the Disclosing Party has found no such records.

____ 2. The Disclosing Party verifies that, as a result of conducting the search in step (1) above, the Disclosing Party has found records of investments or profits from slavery or slaveholder insurance policies. The Disclosing Party verifies that the following constitutes full disclosure of all such records, including the names of any and all slaves or slaveholders described in those records:

SECTION VI -- CERTIFICATIONS FOR FEDERALLY FUNDED MATTERS

NOTE: If the Matter is federally funded, complete this Section VI. If the Matter is not federally funded, proceed to Section VII. For purposes of this Section VI, tax credits allocated by the City and proceeds of debt obligations of the City are not federal funding.

A. CERTIFICATION REGARDING LOBBYING

1. List below the names of all persons or entities registered under the federal Lobbying Disclosure Act of 1995, as amended, who have made lobbying contacts on behalf of the Disclosing Party with respect to the Matter: (Add sheets if necessary):

(If no explanation appears or begins on the lines above, or if the letters "NA" or if the word "None" appear, it will be conclusively presumed that the Disclosing Party means that NO persons or entities registered under the Lobbying Disclosure Act of 1995, as amended, have made lobbying contacts on behalf of the Disclosing Party with respect to the Matter.)

2. The Disclosing Party has not spent and will not expend any federally appropriated funds to pay any person or entity listed in paragraph A(1) above for his or her lobbying activities or to pay any person or entity to influence or attempt to influence an officer or employee of any agency, as defined by applicable federal law, a member of Congress, an officer or employee of Congress, or an employee

of a member of Congress, in connection with the award of any federally funded contract, making any federally funded grant or loan, entering into any cooperative agreement, or to extend, continue, renew, amend, or modify any federally funded contract, grant, loan, or cooperative agreement.

3. The Disclosing Party will submit an updated certification at the end of each calendar quarter in which there occurs any event that materially affects the accuracy of the statements and information set forth in paragraphs A(1) and A(2) above.

4. The Disclosing Party certifies that either: (i) it is not an organization described in section 501(c)(4) of the Internal Revenue Code of 1986; or (ii) it is an organization described in section 501(c)(4) of the Internal Revenue Code of 1986 but has not engaged and will not engage in "Lobbying Activities," as that term is defined in the Lobbying Disclosure Act of 1995, as amended.

5. If the Disclosing Party is the Applicant, the Disclosing Party must obtain certifications equal in form and substance to paragraphs A(1) through A(4) above from all subcontractors before it awards any subcontract and the Disclosing Party must maintain all such subcontractors' certifications for the duration of the Matter and must make such certifications promptly available to the City upon request.

B. CERTIFICATION REGARDING EQUAL EMPLOYMENT OPPORTUNITY

If the Matter is federally funded, federal regulations require the Applicant and all proposed subcontractors to submit the following information with their bids or in writing at the outset of negotiations.

Is the Disclosing Party the Applicant?

☐ Yes

☐ No

If "Yes," answer the three questions below:

1. Have you developed and do you have on file affirmative action programs pursuant to applicable federal regulations? (See 41 CFR Part 60-2.)

☐ Yes

☐ No

2. Have you filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance Programs, or the Equal Employment Opportunity Commission all reports due under the applicable filing requirements?

☐ Yes

☐ No

☐ Reports not required

3. Have you participated in any previous contracts or subcontracts subject to the equal opportunity clause?

☐ Yes

☐ No

If you checked "No" to question (1) or (2) above, please provide an explanation:

SECTION VII -- FURTHER ACKNOWLEDGMENTS AND CERTIFICATION

The Disclosing Party understands and agrees that:

A. The certifications, disclosures, and acknowledgments contained in this EDS will become part of any contract or other agreement between the Applicant and the City in connection with the Matter, whether procurement, City assistance, or other City action, and are material inducements to the City's execution of any contract or taking other action with respect to the Matter. The Disclosing Party understands that it must comply with all statutes, ordinances, and regulations on which this EDS is based.

B. The City's Governmental Ethics Ordinance, MCC Chapter 2-156, imposes certain duties and obligations on persons or entities seeking City contracts, work, business, or transactions. The full text of this ordinance and a training program is available on line at www.cityofchicago.org/Ethics, and may also be obtained from the City's Board of Ethics, 740 N. Sedgwick St., Suite 500, Chicago, IL 60610, (312) 744-9660. The Disclosing Party must comply fully with this ordinance.

C. If the City determines that any information provided in this EDS is false, incomplete or inaccurate, any contract or other agreement in connection with which it is submitted may be rescinded or be void or voidable, and the City may pursue any remedies under the contract or agreement (if not rescinded or void), at law, or in equity, including terminating the Disclosing Party's participation in the Matter and/or declining to allow the Disclosing Party to participate in other City transactions. Remedies at law for a false statement of material fact may include incarceration and an award to the City of treble damages.

D. It is the City's policy to make this document available to the public on its Internet site and/or upon request. Some or all of the information provided in, and appended to, this EDS may be made publicly available on the Internet, in response to a Freedom of Information Act request, or otherwise. By completing and signing this EDS, the Disclosing Party waives and releases any possible rights or claims which it may have against the City in connection with the public release of information contained in this EDS and also authorizes the City to verify the accuracy of any information submitted in this EDS.

E. The information provided in this EDS must be kept current. In the event of changes, the Disclosing Party must supplement this EDS up to the time the City takes action on the Matter. If the Matter is a contract being handled by the City's Department of Procurement Services, the Disclosing Party must update this EDS as the contract requires. **NOTE:** With respect to Matters subject to MCC Chapter 1-23, Article I (imposing **PERMANENT INELIGIBILITY** for certain specified offenses), the information provided herein regarding eligibility must be kept current for a longer period, as required by MCC Chapter 1-23 and Section 2-154-020.

CERTIFICATION

Under penalty of perjury, the person signing below: (1) warrants that he/she is authorized to execute this EDS, and all applicable Appendices, on behalf of the Disclosing Party, and (2) warrants that all certifications and statements contained in this EDS, and all applicable Appendices, are true, accurate and complete as of the date furnished to the City.

Fifth Third Bank

(Print or type exact legal name of Disclosing Party)

By: Lucy Czyz
(Sign here)

Ms. Lucy Czyz

(Print or type name of person signing)

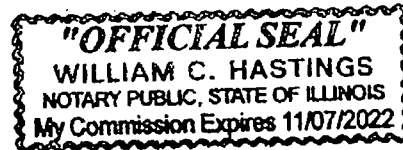
Senior Vice President

(Print or type title of person signing)

Signed and sworn to before me on (date) December 11th, 2019,

at Cook County, Illinois (state).

William C. Hastings
Notary Public



Commission expires: 11/07/2022

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
APPENDIX A**

**FAMILIAL RELATIONSHIPS WITH ELECTED CITY OFFICIALS
AND DEPARTMENT HEADS**

This Appendix is to be completed only by (a) the Applicant, and (b) any legal entity which has a direct ownership interest in the Applicant exceeding 7.5%. It is not to be completed by any legal entity which has only an indirect ownership interest in the Applicant.

Under MCC Section 2-154-015, the Disclosing Party must disclose whether such Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof currently has a "familial relationship" with any elected city official or department head. A "familial relationship" exists if, as of the date this EDS is signed, the Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof is related to the mayor, any alderman, the city clerk, the city treasurer or any city department head as spouse or domestic partner or as any of the following, whether by blood or adoption: parent, child, brother or sister, aunt or uncle, niece or nephew, grandparent, grandchild, father-in-law, mother-in-law, son-in-law, daughter-in-law, stepfather or stepmother, stepson or stepdaughter, stepbrother or stepsister or half-brother or half-sister.

"Applicable Party" means (1) all executive officers of the Disclosing Party listed in Section II.B.1.a., if the Disclosing Party is a corporation; all partners of the Disclosing Party, if the Disclosing Party is a general partnership; all general partners and limited partners of the Disclosing Party, if the Disclosing Party is a limited partnership; all managers, managing members and members of the Disclosing Party, if the Disclosing Party is a limited liability company; (2) all principal officers of the Disclosing Party; and (3) any person having more than a 7.5% ownership interest in the Disclosing Party. "Principal officers" means the president, chief operating officer, executive director, chief financial officer, treasurer or secretary of a legal entity or any person exercising similar authority.

Does the Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof currently have a "familial relationship" with an elected city official or department head?

☐ Yes

☒ No

If yes, please identify below (1) the name and title of such person, (2) the name of the legal entity to which such person is connected; (3) the name and title of the elected city official or department head to whom such person has a familial relationship, and (4) the precise nature of such familial relationship.

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
APPENDIX B**

BUILDING CODE SCOFFLAW/PROBLEM LANDLORD CERTIFICATION

This Appendix is to be completed only by (a) the Applicant, and (b) any legal entity which has a direct ownership interest in the Applicant exceeding 7.5% (an "Owner"). It is not to be completed by any legal entity which has only an indirect ownership interest in the Applicant.

1. Pursuant to MCC Section 2-154-010, is the Applicant or any Owner identified as a building code scofflaw or problem landlord pursuant to MCC Section 2-92-416?

☐ Yes

☒ No

2. If the Applicant is a legal entity publicly traded on any exchange, is any officer or director of the Applicant identified as a building code scofflaw or problem landlord pursuant to MCC Section 2-92-416?

☐ Yes

☐ No

☒ The Applicant is not publicly traded on any exchange.

3. If yes to (1) or (2) above, please identify below the name of each person or legal entity identified as a building code scofflaw or problem landlord and the address of each building or buildings to which the pertinent code violations apply.

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
APPENDIX C**

PROHIBITION ON WAGE & SALARY HISTORY SCREENING - CERTIFICATION

This Appendix is to be completed only by an Applicant that is completing this EDS as a “contractor” as defined in MCC Section 2-92-385. That section, which should be consulted (www.amlegal.com), generally covers a party to any agreement pursuant to which they: (i) receive City of Chicago funds in consideration for services, work or goods provided (including for legal or other professional services), or (ii) pay the City money for a license, grant or concession allowing them to conduct a business on City premises.

On behalf of an Applicant that is a contractor pursuant to MCC Section 2-92-385, I hereby certify that the Applicant is in compliance with MCC Section 2-92-385(b)(1) and (2), which prohibit: (i) screening job applicants based on their wage or salary history, or (ii) seeking job applicants’ wage or salary history from current or former employers. I also certify that the Applicant has adopted a policy that includes those prohibitions.

☒ Yes

☐ No

☐ N/A – I am not an Applicant that is a “contractor” as defined in MCC Section 2-92-385.

This certification shall serve as the affidavit required by MCC Section 2-92-385(c)(1).

If you checked “no” to the above, please explain.

Fifth Third Bank, National Association Board of Directors:

Greg D. Carmichael – Chairman of the Board Nicholas K. Akins

B. Evan Bayh, III

Jorge L. Benitez

Katherine B. Blackburn

Emerson L. Brumback

Jerry W. Burris

C. Bryan Daniels

Thomas H. Harvey

Gary R. Heminger

Jewell D. Hoover

Michael B. McCallister

Eileen A. Mallesch

Marsha C. Williams

Fifth Third Bank, National Association Executive Officers:

Name	Title
Greg D. Carmichael	Chairman of the Board, President & Chief Executive Officer
Lars C. Anderson	Executive Vice President & Chief Operating Officer
Frank R. Forrest	Executive Vice President & Chief Risk Officer
Kristine Garrett	Executive Vice President and Head of Wealth and Asset Management
Mark D. Hazel	Senior Vice President & Controller
Brian D. Lamb	Executive Vice President and Head of Retail Banking
James C. Leonard	Executive Vice President & Treasurer
Philip R. McHugh	Executive Vice President and Head of Regional Banking, Wealth and Asset Management, and Business Banking
Jude A. Schramm	Executive Vice President & Chief Information Officer
Robert P. Shaffer	Executive Vice President & Chief Human Resources Officer
Timothy N. Spence	Executive Vice President and Head of Consumer Bank, Payments, and Strategies
Tayfun Tuzun	Executive Vice President & Chief Financial Officer
Susan B. Zaunbrecher	Executive Vice President, Chief Legal Officer & Corporate Secretary



SECRETARY'S CERTIFICATE

The undersigned does hereby certify that she is the duly elected, qualified, and acting Assistant Secretary of Fifth Third Bank, National Association, a national banking association organized under the laws of the United States and having a main office in Cincinnati, Ohio, and the undersigned does hereby further certify that:

1. Pursuant to Section 805 ILCS 5/1.80, a foreign corporation is defined as a corporation for profit organized under laws other than the laws of Illinois but shall not include a banking corporation organized under the laws of another state or of the United States.

2. Further, 805 ILCS 5/13.05 states that any foreign corporation may secure from the Secretary of State the authority to do business in Illinois excluding corporations engaged in the business of banking, insurance, suretyship, or a business of the character of a building and loan corporation.

3. As a national banking association, Fifth Third Bank is unable to obtain from the Illinois Secretary of State the authority to do business and is, therefore, unable to produce a Certificate of Good Standing evidencing its ability to transact business within the State.

4. Title 12, Section 36 of the United States Code authorizes national banks, regardless of the location of its main office and subject to approval by the Office of the Comptroller of the Currency, to establish and operate branch offices in other states in the same manner as the applicable state law would permit a branch office to be established by a bank chartered by that state. Accordingly, Fifth Third Bank has established branch offices in Illinois in a manner conforming to the Illinois Banking Act and transacts business within the State.

IN WITNESS WHEREOF, I hereunto subscribe my name as of this 12th day of December, 2019.



Lori G. Heilman
Assistant Secretary

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT
AND AFFIDAVIT**

SECTION I -- GENERAL INFORMATION

A. Legal name of the Disclosing Party submitting this EDS. Include d/b/a/ if applicable:

Fifth Third Financial Corporation

Check ONE of the following three boxes:

Indicate whether the Disclosing Party submitting this EDS is:

1. ☐ the Applicant

OR

2. ☒ a legal entity currently holding, or anticipated to hold within six months after City action on the contract, transaction or other undertaking to which this EDS pertains (referred to below as the "Matter"), a direct or indirect interest in excess of 7.5% in the Applicant. State the Applicant's legal name: Fifth Third Bank, National Association; the EDS is #146685

OR

3. ☐ a legal entity with a direct or indirect right of control of the Applicant (see Section II(B)(1))
State the legal name of the entity in which the Disclosing Party holds a right of control:

B. Business address of the Disclosing Party: 38 Fountain Square Plaza

Cincinnati, OH 45263

C. Telephone: 513-534-3719 Fax: 513-534-6757 Email: sam.lind@53.com

D. Name of contact person: Mr. Harry Samuel Lind

E. Federal Employer Identification No. (if you have one): _____

F. Brief description of the Matter to which this EDS pertains. (Include project number and location of property, if applicable):

RFP for Payment of Interest on the Monies of The City of Chicago & The Chicago Board of Education

G. Which City agency or department is requesting this EDS? Department of Finance

If the Matter is a contract being handled by the City's Department of Procurement Services, please complete the following:

Specification # _____ and Contract # _____

SECTION II -- DISCLOSURE OF OWNERSHIP INTERESTS

A. NATURE OF THE DISCLOSING PARTY

1. Indicate the nature of the Disclosing Party:

- | | |
|---|--|
| <input type="checkbox"/> Person | <input type="checkbox"/> Limited liability company |
| <input type="checkbox"/> Publicly registered business corporation | <input type="checkbox"/> Limited liability partnership |
| <input checked="" type="checkbox"/> Privately held business corporation | <input type="checkbox"/> Joint venture |
| <input type="checkbox"/> Sole proprietorship | <input type="checkbox"/> Not-for-profit corporation |
| <input type="checkbox"/> General partnership | (Is the not-for-profit corporation also a 501(c)(3))? |
| <input type="checkbox"/> Limited partnership | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| <input type="checkbox"/> Trust | <input type="checkbox"/> Other (please specify) |
-

2. For legal entities, the state (or foreign country) of incorporation or organization, if applicable:

Ohio

3. For legal entities not organized in the State of Illinois: Has the organization registered to do business in the State of Illinois as a foreign entity?

☐ Yes ☒ No ☐ Organized in Illinois

B. IF THE DISCLOSING PARTY IS A LEGAL ENTITY:

1. List below the full names and titles, if applicable, of: (i) all executive officers and all directors of the entity; (ii) **for not-for-profit corporations**, all members, if any, which are legal entities (if there are no such members, write "no members which are legal entities"); (iii) **for trusts, estates or other similar entities**, the trustee, executor, administrator, or similarly situated party; (iv) **for general or limited partnerships, limited liability companies, limited liability partnerships or joint ventures**, each general partner, managing member, manager or any other person or legal entity that directly or indirectly controls the day-to-day management of the Applicant.

NOTE: Each legal entity listed below must submit an EDS on its own behalf.

Name	Title
------	-------

See attached list

2. Please provide the following information concerning each person or legal entity having a direct or indirect, current or prospective (i.e. within 6 months after City action) beneficial interest (including ownership) in excess of 7.5% of the Applicant. Examples of such an interest include shares in a corporation, partnership interest in a partnership or joint venture, interest of a member or manager in a

limited liability company, or interest of a beneficiary of a trust, estate or other similar entity. If none, state "None."

NOTE: Each legal entity listed below may be required to submit an EDS on its own behalf.

Name	Business Address	Percentage Interest in the Applicant
------	------------------	--------------------------------------

Fifth Third Bancorp	38 Fountain Square Plaza, Cincinnati, OH 45263	100%
---------------------	--	------

SECTION III -- INCOME OR COMPENSATION TO, OR OWNERSHIP BY, CITY ELECTED OFFICIALS

Has the Disclosing Party provided any income or compensation to any City elected official during the 12-month period preceding the date of this EDS? ☐ Yes ☒ No

Does the Disclosing Party reasonably expect to provide any income or compensation to any City elected official during the 12-month period following the date of this EDS? ☐ Yes ☒ No

If "yes" to either of the above, please identify below the name(s) of such City elected official(s) and describe such income or compensation:

Does any City elected official or, to the best of the Disclosing Party's knowledge after reasonable inquiry, any City elected official's spouse or domestic partner, have a financial interest (as defined in Chapter 2-156 of the Municipal Code of Chicago ("MCC")) in the Disclosing Party?

☐ Yes ☒ No

If "yes," please identify below the name(s) of such City elected official(s) and/or spouse(s)/domestic partner(s) and describe the financial interest(s).

SECTION IV -- DISCLOSURE OF SUBCONTRACTORS AND OTHER RETAINED PARTIES

The Disclosing Party must disclose the name and business address of each subcontractor, attorney, lobbyist (as defined in MCC Chapter 2-156), accountant, consultant and any other person or entity whom the Disclosing Party has retained or expects to retain in connection with the Matter, as well as the nature of the relationship, and the total amount of the fees paid or estimated to be paid. The Disclosing Party is not required to disclose employees who are paid solely through the Disclosing Party's regular payroll. If the Disclosing Party is uncertain whether a disclosure is required under this Section, the Disclosing Party must either ask the City whether disclosure is required or make the disclosure.

Name (indicate whether retained or anticipated to be retained)	Business Address	Relationship to Disclosing Party (subcontractor, attorney, lobbyist, etc.)	Fees (<u>indicate whether paid or estimated.</u>) NOTE: "hourly rate" or "t.b.d." is not an acceptable response.
--	------------------	--	---

(Add sheets if necessary)

☒ Check here if the Disclosing Party has not retained, nor expects to retain, any such persons or entities.

SECTION V -- CERTIFICATIONS

A. COURT-ORDERED CHILD SUPPORT COMPLIANCE

Under MCC Section 2-92-415, substantial owners of business entities that contract with the City must remain in compliance with their child support obligations throughout the contract's term.

Has any person who directly or indirectly owns 10% or more of the Disclosing Party been declared in arrearage on any child support obligations by any Illinois court of competent jurisdiction?

☐ Yes ☐ No ☒ No person directly or indirectly owns 10% or more of the Disclosing Party.

If "Yes," has the person entered into a court-approved agreement for payment of all support owed and is the person in compliance with that agreement?

☐ Yes ☐ No

B. FURTHER CERTIFICATIONS

1. [This paragraph 1 applies only if the Matter is a contract being handled by the City's Department of Procurement Services.] In the 5-year period preceding the date of this EDS, neither the Disclosing Party nor any Affiliated Entity [see definition in (5) below] has engaged, in connection with the performance of any public contract, the services of an integrity monitor, independent private sector inspector general, or integrity compliance consultant (i.e., an individual or entity with legal, auditing, investigative, or other similar skills, designated by a public agency to help the agency monitor the activity of specified agency vendors as well as help the vendors reform their business practices so they can be considered for agency contracts in the future, or continue with a contract in progress).

2. The Disclosing Party and its Affiliated Entities are not delinquent in the payment of any fine, fee, tax or other source of indebtedness owed to the City of Chicago, including, but not limited to, water and sewer charges, license fees, parking tickets, property taxes and sales taxes, nor is the Disclosing Party delinquent in the payment of any tax administered by the Illinois Department of Revenue.

3. The Disclosing Party and, if the Disclosing Party is a legal entity, all of those persons or entities identified in Section II(B)(1) of this EDS:

- a. are not presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from any transactions by any federal, state or local unit of government;
- b. have not, during the 5 years before the date of this EDS, been convicted of a criminal offense, adjudged guilty, or had a civil judgment rendered against them in connection with: obtaining, attempting to obtain, or performing a public (federal, state or local) transaction or contract under a public transaction; a violation of federal or state antitrust statutes; fraud; embezzlement; theft; forgery; bribery; falsification or destruction of records; making false statements; or receiving stolen property;
- c. are not presently indicted for, or criminally or civilly charged by, a governmental entity (federal, state or local) with committing any of the offenses set forth in subparagraph (b) above;
- d. have not, during the 5 years before the date of this EDS, had one or more public transactions (federal, state or local) terminated for cause or default; and
- e. have not, during the 5 years before the date of this EDS, been convicted, adjudged guilty, or found liable in a civil proceeding, or in any criminal or civil action, including actions concerning environmental violations, instituted by the City or by the federal government, any state, or any other unit of local government.

4. The Disclosing Party understands and shall comply with the applicable requirements of MCC Chapters 2-56 (Inspector General) and 2-156 (Governmental Ethics).

5. Certifications (5), (6) and (7) concern:

- the Disclosing Party;
- any "Contractor" (meaning any contractor or subcontractor used by the Disclosing Party in connection with the Matter, including but not limited to all persons or legal entities disclosed under Section IV, "Disclosure of Subcontractors and Other Retained Parties");
- any "Affiliated Entity" (meaning a person or entity that, directly or indirectly: controls the Disclosing Party, is controlled by the Disclosing Party, or is, with the Disclosing Party, under common control of another person or entity). Indicia of control include, without limitation: interlocking management or ownership; identity of interests among family members, shared facilities and equipment; common use of employees; or organization of a business entity following the ineligibility of a business entity to do business with federal or state or local government, including the City, using substantially the same management, ownership, or principals as the ineligible entity. With respect to Contractors, the term Affiliated Entity means a person or entity that directly or indirectly controls the Contractor, is controlled by it, or, with the Contractor, is under common control of another person or entity;
- any responsible official of the Disclosing Party, any Contractor or any Affiliated Entity or any other official, agent or employee of the Disclosing Party, any Contractor or any Affiliated Entity, acting pursuant to the direction or authorization of a responsible official of the Disclosing Party, any Contractor or any Affiliated Entity (collectively "Agents").

Neither the Disclosing Party, nor any Contractor, nor any Affiliated Entity of either the Disclosing Party or any Contractor, nor any Agents have, during the 5 years before the date of this EDS, or, with respect to a Contractor, an Affiliated Entity, or an Affiliated Entity of a Contractor during the 5 years before the date of such Contractor's or Affiliated Entity's contract or engagement in connection with the Matter:

- a. bribed or attempted to bribe, or been convicted or adjudged guilty of bribery or attempting to bribe, a public officer or employee of the City, the State of Illinois, or any agency of the federal government or of any state or local government in the United States of America, in that officer's or employee's official capacity;
 - b. agreed or colluded with other bidders or prospective bidders, or been a party to any such agreement, or been convicted or adjudged guilty of agreement or collusion among bidders or prospective bidders, in restraint of freedom of competition by agreement to bid a fixed price or otherwise; or
 - c. made an admission of such conduct described in subparagraph (a) or (b) above that is a matter of record, but have not been prosecuted for such conduct; or
 - d. violated the provisions referenced in MCC Subsection 2-92-320(a)(4)(Contracts Requiring a Base Wage); (a)(5)(Debarment Regulations); or (a)(6)(Minimum Wage Ordinance).
6. Neither the Disclosing Party, nor any Affiliated Entity or Contractor, or any of their employees, officials, agents or partners, is barred from contracting with any unit of state or local government as a result of engaging in or being convicted of (1) bid-rigging in violation of 720 ILCS 5/33E-3; (2) bid-rotating in violation of 720 ILCS 5/33E-4; or (3) any similar offense of any state or of the United States of America that contains the same elements as the offense of bid-rigging or bid-rotating.
7. Neither the Disclosing Party nor any Affiliated Entity is listed on a Sanctions List maintained by the United States Department of Commerce, State, or Treasury, or any successor federal agency.
8. [FOR APPLICANT ONLY] (i) Neither the Applicant nor any "controlling person" [see MCC Chapter 1-23, Article I for applicability and defined terms] of the Applicant is currently indicted or charged with, or has admitted guilt of, or has ever been convicted of, or placed under supervision for, any criminal offense involving actual, attempted, or conspiracy to commit bribery, theft, fraud, forgery, perjury, dishonesty or deceit against an officer or employee of the City or any "sister agency"; and (ii) the Applicant understands and acknowledges that compliance with Article I is a continuing requirement for doing business with the City. NOTE: If MCC Chapter 1-23, Article I applies to the Applicant, that Article's permanent compliance timeframe supersedes 5-year compliance timeframes in this Section V.
9. [FOR APPLICANT ONLY] The Applicant and its Affiliated Entities will not use, nor permit their subcontractors to use, any facility listed as having an active exclusion by the U.S. EPA on the federal System for Award Management ("SAM").
10. [FOR APPLICANT ONLY] The Applicant will obtain from any contractors/subcontractors hired or to be hired in connection with the Matter certifications equal in form and substance to those in Certifications (2) and (9) above and will not, without the prior written consent of the City, use any such

contractor/subcontractor that does not provide such certifications or that the Applicant has reason to believe has not provided or cannot provide truthful certifications.

11. If the Disclosing Party is unable to certify to any of the above statements in this Part B (Further Certifications), the Disclosing Party must explain below:

B.8, B.9, B.10 are not applicable to Fifth Third Financial Corporation

If the letters "NA," the word "None," or no response appears on the lines above, it will be conclusively presumed that the Disclosing Party certified to the above statements.

12. To the best of the Disclosing Party's knowledge after reasonable inquiry, the following is a complete list of all current employees of the Disclosing Party who were, at any time during the 12-month period preceding the date of this EDS, an employee, or elected or appointed official, of the City of Chicago (if none, indicate with "N/A" or "none").

None

13. To the best of the Disclosing Party's knowledge after reasonable inquiry, the following is a complete list of all gifts that the Disclosing Party has given or caused to be given, at any time during the 12-month period preceding the execution date of this EDS, to an employee, or elected or appointed official, of the City of Chicago. For purposes of this statement, a "gift" does not include: (i) anything made generally available to City employees or to the general public, or (ii) food or drink provided in the course of official City business and having a retail value of less than \$25 per recipient, or (iii) a political contribution otherwise duly reported as required by law (if none, indicate with "N/A" or "none"). As to any gift listed below, please also list the name of the City recipient.

None

C. CERTIFICATION OF STATUS AS FINANCIAL INSTITUTION

1. The Disclosing Party certifies that the Disclosing Party (check one)

☒ is ☐ is not

a "financial institution" as defined in MCC Section 2-32-455(b).

2. If the Disclosing Party IS a financial institution, then the Disclosing Party pledges:

"We are not and will not become a predatory lender as defined in MCC Chapter 2-32. We further pledge that none of our affiliates is, and none of them will become, a predatory lender as defined in MCC Chapter 2-32. We understand that becoming a predatory lender or becoming an affiliate of a predatory lender may result in the loss of the privilege of doing business with the City."

If the Disclosing Party is unable to make this pledge because it or any of its affiliates (as defined in MCC Section 2-32-455(b)) is a predatory lender within the meaning of MCC Chapter 2-32, explain here (attach additional pages if necessary):

If the letters "NA," the word "None," or no response appears on the lines above, it will be conclusively presumed that the Disclosing Party certified to the above statements.

D. CERTIFICATION REGARDING FINANCIAL INTEREST IN CITY BUSINESS

Any words or terms defined in MCC Chapter 2-156 have the same meanings if used in this Part D.

1. In accordance with MCC Section 2-156-110: To the best of the Disclosing Party's knowledge after reasonable inquiry, does any official or employee of the City have a financial interest in his or her own name or in the name of any other person or entity in the Matter?

☐ Yes

☒ No

NOTE: If you checked "Yes" to Item D(1), proceed to Items D(2) and D(3). If you checked "No" to Item D(1), skip Items D(2) and D(3) and proceed to Part E.

2. Unless sold pursuant to a process of competitive bidding, or otherwise permitted, no City elected official or employee shall have a financial interest in his or her own name or in the name of any other person or entity in the purchase of any property that (i) belongs to the City, or (ii) is sold for taxes or assessments, or (iii) is sold by virtue of legal process at the suit of the City (collectively, "City Property Sale"). Compensation for property taken pursuant to the City's eminent domain power does not constitute a financial interest within the meaning of this Part D.

Does the Matter involve a City Property Sale?

☐ Yes

☒ No

3. If you checked "Yes" to Item D(1), provide the names and business addresses of the City officials or employees having such financial interest and identify the nature of the financial interest:

Name

Business Address

Nature of Financial Interest

4. The Disclosing Party further certifies that no prohibited financial interest in the Matter will be acquired by any City official or employee.

E. CERTIFICATION REGARDING SLAVERY ERA BUSINESS

Please check either (1) or (2) below. If the Disclosing Party checks (2), the Disclosing Party must disclose below or in an attachment to this EDS all information required by (2). Failure to comply with these disclosure requirements may make any contract entered into with the City in connection with the Matter voidable by the City.

 X 1. The Disclosing Party verifies that the Disclosing Party has searched any and all records of the Disclosing Party and any and all predecessor entities regarding records of investments or profits from slavery or slaveholder insurance policies during the slavery era (including insurance policies issued to slaveholders that provided coverage for damage to or injury or death of their slaves), and the Disclosing Party has found no such records.

 2. The Disclosing Party verifies that, as a result of conducting the search in step (1) above, the Disclosing Party has found records of investments or profits from slavery or slaveholder insurance policies. The Disclosing Party verifies that the following constitutes full disclosure of all such records, including the names of any and all slaves or slaveholders described in those records:

SECTION VI – CERTIFICATIONS FOR FEDERALLY FUNDED MATTERS

NOTE: If the Matter is federally funded, complete this Section VI. If the Matter is not federally funded, proceed to Section VII. For purposes of this Section VI, tax credits allocated by the City and proceeds of debt obligations of the City are not federal funding.

A. CERTIFICATION REGARDING LOBBYING

1. List below the names of all persons or entities registered under the federal Lobbying Disclosure Act of 1995, as amended, who have made lobbying contacts on behalf of the Disclosing Party with respect to the Matter: (Add sheets if necessary):

(If no explanation appears or begins on the lines above, or if the letters "NA" or if the word "None" appear, it will be conclusively presumed that the Disclosing Party means that NO persons or entities registered under the Lobbying Disclosure Act of 1995, as amended, have made lobbying contacts on behalf of the Disclosing Party with respect to the Matter.)

2. The Disclosing Party has not spent and will not expend any federally appropriated funds to pay any person or entity listed in paragraph A(1) above for his or her lobbying activities or to pay any person or entity to influence or attempt to influence an officer or employee of any agency, as defined by applicable federal law, a member of Congress, an officer or employee of Congress, or an employee

of a member of Congress, in connection with the award of any federally funded contract, making any federally funded grant or loan, entering into any cooperative agreement, or to extend, continue, renew, amend, or modify any federally funded contract, grant, loan, or cooperative agreement.

3. The Disclosing Party will submit an updated certification at the end of each calendar quarter in which there occurs any event that materially affects the accuracy of the statements and information set forth in paragraphs A(1) and A(2) above.

4. The Disclosing Party certifies that either: (i) it is not an organization described in section 501(c)(4) of the Internal Revenue Code of 1986; or (ii) it is an organization described in section 501(c)(4) of the Internal Revenue Code of 1986 but has not engaged and will not engage in "Lobbying Activities," as that term is defined in the Lobbying Disclosure Act of 1995, as amended.

5. If the Disclosing Party is the Applicant, the Disclosing Party must obtain certifications equal in form and substance to paragraphs A(1) through A(4) above from all subcontractors before it awards any subcontract and the Disclosing Party must maintain all such subcontractors' certifications for the duration of the Matter and must make such certifications promptly available to the City upon request.

B. CERTIFICATION REGARDING EQUAL EMPLOYMENT OPPORTUNITY

If the Matter is federally funded, federal regulations require the Applicant and all proposed subcontractors to submit the following information with their bids or in writing at the outset of negotiations.

Is the Disclosing Party the Applicant?

☐ Yes

☐ No

If "Yes," answer the three questions below:

1. Have you developed and do you have on file affirmative action programs pursuant to applicable federal regulations? (See 41 CFR Part 60-2.)

☐ Yes

☐ No

2. Have you filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance Programs, or the Equal Employment Opportunity Commission all reports due under the applicable filing requirements?

☐ Yes

☐ No

☐ Reports not required

3. Have you participated in any previous contracts or subcontracts subject to the equal opportunity clause?

☐ Yes

☐ No

If you checked "No" to question (1) or (2) above, please provide an explanation:

SECTION VII -- FURTHER ACKNOWLEDGMENTS AND CERTIFICATION

The Disclosing Party understands and agrees that:

A. The certifications, disclosures, and acknowledgments contained in this EDS will become part of any contract or other agreement between the Applicant and the City in connection with the Matter, whether procurement, City assistance, or other City action, and are material inducements to the City's execution of any contract or taking other action with respect to the Matter. The Disclosing Party understands that it must comply with all statutes, ordinances, and regulations on which this EDS is based.

B. The City's Governmental Ethics Ordinance, MCC Chapter 2-156, imposes certain duties and obligations on persons or entities seeking City contracts, work, business, or transactions. The full text of this ordinance and a training program is available on line at www.cityofchicago.org/Ethics, and may also be obtained from the City's Board of Ethics, 740 N. Sedgwick St., Suite 500, Chicago, IL 60610, (312) 744-9660. The Disclosing Party must comply fully with this ordinance.

C. If the City determines that any information provided in this EDS is false, incomplete or inaccurate, any contract or other agreement in connection with which it is submitted may be rescinded or be void or voidable, and the City may pursue any remedies under the contract or agreement (if not rescinded or void), at law, or in equity, including terminating the Disclosing Party's participation in the Matter and/or declining to allow the Disclosing Party to participate in other City transactions. Remedies at law for a false statement of material fact may include incarceration and an award to the City of treble damages.

D. It is the City's policy to make this document available to the public on its Internet site and/or upon request. Some or all of the information provided in, and appended to, this EDS may be made publicly available on the Internet, in response to a Freedom of Information Act request, or otherwise. By completing and signing this EDS, the Disclosing Party waives and releases any possible rights or claims which it may have against the City in connection with the public release of information contained in this EDS and also authorizes the City to verify the accuracy of any information submitted in this EDS.

E. The information provided in this EDS must be kept current. In the event of changes, the Disclosing Party must supplement this EDS up to the time the City takes action on the Matter. If the Matter is a contract being handled by the City's Department of Procurement Services, the Disclosing Party must update this EDS as the contract requires. **NOTE:** With respect to Matters subject to MCC Chapter 1-23, Article I (imposing **PERMANENT INELIGIBILITY** for certain specified offenses), the information provided herein regarding eligibility must be kept current for a longer period, as required by MCC Chapter 1-23 and Section 2-154-020.

CERTIFICATION

Under penalty of perjury, the person signing below: (1) warrants that he/she is authorized to execute this EDS, and all applicable Appendices, on behalf of the Disclosing Party, and (2) warrants that all certifications and statements contained in this EDS, and all applicable Appendices, are true, accurate and complete as of the date furnished to the City.

Fifth Third Financial Corporation

(Print or type exact legal name of Disclosing Party)

By: Harry Samuel Lind

(Sign here)

Harry Samuel Lind

(Print or type name of person signing)

Associate General Counsel and Senior Vice President

(Print or type title of person signing)

Signed and sworn to before me on (date) 12-10-17,

at Hamilton County, Ohio (state).

[Signature]
Notary Public



JESSICA A. DIPRE
ATTORNEY AT LAW
Notary Public, State of Ohio
My Commission Has No Expiration
Section 147.03 R.C.

Commission expires: NA

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
APPENDIX A**

**FAMILIAL RELATIONSHIPS WITH ELECTED CITY OFFICIALS
AND DEPARTMENT HEADS**

This Appendix is to be completed only by (a) the Applicant, and (b) any legal entity which has a direct ownership interest in the Applicant exceeding 7.5%. It is not to be completed by any legal entity which has only an indirect ownership interest in the Applicant.

Under MCC Section 2-154-015, the Disclosing Party must disclose whether such Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof currently has a "familial relationship" with any elected city official or department head. A "familial relationship" exists if, as of the date this EDS is signed, the Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof is related to the mayor, any alderman, the city clerk, the city treasurer or any city department head as spouse or domestic partner or as any of the following, whether by blood or adoption: parent, child, brother or sister, aunt or uncle, niece or nephew, grandparent, grandchild, father-in-law, mother-in-law, son-in-law, daughter-in-law, stepfather or stepmother, stepson or stepdaughter, stepbrother or stepsister or half-brother or half-sister.

"Applicable Party" means (1) all executive officers of the Disclosing Party listed in Section II.B.1.a., if the Disclosing Party is a corporation; all partners of the Disclosing Party, if the Disclosing Party is a general partnership; all general partners and limited partners of the Disclosing Party, if the Disclosing Party is a limited partnership; all managers, managing members and members of the Disclosing Party, if the Disclosing Party is a limited liability company; (2) all principal officers of the Disclosing Party; and (3) any person having more than a 7.5% ownership interest in the Disclosing Party. "Principal officers" means the president, chief operating officer, executive director, chief financial officer, treasurer or secretary of a legal entity or any person exercising similar authority.

Does the Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof currently have a "familial relationship" with an elected city official or department head?

☐ Yes

☒ No

If yes, please identify below (1) the name and title of such person, (2) the name of the legal entity to which such person is connected; (3) the name and title of the elected city official or department head to whom such person has a familial relationship, and (4) the precise nature of such familial relationship.

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
APPENDIX B**

BUILDING CODE SCOFFLAW/PROBLEM LANDLORD CERTIFICATION

This Appendix is to be completed only by (a) the Applicant, and (b) any legal entity which has a direct ownership interest in the Applicant exceeding 7.5% (an "Owner"). It is not to be completed by any legal entity which has only an indirect ownership interest in the Applicant.

1. Pursuant to MCC Section 2-154-010, is the Applicant or any Owner identified as a building code scofflaw or problem landlord pursuant to MCC Section 2-92-416?

☐ Yes

☒ No

2. If the Applicant is a legal entity publicly traded on any exchange, is any officer or director of the Applicant identified as a building code scofflaw or problem landlord pursuant to MCC Section 2-92-416?

☐ Yes

☐ No

☒ The Applicant is not publicly traded on any exchange.

3. If yes to (1) or (2) above, please identify below the name of each person or legal entity identified as a building code scofflaw or problem landlord and the address of each building or buildings to which the pertinent code violations apply.

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
APPENDIX C**

PROHIBITION ON WAGE & SALARY HISTORY SCREENING - CERTIFICATION

This Appendix is to be completed only by an Applicant that is completing this EDS as a “contractor” as defined in MCC Section 2-92-385. That section, which should be consulted (www.amlegal.com), generally covers a party to any agreement pursuant to which they: (i) receive City of Chicago funds in consideration for services, work or goods provided (including for legal or other professional services), or (ii) pay the City money for a license, grant or concession allowing them to conduct a business on City premises.

On behalf of an Applicant that is a contractor pursuant to MCC Section 2-92-385, I hereby certify that the Applicant is in compliance with MCC Section 2-92-385(b)(1) and (2), which prohibit: (i) screening job applicants based on their wage or salary history, or (ii) seeking job applicants’ wage or salary history from current or former employers. I also certify that the Applicant has adopted a policy that includes those prohibitions.

☐ Yes

☐ No

☒ N/A – I am not an Applicant that is a “contractor” as defined in MCC Section 2-92-385.

This certification shall serve as the affidavit required by MCC Section 2-92-385(c)(1).

If you checked “no” to the above, please explain.

Fifth Third Financial Corporation Board of Directors:

Greg D. Carmichael
Susan B. Zaunbrecher

Fifth Third Financial Corporation Executive Officers:

Name	Title
Greg D. Carmichael	President & Chief Executive Officer
Lars C. Anderson	Executive Vice President and Chief Operating Officer
Frank R. Forrest	Executive Vice President & Chief Risk Officer
James C. Leonard	Executive Vice President & Treasurer
Philip R. McHugh	Executive Vice President & Head of Regional Banking, Wealth and Asset Management, and Business Banking
Jude A. Schramm	Executive Vice President & Chief Information Officer
Robert P. Shaffer	Executive Vice President & Chief Human Resources Officer
Timothy N. Spence	Executive Vice President & Head of Consumer Banking, Payments, and Strategies
Tayfun Tuzun	Executive Vice President & Chief Financial Officer
Susan B. Zaunbrecher	Executive Vice President, Chief Legal Officer & Secretary
Albert P. Cliffler, III	Senior Vice President and Corporate Tax Director
Mark D. Hazel	Senior Vice President & Controller
Lori G. Heilman	Assistant Secretary
H. Samuel Lind	Assistant Secretary
Saema Somalya	Assistant Secretary

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT
AND AFFIDAVIT**

SECTION I -- GENERAL INFORMATION

A. Legal name of the Disclosing Party submitting this EDS. Include d/b/a/ if applicable:

Fifth Third Bancorp

Check ONE of the following three boxes:

Indicate whether the Disclosing Party submitting this EDS is:

1. ☐ the Applicant

OR

2. ☒ a legal entity currently holding, or anticipated to hold within six months after City action on the contract, transaction or other undertaking to which this EDS pertains (referred to below as the "Matter"), a direct or indirect interest in excess of 7.5% in the Applicant. State the Applicant's legal name: Fifth Third Bank, National Association - EDS is 146685

OR

3. ☐ a legal entity with a direct or indirect right of control of the Applicant (see Section II(B)(1)) State the legal name of the entity in which the Disclosing Party holds a right of control:

B. Business address of the Disclosing Party: 38 Fountain Square Plaza

Cincinnati, OH 45263

C. Telephone: 513-534-3719 Fax: 513-534-6757 Email: sam.lind@53.com

D. Name of contact person: Mr. Harry Samuel Lind

E. Federal Employer Identification No. (if you have one): _____

F. Brief description of the Matter to which this EDS pertains. (Include project number and location of property, if applicable):

RFP for Payment of Interest on the Monies of The City of Chicago & The Chicago Board of Education

G. Which City agency or department is requesting this EDS? Department of Finance

If the Matter is a contract being handled by the City's Department of Procurement Services, please complete the following:

Specification # _____ and Contract # _____

SECTION II -- DISCLOSURE OF OWNERSHIP INTERESTS

A. NATURE OF THE DISCLOSING PARTY

1. Indicate the nature of the Disclosing Party:

- | | |
|--|--|
| <input type="checkbox"/> Person | <input type="checkbox"/> Limited liability company |
| <input checked="" type="checkbox"/> Publicly registered business corporation | <input type="checkbox"/> Limited liability partnership |
| <input type="checkbox"/> Privately held business corporation | <input type="checkbox"/> Joint venture |
| <input type="checkbox"/> Sole proprietorship | <input type="checkbox"/> Not-for-profit corporation |
| <input type="checkbox"/> General partnership | (Is the not-for-profit corporation also a 501(c)(3))? |
| <input type="checkbox"/> Limited partnership | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| <input type="checkbox"/> Trust | <input type="checkbox"/> Other (please specify) |

2. For legal entities, the state (or foreign country) of incorporation or organization, if applicable:

Ohio

3. For legal entities not organized in the State of Illinois: Has the organization registered to do business in the State of Illinois as a foreign entity?

☐ Yes ☒ No ☐ Organized in Illinois

B. IF THE DISCLOSING PARTY IS A LEGAL ENTITY:

1. List below the full names and titles, if applicable, of: (i) all executive officers and all directors of the entity; (ii) **for not-for-profit corporations**, all members, if any, which are legal entities (if there are no such members, write "no members which are legal entities"); (iii) **for trusts, estates or other similar entities**, the trustee, executor, administrator, or similarly situated party; (iv) **for general or limited partnerships, limited liability companies, limited liability partnerships or joint ventures**, each general partner, managing member, manager or any other person or legal entity that directly or indirectly controls the day-to-day management of the Applicant.

NOTE: Each legal entity listed below must submit an EDS on its own behalf.

Name	Title
------	-------

see attached list

2. Please provide the following information concerning each person or legal entity having a direct or indirect, current or prospective (i.e. within 6 months after City action) beneficial interest (including ownership) in excess of 7.5% of the Applicant. Examples of such an interest include shares in a corporation, partnership interest in a partnership or joint venture, interest of a member or manager in a

limited liability company, or interest of a beneficiary of a trust, estate or other similar entity. If none, state "None."

NOTE: Each legal entity listed below may be required to submit an EDS on its own behalf.

Name	Business Address	Percentage Interest in the Applicant
T. Rowe Price		9.45%
Vanguard		8.8%

SECTION III -- INCOME OR COMPENSATION TO, OR OWNERSHIP BY, CITY ELECTED OFFICIALS

Has the Disclosing Party provided any income or compensation to any City elected official during the 12-month period preceding the date of this EDS? ☐ Yes ☒ No

Does the Disclosing Party reasonably expect to provide any income or compensation to any City elected official during the 12-month period following the date of this EDS? ☐ Yes ☒ No

If "yes" to either of the above, please identify below the name(s) of such City elected official(s) and describe such income or compensation:

Does any City elected official or, to the best of the Disclosing Party's knowledge after reasonable inquiry, any City elected official's spouse or domestic partner, have a financial interest (as defined in Chapter 2-156 of the Municipal Code of Chicago ("MCC")) in the Disclosing Party?

☐ Yes ☒ No

If "yes," please identify below the name(s) of such City elected official(s) and/or spouse(s)/domestic partner(s) and describe the financial interest(s).

SECTION IV -- DISCLOSURE OF SUBCONTRACTORS AND OTHER RETAINED PARTIES

The Disclosing Party must disclose the name and business address of each subcontractor, attorney, lobbyist (as defined in MCC Chapter 2-156), accountant, consultant and any other person or entity whom the Disclosing Party has retained or expects to retain in connection with the Matter, as well as the nature of the relationship, and the total amount of the fees paid or estimated to be paid. The Disclosing Party is not required to disclose employees who are paid solely through the Disclosing Party's regular payroll. If the Disclosing Party is uncertain whether a disclosure is required under this Section, the Disclosing Party must either ask the City whether disclosure is required or make the disclosure.

Name (indicate whether retained or anticipated to be retained)	Business Address	Relationship to Disclosing Party (subcontractor, attorney, lobbyist, etc.)	Fees (indicate whether paid or estimated.) NOTE: "hourly rate" or "t.b.d." is not an acceptable response.
--	------------------	--	---

(Add sheets if necessary)

☒ Check here if the Disclosing Party has not retained, nor expects to retain, any such persons or entities.

SECTION V -- CERTIFICATIONS

A. COURT-ORDERED CHILD SUPPORT COMPLIANCE

Under MCC Section 2-92-415, substantial owners of business entities that contract with the City must remain in compliance with their child support obligations throughout the contract's term.

Has any person who directly or indirectly owns 10% or more of the Disclosing Party been declared in arrearage on any child support obligations by any Illinois court of competent jurisdiction?

☐ Yes ☐ No ☒ No person directly or indirectly owns 10% or more of the Disclosing Party.

If "Yes," has the person entered into a court-approved agreement for payment of all support owed and is the person in compliance with that agreement?

☐ Yes ☐ No

B. FURTHER CERTIFICATIONS

1. [This paragraph 1 applies only if the Matter is a contract being handled by the City's Department of Procurement Services.] In the 5-year period preceding the date of this EDS, neither the Disclosing Party nor any Affiliated Entity [see definition in (5) below] has engaged, in connection with the performance of any public contract, the services of an integrity monitor, independent private sector inspector general, or integrity compliance consultant (i.e., an individual or entity with legal, auditing, investigative, or other similar skills, designated by a public agency to help the agency monitor the activity of specified agency vendors as well as help the vendors reform their business practices so they can be considered for agency contracts in the future, or continue with a contract in progress).

2. The Disclosing Party and its Affiliated Entities are not delinquent in the payment of any fine, fee, tax or other source of indebtedness owed to the City of Chicago, including, but not limited to, water and sewer charges, license fees, parking tickets, property taxes and sales taxes, nor is the Disclosing Party delinquent in the payment of any tax administered by the Illinois Department of Revenue.

3. The Disclosing Party and, if the Disclosing Party is a legal entity, all of those persons or entities identified in Section II(B)(1) of this EDS:

- a. are not presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from any transactions by any federal, state or local unit of government;
- b. have not, during the 5 years before the date of this EDS, been convicted of a criminal offense, adjudged guilty, or had a civil judgment rendered against them in connection with: obtaining, attempting to obtain, or performing a public (federal, state or local) transaction or contract under a public transaction; a violation of federal or state antitrust statutes; fraud; embezzlement; theft; forgery; bribery; falsification or destruction of records; making false statements; or receiving stolen property;
- c. are not presently indicted for, or criminally or civilly charged by, a governmental entity (federal, state or local) with committing any of the offenses set forth in subparagraph (b) above;
- d. have not, during the 5 years before the date of this EDS, had one or more public transactions (federal, state or local) terminated for cause or default; and
- e. have not, during the 5 years before the date of this EDS, been convicted, adjudged guilty, or found liable in a civil proceeding, or in any criminal or civil action, including actions concerning environmental violations, instituted by the City or by the federal government, any state, or any other unit of local government.

4. The Disclosing Party understands and shall comply with the applicable requirements of MCC Chapters 2-56 (Inspector General) and 2-156 (Governmental Ethics).

5. Certifications (5), (6) and (7) concern:

- the Disclosing Party;
- any "Contractor" (meaning any contractor or subcontractor used by the Disclosing Party in connection with the Matter, including but not limited to all persons or legal entities disclosed under Section IV, "Disclosure of Subcontractors and Other Retained Parties");
- any "Affiliated Entity" (meaning a person or entity that, directly or indirectly: controls the Disclosing Party, is controlled by the Disclosing Party, or is, with the Disclosing Party, under common control of another person or entity). Indicia of control include, without limitation: interlocking management or ownership; identity of interests among family members, shared facilities and equipment; common use of employees; or organization of a business entity following the ineligibility of a business entity to do business with federal or state or local government, including the City, using substantially the same management, ownership, or principals as the ineligible entity. With respect to Contractors, the term Affiliated Entity means a person or entity that directly or indirectly controls the Contractor, is controlled by it, or, with the Contractor, is under common control of another person or entity;
- any responsible official of the Disclosing Party, any Contractor or any Affiliated Entity or any other official, agent or employee of the Disclosing Party, any Contractor or any Affiliated Entity, acting pursuant to the direction or authorization of a responsible official of the Disclosing Party, any Contractor or any Affiliated Entity (collectively "Agents").

Neither the Disclosing Party, nor any Contractor, nor any Affiliated Entity of either the Disclosing Party or any Contractor, nor any Agents have, during the 5 years before the date of this EDS, or, with respect to a Contractor, an Affiliated Entity, or an Affiliated Entity of a Contractor during the 5 years before the date of such Contractor's or Affiliated Entity's contract or engagement in connection with the Matter:

- a. bribed or attempted to bribe, or been convicted or adjudged guilty of bribery or attempting to bribe, a public officer or employee of the City, the State of Illinois, or any agency of the federal government or of any state or local government in the United States of America, in that officer's or employee's official capacity;
 - b. agreed or colluded with other bidders or prospective bidders, or been a party to any such agreement, or been convicted or adjudged guilty of agreement or collusion among bidders or prospective bidders, in restraint of freedom of competition by agreement to bid a fixed price or otherwise; or
 - c. made an admission of such conduct described in subparagraph (a) or (b) above that is a matter of record, but have not been prosecuted for such conduct; or
 - d. violated the provisions referenced in MCC Subsection 2-92-320(a)(4)(Contracts Requiring a Base Wage); (a)(5)(Debarment Regulations); or (a)(6)(Minimum Wage Ordinance).
6. Neither the Disclosing Party, nor any Affiliated Entity or Contractor, or any of their employees, officials, agents or partners, is barred from contracting with any unit of state or local government as a result of engaging in or being convicted of (1) bid-rigging in violation of 720 ILCS 5/33E-3; (2) bid-rotating in violation of 720 ILCS 5/33E-4; or (3) any similar offense of any state or of the United States of America that contains the same elements as the offense of bid-rigging or bid-rotating.
7. Neither the Disclosing Party nor any Affiliated Entity is listed on a Sanctions List maintained by the United States Department of Commerce, State, or Treasury, or any successor federal agency.
8. [FOR APPLICANT ONLY] (i) Neither the Applicant nor any "controlling person" [see MCC Chapter 1-23, Article I for applicability and defined terms] of the Applicant is currently indicted or charged with, or has admitted guilt of, or has ever been convicted of, or placed under supervision for, any criminal offense involving actual, attempted, or conspiracy to commit bribery, theft, fraud, forgery, perjury, dishonesty or deceit against an officer or employee of the City or any "sister agency"; and (ii) the Applicant understands and acknowledges that compliance with Article I is a continuing requirement for doing business with the City. NOTE: If MCC Chapter 1-23, Article I applies to the Applicant, that Article's permanent compliance timeframe supersedes 5-year compliance timeframes in this Section V.
9. [FOR APPLICANT ONLY] The Applicant and its Affiliated Entities will not use, nor permit their subcontractors to use, any facility listed as having an active exclusion by the U.S. EPA on the federal System for Award Management ("SAM").
10. [FOR APPLICANT ONLY] The Applicant will obtain from any contractors/subcontractors hired or to be hired in connection with the Matter certifications equal in form and substance to those in Certifications (2) and (9) above and will not, without the prior written consent of the City, use any such

contractor/subcontractor that does not provide such certifications or that the Applicant has reason to believe has not provided or cannot provide truthful certifications.

11. If the Disclosing Party is unable to certify to any of the above statements in this Part B (Further Certifications), the Disclosing Party must explain below:

B.8, B.9, B.10 do not apply as Fifth Third Bancorp is not the applicant

If the letters "NA," the word "None," or no response appears on the lines above, it will be conclusively presumed that the Disclosing Party certified to the above statements.

12. To the best of the Disclosing Party's knowledge after reasonable inquiry, the following is a complete list of all current employees of the Disclosing Party who were, at any time during the 12-month period preceding the date of this EDS, an employee, or elected or appointed official, of the City of Chicago (if none, indicate with "N/A" or "none").

None

13. To the best of the Disclosing Party's knowledge after reasonable inquiry, the following is a complete list of all gifts that the Disclosing Party has given or caused to be given, at any time during the 12-month period preceding the execution date of this EDS, to an employee, or elected or appointed official, of the City of Chicago. For purposes of this statement, a "gift" does not include: (i) anything made generally available to City employees or to the general public, or (ii) food or drink provided in the course of official City business and having a retail value of less than \$25 per recipient, or (iii) a political contribution otherwise duly reported as required by law (if none, indicate with "N/A" or "none"). As to any gift listed below, please also list the name of the City recipient.

None

C. CERTIFICATION OF STATUS AS FINANCIAL INSTITUTION

1. The Disclosing Party certifies that the Disclosing Party (check one)

☒ is ☐ is not

a "financial institution" as defined in MCC Section 2-32-455(b).

2. If the Disclosing Party IS a financial institution, then the Disclosing Party pledges:

"We are not and will not become a predatory lender as defined in MCC Chapter 2-32. We further pledge that none of our affiliates is, and none of them will become, a predatory lender as defined in MCC Chapter 2-32. We understand that becoming a predatory lender or becoming an affiliate of a predatory lender may result in the loss of the privilege of doing business with the City."

If the Disclosing Party is unable to make this pledge because it or any of its affiliates (as defined in MCC Section 2-32-455(b)) is a predatory lender within the meaning of MCC Chapter 2-32, explain here (attach additional pages if necessary):

If the letters "NA," the word "None," or no response appears on the lines above, it will be conclusively presumed that the Disclosing Party certified to the above statements.

D. CERTIFICATION REGARDING FINANCIAL INTEREST IN CITY BUSINESS

Any words or terms defined in MCC Chapter 2-156 have the same meanings if used in this Part D.

1. In accordance with MCC Section 2-156-110: To the best of the Disclosing Party's knowledge after reasonable inquiry, does any official or employee of the City have a financial interest in his or her own name or in the name of any other person or entity in the Matter?

☐ Yes

☒ No

NOTE: If you checked "Yes" to Item D(1), proceed to Items D(2) and D(3). If you checked "No" to Item D(1), skip Items D(2) and D(3) and proceed to Part E.

2. Unless sold pursuant to a process of competitive bidding, or otherwise permitted, no City elected official or employee shall have a financial interest in his or her own name or in the name of any other person or entity in the purchase of any property that (i) belongs to the City, or (ii) is sold for taxes or assessments, or (iii) is sold by virtue of legal process at the suit of the City (collectively, "City Property Sale"). Compensation for property taken pursuant to the City's eminent domain power does not constitute a financial interest within the meaning of this Part D.

Does the Matter involve a City Property Sale?

☐ Yes

☒ No

3. If you checked "Yes" to Item D(1), provide the names and business addresses of the City officials or employees having such financial interest and identify the nature of the financial interest:

Name

Business Address

Nature of Financial Interest

4. The Disclosing Party further certifies that no prohibited financial interest in the Matter will be acquired by any City official or employee.

E. CERTIFICATION REGARDING SLAVERY ERA BUSINESS

Please check either (1) or (2) below. If the Disclosing Party checks (2), the Disclosing Party must disclose below or in an attachment to this EDS all information required by (2). Failure to comply with these disclosure requirements may make any contract entered into with the City in connection with the Matter voidable by the City.

X 1. The Disclosing Party verifies that the Disclosing Party has searched any and all records of the Disclosing Party and any and all predecessor entities regarding records of investments or profits from slavery or slaveholder insurance policies during the slavery era (including insurance policies issued to slaveholders that provided coverage for damage to or injury or death of their slaves), and the Disclosing Party has found no such records.

 2. The Disclosing Party verifies that, as a result of conducting the search in step (1) above, the Disclosing Party has found records of investments or profits from slavery or slaveholder insurance policies. The Disclosing Party verifies that the following constitutes full disclosure of all such records, including the names of any and all slaves or slaveholders described in those records:

SECTION VI – CERTIFICATIONS FOR FEDERALLY FUNDED MATTERS

NOTE: If the Matter is federally funded, complete this Section VI. If the Matter is not federally funded, proceed to Section VII. For purposes of this Section VI, tax credits allocated by the City and proceeds of debt obligations of the City are not federal funding.

A. CERTIFICATION REGARDING LOBBYING

1. List below the names of all persons or entities registered under the federal Lobbying Disclosure Act of 1995, as amended, who have made lobbying contacts on behalf of the Disclosing Party with respect to the Matter: (Add sheets if necessary):

(If no explanation appears or begins on the lines above, or if the letters "NA" or if the word "None" appear, it will be conclusively presumed that the Disclosing Party means that NO persons or entities registered under the Lobbying Disclosure Act of 1995, as amended, have made lobbying contacts on behalf of the Disclosing Party with respect to the Matter.)

2. The Disclosing Party has not spent and will not expend any federally appropriated funds to pay any person or entity listed in paragraph A(1) above for his or her lobbying activities or to pay any person or entity to influence or attempt to influence an officer or employee of any agency, as defined by applicable federal law, a member of Congress, an officer or employee of Congress, or an employee

of a member of Congress, in connection with the award of any federally funded contract, making any federally funded grant or loan, entering into any cooperative agreement, or to extend, continue, renew, amend, or modify any federally funded contract, grant, loan, or cooperative agreement.

3. The Disclosing Party will submit an updated certification at the end of each calendar quarter in which there occurs any event that materially affects the accuracy of the statements and information set forth in paragraphs A(1) and A(2) above.

4. The Disclosing Party certifies that either: (i) it is not an organization described in section 501(c)(4) of the Internal Revenue Code of 1986; or (ii) it is an organization described in section 501(c)(4) of the Internal Revenue Code of 1986 but has not engaged and will not engage in "Lobbying Activities," as that term is defined in the Lobbying Disclosure Act of 1995, as amended.

5. If the Disclosing Party is the Applicant, the Disclosing Party must obtain certifications equal in form and substance to paragraphs A(1) through A(4) above from all subcontractors before it awards any subcontract and the Disclosing Party must maintain all such subcontractors' certifications for the duration of the Matter and must make such certifications promptly available to the City upon request.

B. CERTIFICATION REGARDING EQUAL EMPLOYMENT OPPORTUNITY

If the Matter is federally funded, federal regulations require the Applicant and all proposed subcontractors to submit the following information with their bids or in writing at the outset of negotiations.

Is the Disclosing Party the Applicant?

☐ Yes

☐ No

If "Yes," answer the three questions below:

1. Have you developed and do you have on file affirmative action programs pursuant to applicable federal regulations? (See 41 CFR Part 60-2.)

☐ Yes

☐ No

2. Have you filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance Programs, or the Equal Employment Opportunity Commission all reports due under the applicable filing requirements?

☐ Yes

☐ No

☐ Reports not required

3. Have you participated in any previous contracts or subcontracts subject to the equal opportunity clause?

☐ Yes

☐ No

If you checked "No" to question (1) or (2) above, please provide an explanation:

SECTION VII -- FURTHER ACKNOWLEDGMENTS AND CERTIFICATION

The Disclosing Party understands and agrees that:

A. The certifications, disclosures, and acknowledgments contained in this EDS will become part of any contract or other agreement between the Applicant and the City in connection with the Matter, whether procurement, City assistance, or other City action, and are material inducements to the City's execution of any contract or taking other action with respect to the Matter. The Disclosing Party understands that it must comply with all statutes, ordinances, and regulations on which this EDS is based.

B. The City's Governmental Ethics Ordinance, MCC Chapter 2-156, imposes certain duties and obligations on persons or entities seeking City contracts, work, business, or transactions. The full text of this ordinance and a training program is available on line at www.cityofchicago.org/Ethics, and may also be obtained from the City's Board of Ethics, 740 N. Sedgwick St., Suite 500, Chicago, IL 60610, (312) 744-9660. The Disclosing Party must comply fully with this ordinance.

C. If the City determines that any information provided in this EDS is false, incomplete or inaccurate, any contract or other agreement in connection with which it is submitted may be rescinded or be void or voidable, and the City may pursue any remedies under the contract or agreement (if not rescinded or void), at law, or in equity, including terminating the Disclosing Party's participation in the Matter and/or declining to allow the Disclosing Party to participate in other City transactions. Remedies at law for a false statement of material fact may include incarceration and an award to the City of treble damages.

D. It is the City's policy to make this document available to the public on its Internet site and/or upon request. Some or all of the information provided in, and appended to, this EDS may be made publicly available on the Internet, in response to a Freedom of Information Act request, or otherwise. By completing and signing this EDS, the Disclosing Party waives and releases any possible rights or claims which it may have against the City in connection with the public release of information contained in this EDS and also authorizes the City to verify the accuracy of any information submitted in this EDS.

E. The information provided in this EDS must be kept current. In the event of changes, the Disclosing Party must supplement this EDS up to the time the City takes action on the Matter. If the Matter is a contract being handled by the City's Department of Procurement Services, the Disclosing Party must update this EDS as the contract requires. **NOTE:** With respect to Matters subject to MCC Chapter 1-23, Article I (imposing **PERMANENT INELIGIBILITY** for certain specified offenses), the information provided herein regarding eligibility must be kept current for a longer period, as required by MCC Chapter 1-23 and Section 2-154-020.

CERTIFICATION

Under penalty of perjury, the person signing below: (1) warrants that he/she is authorized to execute this EDS, and all applicable Appendices, on behalf of the Disclosing Party, and (2) warrants that all certifications and statements contained in this EDS, and all applicable Appendices, are true, accurate and complete as of the date furnished to the City.

Fifth Third Bancorp

(Print or type exact legal name of Disclosing Party)

By: Harry Samuel Lind

(Sign here)

Harry Samuel Lind

(Print or type name of person signing)

Associate General Counsel and Senior Vice President

(Print or type title of person signing)

Signed and sworn to before me on (date) 12-10-19,

at Hamilton County, Ohio (state).

[Signature]
Notary Public



JESSICA A. DIPRE
ATTORNEY AT LAW
Notary Public, State of Ohio
My Commission expires on
12/31/2021

Commission expires: NA

CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
APPENDIX A

FAMILIAL RELATIONSHIPS WITH ELECTED CITY OFFICIALS
AND DEPARTMENT HEADS

This Appendix is to be completed only by (a) the Applicant, and (b) any legal entity which has a direct ownership interest in the Applicant exceeding 7.5%. It is not to be completed by any legal entity which has only an indirect ownership interest in the Applicant.

Under MCC Section 2-154-015, the Disclosing Party must disclose whether such Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof currently has a "familial relationship" with any elected city official or department head. A "familial relationship" exists if, as of the date this EDS is signed, the Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof is related to the mayor, any alderman, the city clerk, the city treasurer or any city department head as spouse or domestic partner or as any of the following, whether by blood or adoption: parent, child, brother or sister, aunt or uncle, niece or nephew, grandparent, grandchild, father-in-law, mother-in-law, son-in-law, daughter-in-law, stepfather or stepmother, stepson or stepdaughter, stepbrother or stepsister or half-brother or half-sister.

"Applicable Party" means (1) all executive officers of the Disclosing Party listed in Section II.B.1.a., if the Disclosing Party is a corporation; all partners of the Disclosing Party, if the Disclosing Party is a general partnership; all general partners and limited partners of the Disclosing Party, if the Disclosing Party is a limited partnership; all managers, managing members and members of the Disclosing Party, if the Disclosing Party is a limited liability company; (2) all principal officers of the Disclosing Party; and (3) any person having more than a 7.5% ownership interest in the Disclosing Party. "Principal officers" means the president, chief operating officer, executive director, chief financial officer, treasurer or secretary of a legal entity or any person exercising similar authority.

Does the Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof currently have a "familial relationship" with an elected city official or department head?

☐ Yes

☐ No

If yes, please identify below (1) the name and title of such person, (2) the name of the legal entity to which such person is connected; (3) the name and title of the elected city official or department head to whom such person has a familial relationship, and (4) the precise nature of such familial relationship.

not applicable as Fifth Third Bancorp has indirect ownership over applicant

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
APPENDIX B**

BUILDING CODE SCOFFLAW/PROBLEM LANDLORD CERTIFICATION

This Appendix is to be completed only by (a) the Applicant, and (b) any legal entity which has a direct ownership interest in the Applicant exceeding 7.5% (an "Owner"). It is not to be completed by any legal entity which has only an indirect ownership interest in the Applicant.

1. Pursuant to MCC Section 2-154-010, is the Applicant or any Owner identified as a building code scofflaw or problem landlord pursuant to MCC Section 2-92-416?

☐ Yes ☐ No

2. If the Applicant is a legal entity publicly traded on any exchange, is any officer or director of the Applicant identified as a building code scofflaw or problem landlord pursuant to MCC Section 2-92-416?

☐ Yes ☐ No ☐ The Applicant is not publicly traded on any exchange.

3. If yes to (1) or (2) above, please identify below the name of each person or legal entity identified as a building code scofflaw or problem landlord and the address of each building or buildings to which the pertinent code violations apply.

not applicable as Fifth Third Bancorp has indirect ownership over applicant

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
APPENDIX C**

PROHIBITION ON WAGE & SALARY HISTORY SCREENING - CERTIFICATION

This Appendix is to be completed only by an Applicant that is completing this EDS as a “contractor” as defined in MCC Section 2-92-385. That section, which should be consulted (www.amlegal.com), generally covers a party to any agreement pursuant to which they: (i) receive City of Chicago funds in consideration for services, work or goods provided (including for legal or other professional services), or (ii) pay the City money for a license, grant or concession allowing them to conduct a business on City premises.

On behalf of an Applicant that is a contractor pursuant to MCC Section 2-92-385, I hereby certify that the Applicant is in compliance with MCC Section 2-92-385(b)(1) and (2), which prohibit: (i) screening job applicants based on their wage or salary history, or (ii) seeking job applicants’ wage or salary history from current or former employers. I also certify that the Applicant has adopted a policy that includes those prohibitions.

☐ Yes

☐ No

☒ N/A – I am not an Applicant that is a “contractor” as defined in MCC Section 2-92-385.

This certification shall serve as the affidavit required by MCC Section 2-92-385(c)(1).

If you checked “no” to the above, please explain.

Fifth Third Bancorp Board of Directors:

Greg D. Carmichael – Chairman of the Board

Nicholas K. Akins

B. Evan Bayh, III

Jorge L. Benitez

Katherine B. Blackburn

Emerson L. Brumback

Jerry W. Burris

C. Bryan Daniels

Thomas H. Harvey

Gary R. Heminger

Jewell D. Hoover

Michael B. McCallister

Eileen A. Mallesch

Marsha C. Williams

Fifth Third Bancorp Executive Officers:

Name	Title
Greg D. Carmichael	Chairman of the Board, President & Chief Executive Officer
Lars C. Anderson	Executive Vice President & Chief Operating Officer
Frank R. Forrest	Executive Vice President & Chief Risk Officer
Kristine Garrett	Executive Vice President and Head of Wealth and Asset Management
Mark D. Hazel	Senior Vice President & Controller
Brian D. Lamb	Executive Vice President and Head of Retail Banking
James C. Leonard	Executive Vice President & Treasurer
Philip R. McHugh	Executive Vice President and Head of Regional Banking, Wealth and Asset Management, and Business Banking
Jude A. Schramm	Executive Vice President & Chief Information Officer
Robert P. Shaffer	Executive Vice President & Chief Human Resources Officer
Timothy N. Spence	Executive Vice President and Head of Consumer Bank, Payments, and Strategies
Tayfun Tuzun	Executive Vice President & Chief Financial Officer
Susan B. Zaunbrecher	Executive Vice President, Chief Legal Officer & Corporate Secretary



SECRETARY'S CERTIFICATE

The undersigned does hereby certify that she is the duly elected, qualified, and acting Assistant Secretary of Fifth Third Bank, National Association, a national banking association organized under the laws of the United States and having a main office in Cincinnati, Ohio, and the undersigned does hereby further certify that:


1. Pursuant to Section 805 ILCS 5/1.80, a foreign corporation is defined as a corporation for profit organized under laws other than the laws of Illinois but shall not include a banking corporation organized under the laws of another state or of the United States.

2. Further, 805 ILCS 5/13.05 states that any foreign corporation may secure from the Secretary of State the authority to do business in Illinois excluding corporations engaged in the business of banking, insurance, suretyship, or a business of the character of a building and loan corporation.

3. As a national banking association, Fifth Third Bank is unable to obtain from the Illinois Secretary of State the authority to do business and is, therefore, unable to produce a Certificate of Good Standing evidencing its ability to transact business within the State.

4. Title 12, Section 36 of the United States Code authorizes national banks, regardless of the location of its main office and subject to approval by the Office of the Comptroller of the Currency, to establish and operate branch offices in other states in the same manner as the applicable state law would permit a branch office to be established by a bank chartered by that state. Accordingly, Fifth Third Bank has established branch offices in Illinois in a manner conforming to the Illinois Banking Act and transacts business within the State.

IN WITNESS WHEREOF, I hereunto subscribe my name as of this 12th day of December, 2019.



Lori G. Heilman
Assistant Secretary

FORM ADV

UNIFORM APPLICATION FOR INVESTMENT ADVISER REGISTRATION AND REPORT BY EXEMPT REPORTING ADVISERS

Primary Business Name: T. ROWE PRICE ASSOCIATES, INC.

CRD Number:

Other-Than-Annual Amendment - All Sections

Rev. 10/2017

8/1/2019 2:06:12 PM

WARNING: Complete this form truthfully. False statements or omissions may result in denial of your application, revocation of your registration, or criminal prosecution. You must keep this form updated by filing periodic amendments. See Form ADV General Instruction 4.

Item 1 Identifying Information

Responses to this Item tell us who you are, where you are doing business, and how we can contact you. If you are filing an *umbrella registration*, the information in Item 1 should be provided for the *filing adviser* only. General Instruction 5 provides information to assist you with filing an *umbrella registration*.

A. Your full legal name (if you are a sole proprietor, your last, first, and middle names):

T. ROWE PRICE ASSOCIATES, INC.

B. (1) Name under which you primarily conduct your advisory business, if different from Item 1.A.

T. ROWE PRICE ASSOCIATES, INC.

List on Section 1.B. of Schedule D any additional names under which you conduct your advisory business.

(2) If you are using this Form ADV to register more than one investment adviser under an *umbrella registration*, check this box ☐

If you check this box, complete a Schedule R for each relying adviser.

C. If this filing is reporting a change in your legal name (Item 1.A.) or primary business name (Item 1.B.(1)), enter the new name and specify whether the name change is of

☐ your legal name or ☐ your primary business name:

D. (1) If you are registered with the SEC as an investment adviser, your SEC file number:

(2) If you report to the SEC as an *exempt reporting adviser*, your SEC file number:

(3) If you have one or more Central Index Key numbers assigned by the SEC ("CIK Numbers"), all of your CIK numbers:

No Information Filed

E. (1) If you have a number ("CRD Number") assigned by the FINRA's CRD system or by the IARD system, your CRD number: **105496**

If your firm does not have a CRD number, skip this Item 1.E. Do not provide the CRD number of one of your officers, employees, or affiliates.

(2) If you have additional CRD Numbers, your additional CRD numbers:

No Information Filed

F. Principal Office and Place of Business

(1) Address (do not use a P.O. Box):

Number and Street 1:

100 EAST PRATT STREET

City:

BALTIMORE

State:

Maryland

Number and Street 2:

Country:

United States

ZIP+4/Postal Code:

21202

If this address is a private residence, check this box: ☐

List on Section 1.F. of Schedule D any office, other than your principal office and place of business, at which you conduct investment advisory business. If you are applying for registration, or are registered, with one or more state securities authorities, you must list all of your offices in the state or states to which you are applying for registration or with whom you are registered. If you are applying for SEC registration, if you are registered only with the SEC, or if you are reporting to the SEC as an exempt reporting adviser, list the largest twenty-five offices in terms of numbers of employees as of the end of your most recently completed fiscal year.

(2) Days of week that you normally conduct business at your principal office and place of business:

☒ Monday - Friday ☐ Other:

Normal business hours at this location:

8:00 A.M. - 5:00 P.M.

(3) Telephone number at this location:

410-345-2000

(4) Facsimile number at this location, if any.

410-345-6575

(5) What is the total number of offices, other than your principal office and place of business, at which you conduct investment advisory business as of

the end of your most recently completed fiscal year?

6

- G. Mailing address, if different from your *principal office and place of business* address.

Number and Street 1: _____ Number and Street 2: _____
City: _____ State: _____ Country: _____ ZIP+4/Postal Code: _____

If this address is a private residence, check this box: ☐

- H. If you are a sole proprietor, state your full residence address, if different from your *principal office and place of business* address in Item 1.F.:

Number and Street 1: _____ Number and Street 2: _____
City: _____ State: _____ Country: _____ ZIP+4/Postal Code: _____

- I. Do you have one or more websites or accounts on publicly available social media platforms (including, but not limited to, Twitter, Facebook and LinkedIn)? Yes No
☐ ☐

If "yes," list all firm website addresses and the address for each of the firm's accounts on publicly available social media platforms on Section 1.I. of Schedule D. If a website address serves as a portal through which to access other information you have published on the web, you may list the portal without listing addresses for all of the other information. You may need to list more than one portal address. Do not provide the addresses of websites or accounts on publicly available social media platforms where you do not control the content. Do not provide the individual electronic mail (e-mail) addresses of employees or the addresses of employee accounts on publicly available social media platforms.

- J. Chief Compliance Officer

(1) Provide the name and contact information of your Chief Compliance Officer. If you are an *exempt reporting adviser*, you must provide the contact information for your Chief Compliance Officer, if you have one. If not, you must complete Item 1.K. below.

Name: _____ Other titles, if any: _____
Telephone number: _____ Facsimile number, if any: _____
Number and Street 1: _____ Number and Street 2: _____
City: _____ State: _____ Country: _____ ZIP+4/Postal Code: _____

Electronic mail (e-mail) address, if Chief Compliance Officer has one: _____

(2) If your Chief Compliance Officer is compensated or employed by any *person* other than you, a *related person* or an investment company registered under the Investment Company Act of 1940 that you advise for providing chief compliance officer services to you, provide the *person's* name and IRS Employer Identification Number (if any):

Name: _____
IRS Employer Identification Number: _____

- K. Additional Regulatory Contact Person: If a person other than the Chief Compliance Officer is authorized to receive information and respond to questions about this Form ADV, you may provide that information here.

Name: _____ Titles: _____
Telephone number: _____ Facsimile number, if any: _____
Number and Street 1: _____ Number and Street 2: _____
City: _____ State: _____ Country: _____ ZIP+4/Postal Code: _____

Electronic mail (e-mail) address, if contact person has one: _____

- L. Do you maintain some or all of the books and records you are required to keep under Section 204 of the Advisers Act, or similar state law, somewhere other than your *principal office and place of business*? Yes No
☐ ☐

If "yes," complete Section 1.L. of Schedule D.

- M. Are you registered with a *foreign financial regulatory authority*? Yes No
☐ ☐

Answer "no" if you are not registered with a *foreign financial regulatory authority*, even if you have an affiliate that is registered with a *foreign financial regulatory authority*. If "yes," complete Section 1.M. of Schedule D.

- N. Are you a public reporting company under Sections 12 or 15(d) of the Securities Exchange Act of 1934? Yes No
☐ ☐

- O. Did you have \$1 billion or more in assets on the last day of your most recent fiscal year? Yes No
☐ ☐

If yes, what is the approximate amount of your assets

- ☐ \$1 billion to less than \$10 billion
☐ \$10 billion to less than \$50 billion

550 billion or more

For purposes of Item 1.O. only, "assets" refers to your total assets, rather than the assets you manage on behalf of clients. Determine your total assets using the total assets shown on the balance sheet for your most recent fiscal year end.

P. Provide your Legal Entity Identifier if you have one

A legal entity identifier is a unique number that companies use to identify each other in the financial marketplace. You may not have a legal entity identifier.

SECTION 1.B. Other Business Names

No Information Filed

SECTION 1.F. Other Offices

Complete the following information for each office, other than your *principal office and place of business*, at which you conduct investment advisory business. You must complete a separate Schedule D Section 1.F. for each location. If you are applying for SEC registration, if you are registered only with the SEC, or if you are an *exempt reporting adviser*, list only the largest twenty-five offices (in terms of numbers of employees).

Number and Street 1:

T. ROWE PRICE ASSOCIATES, INC.

City:

SAN FRANCISCO

State:

California

Number and Street 2:

333 BUSH STREET, SUITE 2250

Country:

United States

ZIP+4/Postal Code:

94104-2800

If this address is a private residence, check this box: ☐

Telephone Number:

415-772-9950

Facsimile Number, if any:

415-772-1111

If this office location is also required to be registered with FINRA or a *state securities authority* as a branch office location for a broker-dealer or investment adviser on the Uniform Branch Office Registration Form (Form BR), please provide the CRD Branch Number here:

91343

How many *employees* perform investment advisory functions from this office location?

9

Are other business activities conducted at this office location? (check all that apply)

☐ (1) Broker-dealer (registered or unregistered)

☐ (2) Bank (including a separately identifiable department or division of a bank)

☐ (3) Insurance broker or agent

☒ (4) Commodity pool operator or commodity trading advisor (whether registered or exempt from registration)

☐ (5) Registered municipal advisor

☐ (6) Accountant or accounting firm

☐ (7) Lawyer or law firm

Describe any other *investment-related* business activities conducted from this office location:

Complete the following information for each office, other than your *principal office and place of business*, at which you conduct investment advisory business. You must complete a separate Schedule D Section 1.F. for each location. If you are applying for SEC registration, if you are registered only with the SEC, or if you are an *exempt reporting adviser*, list only the largest twenty-five offices (in terms of numbers of employees).

Number and Street 1:

T. ROWE PRICE ASSOCIATES, INC

City:

OWINGS MILLS

State:

Maryland

Number and Street 2:

4525 PAINTERS MILL

Country:

United States

ZIP+4/Postal Code:

21117-4903

If this address is a private residence, check this box: ☐

Telephone Number
410-345-2000

Facsimile Number, if any:
410-345-6575

If this office location is also required to be registered with FINRA or a *state securities authority* as a branch office location for a broker-dealer or investment adviser on the Uniform Branch Office Registration Form (Form BR), please provide the CRD Branch Number here:

How many employees perform investment advisory functions from this office location?
18

Are other business activities conducted at this office location? (check all that apply)

- ☐ (1) Broker-dealer (registered or unregistered)
☐ (2) Bank (including a separately identifiable department or division of a bank)
☐ (3) Insurance broker or agent
☒ (4) Commodity pool operator or commodity trading advisor (whether registered or exempt from registration)
☐ (5) Registered municipal advisor
☐ (6) Accountant or accounting firm
☐ (7) Lawyer or law firm

Describe any other *investment-related* business activities conducted from this office location:

Complete the following information for each office, other than your *principal office and place of business*, at which you conduct investment advisory business. You must complete a separate Schedule D Section 1.F. for each location. If you are applying for SEC registration, if you are registered only with the SEC, or if you are an *exempt reporting adviser*, list only the largest twenty-five offices (in terms of numbers of *employees*).

Number and Street 1: T. ROWE PRICE ASSOCIATES, INC.	Number and Street 2: 2260 BRIARGATE PARKWAY
City: COLORADO SPRINGS	State: Colorado
	Country: United States
	ZIP+4/Postal Code: 80920-7658

If this address is a private residence, check this box: ☐

Telephone Number: 719-278-5800	Facsimile Number, if any: 719-278-6351
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If this office location is also required to be registered with FINRA or a *state securities authority* as a branch office location for a broker-dealer or investment adviser on the Uniform Branch Office Registration Form (Form BR), please provide the CRD Branch Number here:
414985

How many employees perform investment advisory functions from this office location?
3

Are other business activities conducted at this office location? (check all that apply)

- ☐ (1) Broker-dealer (registered or unregistered)
☐ (2) Bank (including a separately identifiable department or division of a bank)
☐ (3) Insurance broker or agent
☒ (4) Commodity pool operator or commodity trading advisor (whether registered or exempt from registration)
☐ (5) Registered municipal advisor
☐ (6) Accountant or accounting firm
☐ (7) Lawyer or law firm

Describe any other *investment-related* business activities conducted from this office location:

Complete the following information for each office, other than your *principal office and place of business*, at which you conduct investment advisory business. You must complete a separate Schedule D Section 1.F. for each location. If you are applying for SEC registration, if you are registered only with the SEC, or if you are an *exempt reporting adviser*, list only the largest twenty-five offices (in terms of numbers of *employees*).

Number and Street 1: T. ROWE PRICE ASSOCIATES, INC.	Number and Street 2: 1735 MARKET STREET, SUITE 3020
--	--

City:
PHILADELPHIA

State
Pennsylvania

Country
United States

ZIP+4/Postal Code:
19103-7051

If this address is a private residence, check this box: ☐

Telephone Number:
2672382700

Facsimile Number, if any:

If this office location is also required to be registered with FINRA or a *state securities authority* as a branch office location for a broker-dealer or investment adviser on the Uniform Branch Office Registration Form (Form BR), please provide the *CRD Branch Number* here:

How many *employees* perform investment advisory functions from this office location?

6

Are other business activities conducted at this office location? (check all that apply)

☐ (1) Broker-dealer (registered or unregistered)

☐ (2) Bank (including a separately identifiable department or division of a bank)

☐ (3) Insurance broker or agent

☒ (4) Commodity pool operator or commodity trading advisor (whether registered or exempt from registration)

☐ (5) Registered municipal advisor

☐ (6) Accountant or accounting firm

☐ (7) Lawyer or law firm

Describe any other *investment-related* business activities conducted from this office location:

Complete the following information for each office, other than your *principal office and place of business*, at which you conduct investment advisory business. You must complete a separate Schedule D Section 1.F. for each location. If you are applying for SEC registration, if you are registered only with the SEC, or if you are an *exempt reporting adviser*, list only the largest twenty-five offices (in terms of numbers of *employees*).

Number and Street 1:

T. ROWE PRICE ASSOCIATES, INC.

Number and Street 2:

4211 WEST BOY SCOUT BOULEVARD

City:

TAMPA

State:

Florida

Country:

United States

ZIP+4/Postal Code:

33607-5724

If this address is a private residence, check this box: ☐

Telephone Number:

78002255132

Facsimile Number, if any:

If this office location is also required to be registered with FINRA or a *state securities authority* as a branch office location for a broker-dealer or investment adviser on the Uniform Branch Office Registration Form (Form BR), please provide the *CRD Branch Number* here:

How many *employees* perform investment advisory functions from this office location?

1

Are other business activities conducted at this office location? (check all that apply)

☐ (1) Broker-dealer (registered or unregistered)

☐ (2) Bank (including a separately identifiable department or division of a bank)

☐ (3) Insurance broker or agent

☒ (4) Commodity pool operator or commodity trading advisor (whether registered or exempt from registration)

☐ (5) Registered municipal advisor

☐ (6) Accountant or accounting firm

☐ (7) Lawyer or law firm

Describe any other *investment-related* business activities conducted from this office location:

SECTION 1.I. Website Addresses

List your website addresses, including addresses for accounts on publicly available social media platforms where you control the content (including, but not limited to, Twitter, Facebook and/or LinkedIn) You must complete a separate Schedule D Section 1.I. for each website or account on a publicly available social media platform

SECTION 1.L. Location of Books and Records

Complete the following information for each location at which you keep your books and records, other than your *principal office and place of business*. You must complete a separate Schedule D, Section 1.L. for each location.

Name of entity where books and records are kept:

VERITAS

Number and Street 1:

VERITAS

Number and Street 2:

2625 AUGUSTINE DRIVE

City:

SANTA CLARA

State:

California

Country:

United States

ZIP+4/Postal Code:

95054

If this address is a private residence, check this box: ☐

Telephone Number:

866-837-4827

Facsimile number, if any:

This is (check one):

☐ one of your branch offices or affiliates.

☒ a third-party unaffiliated recordkeeper.

☐ other.

Briefly describe the books and records kept at this location.

RECORDS WHICH ARE REQUIRED TO BE KEPT IN ACCORDANCE WITH RULE 204 OF THE ADVISERS ACT.

Name of entity where books and records are kept:

T. ROWE PRICE ASSOCIATES, INC.

Number and Street 1:

T. ROWE PRICE ASSOCIATES, INC.

Number and Street 2:

4525 PAINTERS MILL

City:

OWINGS MILLS

State:

Maryland

Country:

United States

ZIP+4/Postal Code:

21117-4903

If this address is a private residence, check this box: ☐

Telephone Number:

410-345-2000

Facsimile number, if any:

410-345-6575

This is (check one):

☒ one of your branch offices or affiliates.

☐ a third-party unaffiliated recordkeeper.

☐ other.

Briefly describe the books and records kept at this location.

RECORDS WHICH ARE REQUIRED TO BE KEPT IN ACCORDANCE WITH RULE 204 OF THE ADVISERS ACT.

Name of entity where books and records are kept:

INSTITUTIONAL SHAREHOLDER SERVICES

Number and Street 1:

INSTITUTIONAL SHAREHOLDER SERVICES

Number and Street 2:

702 KING FARM BLVD, SUITE 400

City:

ROCKVILLE

State:

Maryland

Country:

United States

ZIP+4/Postal Code:

20850-6536

If this address is a private residence, check this box: ☐

Telephone Number:
301-556-0318

Facsimile number, if any:
301-980-8705

This is (check one):

- ☐ one of your branch offices or affiliates.
☐ a third-party unaffiliated recordkeeper.
☐ other.

Briefly describe the books and records kept at this location.

RECORDS WHICH ARE REQUIRED TO BE KEPT IN ACCORDANCE WITH RULE 204 OF THE ADVISERS ACT.

Name of entity where books and records are kept:

IRON MOUNTAIN

Number and Street 1:

IRON MOUNTAIN

Number and Street 2:

8200 PRESTON COURT, SUITE 1

City:

JESSUP

State:

Maryland

Country:

United States

ZIP+4/Postal Code:

20794

If this address is a private residence, check this box: ☐

Telephone Number:

410-792-8971

Facsimile number, if any:

410-792-0776

This is (check one):

- ☐ one of your branch offices or affiliates.
☒ a third-party unaffiliated recordkeeper.
☐ other.

Briefly describe the books and records kept at this location.

RECORDS WHICH ARE REQUIRED TO BE KEPT IN ACCORDANCE WITH RULE 204 OF THE ADVISERS ACT.

Name of entity where books and records are kept:

T. ROWE PRICE ASSOCIATES, INC.

Number and Street 1:

T. ROWE PRICE ASSOCIATES, INC.

Number and Street 2:

1735 MARKET STREET, SUITE 3020

City:

PHILADELPHIA

State:

Pennsylvania

Country:

United States

ZIP+4/Postal Code:

19103-7051

If this address is a private residence, check this box: ☐

Telephone Number:

2672382700

Facsimile number, if any.

This is (check one):

- ☐ one of your branch offices or affiliates.
☐ a third-party unaffiliated recordkeeper.
☐ other.

Briefly describe the books and records kept at this location.

RECORDS WHICH ARE REQUIRED TO BE KEPT IN ACCORDANCE WITH RULE 204 OF THE ADVISERS ACT.

Name of entity where books and records are kept:

T. ROWE PRICE ASSOCIATES, INC

Number and Street 1:

T. ROWE PRICE ASSOCIATES, INC

Number and Street 2:

2220 BRIARGATE PARKWAY

City:
COLORADO SPRINGS

State
Colorado

Country:
United States

ZIP+4/Postal Code:
80920

If this address is a private residence, check this box: ☐

Telephone Number:
719 278 5600

Facsimile number, if any:

This is (check one):

- ☒ one of your branch offices or affiliates.
☐ a third-party unaffiliated recordkeeper.
☐ other.

Briefly describe the books and records kept at this location.

RECORDS WHICH ARE REQUIRED TO BE KEPT IN ACCORDANCE WITH RULE 204 OF THE ADVISERS ACT.

Name of entity where books and records are kept:
T. ROWE PRICE ASSOCIATES, INC.

Number and Street 1:
T. ROWE PRICE ASSOCIATES, INC.

Number and Street 2:
233 PARK AVENUE, SOUTH

City:
NEW YORK

State:
New York

Country:
United States

ZIP+4/Postal Code:
10010

If this address is a private residence, check this box: ☐

Telephone Number:
855 593 9675

Facsimile number, if any:

This is (check one):

- ☒ one of your branch offices or affiliates.
☐ a third-party unaffiliated recordkeeper.
☐ other.

Briefly describe the books and records kept at this location.

RECORDS WHICH ARE REQUIRED TO BE KEPT IN ACCORDANCE WITH RULE 204 OF THE ADVISERS ACT.

Name of entity where books and records are kept:
T. ROWE PRICE ASSOCIATES, INC.

Number and Street 1:
T. ROWE PRICE ASSOCIATES, INC.

Number and Street 2:
333 BUSH STREET, SUITE 2550

City:
SAN FRANCISCO

State:
California

Country:
United States

ZIP+4/Postal Code:
19103

If this address is a private residence, check this box: ☐

Telephone Number:
267 238 2700

Facsimile number, if any:

This is (check one):

- ☒ one of your branch offices or affiliates.
☐ a third-party unaffiliated recordkeeper.
☐ other.

Briefly describe the books and records kept at this location.

RECORDS WHICH ARE REQUIRED TO BE KEPT IN ACCORDANCE WITH RULE 204 OF THE ADVISERS ACT.

Name of entity where books and records are kept.

T. ROWE PRICE ASSOCIATES, INC.

Number and Street 1:

T. ROWE PRICE ASSOCIATES, INC.

City:

TAMPA

State:

Florida

Number and Street 2:

4211 WEST BOY SCOUT BOULEVARD

Country:

United States

ZIP+4/Postal Code:

33607

If this address is a private residence, check this box: ☐

Telephone Number:

1800 225 5132

Facsimile number, if any:

This is (check one):

☒ one of your branch offices or affiliates.

☐ a third-party unaffiliated recordkeeper.

☐ other.

Briefly describe the books and records kept at this location.

RECORDS WHICH ARE REQUIRED TO BE KEPT IN ACCORDANCE WITH RULE 204 OF THE ADVISERS ACT.

SECTION 1.M. Registration with Foreign Financial Regulatory Authorities

No Information Filed

Item 2 SEC Registration/Reporting

Responses to this Item help us (and you) determine whether you are eligible to register with the SEC. Complete this Item 2.A. only if you are applying for SEC registration or submitting an *annual updating amendment* to your SEC registration. If you are filing an *umbrella registration*, the information in Item 2 should be provided for the *filing adviser* only.

A. To register (or remain registered) with the SEC, you must check **at least one** of the Items 2.A.(1) through 2.A.(12), below. If you are submitting an *annual updating amendment* to your SEC registration and you are no longer eligible to register with the SEC, check Item 2.A.(13). Part 1A Instruction 2 provides information to help you determine whether you may affirmatively respond to each of these items.

You (the adviser):

☒ (1) are a **large advisory firm** that either:

(a) has regulatory assets under management of \$100 million (in U.S. dollars) or more; or

(b) has regulatory assets under management of \$90 million (in U.S. dollars) or more at the time of filing its most recent *annual updating amendment* and is registered with the SEC;

☐ (2) are a **mid-sized advisory firm** that has regulatory assets under management of \$25 million (in U.S. dollars) or more but less than \$100 million (in U.S. dollars) and you are either:

(a) not required to be registered as an adviser with the *state securities authority* of the state where you maintain your *principal office and place of business*; or

(b) not subject to examination by the *state securities authority* of the state where you maintain your *principal office and place of business*;

Click **HERE** for a list of states in which an investment adviser, if registered, would not be subject to examination by the state securities authority.

(3) Reserved

☐ (4) have your *principal office and place of business* **outside the United States**;

☒ (5) are an **investment adviser (or subadviser) to an investment company** registered under the Investment Company Act of 1940;

☐ (6) are an **investment adviser to a company which has elected to be a business development company** pursuant to section 54 of the Investment Company Act of 1940 and has not withdrawn the election, and you have at least \$25 million of regulatory assets under management;

☐ (7) are a **pension consultant** with respect to assets of plans having an aggregate value of at least \$200,000,000 that qualifies for the exemption in rule 203A-2(a);

☐ (8) are a **related adviser** under rule 203A-2(b) that *controls, is controlled by, or is under common control with*, an investment adviser that is registered with the SEC, and your *principal office and place of business* is the same as the registered adviser;

If you check this box, complete Section 2.A.(8) of Schedule D.

☐ (9) are an **adviser** relying on rule 203A-2(c) because you **expect to be eligible for SEC registration within 120 days**;

If you check this box, complete Section 2.A.(9) of Schedule D.

☐ (10) are a **multi-state adviser** that is required to register in 15 or more states and is relying on rule 203A-2(d);

If you check this box, complete Section 2.A (10) of Schedule D

☐ (11) are an **Internet adviser** relying on rule 203A-2(e);

☐ (12) have **received an SEC order** exempting you from the prohibition against registration with the SEC;

If you check this box, complete Section 2.A.(12) of Schedule D.

☐ (13) are **no longer eligible** to remain registered with the SEC.

State Securities Authority Notice Filings and State Reporting by Exempt Reporting Advisers

C. Under state laws, SEC-registered advisers may be required to provide to *state securities authorities* a copy of the Form ADV and any amendments they file with the SEC. These are called *notice filings*. In addition, *exempt reporting advisers* may be required to provide *state securities authorities* with a copy of reports and any amendments they file with the SEC. If this is an initial application or report, check the box(es) next to the state(s) that you would like to receive notice of this and all subsequent filings or reports you submit to the SEC. If this is an amendment to direct your *notice filings* or reports to additional state(s), check the box(es) next to the state(s) that you would like to receive notice of this and all subsequent filings or reports you submit to the SEC. If this is an amendment to your registration to stop your *notice filings* or reports from going to state(s) that currently receive them, uncheck the box(es) next to those state(s).

Jurisdictions

<input checked="" type="checkbox"/> AL	<input checked="" type="checkbox"/> IL	<input checked="" type="checkbox"/> NE	<input checked="" type="checkbox"/> SC
<input checked="" type="checkbox"/> AK	<input checked="" type="checkbox"/> IN	<input checked="" type="checkbox"/> NV	<input checked="" type="checkbox"/> SD
<input checked="" type="checkbox"/> AZ	<input checked="" type="checkbox"/> IA	<input checked="" type="checkbox"/> NH	<input checked="" type="checkbox"/> TN
<input checked="" type="checkbox"/> AR	<input checked="" type="checkbox"/> KS	<input checked="" type="checkbox"/> NJ	<input checked="" type="checkbox"/> TX
<input checked="" type="checkbox"/> CA	<input checked="" type="checkbox"/> KY	<input checked="" type="checkbox"/> NM	<input checked="" type="checkbox"/> UT
<input checked="" type="checkbox"/> CO	<input checked="" type="checkbox"/> LA	<input checked="" type="checkbox"/> NY	<input checked="" type="checkbox"/> VT
<input checked="" type="checkbox"/> CT	<input checked="" type="checkbox"/> ME	<input checked="" type="checkbox"/> NC	<input checked="" type="checkbox"/> VI
<input checked="" type="checkbox"/> DE	<input checked="" type="checkbox"/> MD	<input checked="" type="checkbox"/> ND	<input checked="" type="checkbox"/> VA
<input checked="" type="checkbox"/> DC	<input checked="" type="checkbox"/> MA	<input checked="" type="checkbox"/> OH	<input checked="" type="checkbox"/> WA
<input checked="" type="checkbox"/> FL	<input checked="" type="checkbox"/> MI	<input checked="" type="checkbox"/> OK	<input checked="" type="checkbox"/> WV
<input checked="" type="checkbox"/> GA	<input checked="" type="checkbox"/> MN	<input checked="" type="checkbox"/> OR	<input checked="" type="checkbox"/> WI
<input type="checkbox"/> GU	<input checked="" type="checkbox"/> MS	<input checked="" type="checkbox"/> PA	<input checked="" type="checkbox"/> WY
<input checked="" type="checkbox"/> HI	<input checked="" type="checkbox"/> MO	<input checked="" type="checkbox"/> PR	
<input checked="" type="checkbox"/> ID	<input checked="" type="checkbox"/> MT	<input checked="" type="checkbox"/> RI	

If you are amending your registration to stop your notice filings or reports from going to a state that currently receives them and you do not want to pay that state's notice filing or report filing fee for the coming year, your amendment must be filed before the end of the year (December 31).

SECTION 2.A.(8) Related Adviser

If you are relying on the exemption in rule 203A-2(b) from the prohibition on registration because you *control*, are *controlled* by, or are under common *control* with an investment adviser that is registered with the SEC and your *principal office and place of business* is the same as that of the registered adviser, provide the following information:

Name of Registered Investment Adviser

CRD Number of Registered Investment Adviser

SEC Number of Registered Investment Adviser

SECTION 2.A.(9) Investment Adviser Expecting to be Eligible for Commission Registration within 120 Days

If you are relying on rule 203A-2(c), the exemption from the prohibition on registration available to an adviser that expects to be eligible for SEC registration within 120 days, you are required to make certain representations about your eligibility for SEC registration. By checking the appropriate boxes, you will be deemed to have made the required representations. You must make both of these representations:

- ☐ I am not registered or required to be registered with the SEC or a *state securities authority* and I have a reasonable expectation that I will be eligible to register with the SEC within 120 days after the date my registration with the SEC becomes effective.
- ☐ I undertake to withdraw from SEC registration if, on the 120th day after my registration with the SEC becomes effective, I would be prohibited by Section 203A(a) of the Advisers Act from registering with the SEC.

SECTION 2.A.(10) Multi-State Adviser

If you are relying on rule 203A-2(d), the multi-state adviser exemption from the prohibition on registration, you are required to make certain representations

about your eligibility for SEC registration. By checking the appropriate boxes, you will be deemed to have made the required representations

If you are applying for registration as an investment adviser with the SEC, you must make both of these representations:

- ☒ I have reviewed the applicable state and federal laws and have concluded that I am required by the laws of 15 or more states to register as an investment adviser with the *state securities authorities* in those states.
- ☒ I undertake to withdraw from SEC registration if I file an amendment to this registration indicating that I would be required by the laws of fewer than 15 states to register as an investment adviser with the *state securities authorities* of those states.

If you are submitting your *annual updating amendment*, you must make this representation:

- ☒ Within 90 days prior to the date of filing this amendment, I have reviewed the applicable state and federal laws and have concluded that I am required by the laws of at least 15 states to register as an investment adviser with the *state securities authorities* in those states.

SECTION 2.A.(12) SEC Exemptive Order

If you are relying upon an SEC order exempting you from the prohibition on registration, provide the following information:

Application Number:

803-

Date of order:

Item 3 Form of Organization

If you are filing an *umbrella registration*, the information in Item 3 should be provided for the *filing adviser* only.

- A. How are you organized?
- ☒ Corporation
- ☐ Sole Proprietorship
- ☐ Limited Liability Partnership (LLP)
- ☐ Partnership
- ☐ Limited Liability Company (LLC)
- ☐ Limited Partnership (LP)
- ☐ Other (specify):

If you are changing your response to this Item, see Part 1A Instruction 4.

- B. In what month does your fiscal year end each year?
- DECEMBER
- C. Under the laws of what state or country are you organized?
- State Country
- Maryland United States

If you are a partnership, provide the name of the state or country under whose laws your partnership was formed. If you are a sole proprietor, provide the name of the state or country where you reside.

If you are changing your response to this Item, see Part 1A Instruction 4.

Item 4 Successions

- | | Yes | No |
|---|-----------------------|----------------------------------|
| A. Are you, at the time of this filing, succeeding to the business of a registered investment adviser, including, for example, a change of your structure or legal status (e.g., form of organization or state of incorporation)? | <input type="radio"/> | <input checked="" type="radio"/> |

If "yes", complete Item 4.B. and Section 4 of Schedule D.

- B. Date of Succession: (MM/DD/YYYY)

If you have already reported this succession on a previous Form ADV filing, do not report the succession again. Instead, check "No." See Part 1A Instruction 4.

SECTION 4 Successions

Item 5 Information About Your Advisory Business - Employees, Clients, and Compensation

Responses to this Item help us understand your business, assist us in preparing for on-site examinations, and provide us with data we use when making regulatory policy. Part 1A Instruction 5.a. provides additional guidance to newly formed advisers for completing this Item 5.

Employees

If you are organized as a sole proprietorship, include yourself as an employee in your responses to Item 5.A. and Items 5.B.(1), (2), (3), (4), and (5). If an employee performs more than one function, you should count that employee in each of your responses to Items 5.B.(1), (2), (3), (4), and (5).

A. Approximately how many employees do you have? Include full- and part-time employees but do not include any clerical workers.

3759

B. (1) Approximately how many of the employees reported in 5.A. perform investment advisory functions (including research)?

444

(2) Approximately how many of the employees reported in 5.A. are registered representatives of a broker-dealer?

429

(3) Approximately how many of the employees reported in 5.A. are registered with one or more state securities authorities as investment adviser representatives?

67

(4) Approximately how many of the employees reported in 5.A. are registered with one or more state securities authorities as investment adviser representatives for an investment adviser other than you?

0

(5) Approximately how many of the employees reported in 5.A. are licensed agents of an insurance company or agency?

0

(6) Approximately how many firms or other persons solicit advisory clients on your behalf?

7

In your response to Item 5.B.(6), do not count any of your employees and count a firm only once - do not count each of the firm's employees that solicit on your behalf.

Clients

In your responses to Items 5.C. and 5.D. do not include as "clients" the investors in a private fund you advise, unless you have a separate advisory relationship with those investors.

C. (1) To approximately how many clients for whom you do not have regulatory assets under management did you provide investment advisory services during your most recently completed fiscal year?

26

(2) Approximately what percentage of your clients are non-United States persons?

12%

D. For purposes of this Item 5.D., the category "individuals" includes trusts, estates, and 401(k) plans and IRAs of individuals and their family members, but does not include businesses organized as sole proprietorships.

The category "business development companies" consists of companies that have made an election pursuant to section 54 of the Investment Company Act of 1940. Unless you provide advisory services pursuant to an investment advisory contract to an investment company registered under the Investment Company Act of 1940, do not answer (d)(1) or (d)(3) below.

Indicate the approximate number of your clients and amount of your total regulatory assets under management (reported in Item 5.F. below) attributable to each of the following type of client. If you have fewer than 5 clients in a particular category (other than (d), (e), and (f)) you may check Item 5.D.(2) rather than respond to Item 5.D.(1).

The aggregate amount of regulatory assets under management reported in Item 5.D.(3) should equal the total amount of regulatory assets under management reported in Item 5.F.(2)(c) below.

If a client fits into more than one category, select one category that most accurately represents the client to avoid double counting clients and assets. If you advise a registered investment company, business development company, or pooled investment vehicle, report those assets in categories (d), (e), and (f) as applicable.

Type of Client	(1) Number of Client(s)	(2) Fewer than 5 Clients	(3) Amount of Regulatory Assets under Management
(a) Individuals (other than high net worth individuals)	13	<input type="checkbox"/>	\$ 5,215,181
(b) High net worth individuals	423	<input type="checkbox"/>	\$ 1,377,168,767
(c) Banking or thrift institutions	1	<input type="checkbox"/>	\$ 599,153,413

(d) Investment companies	287		\$ 706,427,477,361
(e) Business development companies	0		\$ 0
(f) Pooled investment vehicles (other than investment companies and business development companies)	330		\$ 136,562,859,639
(g) Pension and profit sharing plans (but not the plan participants or government pension plans)	208	<input type="checkbox"/>	\$ 39,419,947,130
(h) Charitable organizations	77	<input type="checkbox"/>	\$ 1,169,454,572
(i) State or municipal <i>government entities</i> (including government pension plans)	74	<input type="checkbox"/>	\$ 26,416,673,152
(j) Other investment advisers	0	<input type="checkbox"/>	\$ 0
(k) Insurance companies	32	<input type="checkbox"/>	\$ 11,226,525,308
(l) Sovereign wealth funds and foreign official institutions	11	<input type="checkbox"/>	\$ 8,580,630,341
(m) Corporations or other businesses not listed above	233	<input type="checkbox"/>	\$ 8,634,058,588
(n) Other: SMA PROGRAM CLIENTS	756	<input type="checkbox"/>	\$ 218,448,571

Compensation Arrangements

E. You are compensated for your investment advisory services by (check all that apply):

- ☒ (1) A percentage of assets under your management
☐ (2) Hourly charges
☐ (3) Subscription fees (for a newsletter or periodical)
☐ (4) Fixed fees (other than subscription fees)
☐ (5) Commissions
☒ (6) Performance-based fees
☐ (7) Other (specify):

Item 5 Information About Your Advisory Business - Regulatory Assets Under Management

Regulatory Assets Under Management

Yes No

F. (1) Do you provide continuous and regular supervisory or management services to securities portfolios? ☒ Yes ☐ No

(2) If yes, what is the amount of your regulatory assets under management and total number of accounts?

	U.S. Dollar Amount	Total Number of Accounts
Discretionary:	(a) \$ 940,072,807,756	(d) 2,441
Non-Discretionary:	(b) \$ 564,804,267	(e) 4
Total:	(c) \$ 940,637,612,023	(f) 2,445

Part 1A Instruction 5.b. explains how to calculate your regulatory assets under management. You must follow these instructions carefully when completing this Item.

(3) What is the approximate amount of your total regulatory assets under management (reported in Item 5.F.(2)(c) above) attributable to *clients* who are non-United States persons?

\$ 45,303,976,926

Item 5 Information About Your Advisory Business - Advisory Activities

Advisory Activities

G. What type(s) of advisory services do you provide? Check all that apply.

- ☐ (1) Financial planning services
☒ (2) Portfolio management for individuals and/or small businesses
☒ (3) Portfolio management for investment companies (as well as "business development companies" that have made an election pursuant to section 54 of the Investment Company Act of 1940)
☒ (4) Portfolio management for pooled investment vehicles (other than investment companies)
☒ (5) Portfolio management for businesses (other than small businesses) or institutional *clients* (other than registered investment companies and other pooled investment vehicles)
☐ (6) Pension consulting services
☐ (7) Selection of other advisers (including *private fund* managers)
☐ (8) Publication of periodicals or newsletters
☐ (9) Security ratings or pricing services
☐ (10) Market timing services
☐ (11) Educational seminars/workshops
☐ (12) Other(specify):

Do not check Item 5.G.(3) unless you provide advisory services pursuant to an investment advisory contract to an investment company registered under the Investment Company Act of 1940, including as a subadviser. If you check Item 5.G.(3), report the 811 or 814 number of the investment company or investment companies to which you provide advice in Section 5.G (3) of Schedule D.

H. If you provide financial planning services, to how many *clients* did you provide these services during your last fiscal year?

- ☐ 0
☐ 1 - 10
☐ 11 - 25
☐ 26 - 50
☐ 51 - 100
☐ 101 - 250
☐ 251 - 500
☐ More than 500

If more than 500, how many?
(round to the nearest 500)

In your responses to this Item 5.H., do not include as "clients" the investors in a private fund you advise, unless you have a separate advisory relationship with those investors.

- | | Yes | No |
|--|----------------------------------|-----------------------|
| I. (1) Do you participate in a <i>wrap fee program</i> ? | <input checked="" type="radio"/> | <input type="radio"/> |
| (2) If you participate in a <i>wrap fee program</i> , what is the amount of your regulatory assets under management attributable to acting as: | | |
| (a) <i>sponsor</i> to a <i>wrap fee program</i> | | |
| \$ 0 | | |
| (b) portfolio manager for a <i>wrap fee program</i> ? | | |
| \$ 198,415,432 | | |
| (c) <i>sponsor</i> to and portfolio manager for the same <i>wrap fee program</i> ? | | |
| \$ 0 | | |

If you report an amount in Item 5.I.(2)(c), do not report that amount in Item 5.I.(2)(a) or Item 5.I.(2)(b).

If you are a portfolio manager for a wrap fee program, list the names of the programs, their sponsors and related information in Section 5.I.(2) of Schedule D.

If your involvement in a wrap fee program is limited to recommending wrap fee programs to your clients, or you advise a mutual fund that is offered through a wrap fee program, do not check Item 5.I.(1) or enter any amounts in response to Item 5.I.(2).

- | | Yes | No |
|--|----------------------------------|----------------------------------|
| J. (1) In response to Item 4.B. of Part 2A of Form ADV, do you indicate that you provide investment advice only with respect to limited types of investments? | <input type="radio"/> | <input checked="" type="radio"/> |
| (2) Do you report <i>client</i> assets in Item 4.E. of Part 2A that are computed using a different method than the method used to compute your regulatory assets under management? | <input checked="" type="radio"/> | <input type="radio"/> |

K. Separately Managed Account *Clients*

- | | Yes | No |
|--|----------------------------------|-----------------------|
| (1) Do you have regulatory assets under management attributable to <i>clients</i> other than those listed in Item 5.D.(3)(d)-(f) (separately managed account <i>clients</i>)? | <input checked="" type="radio"/> | <input type="radio"/> |

If yes, complete Section 5.K.(1) of Schedule D.

- | | | |
|--|-----------------------|----------------------------------|
| (2) Do you engage in borrowing transactions on behalf of any of the separately managed account <i>clients</i> that you advise? | <input type="radio"/> | <input checked="" type="radio"/> |
|--|-----------------------|----------------------------------|

If yes, complete Section 5.K.(2) of Schedule D.

- | | | |
|---|----------------------------------|-----------------------|
| (3) Do you engage in derivative transactions on behalf of any of the separately managed account <i>clients</i> that you advise? | <input checked="" type="radio"/> | <input type="radio"/> |
|---|----------------------------------|-----------------------|

If yes, complete Section 5.K.(2) of Schedule D.

- | | | |
|--|----------------------------------|-----------------------|
| (4) After subtracting the amounts in Item 5.D.(3)(d)-(f) above from your total regulatory assets under management, does any custodian hold ten percent or more of this remaining amount of regulatory assets under management? | <input checked="" type="radio"/> | <input type="radio"/> |
|--|----------------------------------|-----------------------|

If yes, complete Section 5.K.(3) of Schedule D for each custodian.

SECTION 5.G.(3) Advisers to Registered Investment Companies and Business Development Companies

If you check Item 5.G.(3), what is the SEC file number (811 or 814 number) of each of the registered investment companies and business development companies to which you act as an adviser pursuant to an advisory contract? You must complete a separate Schedule D Section 5.G.(3) for each registered investment company and business development company to which you act as an adviser.

SEC File Number
811 - 07075

Provide the regulatory assets under management of all *parallel managed accounts* related to a registered investment company (or series thereof) or business development company that you advise.

Series ID	Parallel Managed Account Regulatory assets under management
	\$ 475,176,170

SEC File Number

Provide the regulatory assets under management of all *parallel managed accounts* related to a registered investment company (or series thereof) or business development company that you advise.

Series ID	Parallel Managed Account Regulatory assets under management
	\$ 232,499,373,686

SEC File Number

Provide the regulatory assets under management of all *parallel managed accounts* related to a registered investment company (or series thereof) or business development company that you advise.

Series ID	Parallel Managed Account Regulatory assets under management
	\$ 19,082,924,719

SEC File Number

Provide the regulatory assets under management of all *parallel managed accounts* related to a registered investment company (or series thereof) or business development company that you advise.

Series ID	Parallel Managed Account Regulatory assets under management
	\$ 17,144,445,059

SEC File Number

Provide the regulatory assets under management of all *parallel managed accounts* related to a registered investment company (or series thereof) or business development company that you advise.

Series ID	Parallel Managed Account Regulatory assets under management
	\$ 18,451,552,392

SEC File Number

Provide the regulatory assets under management of all *parallel managed accounts* related to a registered investment company (or series thereof) or business development company that you advise.

Series ID	Parallel Managed Account Regulatory assets under management
	\$ 13,730,852,702

SEC File Number

Provide the regulatory assets under management of all *parallel managed accounts* related to a registered investment company (or series thereof) or business development company that you advise.

Series ID	Parallel Managed Account Regulatory assets under management
	\$ 13,961,304,303

SEC File Number

Provide the regulatory assets under management of all *parallel managed accounts* related to a registered investment company (or series thereof) or business development company that you advise.

Series ID	Parallel Managed Account Regulatory assets under management
	\$ 2,938,922,239

SEC File Number

Provide the regulatory assets under management of all *parallel managed accounts* related to a registered investment company (or series thereof) or business development company that you advise.

Series ID	Parallel Managed Account Regulatory assets under management
	\$ 1,932,582,125

SEC File Number

Provide the regulatory assets under management of all *parallel managed accounts* related to a registered investment company (or series thereof) or business development company that you advise.

Series ID	Parallel Managed Account Regulatory assets under management
	\$ 4,730,972,002

SEC File Number

Provide the regulatory assets under management of all *parallel managed accounts* related to a registered investment company (or series thereof) or business development company that you advise.

Series ID	Parallel Managed Account Regulatory assets under management
	\$ 187,376,234,475

SEC File Number

Provide the regulatory assets under management of all *parallel managed accounts* related to a registered investment company (or series thereof) or business development company that you advise.

Series ID	Parallel Managed Account Regulatory assets under management
	\$ 0

SEC File Number

Provide the regulatory assets under management of all *parallel managed accounts* related to a registered investment company (or series thereof) or business development company that you advise.

Series ID	Parallel Managed Account Regulatory assets under management
	\$ 2,550,223,702

SEC File Number

Provide the regulatory assets under management of all *parallel managed accounts* related to a registered investment company (or series thereof) or business development company that you advise.

Series ID	Parallel Managed Account Regulatory assets under management
	\$ 0

SEC File Number

Provide the regulatory assets under management of all *parallel managed accounts* related to a registered investment company (or series thereof) or business development company that you advise.

Series ID	Parallel Managed Account Regulatory assets under management
	\$ 0

SEC File Number

Provide the regulatory assets under management of all *parallel managed accounts* related to a registered investment company (or series thereof) or business development company that you advise.

Series ID	Parallel Managed Account Regulatory assets under management
	\$ 775,571,710

SEC File Number

Provide the regulatory assets under management of all *parallel managed accounts* related to a registered investment company (or series thereof) or business development company that you advise.

Series ID	Parallel Managed Account Regulatory assets under management
	\$ 2,925,127,351

SEC File Number

Provide the regulatory assets under management of all *parallel managed accounts* related to a registered investment company (or series thereof) or business development company that you advise.

Series ID	Parallel Managed Account Regulatory assets under management
	\$ 0

SEC File Number

Provide the regulatory assets under management of all *parallel managed accounts* related to a registered investment company (or series thereof) or business development company that you advise.

Series ID	Parallel Managed Account Regulatory assets under management
	\$ 2,941,745,785

SEC File Number

Provide the regulatory assets under management of all *parallel managed accounts* related to a registered investment company (or series thereof) or business development company that you advise.

	\$ 1,905,368,976
--	------------------

SEC File Number

Provide the regulatory assets under management of all *parallel managed accounts* related to a registered investment company (or series thereof) or business development company that you advise.

Series ID	Parallel Managed Account Regulatory assets under management
	\$ 17,639,535,063

SEC File Number

Provide the regulatory assets under management of all *parallel managed accounts* related to a registered investment company (or series thereof) or business development company that you advise.

Series ID	Parallel Managed Account Regulatory assets under management
	\$ 0

SEC File Number

Provide the regulatory assets under management of all *parallel managed accounts* related to a registered investment company (or series thereof) or business development company that you advise.

Series ID	Parallel Managed Account Regulatory assets under management
	\$ 7,609,833

SEC File Number

Provide the regulatory assets under management of all *parallel managed accounts* related to a registered investment company (or series thereof) or business development company that you advise.

Series ID	Parallel Managed Account Regulatory assets under management
	\$ 1,997,668,820

SEC File Number

Provide the regulatory assets under management of all *parallel managed accounts* related to a registered investment company (or series thereof) or business development company that you advise.

Series ID	Parallel Managed Account Regulatory assets under management
	\$ 2,642,938,814

SEC File Number

Provide the regulatory assets under management of all *parallel managed accounts* related to a registered investment company (or series thereof) or business development company that you advise.

Series ID	Parallel Managed Account Regulatory assets under management
	\$ 1,982,170,343

SEC File Number

Provide the regulatory assets under management of all *parallel managed accounts* related to a registered investment company (or series thereof) or business development company that you advise.

Series ID	Parallel Managed Account Regulatory assets under management
	\$ 836,058,191

SEC File Number

Provide the regulatory assets under management of all *parallel managed accounts* related to a registered investment company (or series thereof) or business development company that you advise.

Series ID	Parallel Managed Account Regulatory assets under management
	\$ 116,377,054

SEC File Number

Provide the regulatory assets under management of all *parallel managed accounts* related to a registered investment company (or series thereof) or business development company that you advise.

Series ID	Parallel Managed Account Regulatory assets under management
	\$ 3,459,811,809

SEC File Number

Provide the regulatory assets under management of all *parallel managed accounts* related to a registered investment company (or series thereof) or business development company that you advise.

Series ID	Parallel Managed Account Regulatory assets under management
	\$ 1,340,242,524

SEC File Number

Provide the regulatory assets under management of all *parallel managed accounts* related to a registered investment company (or series thereof) or business development company that you advise.

Series ID	Parallel Managed Account Regulatory assets under management
	\$ 5,860,469,138

SEC File Number

Provide the regulatory assets under management of all *parallel managed accounts* related to a registered investment company (or series thereof) or business development company that you advise.

Series ID	Parallel Managed Account Regulatory assets under management
	\$ 15,713,452,524

SEC File Number

Provide the regulatory assets under management of all *parallel managed accounts* related to a registered investment company (or series thereof) or business development company that you advise.

Series ID	Parallel Managed Account Regulatory assets under management
	\$ 0

SEC File Number

Provide the regulatory assets under management of all *parallel managed accounts* related to a registered investment company (or series thereof) or business development company that you advise.

Series ID	Parallel Managed Account Regulatory assets under management
	\$ 26,285,945

SEC File Number

Provide the regulatory assets under management of all *parallel managed accounts* related to a registered investment company (or series thereof) or business development company that you advise.

Series ID	Parallel Managed Account Regulatory assets under management
	\$ 0

SEC File Number

Provide the regulatory assets under management of all *parallel managed accounts* related to a registered investment company (or series thereof) or business development company that you advise.

Series ID	Parallel Managed Account Regulatory assets under management
	\$ 37,237

SEC File Number

Provide the regulatory assets under management of all *parallel managed accounts* related to a registered investment company (or series thereof) or business development company that you advise.

Series ID	Parallel Managed Account Regulatory assets under management
	\$ 13,292,000,663

SEC File Number

Provide the regulatory assets under management of all *parallel managed accounts* related to a registered investment company (or series thereof) or business development company that you advise.

Series ID	Parallel Managed Account Regulatory assets under management
	\$ 34,609,533

SEC File Number

Provide the regulatory assets under management of all *parallel managed accounts* related to a registered investment company (or series thereof) or business development company that you advise.

Series ID	Parallel Managed Account Regulatory assets under management
	\$ 2,454,021,942

SEC File Number

Provide the regulatory assets under management of all *parallel managed accounts* related to a registered investment company (or series thereof) or business development company that you advise.

Series ID	Parallel Managed Account Regulatory assets under management
	\$ 46,663,225,136

SEC File Number

Provide the regulatory assets under management of all *parallel managed accounts* related to a registered investment company (or series thereof) or business development company that you advise.

Series ID	Parallel Managed Account Regulatory assets under management
	\$ 132,297,612

SEC File Number

Provide the regulatory assets under management of all *parallel managed accounts* related to a registered investment company (or series thereof) or business development company that you advise.

Series ID	Parallel Managed Account Regulatory assets under management
	\$ 2,247,996,099

SEC File Number

Provide the regulatory assets under management of all *parallel managed accounts* related to a registered investment company (or series thereof) or business development company that you advise.

Series ID	Parallel Managed Account Regulatory assets under management
	\$ 0

SEC File Number

Provide the regulatory assets under management of all *parallel managed accounts* related to a registered investment company (or series thereof) or business development company that you advise.

Series ID	Parallel Managed Account Regulatory assets under management
	\$ 4,641,544,060

SEC File Number

Provide the regulatory assets under management of all *parallel managed accounts* related to a registered investment company (or series thereof) or business development company that you advise.

Series ID	Parallel Managed Account Regulatory assets under management
	\$ 6,398,461,114

SEC File Number

Provide the regulatory assets under management of all *parallel managed accounts* related to a registered investment company (or series thereof) or business development company that you advise.

Series ID	Parallel Managed Account Regulatory assets under management
	\$ 637,455,527

SEC File Number

Provide the regulatory assets under management of all *parallel managed accounts* related to a registered investment company (or series thereof) or business development company that you advise.

Series ID	Parallel Managed Account Regulatory assets under management
	\$ 230,910,951

SEC File Number

Provide the regulatory assets under management of all *parallel managed accounts* related to a registered investment company (or series thereof) or business development company that you advise.

Series ID	Parallel Managed Account Regulatory assets under management
	\$ 10,808,801,260

SEC File Number

Provide the regulatory assets under management of all *parallel managed accounts* related to a registered investment company (or series thereof) or business development company that you advise

Series ID	Parallel Managed Account Regulatory assets under management
	\$ 65,060,309

SEC File Number

Provide the regulatory assets under management of all *parallel managed accounts* related to a registered investment company (or series thereof) or business development company that you advise.

Series ID	Parallel Managed Account Regulatory assets under management
	\$ 16,644,381,009

SEC File Number

Provide the regulatory assets under management of all *parallel managed accounts* related to a registered investment company (or series thereof) or business development company that you advise.

Series ID	Parallel Managed Account Regulatory assets under management
	\$ 0

SEC File Number

Provide the regulatory assets under management of all *parallel managed accounts* related to a registered investment company (or series thereof) or business development company that you advise.

Series ID	Parallel Managed Account Regulatory assets under management
	\$ 821,654

SEC File Number

Provide the regulatory assets under management of all *parallel managed accounts* related to a registered investment company (or series thereof) or business development company that you advise.

Series ID	Parallel Managed Account Regulatory assets under management
	\$ 837,823,054

SEC File Number

Provide the regulatory assets under management of all *parallel managed accounts* related to a registered investment company (or series thereof) or business development company that you advise.

Series ID	Parallel Managed Account Regulatory assets under management
	\$ 31,429,184,247

SEC File Number

Provide the regulatory assets under management of all *parallel managed accounts* related to a registered investment company (or series thereof) or business development company that you advise.

Series ID	Parallel Managed Account Regulatory assets under management
	\$ 70,210,270,996

SEC File Number

Provide the regulatory assets under management of all *parallel managed accounts* related to a registered investment company (or series thereof) or business development company that you advise.

Series ID	Parallel Managed Account Regulatory assets under management
	\$ 5,683,791,723

SEC File Number

Provide the regulatory assets under management of all *parallel managed accounts* related to a registered investment company (or series thereof) or business development company that you advise.

No Information Filed

SEC File Number

Provide the regulatory assets under management of all *parallel managed accounts* related to a registered investment company (or series thereof) or business development company that you advise.

Series ID	Parallel Managed Account Regulatory assets under management
	\$ 0

SEC File Number

Provide the regulatory assets under management of all *parallel managed accounts* related to a registered investment company (or series thereof) or business development company that you advise.

Series ID	Parallel Managed Account Regulatory assets under management
	\$ 26,230,352,927

SEC File Number

Provide the regulatory assets under management of all *parallel managed accounts* related to a registered investment company (or series thereof) or business development company that you advise.

Series ID	Parallel Managed Account Regulatory assets under management
	\$ 6,958,535,053

SEC File Number

Provide the regulatory assets under management of all *parallel managed accounts* related to a registered investment company (or series thereof) or business development company that you advise.

Series ID	Parallel Managed Account Regulatory assets under management
	\$ 999,726,178

SEC File Number

Provide the regulatory assets under management of all *parallel managed accounts* related to a registered investment company (or series thereof) or business development company that you advise.

Series ID	Parallel Managed Account Regulatory assets under management
	\$ 33,738,041,067

SEC File Number

Provide the regulatory assets under management of all *parallel managed accounts* related to a registered investment company (or series thereof) or business development company that you advise.

Series ID	Parallel Managed Account Regulatory assets under management
	\$ 92,380,757

SEC File Number

Provide the regulatory assets under management of all *parallel managed accounts* related to a registered investment company (or series thereof) or business development company that you advise.

Series ID:	Parallel Managed Account Regulatory assets under management
	\$ 5,277,869,170

SEC File Number

Provide the regulatory assets under management of all *parallel managed accounts* related to a registered investment company (or series thereof) or business development company that you advise.

Series ID:	Parallel Managed Account Regulatory assets under management
	\$ 3,610,309,396

SECTION 5.1.(2) Wrap Fee Programs

If you are a portfolio manager for one or more *wrap fee programs*, list the name of each program and its *sponsor*. You must complete a separate Schedule D Section 5.1.(2) for each *wrap fee program* for which you are a portfolio manager.

Name of *Wrap Fee Program*

J.P. MORGAN SECURITIES LLC

Name of *Sponsor*

J.P. MORGAN SECURITIES LLC

Sponsor's SEC File Number (if any) (e.g., 801-, 8-, 866-, 802-):

Sponsor's CRD Number (if any):

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Name of *Wrap Fee Program*

MORGAN STANLEY SMITH BARNEY LLC

Name of *Sponsor*

MORGAN STANLEY

Sponsor's SEC File Number (if any) (e.g., 801-, 8-, 866-, 802-):

Sponsor's CRD Number (if any):

Name of *Wrap Fee Program*

WELLS FARGO BANK, NATIONAL ASSOCIATION

Sponsor's SEC File Number (if any) (e.g., 801-, 8-, 866-, 802-):

Sponsor's CRD Number (if any):

SECTION 5.K.(1) Separately Managed Accounts

After subtracting the amounts reported in Item 5.D.(3)(d)-(f) from your total regulatory assets under management, indicate the approximate percentage of this remaining amount attributable to each of the following categories of assets. If the remaining amount is at least \$10 billion in regulatory assets under management, complete Question (a). If the remaining amount is less than \$10 billion in regulatory assets under management, complete Question (b).

Any regulatory assets under management reported in Item 5.D.(3)(d), (e), and (f) should not be reported below.

If you are a subadvisor to a separately managed account, you should only provide information with respect to the portion of the account that you subadvise.

End of year refers to the date used to calculate your regulatory assets under management for purposes of your *annual updating amendment*. Mid-year is the date six months before the end of year date. Each column should add up to 100% and numbers should be rounded to the nearest percent.

Investments in derivatives, registered investment companies, business development companies, and pooled investment vehicles should be reported in those categories. Do not report those investments based on related or underlying portfolio assets. Cash equivalents include bank deposits, certificates of deposit, bankers' acceptances and similar bank instruments.

Some assets could be classified into more than one category or require discretion about which category applies. You may use your own internal methodologies and the conventions of your service providers in determining how to categorize assets, so long as the methodologies or conventions are consistently applied and consistent with information you report internally and to current and prospective clients. However, you should not double count assets, and your responses must be consistent with any instructions or other guidance relating to this Section.

(a) Asset Type	Mid-year	End of year
(i) Exchange-Traded Equity Securities	67 %	66 %
(ii) Non Exchange-Traded Equity Securities	0 %	1 %
(iii) U.S. Government/Agency Bonds	5 %	5 %
(iv) U.S. State and Local Bonds	2 %	3 %
(v) Sovereign Bonds	0 %	0 %
(vi) Investment Grade Corporate Bonds	4 %	4 %
(vii) Non-Investment Grade Corporate Bonds	8 %	8 %
(viii) Derivatives	0 %	0 %
(ix) Securities Issued by Registered Investment Companies or Business Development Companies	2 %	2 %
(x) Securities Issued by Pooled Investment Vehicles (other than Registered Investment Companies or Business Development Companies)	4 %	4 %
(xi) Cash and Cash Equivalents	3 %	2 %
(xii) Other	5 %	5 %

Generally describe any assets included in "Other"

SECURITIES THAT COULD NOT BE CAPTURED IN THE DESIGNATED ASSET TYPES BASED ON OUR SYSTEM CONFIGURATION SUCH AS COLLATERAL AND COLLATERAL OFFSETS, CERTAIN UNRELATED FUNDS, AND UNSETTLED INTERESTS.

(b) Asset Type	End of year
(i) Exchange-Traded Equity Securities	%
(ii) Non Exchange-Traded Equity Securities	%
(iii) U.S. Government/Agency Bonds	%
(iv) U.S. State and Local Bonds	%
(v) Sovereign Bonds	%
(vi) Investment Grade Corporate Bonds	%
(vii) Non-Investment Grade Corporate Bonds	%
(viii) Derivatives	%
(ix) Securities Issued by Registered Investment Companies or Business Development Companies	%
(x) Securities Issued by Pooled Investment Vehicles (other than Registered Investment Companies or Business Development Companies)	%
(xi) Cash and Cash Equivalents	%

Generally describe any assets included in "Other"

SECTION 5.K.(2) Separately Managed Accounts - Use of Borrowings and Derivatives

☐ No information is required to be reported in this Section 5.K.(2) per the instructions of this Section 5.K.(2)

If your regulatory assets under management attributable to separately managed accounts are at least \$10 billion, you should complete Question (a). If your regulatory assets under management attributable to separately managed accounts are at least \$500 million but less than \$10 billion, you should complete Question (b).

(a) In the table below, provide the following information regarding the separately managed accounts you advise. If you are a subadviser to a separately managed account, you should only provide information with respect to the portion of the account that you subadvise. End of year refers to the date used to calculate your regulatory assets under management for purposes of your *annual updating amendment*. Mid-year is the date six months before the end of year date.

In column 1, indicate the regulatory assets under management attributable to separately managed accounts associated with each level of gross notional exposure. For purposes of this table, the gross notional exposure of an account is the percentage obtained by dividing (i) the sum of (a) the dollar amount of any *borrowings* and (b) the *gross notional value* of all derivatives, by (ii) the regulatory assets under management of the account.

In column 2, provide the dollar amount of *borrowings* for the accounts included in column 1.

In column 3, provide aggregate *gross notional value* of derivatives divided by the aggregate regulatory assets under management of the accounts included in column 1 with respect to each category of derivatives specified in 3(a) through (f).

You may, but are not required to, complete the table with respect to any separately managed account with regulatory assets under management of less than \$10,000,000.

Any regulatory assets under management reported in Item 5.D.(3)(d), (e), and (f) should not be reported below.

(i) Mid-Year

Gross Notional Exposure	(1) Regulatory Assets Under Management	(2) Borrowings	(3) Derivative Exposures					
			(a) Interest Rate Derivative	(b) Foreign Exchange Derivative	(c) Credit Derivative	(d) Equity Derivative	(e) Commodity Derivative	(f) Other Derivative
Less than 10%	\$ 96,104,354,590	\$ 0	0.06 %	0.1 %	0 %	0 %	0 %	0 %
10-149%	\$ 1,192,504,499	\$ 0	26.52 %	1.07 %	0.62 %	0 %	0 %	0 %
150% or more	\$ 100,198,830	\$ 0	0 %	181.54 %	0 %	0 %	0 %	0 %

Optional: Use the space below to provide a narrative description of the strategies and/or manner in which *borrowings* and derivatives are used in the management of the separately managed accounts that you advise.

(ii) End of Year

Gross Notional Exposure	(1) Regulatory Assets Under Management	(2) Borrowings	(3) Derivative Exposures					
			(a) Interest Rate Derivative	(b) Foreign Exchange Derivative	(c) Credit Derivative	(d) Equity Derivative	(e) Commodity Derivative	(f) Other Derivative
Less than 10%	\$ 94,443,297,556	\$ 0	0.06 %	0.07 %	0 %	0 %	0 %	0 %
10-149%	\$ 1,635,910,765	\$ 0	19.33 %	13.23 %	0.45 %	0 %	0 %	0 %
150% or more	\$ 164,586	\$ 0	0 %	999 %	0 %	0 %	0 %	0 %

Optional: Use the space below to provide a narrative description of the strategies and/or manner in which *borrowings* and derivatives are used in the management of the separately managed accounts that you advise.

(b) In the table below, provide the following information regarding the separately managed accounts you advise as of the date used to calculate your regulatory assets under management for purposes of your *annual updating amendment*. If you are a subadviser to a separately managed account, you should only provide information with respect to the portion of the account that you subadvise.

In column 1, indicate the regulatory assets under management attributable to separately managed accounts associated with each level of gross notional exposure. For purposes of this table, the gross notional exposure of an account is the percentage obtained by dividing (i) the sum of (a) the

dollar amount of any *borrowings* and (b) the *gross notional value* of all derivatives, by (ii) the regulatory assets under management of the account.

In column 2, provide the dollar amount of *borrowings* for the accounts included in column 1.

You may, but are not required to, complete the table with respect to any separately managed accounts with regulatory assets under management of less than \$10,000,000.

Any regulatory assets under management reported in Item 5.D.(3)(d), (e), and (f) should not be reported below.

Gross Notional Exposure	(1) Regulatory Assets Under Management	(2) Borrowings
Less than 10%	\$	\$ 0
10-149%	\$	\$ 0
150% or more	\$	\$ 0

Optional: Use the space below to provide a narrative description of the strategies and/or manner in which *borrowings* and derivatives are used in the management of the separately managed accounts that you advise.

SECTION 5.K.(3) Custodians for Separately Managed Accounts

Complete a separate Schedule D Section 5.K.(3) for each custodian that holds ten percent or more of your aggregate separately managed account regulatory assets under management.

- (a) Legal name of custodian:
THE BANK OF NEW YORK MELLON CORPORATION
- (b) Primary business name of custodian:
THE BANK OF NEW YORK MELLON CORPORATION
- (c) The location(s) of the custodian's office(s) responsible for *custody* of the assets :
City: NEW YORK State: New York Country: United States
- (d) Is the custodian a *related person* of your firm? Yes No ☐ ☒
- (e) If the custodian is a broker-dealer, provide its SEC registration number (if any)
-
- (f) If the custodian is not a broker-dealer, or is a broker-dealer but does not have an SEC registration number, provide its *legal entity identifier* (if any)
- (g) What amount of your regulatory assets under management attributable to separately managed accounts is held at the custodian?
\$ 17,719,162,064

- (a) Legal name of custodian:
NORTHERN TRUST CORPORATION
- (b) Primary business name of custodian:
NORTHERN TRUST CORPORATION
- (c) The location(s) of the custodian's office(s) responsible for *custody* of the assets :
City: CHICAGO State: Illinois Country: United States
- (d) Is the custodian a *related person* of your firm? Yes No ☐ ☒
- (e) If the custodian is a broker-dealer, provide its SEC registration number (if any)
-
- (f) If the custodian is not a broker-dealer, or is a broker-dealer but does not have an SEC registration number, provide its *legal entity identifier* (if any)
- (g) What amount of your regulatory assets under management attributable to separately managed accounts is held at the custodian?
\$ 13,089,921,788

- (a) Legal name of custodian.

STATE STREET CORPORATION

(b) Primary business name of custodian:

STATE STREET CORPORATION

(c) The location(s) of the custodian's office(s) responsible for *custody* of the assets :

City:

BOSTON

State:

Massachusetts

Country:

United States

Yes No

(d) Is the custodian a *related person* of your firm?

☐ Yes ☒ No

(e) If the custodian is a broker-dealer, provide its SEC registration number (if any)

-

(f) If the custodian is not a broker-dealer, or is a broker-dealer but does not have an SEC registration number, provide its *legal entity identifier* (if any)

(g) What amount of your regulatory assets under management attributable to separately managed accounts is held at the custodian?

\$ 28,507,249,536

Item 6 Other Business Activities

In this Item, we request information about your firm's other business activities.

A. You are actively engaged in business as a (check all that apply):

- ☒ (1) broker-dealer (registered or unregistered)
- ☒ (2) registered representative of a broker-dealer
- ☒ (3) commodity pool operator or commodity trading advisor (whether registered or exempt from registration)
- ☒ (4) futures commission merchant
- ☒ (5) real estate broker, dealer, or agent
- ☒ (6) insurance broker or agent
- ☒ (7) bank (including a separately identifiable department or division of a bank)
- ☒ (8) trust company
- ☒ (9) registered municipal advisor
- ☒ (10) registered security-based swap dealer
- ☒ (11) major security-based swap participant
- ☒ (12) accountant or accounting firm
- ☒ (13) lawyer or law firm
- ☒ (14) other financial product salesperson (specify):

If you engage in other business using a name that is different from the names reported in Items 1.A. or 1.B.(1), complete Section 6.A. of Schedule D.

Yes No

B. (1) Are you actively engaged in any other business not listed in Item 6.A. (other than giving investment advice)?

☐ Yes ☒ No

(2) If yes, is this other business your primary business?

☐ Yes ☒ No

If "yes," describe this other business on Section 6.B.(2) of Schedule D, and if you engage in this business under a different name, provide that name.

Yes No

(3) Do you sell products or provide services other than investment advice to your advisory clients?

☐ Yes ☒ No

If "yes," describe this other business on Section 6.B.(3) of Schedule D, and if you engage in this business under a different name, provide that name.

SECTION 6.A. Names of Your Other Businesses

No Information Filed

SECTION 6.B.(2) Description of Primary Business

Describe your primary business (not your investment advisory business):

If you engage in that business under a different name, provide that name:

SECTION 6.B.(3) Description of Other Products and Services

Describe other products or services you sell to your client. You may omit products and services that you listed in Section 6 B.(2) above.

If you engage in that business under a different name, provide that name.

Item 7 Financial Industry Affiliations

In this Item, we request information about your financial industry affiliations and activities. This information identifies areas in which conflicts of interest may occur between you and your clients.

- A. This part of Item 7 requires you to provide information about you and your *related persons*, including foreign affiliates. Your *related persons* are all of your *advisory affiliates* and any person that is under common control with you.

You have a *related person* that is a (check all that apply):

- ☒ (1) broker-dealer, municipal securities dealer, or government securities broker or dealer (registered or unregistered)
- ☒ (2) other investment adviser (including financial planners)
- ☐ (3) registered municipal advisor
- ☐ (4) registered security-based swap dealer
- ☐ (5) major security-based swap participant
- ☒ (6) commodity pool operator or commodity trading advisor (whether registered or exempt from registration)
- ☐ (7) futures commission merchant
- ☐ (8) banking or thrift institution
- ☒ (9) trust company
- ☐ (10) accountant or accounting firm
- ☐ (11) lawyer or law firm
- ☐ (12) insurance company or agency
- ☐ (13) pension consultant
- ☐ (14) real estate broker or dealer
- ☐ (15) sponsor or syndicator of limited partnerships (or equivalent), excluding pooled investment vehicles
- ☒ (16) sponsor, general partner, managing member (or equivalent) of pooled investment vehicles

Note that Item 7.A. should not be used to disclose that some of your employees perform investment advisory functions or are registered representatives of a broker-dealer. The number of your firm's employees who perform investment advisory functions should be disclosed under Item 5.B.(1). The number of your firm's employees who are registered representatives of a broker-dealer should be disclosed under Item 5.B.(2).

Note that if you are filing an umbrella registration, you should not check Item 7.A.(2) with respect to your relying advisers, and you do not have to complete Section 7.A. in Schedule D for your relying advisers. You should complete a Schedule R for each relying adviser.

For each related person, including foreign affiliates that may not be registered or required to be registered in the United States, complete Section 7.A. of Schedule D.

You do not need to complete Section 7.A. of Schedule D for any related person if: (1) you have no business dealings with the related person in connection with advisory services you provide to your clients; (2) you do not conduct shared operations with the related person; (3) you do not refer clients or business to the related person, and the related person does not refer prospective clients or business to you; (4) you do not share supervised persons or premises with the related person; and (5) you have no reason to believe that your relationship with the related person otherwise creates a conflict of interest with your clients.

You must complete Section 7.A. of Schedule D for each related person acting as qualified custodian in connection with advisory services you provide to your clients (other than any mutual fund transfer agent pursuant to rule 206(4)-2(b)(1)), regardless of whether you have determined the related person to be operationally independent under rule 206(4)-2 of the Advisers Act.

SECTION 7.A. Financial Industry Affiliations

Complete a separate Schedule D Section 7.A. for each *related person* listed in Item 7.A.

1. Legal Name of *Related Person*:

T. ROWE PRICE SINGAPORE PRIVATE LTD

2. Primary Business Name of *Related Person*:

T. ROWE PRICE SINGAPORE PRIVATE LTD

3. *Related Person's* SEC File Number (if any) (e.g., 801-, 8-, 866-, 802-)

Other

4. *Related Person's*

(a) CRD Number (if any):

(b) CRD Number(s) (if any):

No Information Filed

5. *Related Person is* (check all that apply)

- (a) ☐ broker-dealer, municipal securities dealer, or government securities broker or dealer
- (b) ☒ other investment adviser (including financial planners)
- (c) ☐ registered municipal advisor
- (d) ☐ registered security-based swap dealer
- (e) ☐ major security-based swap participant

- (f) ☒ commodity pool operator or commodity trading advisor (whether registered or exempt from registration)
- (g) ☐ futures commission merchant
- (h) ☐ banking or thrift institution
- (i) ☐ trust company
- (j) ☐ accountant or accounting firm
- (k) ☐ lawyer or law firm
- (l) ☐ insurance company or agency
- (m) ☐ pension consultant
- (n) ☐ real estate broker or dealer
- (o) ☐ sponsor or syndicator of limited partnerships (or equivalent), excluding pooled investment vehicles
- (p) ☐ sponsor, general partner, managing member (or equivalent) of pooled investment vehicles

6. Do you control or are you controlled by the related person? Yes ☐ No ☐
7. Are you and the related person under common control? Yes ☐ No ☐
8. (a) Does the related person act as a qualified custodian for your clients in connection with advisory services you provide to clients? Yes ☐ No ☒
- (b) If you are registering or registered with the SEC and you have answered "yes," to question 8.(a) above, have you overcome the presumption that you are not operationally independent (pursuant to rule 206(4)-2(d)(5)) from the related person and thus are not required to obtain a surprise examination for your clients' funds or securities that are maintained at the related person? Yes ☐ No ☒
- (c) If you have answered "yes" to question 8.(a) above, provide the location of the related person's office responsible for custody of your clients' assets:
- Number and Street 1: _____ Number and Street 2: _____
City: _____ State: _____ Country: _____ ZIP+4/Postal Code: _____
If this address is a private residence, check this box: ☐
9. (a) If the related person is an investment adviser, is it exempt from registration? Yes ☐ No ☒
- (b) If the answer is yes, under what exemption? _____
10. (a) Is the related person registered with a foreign financial regulatory authority? Yes ☐ No ☒
- (b) If the answer is yes, list the name and country, in English of each foreign financial regulatory authority with which the related person is registered.
- | Name of Country / English Name of Foreign Financial Regulatory Authority |
|--|
| Singapore - Monetary Authority of Singapore |
11. Do you and the related person share any supervised persons? Yes ☐ No ☒
12. Do you and the related person share the same physical location? Yes ☐ No ☒

1. Legal Name of Related Person:
T. ROWE PRICE INTERNATIONAL LTD

2. Primary Business Name of Related Person:
T. ROWE PRICE INTERNATIONAL LTD

3. Related Person's SEC File Number (if any) (e.g., 801-, 8-, 866-, 802-)

Other

4. Related Person's

(a) CRD Number(s) (if any):

(b) CIK Number(s) (if any):

No Information Filed

5. Related Person is: (check all that apply)

- (a) ☐ broker-dealer, municipal securities dealer, or government securities broker or dealer
- (b) ☒ other investment adviser (including financial planners)
- (c) ☐ registered municipal advisor
- (d) ☐ registered security-based swap dealer
- (e) ☐ major security-based swap participant
- (f) ☒ commodity pool operator or commodity trading advisor (whether registered or exempt from registration)
- (g) ☐ futures commission merchant
- (h) ☐ banking or thrift institution
- (i) ☐ trust company
- (j) ☐ accountant or accounting firm

- (k) ☐ lawyer or law firm
 (l) ☐ insurance company or agency
 (m) ☐ pension consultant
 (n) ☐ real estate broker or dealer
 (o) ☐ sponsor or syndicator of limited partnerships (or equivalent), excluding pooled investment vehicles
 (p) ☒ sponsor, general partner, managing member (or equivalent) of pooled investment vehicles

6. Do you control or are you controlled by the related person? Yes No
☐ ☐
7. Are you and the related person under common control? ☐ ☐
8. (a) Does the related person act as a qualified custodian for your clients in connection with advisory services you provide to clients? ☐ ☒
 (b) If you are registering or registered with the SEC and you have answered "yes," to question 8.(a) above, have you overcome the presumption that you are not operationally independent (pursuant to rule 206(4)-2(d)(5)) from the related person and thus are not required to obtain a surprise examination for your clients' funds or securities that are maintained at the related person? ☐ ☒
 (c) If you have answered "yes" to question 8.(a) above, provide the location of the related person's office responsible for custody of your clients' assets:
 Number and Street 1: _____ Number and Street 2: _____
 City: _____ State: _____ Country: _____ ZIP+4/Postal Code: _____
 If this address is a private residence, check this box: ☐
9. (a) If the related person is an investment adviser, is it exempt from registration? Yes No
☐ ☒
 (b) If the answer is yes, under what exemption?
10. (a) Is the related person registered with a foreign financial regulatory authority? ☐ ☒
 (b) If the answer is yes, list the name and country, in English of each foreign financial regulatory authority with which the related person is registered.

Name of Country/English Name of Foreign Financial Regulatory Authority
United Kingdom - Financial Conduct Authority
11. Do you and the related person share any supervised persons? ☐ ☒
12. Do you and the related person share the same physical location? ☐ ☒

1. Legal Name of Related Person:
T.ROWE PRICE HONG KONG LIMITED
2. Primary Business Name of Related Person:
T.ROWE PRICE HONG KONG LIMITED
3. Related Person's SEC File Number (if any) (e.g., 801-, 8-, 866-, 802-)
 or
 Other
4. Related Person's
 (a) CRD Number (if any):
 (b) CIK Number(s) (if any):
 No Information Filed
5. Related Person is: (check all that apply)
- (a) ☐ broker-dealer, municipal securities dealer, or government securities broker or dealer
 (b) ☒ other investment adviser (including financial planners)
 (c) ☐ registered municipal advisor
 (d) ☐ registered security-based swap dealer
 (e) ☐ major security-based swap participant
 (f) ☒ commodity pool operator or commodity trading advisor (whether registered or exempt from registration)
 (g) ☐ futures commission merchant
 (h) ☐ banking or thrift institution
 (i) ☐ trust company
 (j) ☐ accountant or accounting firm
 (k) ☐ lawyer or law firm
 (l) ☐ insurance company or agency
 (m) ☐ pension consultant
 (n) ☐ real estate broker or dealer
 (o) ☐ sponsor or syndicator of limited partnerships (or equivalent), excluding pooled investment vehicles

(p) ☐ sponsor, general partner, managing member (or equivalent) of pooled investment vehicles

6. Do you control or are you controlled by the related person? Yes No
☐ ☐
7. Are you and the related person under common control? ☐ ☐
8. (a) Does the related person act as a qualified custodian for your clients in connection with advisory services you provide to clients? ☐ ☐
- (b) If you are registering or registered with the SEC and you have answered "yes," to question 8.(a) above, have you overcome the presumption that you are not operationally independent (pursuant to rule 206(4)-2(d)(5)) from the related person and thus are not required to obtain a surprise examination for your clients' funds or securities that are maintained at the related person? ☐ ☐
- (c) If you have answered "yes" to question 8.(a) above, provide the location of the related person's office responsible for custody of your clients' assets:
- Number and Street 1: _____ Number and Street 2: _____
- City: _____ State: _____ Country: _____ ZIP+4/Postal Code: _____
- If this address is a private residence, check this box: ☐
9. (a) If the related person is an investment adviser, is it exempt from registration? Yes No
☐ ☐
- (b) If the answer is yes, under what exemption?
10. (a) Is the related person registered with a foreign financial regulatory authority? ☐ ☐
- (b) If the answer is yes, list the name and country, in English of each foreign financial regulatory authority with which the related person is registered.
- | Name of Country/English Name of Foreign Financial Regulatory Authority |
|--|
| Hong Kong - Securities and Futures Commission |
11. Do you and the related person share any supervised persons? ☐ ☐
12. Do you and the related person share the same physical location? ☐ ☐

1. Legal Name of Related Person:
UTI ASSET MANAGEMENT COMPANY LIMITED
2. Primary Business Name of Related Person:
UTI ASSET MANAGEMENT COMPANY LIMITED
3. Related Person's SEC File Number (if any) (e.g., 801-, 8-, 866-, 802-)
-
or
Other
4. Related Person's
- (a) CRD Number (if any):
- (b) CIK Number(s) (if any):
No Information Filed
5. Related Person is: (check all that apply)
- (a) ☐ broker-dealer, municipal securities dealer, or government securities broker or dealer
- (b) ☒ other investment adviser (including financial planners)
- (c) ☐ registered municipal advisor
- (d) ☐ registered security-based swap dealer
- (e) ☐ major security-based swap participant
- (f) ☐ commodity pool operator or commodity trading advisor (whether registered or exempt from registration)
- (g) ☐ futures commission merchant
- (h) ☐ banking or thrift institution
- (i) ☐ trust company
- (j) ☐ accountant or accounting firm
- (k) ☐ lawyer or law firm
- (l) ☐ insurance company or agency
- (m) ☐ pension consultant
- (n) ☐ real estate broker or dealer
- (o) ☐ sponsor or syndicator of limited partnerships (or equivalent), excluding pooled investment vehicles
- (p) ☐ sponsor, general partner, managing member (or equivalent) of pooled investment vehicles

6. Do you control or are you controlled by the related person? Yes No
☐ ☐

7. Are you and the *related person* under common control? C C
8. (a) Does the *related person* act as a qualified custodian for your *clients* in connection with advisory services you provide to *clients*? C C
(b) If you are registering or registered with the SEC and you have answered "yes," to question 8.(a) above, have you overcome the presumption that you are not operationally independent (pursuant to rule 206(4)-2(d)(5)) from the *related person* and thus are not required to obtain a surprise examination for your *clients'* funds or securities that are maintained at the *related person*? C C
(c) If you have answered "yes" to question 8.(a) above, provide the location of the *related person's* office responsible for *custody* of your *clients'* assets:
Number and Street 1: _____ Number and Street 2: _____
City: _____ State: _____ Country: _____ ZIP+4/Postal Code: _____
If this address is a private residence, check this box: ☐ Yes No
9. (a) If the *related person* is an investment adviser, is it exempt from registration? C C
(b) If the answer is yes, under what exemption? _____
10. (a) Is the *related person* registered with a foreign financial regulatory authority? C C
(b) If the answer is yes, list the name and country, in English of each foreign financial regulatory authority with which the *related person* is registered.

Name of Country/English Name of Foreign Financial Regulatory Authority
India - Securities and Exchange Board of India
11. Do you and the *related person* share any supervised persons? C C
12. Do you and the *related person* share the same physical location? C C

1. Legal Name of *Related Person*:
T. ROWE PRICE TRUST COMPANY
2. Primary Business Name of *Related Person*:
T. ROWE PRICE TRUST COMPANY
3. *Related Person's* SEC File Number (if any) (e.g., 801-, 8-, 866-, 802-)
-
or
Other _____
4. *Related Person's*
(a) CRD Number (if any): _____
(b) CIK Number(s) (if any): _____
No Information Filed
5. *Related Person* is: (check all that apply)
- (a) ☐ broker-dealer, municipal securities dealer, or government securities broker or dealer
 - (b) ☐ other investment adviser (including financial planners)
 - (c) ☐ registered municipal advisor
 - (d) ☐ registered security-based swap dealer
 - (e) ☐ major security-based swap participant
 - (f) ☐ commodity pool operator or commodity trading advisor (whether registered or exempt from registration)
 - (g) ☐ futures commission merchant
 - (h) ☐ banking or thrift institution
 - (i) ☒ trust company
 - (j) ☐ accountant or accounting firm
 - (k) ☐ lawyer or law firm
 - (l) ☐ insurance company or agency
 - (m) ☐ pension consultant
 - (n) ☐ real estate broker or dealer
 - (o) ☐ sponsor or syndicator of limited partnerships (or equivalent), excluding pooled investment vehicles
 - (p) ☒ sponsor, general partner, managing member (or equivalent) of pooled investment vehicles

6. Do you control or are you controlled by the *related person*? C C
7. Are you and the *related person* under common control? C C
8. (a) Does the *related person* act as a qualified custodian for your *clients* in connection with advisory services you provide to *clients*? C C
(b) If you are registering or registered with the SEC and you have answered "yes," to question 8 (a) above, have you overcome the C C

presumption that you are not operationally independent (pursuant to rule 206(4)-2(d)(5)) from the *related person* and thus are not required to obtain a surprise examination for your *clients'* funds or securities that are maintained at the *related person*?

- (c) If you have answered "yes" to question 8 (a) above, provide the location of the *related person's* office responsible for custody of your *clients'* assets:

Number and Street 1:

Number and Street 2:

City:

State:

Country:

ZIP+4/Postal Code:

If this address is a private residence, check this box: ☐

Yes No

9. (a) If the *related person* is an investment adviser, is it exempt from registration?

☐ ☐

- (b) If the answer is yes, under what exemption?

10. (a) Is the *related person* registered with a *foreign financial regulatory authority*?

☐ ☒

- (b) If the answer is yes, list the name and country, in English of each *foreign financial regulatory authority* with which the *related person* is registered.

No Information Filed

11. Do you and the *related person* share any *supervised persons*?

☐ ☐

12. Do you and the *related person* share the same physical location?

☐ ☐

1. Legal Name of *Related Person*:

T. ROWE PRICE (CANADA) INC.

2. Primary Business Name of *Related Person*:

T. ROWE PRICE (CANADA), INC.

3. *Related Person's* SEC File Number (if any) (e.g., 801-, 8-, 866-, 802-)

Other

4. *Related Person's*

- (a) CRD Number (if any):

- (b) CRD Number (if any):

No Information Filed

5. *Related Person* is: (check all that apply)

- (a) ☐ broker-dealer, municipal securities dealer, or government securities broker or dealer
(b) ☒ other investment adviser (including financial planners)
(c) ☐ registered municipal advisor
(d) ☐ registered security-based swap dealer
(e) ☐ major security-based swap participant
(f) ☒ commodity pool operator or commodity trading advisor (whether registered or exempt from registration)
(g) ☐ futures commission merchant
(h) ☐ banking or thrift institution
(i) ☐ trust company
(j) ☐ accountant or accounting firm
(k) ☐ lawyer or law firm
(l) ☐ insurance company or agency
(m) ☐ pension consultant
(n) ☐ real estate broker or dealer
(o) ☐ sponsor or syndicator of limited partnerships (or equivalent), excluding pooled investment vehicles
(p) ☒ sponsor, general partner, managing member (or equivalent) of pooled investment vehicles

Yes No

6. Do you *control* or are you *controlled* by the *related person*?

☐ ☐

7. Are you and the *related person* under common *control*?

☐ ☐

8. (a) Does the *related person* act as a qualified custodian for your *clients* in connection with advisory services you provide to *clients*?

☐ ☒

- (b) If you are registering or registered with the SEC and you have answered "yes," to question 8.(a) above, have you overcome the presumption that you are not operationally independent (pursuant to rule 206(4)-2(d)(5)) from the *related person* and thus are not required to obtain a surprise examination for your *clients'* funds or securities that are maintained at the *related person*?

☐ ☐

- (c) If you have answered "yes" to question 8 (a) above, provide the location of the *related person's* office responsible for custody of your *clients'* assets:

Number and Street 1:

Number and Street 2:

City:

State:

Country:

ZIP+4/Postal Code:

If this address is a private residence, check this box: ☐

9. (a) If the *related person* is an investment adviser, is it exempt from registration?

(b) If the answer is yes, under what exemption?

10. (a) Is the *related person* registered with a *foreign financial regulatory authority*?

(b) If the answer is yes, list the name and country, in English of each *foreign financial regulatory authority* with which the *related person* is registered

Name of Country/English Name of Foreign Financial Regulatory Authority
Canada - Alberta Securities Commission
Canada - British Columbia Securities Commission
Canada - Manitoba Securities Commission
Canada - New Brunswick Securities Commission
Canada - Newfoundland and Labrador, Financial Services Regulation Division
Canada - Nova Scotia Securities Commission
Canada - Ontario Securities Commission
Canada - Prince Edward Island, Securities Office
Canada - Quebec, Financial Markets Authority
Canada - Saskatchewan Financial Services Commission

11. Do you and the *related person* share any *supervised persons*?

12. Do you and the *related person* share the same physical location?

1. Legal Name of *Related Person*:

T. ROWE PRICE ADVISORY SERVICES, INC.

2. Primary Business Name of *Related Person*:

T. ROWE PRICE ADVISORY SERVICES, INC.

3. *Related Person's* SEC File Number (if any) (e.g., 801-, 8-, 866-, 802-)

or

Other

4. *Related Person's*

(a) CRD Number (if any):

(b) CIK Number(s) (if any):

No Information Filed

5. *Related Person* is: (check all that apply)

(a) ☐ broker-dealer, municipal securities dealer, or government securities broker or dealer

(b) ☒ other investment adviser (including financial planners)

(c) ☐ registered municipal advisor

(d) ☐ registered security-based swap dealer

(e) ☐ major security-based swap participant

(f) ☒ commodity pool operator or commodity trading advisor (whether registered or exempt from registration)

(g) ☐ futures commission merchant

(h) ☐ banking or thrift institution

(i) ☐ trust company

(j) ☐ accountant or accounting firm

(k) ☐ lawyer or law firm

(l) ☐ insurance company or agency

(m) ☐ pension consultant

(n) ☐ real estate broker or dealer

(o) ☐ sponsor or syndicator of limited partnerships (or equivalent), excluding pooled investment vehicles

(p) ☐ sponsor, general partner, managing member (or equivalent) of pooled investment vehicles

Yes No

6. Do you *control* or are you *controlled* by the *related person*?

7. Are you and the *related person* under common control?

8. (a) Does the *related person* act as a qualified custodian for your *clients* in connection with advisory services you provide to *clients*?

(b) If you are registering or registered with the SEC and you have answered "yes," to question 8 (a) above, have you overcome the

presumption that you are not operationally independent (pursuant to rule 206(4)-2(d)(5)) from the *related person* and thus are not required to obtain a surprise examination for your *clients'* funds or securities that are maintained at the *related person*?

- (c) If you have answered "yes" to question 8.(a) above, provide the location of the *related person's* office responsible for *custody* of your *clients'* assets:

Number and Street 1:

Number and Street 2:

City:

State:

Country:

ZIP+4/Postal Code:

If this address is a private residence, check this box: ☐

Yes No

9. (a) If the *related person* is an investment adviser, is it exempt from registration?

☐ ☒

- (b) If the answer is yes, under what exemption?

10. (a) Is the *related person* registered with a *foreign financial regulatory authority*?

☐ ☒

- (b) If the answer is yes, list the name and country, in English of each *foreign financial regulatory authority* with which the *related person* is registered

No Information Filed

11. Do you and the *related person* share any *supervised persons*?

☒ ☐

12. Do you and the *related person* share the same physical location?

☒ ☐

1. Legal Name of *Related Person*:

T. ROWE PRICE AUSTRALIA LIMITED

2. Primary Business Name of *Related Person*:

T. ROWE PRICE AUSTRALIA LIMITED

3. *Related Person's* SEC File Number (if any) (e.g., 801-, 8-, 866-, 802-)

Other

4. *Related Person's*

- (a) CRD Number (if any):

- (b) CIK Number(s) (if any):

No Information Filed

5. *Related Person* is: (check all that apply)

- (a) ☐ broker-dealer, municipal securities dealer, or government securities broker or dealer
(b) ☒ other investment adviser (including financial planners)
(c) ☐ registered municipal advisor
(d) ☐ registered security-based swap dealer
(e) ☐ major security-based swap participant
(f) ☒ commodity pool operator or commodity trading advisor (whether registered or exempt from registration)
(g) ☐ futures commission merchant
(h) ☐ banking or thrift institution
(i) ☐ trust company
(j) ☐ accountant or accounting firm
(k) ☐ lawyer or law firm
(l) ☐ insurance company or agency
(m) ☐ pension consultant
(n) ☐ real estate broker or dealer
(o) ☐ sponsor or syndicator of limited partnerships (or equivalent), excluding pooled investment vehicles
(p) ☒ sponsor, general partner, managing member (or equivalent) of pooled investment vehicles

Yes No

6. Do you *control* or are you *controlled* by the *related person*?

☒ ☐

7. Are you and the *related person* under common *control*?

☒ ☐

8. (a) Does the *related person* act as a qualified custodian for your *clients* in connection with advisory services you provide to *clients*?

☐ ☒

- (b) If you are registering or registered with the SEC and you have answered "yes," to question 8.(a) above, have you overcome the presumption that you are not operationally independent (pursuant to rule 206(4)-2(d)(5)) from the *related person* and thus are not required to obtain a surprise examination for your *clients'* funds or securities that are maintained at the *related person*?

☐ ☒

- (c) If you have answered "yes" to question 8.(a) above, provide the location of the *related person's* office responsible for *custody* of your *clients'* assets:

Number and Street 1

Number and Street 2

City:

State:

Country:

ZIP+4/Postal Code:

If this address is a private residence, check this box: ☐

9. (a) If the *related person* is an investment adviser, is it exempt from registration?

☐ ☐

(b) If the answer is yes, under what exemption?

10. (a) Is the *related person* registered with a foreign financial regulatory authority?

☐ ☐

(b) If the answer is yes, list the name and country, in English of each foreign financial regulatory authority with which the *related person* is registered.

Name of Country/English Name of Foreign Financial Regulatory Authority

Australia - Australian Securities and Investments Commission

11. Do you and the *related person* share any supervised persons?

☐ ☐

12. Do you and the *related person* share the same physical location?

☐ ☐

1. Legal Name of *Related Person*:

T. ROWE PRICE JAPAN, INC.

2. Primary Business Name of *Related Person*:

T. ROWE PRICE JAPAN, INC.

3. *Related Person's* SEC File Number (if any) (e.g., 801-, 8-, 866-, 802-)

Other

4. *Related Person's*

(a) CRD Number (if any):

(b) CEN Number(s) (if any):

No Information Filed

5. *Related Person* is: (check all that apply)

- (a) ☐ broker-dealer, municipal securities dealer, or government securities broker or dealer
- (b) ☒ other investment adviser (including financial planners)
- (c) ☐ registered municipal advisor
- (d) ☐ registered security-based swap dealer
- (e) ☐ major security-based swap participant
- (f) ☒ commodity pool operator or commodity trading advisor (whether registered or exempt from registration)
- (g) ☐ futures commission merchant
- (h) ☐ banking or thrift institution
- (i) ☐ trust company
- (j) ☐ accountant or accounting firm
- (k) ☐ lawyer or law firm
- (l) ☐ insurance company or agency
- (m) ☐ pension consultant
- (n) ☐ real estate broker or dealer
- (o) ☐ sponsor or syndicator of limited partnerships (or equivalent), excluding pooled investment vehicles
- (p) ☒ sponsor, general partner, managing member (or equivalent) of pooled investment vehicles

6. Do you control or are you controlled by the *related person*?

Yes No

☐ ☐

7. Are you and the *related person* under common control?

☐ ☐

8. (a) Does the *related person* act as a qualified custodian for your *clients* in connection with advisory services you provide to *clients*?

☐ ☐

(b) If you are registering or registered with the SEC and you have answered "yes," to question 8.(a) above, have you overcome the presumption that you are not operationally independent (pursuant to rule 206(4)-2(d)(5)) from the *related person* and thus are not required to obtain a surprise examination for your *clients'* funds or securities that are maintained at the *related person*?

☐ ☐

(c) If you have answered "yes" to question 8.(a) above, provide the location of the *related person's* office responsible for custody of your *clients'* assets:

Number and Street 1:

Number and Street 2:

City:

State:

Country:

ZIP+4/Postal Code:

If this address is a private residence, check this box: ☐

Yes No

9. (a) If the *related person* is an investment adviser, is it exempt from registration?

☐ ☐

(b) If the answer is yes, under what exemption?

10. (a) Is the *related person* registered with a *foreign financial regulatory authority* ? G C
(b) If the answer is yes, list the name and country, in English of each *foreign financial regulatory authority* with which the *related person* is registered.

Name of Country/English Name of Foreign Financial Regulatory Authority

Japan - Financial Services Agency

11. Do you and the *related person* share any supervised persons? G C
12. Do you and the *related person* share the same physical location? G C

1. Legal Name of *Related Person*:

T. ROWE PRICE INVESTMENT SERVICES, INC.

2. Primary Business Name of *Related Person*:

T. ROWE PRICE INVESTMENT SERVICES, INC.

3. *Related Person's* SEC File Number (if any) (e.g., 801-, 8-, 866-, 802-)

or
Other

4. *Related Person's*

(a) CRD Number (if any):

(b) CRD Number (if any):

No Information Filed

5. *Related Person* is: (check all that apply)

- (a) ☒ broker-dealer, municipal securities dealer, or government securities broker or dealer
(b) ☐ other investment adviser (including financial planners)
(c) ☐ registered municipal advisor
(d) ☐ registered security-based swap dealer
(e) ☐ major security-based swap participant
(f) ☐ commodity pool operator or commodity trading advisor (whether registered or exempt from registration)
(g) ☐ futures commission merchant
(h) ☐ banking or thrift institution
(i) ☐ trust company
(j) ☐ accountant or accounting firm
(k) ☐ lawyer or law firm
(l) ☐ insurance company or agency
(m) ☐ pension consultant
(n) ☐ real estate broker or dealer
(o) ☐ sponsor or syndicator of limited partnerships (or equivalent), excluding pooled investment vehicles
(p) ☐ sponsor, general partner, managing member (or equivalent) of pooled investment vehicles

6. Do you control or are you controlled by the *related person*? Yes No
G C

7. Are you and the *related person* under common control? G C

8. (a) Does the *related person* act as a qualified custodian for your *clients* in connection with advisory services you provide to *clients*? C G
(b) If you are registering or registered with the SEC and you have answered "yes," to question 8.(a) above, have you overcome the presumption that you are not operationally independent (pursuant to rule 206(4)-2(d)(5)) from the *related person* and thus are not required to obtain a surprise examination for your *clients'* funds or securities that are maintained at the *related person*? C C
(c) If you have answered "yes" to question 8.(a) above, provide the location of the *related person's* office responsible for custody of your *clients'* assets:
Number and Street 1: _____ Number and Street 2: _____
City: _____ State: _____ Country: _____ ZIP+4/Postal Code: _____
If this address is a private residence, check this box: ☐

9. (a) If the *related person* is an investment adviser, is it exempt from registration? Yes No
C C

(b) If the answer is yes, under what exemption?

10. (a) Is the *related person* registered with a *foreign financial regulatory authority* ? C G

(b) If the answer is yes, list the name and country, in English of each *foreign financial regulatory authority* with which the *related person* is registered.

No Information Filed

11. Do you and the *related person* share any supervised persons? G C

12. Do you and the *related person* share the same physical location?

Yes No

Item 7 Private Fund Reporting

B. Are you an adviser to any *private fund*?

If "yes," then for each private fund that you advise, you must complete a Section 7.B.(1) of Schedule D, except in certain circumstances described in the next sentence and in Instruction 6 of the Instructions to Part 1A. If you are registered or applying for registration with the SEC or reporting as an SEC exempt reporting adviser, and another SEC-registered adviser or SEC exempt reporting adviser reports this information with respect to any such private fund in Section 7.B.(1) of Schedule D of its Form ADV (e.g., if you are a subadviser), do not complete Section 7.B.(1) of Schedule D with respect to that private fund. You must, instead, complete Section 7.B.(2) of Schedule D.

In either case, if you seek to preserve the anonymity of a private fund client by maintaining its identity in your books and records in numerical or alphabetical code, or similar designation, pursuant to rule 204-2(d), you may identify the private fund in Section 7.B.(1) or 7.B.(2) of Schedule D using the same code or designation in place of the fund's name.

SECTION 7.B.(1) Private Fund Reporting

A. PRIVATE FUND

Information About the Private Fund

1. (a) Name of the *private fund*:

(b) *Private fund* identification number:
(include the "805-" prefix also)

2. Under the laws of what state or country is the *private fund* organized:

State:
Wyoming

Country:
United States

3. (a) Name(s) of General Partner, Manager, Trustee, or Directors (or *persons* serving in a similar capacity):

No Information Filed

(b) If filing an *umbrella registration*, identify the *filing adviser* and/or *relying adviser(s)* that sponsor(s) or manage(s) this *private fund*.

No Information Filed

4. The *private fund* (check all that apply; you must check at least one):

- ☒ (1) qualifies for the exclusion from the definition of investment company under section 3(c)(1) of the Investment Company Act of 1940
☐ (2) qualifies for the exclusion from the definition of investment company under section 3(c)(7) of the Investment Company Act of 1940

5. List the name and country, in English, of each *foreign financial regulatory authority* with which the *private fund* is registered.

No Information Filed

Yes No

6. (a) Is this a "master fund" in a master-feeder arrangement?

(b) If yes, what is the name and *private fund* identification number (if any) of the feeder funds investing in this *private fund*?

No Information Filed

Yes No

(c) Is this a "feeder fund" in a master-feeder arrangement?

(d) If yes, what is the name and *private fund* identification number (if any) of the master fund in which this *private fund* invests?

Name of *private fund*:

Private fund identification number:
(include the "805-" prefix also)

NOTE: You must complete question 6 for each master-feeder arrangement regardless of whether you are filing a single Schedule D, Section 7.B (1) for the master-feeder arrangement or reporting on the funds separately.

- 7 If you are filing a single Schedule D, Section 7.B.(1) for a master-feeder arrangement according to the instructions to this Section 7.B.(1), for each of the feeder funds answer the following questions:

No Information Filed

NOTE: For purposes of questions 6 and 7, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

8. (a) Is this *private fund* a "fund of funds"?

Yes No

☐ ☒

NOTE: For purposes of this question only, answer "yes" if the fund invests 10 percent or more of its total assets in other pooled investment vehicles, regardless of whether they are also *private funds* or registered investment companies.

- (b) If yes, does the *private fund* invest in funds managed by you or by a *related person*?

☐ ☐

Yes No

9. During your last fiscal year, did the *private fund* invest in securities issued by investment companies registered under the Investment Company Act of 1940 (other than "money market funds," to the extent provided in Instruction 6.e.)?

☐ ☒

10. What type of fund is the *private fund*?

☐ hedge fund ☐ liquidity fund ☒ private equity fund ☐ real estate fund ☐ securitized asset fund ☐ venture capital fund ☐ Other *private fund*:

NOTE: For definitions of these fund types, please see Instruction 6 of the Instructions to Part 1A.

11. Current gross asset value of the *private fund*:

\$ 0

Ownership

12. Minimum investment commitment required of an investor in the *private fund*:

\$ 100,000

NOTE: Report the amount routinely required of investors who are not your *related persons* (even if different from the amount set forth in the organizational documents of the fund).

13. Approximate number of the *private fund's* beneficial owners:

13

14. What is the approximate percentage of the *private fund* beneficially owned by you and your *related persons*:

0%

15. (a) What is the approximate percentage of the *private fund* beneficially owned (in the aggregate) by funds of funds:

10%

Yes No

- (b) If the *private fund* qualifies for the exclusion from the definition of investment company under section 3(c)(1) of the Investment Company Act of 1940, are sales of the fund limited to *qualified clients*?

☒ ☐

16. What is the approximate percentage of the *private fund* beneficially owned by non-United States persons:

0%

Your Advisory Services

Yes No

17. (a) Are you a subadviser to this *private fund*?

☐ ☒

(b) If the answer to question 17.(a) is "yes," provide the name and SEC file number, if any, of the adviser of the *private fund*. If the answer to question 17.(a) is "no," leave this question blank.

Name of adviser to private fund	SEC file number	CRD number
GATES CAPITAL PARTNERS, LLC		

Yes No

18 (a) Do any investment advisers (other than the investment advisers listed in Section 7 B.(1).A 3.(b)) advise the *private fund*? ☐ ☒(b) If the answer to question 18.(a) is "yes," provide the name and SEC file number, if any, of the other advisers to the *private fund*. If the answer to question 18.(a) is "no," leave this question blank.

No Information Filed

Yes No

19. Are your *clients* solicited to invest in the *private fund*? ☐ ☒NOTE: For purposes of this question, do not consider feeder funds of the *private fund*.20. Approximately what percentage of your *clients* has invested in the *private fund*?

1%

Private Offering

Yes No

21. Has the *private fund* ever relied on an exemption from registration of its securities under Regulation D of the Securities Act of 1933? ☐ ☒22. If yes, provide the *private fund's* Form D file number (if any):Form D file number: **B. SERVICE PROVIDERS****Auditors**

Yes No

23. (a) (1) Are the *private fund's* financial statements subject to an annual audit? ☐ ☒(2) If the answer to question 23.(a)(1) is "yes," are the financial statements prepared in accordance with U.S. GAAP? ☐ ☒If the answer to question 23.(a)(1) is "yes," respond to questions (b) through (h) below. If the *private fund* uses more than one auditing firm, you must complete questions (b) through (f) separately for each auditing firm.**Additional Auditor Information : 1 Record(s) Filed.**If the answer to question 23.(a)(1) is "yes," respond to questions (b) through (h) below. If the *private fund* uses more than one auditing firm, you must complete questions (b) through (f) separately for each auditing firm.

(b) Name of the auditing firm:

EKS&H LLLP

(c) The location of the auditing firm's office responsible for the *private fund's* audit (city, state and country):

City:

State:

Country:

DENVER

Colorado

United States

Yes No

(d) Is the auditing firm an *independent public accountant*? ☐ ☒(e) Is the auditing firm registered with the Public Company Accounting Oversight Board? ☐ ☒

If yes, Public Company Accounting Oversight Board-Assigned Number:

34

(f) If "yes" to (e) above, is the auditing firm subject to regular inspection by the Public Company Accounting Oversight Board in accordance with its rules? ☐ ☒

Yes No

(g) Are the *private fund's* audited financial statements for the most recently completed fiscal year distributed to the *private fund's* investors? ☐ ☒(h) Do all of the reports prepared by the auditing firm for the *private fund* since your last annual updating amendment contain unqualified opinions? ☐ ☒☒ Yes ☐ No ☐ Report Not Yet Received

If you check "Report Not Yet Received," you must promptly file an amendment to your Form ADV to update your response when the report is available

Prime Broker

Yes No

24. (a) Does the *private fund* use one or more prime brokers?

☐ ☒

If the answer to question 24.(a) is "yes," respond to questions (b) through (e) below for each prime broker the *private fund* uses. If the *private fund* uses more than one prime broker, you must complete questions (b) through (e) separately for each prime broker

No Information Filed

Custodian

Yes No

25. (a) Does the *private fund* use any custodians (including the prime brokers listed above) to hold some or all of its assets?

☐ ☒

If the answer to question 25.(a) is "yes," respond to questions (b) through (g) below for each custodian the *private fund* uses. If the *private fund* uses more than one custodian, you must complete questions (b) through (g) separately for each custodian.

No Information Filed

Administrator

Yes No

26. (a) Does the *private fund* use an administrator other than your firm?

☐ ☒

If the answer to question 26.(a) is "yes," respond to questions (b) through (f) below. If the *private fund* uses more than one administrator, you must complete questions (b) through (f) separately for each administrator.

No Information Filed

27. During your last fiscal year, what percentage of the *private fund's* assets (by value) was valued by a *person*, such as an administrator, that is not your *related person*?

0%

Include only those assets where (i) such *person* carried out the valuation procedure established for that asset, if any, including obtaining any relevant quotes, and (ii) the valuation used for purposes of investor subscriptions, redemptions or distributions, and fee calculations (including allocations) was the valuation determined by such *person*.

Marketers

Yes No

28. (a) Does the *private fund* use the services of someone other than you or your *employees* for marketing purposes?

☐ ☒

You must answer "yes" whether the *person* acts as a placement agent, consultant, finder, introducer, municipal advisor or other solicitor, or similar *person*. If the answer to question 28.(a) is "yes," respond to questions (b) through (g) below for each such marketer the *private fund* uses. If the *private fund* uses more than one marketer you must complete questions (b) through (g) separately for each marketer.

No Information Filed

A. PRIVATE FUND

Information About the Private Fund

1. (a) Name of the *private fund*:

(b) *Private fund* identification number:
(include the "805-" prefix also)

2 Under the laws of what state or country is the *private fund* organized:

State:
Wyoming

Country:
United States

3 (a) Name(s) of General Partner, Manager, Trustee, or Directors (or *persons* serving in a similar capacity):

(b) If filing an *umbrella registration*, identify the *filing adviser* and/or *relying adviser(s)* that sponsor(s) or manage(s) this *private fund*.

No Information Filed

4. The *private fund* (check all that apply; you must check at least one):

- ☒ (1) qualifies for the exclusion from the definition of investment company under section 3(c)(1) of the Investment Company Act of 1940
☐ (2) qualifies for the exclusion from the definition of investment company under section 3(c)(7) of the Investment Company Act of 1940

5. List the name and country, in English, of each *foreign financial regulatory authority* with which the *private fund* is registered.

No Information Filed

6. (a) Is this a "master fund" in a master-feeder arrangement?

Yes No
☐ ☒

(b) If yes, what is the name and *private fund* identification number (if any) of the feeder funds investing in this *private fund*?

No Information Filed

(c) Is this a "feeder fund" in a master-feeder arrangement?

Yes No
☐ ☒

(d) If yes, what is the name and *private fund* identification number (if any) of the master fund in which this *private fund* invests?

Name of *private fund*:

Private fund identification number:
(include the "805-" prefix also)

NOTE: You must complete question 6 for each master-feeder arrangement regardless of whether you are filing a single Schedule D, Section 7.B.(1) for the master-feeder arrangement or reporting on the funds separately.

7. If you are filing a single Schedule D, Section 7.B.(1) for a master-feeder arrangement according to the instructions to this Section 7.B.(1), for each of the feeder funds answer the following questions:

No Information Filed

NOTE: For purposes of questions 6 and 7, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

8. (a) Is this *private fund* a "fund of funds"?

Yes No
☐ ☒

NOTE: For purposes of this question only, answer "yes" if the fund invests 10 percent or more of its total assets in other pooled investment vehicles, regardless of whether they are also *private funds* or registered investment companies.

(b) If yes, does the *private fund* invest in funds managed by you or by a *related person*?

☐ ☒

9. During your last fiscal year, did the *private fund* invest in securities issued by investment companies registered under the Investment Company Act of 1940 (other than "money market funds," to the extent provided in Instruction 6.e.)?

Yes No
☐ ☒

10. What type of fund is the *private fund*?

☐ hedge fund ☐ liquidity fund ☒ private equity fund ☐ real estate fund ☐ securitized asset fund ☐ venture capital fund ☐ Other *private fund*:

NOTE: For definitions of these fund types, please see Instruction 6 of the Instructions to Part 1A.

11. Current gross asset value of the *private fund*:

\$ 0

Ownership

12. Minimum investment commitment required of an investor in the *private fund*:

\$ 100,000

NOTE: Report the amount routinely required of investors who are not your *related persons* (even if different from the amount set forth in the organizational documents of the fund).

13. Approximate number of the *private fund's* beneficial owners:

13

14. What is the approximate percentage of the *private fund* beneficially owned by you and your *related persons*:

0%

15. (a) What is the approximate percentage of the *private fund* beneficially owned (in the aggregate) by funds of funds:

10%

Yes No

(b) If the *private fund* qualifies for the exclusion from the definition of investment company under section 3(c)(1) of the Investment Company Act of 1940, are sales of the fund limited to *qualified clients*? ☒ ☐

16. What is the approximate percentage of the *private fund* beneficially owned by non-*United States persons*:

0%

Your Advisory Services

Yes No

17. (a) Are you a subadviser to this *private fund*? ☒ ☐

(b) If the answer to question 17.(a) is "yes," provide the name and SEC file number, if any, of the adviser of the *private fund*. If the answer to question 17.(a) is "no," leave this question blank.

Name of adviser to private fund	SEC file number, if any	CRD number
GATES CAPITAL PARTNERS, LLC		

Yes No

18. (a) Do any investment advisers (other than the investment advisers listed in Section 7.B.(1).A.3.(b)) advise the *private fund*? ☒ ☐

(b) If the answer to question 18.(a) is "yes," provide the name and SEC file number, if any, of the other advisers to the *private fund*. If the answer to question 18.(a) is "no," leave this question blank.

No Information Filed

Yes No

19. Are your *clients* solicited to invest in the *private fund*? ☒ ☐

NOTE: For purposes of this question, do not consider feeder funds of the *private fund*.

20. Approximately what percentage of your *clients* has invested in the *private fund*?

1%

Private Offering

Yes No

21. Has the *private fund* ever relied on an exemption from registration of its securities under Regulation D of the Securities Act of 1933? ☒ ☐

22. If yes, provide the *private fund's* Form D file number (if any):

Form D file number

B. SERVICE PROVIDERS

Auditors

Yes No

23. (a) (1) Are the *private fund's* financial statements subject to an annual audit? ☒ ☐

(2) If the answer to question 23.(a)(1) is "yes," are the financial statements prepared in accordance with U.S. GAAP? ☒ ☐

If the answer to question 23.(a)(1) is "yes," respond to questions (b) through (h) below. If the *private fund* uses more than one auditing firm, you must complete questions (b) through (f) separately for each auditing firm.

Additional Auditor Information : 1 Record(s) Filed.

If the answer to question 23 (a)(1) is "yes," respond to questions (b) through (h) below. If the *private fund* uses more than one auditing firm, you must complete questions (b) through (f) separately for each auditing firm.

(b) Name of the auditing firm.

- (c) The location of the auditing firm's office responsible for the
- private fund's*
- audit (city, state and country):

City:

DENVER

State:

Colorado

Country:

United States

Yes No

- (d) Is the auditing firm an
- independent public accountant*
- ?
- ☒
- Yes
- ☐
- No

- (e) Is the auditing firm registered with the Public Company Accounting Oversight Board?
- ☒
- Yes
- ☐
- No

If yes, Public Company Accounting Oversight Board-Assigned Number:

34

- (f) If "yes" to (e) above, is the auditing firm subject to regular inspection by the Public Company Accounting Oversight Board in accordance with its rules?
- ☒
- Yes
- ☐
- No

Yes No

- (g) Are the
- private fund's*
- audited financial statements for the most recently completed fiscal year distributed to the
- private fund's*
- investors?
- ☒
- Yes
- ☐
- No

- (h) Do all of the reports prepared by the auditing firm for the
- private fund*
- since your last
- annual updating amendment*
- contain unqualified opinions?

☒ Yes ☐ No ☐ Report Not Yet Received

If you check "Report Not Yet Received," you must promptly file an amendment to your Form ADV to update your response when the report is available.

Prime Broker

Yes No

24. (a) Does the
- private fund*
- use one or more prime brokers?
- ☒
- Yes
- ☐
- No

If the answer to question 24.(a) is "yes," respond to questions (b) through (e) below for each prime broker the *private fund* uses. If the *private fund* uses more than one prime broker, you must complete questions (b) through (e) separately for each prime broker.

No Information Filed

Custodian

Yes No

25. (a) Does the
- private fund*
- use any custodians (including the prime brokers listed above) to hold some or all of its assets?
- ☒
- Yes
- ☐
- No

If the answer to question 25.(a) is "yes," respond to questions (b) through (g) below for each custodian the *private fund* uses. If the *private fund* uses more than one custodian, you must complete questions (b) through (g) separately for each custodian.

No Information Filed

Administrator

Yes No

26. (a) Does the
- private fund*
- use an administrator other than your firm?
- ☒
- Yes
- ☐
- No

If the answer to question 26.(a) is "yes," respond to questions (b) through (f) below. If the *private fund* uses more than one administrator, you must complete questions (b) through (f) separately for each administrator.

No Information Filed

27. During your last fiscal year, what percentage of the
- private fund's*
- assets (by value) was valued by a
- person*
- , such as an administrator, that is not your
- related person*
- ?

0%

Include only those assets where (i) such *person* carried out the valuation procedure established for that asset, if any, including obtaining any relevant quotes, and (ii) the valuation used for purposes of investor subscriptions, redemptions or distributions, and fee calculations (including allocations) was the valuation determined by such *person*.**Marketers**

28. (a) Does the *private fund* use the services of someone other than you or your *employees* for marketing purposes?

C G

You must answer "yes" whether the *person* acts as a placement agent, consultant, finder, introducer, municipal advisor or other solicitor, or similar *person*. If the answer to question 28.(a) is "yes," respond to questions (b) through (g) below for each such marketer the *private fund* uses. If the *private fund* uses more than one marketer you must complete questions (b) through (g) separately for each marketer.

No Information Filed

A. PRIVATE FUND

Information About the Private Fund

1. (a) Name of the *private fund*:

(b) *Private fund* identification number:
(include the "805-" prefix also)

2. Under the laws of what state or country is the *private fund* organized:

State:
Delaware

Country:
United States

3. (a) Name(s) of General Partner, Manager, Trustee, or Directors (or *persons* serving in a similar capacity):

No Information Filed

(b) If filing an *umbrella registration*, identify the *filing adviser* and/or *relying adviser(s)* that sponsor(s) or manage(s) this *private fund*.

No Information Filed

4. The *private fund* (check all that apply; you must check at least one):

- ☒ (1) qualifies for the exclusion from the definition of investment company under section 3(c)(1) of the Investment Company Act of 1940
☐ (2) qualifies for the exclusion from the definition of investment company under section 3(c)(7) of the Investment Company Act of 1940

5. List the name and country, in English, of each *foreign financial regulatory authority* with which the *private fund* is registered.

No Information Filed

6. (a) Is this a "master fund" in a master-feeder arrangement?

Yes No

C G

(b) If yes, what is the name and *private fund* identification number (if any) of the feeder funds investing in this *private fund*?

No Information Filed

(c) Is this a "feeder fund" in a master-feeder arrangement?

Yes No

C G

(d) If yes, what is the name and *private fund* identification number (if any) of the master fund in which this *private fund* invests?

Name of *private fund*:

Private fund identification number:
(include the "805-" prefix also)

NOTE: You must complete question 6 for each master-feeder arrangement regardless of whether you are filing a single Schedule D, Section 7 B.(1) for the master-feeder arrangement or reporting on the funds separately.

7. If you are filing a single Schedule D, Section 7.B.(1) for a master-feeder arrangement according to the instructions to this Section 7.B.(1), for each of the feeder funds answer the following questions:

No Information Filed

NOTE: For purposes of questions 6 and 7, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

8. (a) Is this *private fund* a "fund of funds"? Yes No
☐ ☒
- NOTE: For purposes of this question only, answer "yes" if the fund invests 10 percent or more of its total assets in other pooled investment vehicles, regardless of whether they are also *private funds* or registered investment companies.
- (b) If yes, does the *private fund* invest in funds managed by you or by a *related person*? ☐ ☐

9. During your last fiscal year, did the *private fund* invest in securities issued by investment companies registered under the Investment Company Act of 1940 (other than "money market funds," to the extent provided in Instruction 6.e.)? Yes No
☐ ☒
10. What type of fund is the *private fund*? Yes No
- ☐ hedge fund ☐ liquidity fund ☐ private equity fund ☐ real estate fund ☐ securitized asset fund ☐ venture capital fund ☒ Other *private fund*:
FAMILY OFFICE INVESTMENT VEHICLE

NOTE: For definitions of these fund types, please see Instruction 6 of the Instructions to Part 1A.

11. Current gross asset value of the *private fund*:
\$ 462,795,773

Ownership

12. Minimum investment commitment required of an investor in the *private fund*:
\$ 0
- NOTE: Report the amount routinely required of investors who are not your *related persons* (even if different from the amount set forth in the organizational documents of the fund).
13. Approximate number of the *private fund's* beneficial owners:
83
14. What is the approximate percentage of the *private fund* beneficially owned by you and your *related persons*:
0%
15. (a) What is the approximate percentage of the *private fund* beneficially owned (in the aggregate) by funds of funds:
0%
- Yes No
- (b) If the *private fund* qualifies for the exclusion from the definition of investment company under section 3(c)(1) of the Investment Company Act of 1940, are sales of the fund limited to *qualified clients*? ☐ ☐
16. What is the approximate percentage of the *private fund* beneficially owned by non-United States persons:
0%

Your Advisory Services

17. (a) Are you a subadviser to this *private fund*? Yes No
☐ ☒
- (b) If the answer to question 17.(a) is "yes," provide the name and SEC file number, if any, of the adviser of the *private fund*. If the answer to question 17.(a) is "no," leave this question blank.
- No Information Filed
- Yes No
18. (a) Do any investment advisers (other than the investment advisers listed in Section 7.B.(1).A.3.(b)) advise the *private fund*? ☐ ☒
- (b) If the answer to question 18.(a) is "yes," provide the name and SEC file number, if any, of the other advisers to the *private fund*. If the answer to question 18.(a) is "no," leave this question blank.
- No Information Filed
- Yes No
19. Are your *clients* solicited to invest in the *private fund*? ☐ ☒
- NOTE: For purposes of this question, do not consider feeder funds of the *private fund*.
20. Approximately what percentage of your *clients* has invested in the *private fund*?
0%

Private Offering

Yes No

21. Has the *private fund* ever relied on an exemption from registration of its securities under Regulation D of the Securities Act of 1933?

☐ ☒

22. If yes, provide the *private fund's* Form D file number (if any):

No Information Filed

B. SERVICE PROVIDERS

Auditors

Yes No

23. (a) (1) Are the *private fund's* financial statements subject to an annual audit?

☐ ☒

(2) If the answer to question 23.(a)(1) is "yes," are the financial statements prepared in accordance with U.S. GAAP?

☐ ☒

If the answer to question 23.(a)(1) is "yes," respond to questions (b) through (h) below. If the *private fund* uses more than one auditing firm, you must complete questions (b) through (f) separately for each auditing firm.

No Information Filed

Yes No

(g) Are the *private fund's* audited financial statements for the most recently completed fiscal year distributed to the *private fund's* investors?

☐ ☒

(h) Do all of the reports prepared by the auditing firm for the *private fund* since your last *annual updating amendment* contain unqualified opinions?

☐ Yes ☐ No ☐ Report Not Yet Received

If you check "Report Not Yet Received," you must promptly file an amendment to your Form ADV to update your response when the report is available.

Prime Broker

Yes No

24. (a) Does the *private fund* use one or more prime brokers?

☐ ☒

If the answer to question 24.(a) is "yes," respond to questions (b) through (e) below for each prime broker the *private fund* uses. If the *private fund* uses more than one prime broker, you must complete questions (b) through (e) separately for each prime broker.

No Information Filed

Custodian

Yes No

25. (a) Does the *private fund* use any custodians (including the prime brokers listed above) to hold some or all of its assets?

☐ ☒

If the answer to question 25.(a) is "yes," respond to questions (b) through (g) below for each custodian the *private fund* uses. If the *private fund* uses more than one custodian, you must complete questions (b) through (g) separately for each custodian.

Additional Custodian Information : 1 Record(s) Filed.

If the answer to question 25.(a) is "yes," respond to questions (b) through (g) below for each custodian the *private fund* uses. If the *private fund* uses more than one custodian, you must complete questions (b) through (g) separately for each custodian.

(b) Legal name of custodian:
NORTHERN TRUST SECURITIES, INC.

(c) Primary business name of custodian:
NORTHERN TRUST SECURITIES, INC.

(d) The location of the custodian's office responsible for custody of the *private fund's* assets (city, state and country):

City:
NEW YORK

State:
New York

Country:
United States

(e) Is the custodian a *related person* of your firm?

Yes No

☐ ☒

(f) If the custodian is a broker-dealer, provide its SEC registration number (if any):

8 - 23689

CRD Number (if any):

7927

(g) If the custodian is not a broker-dealer, or is a broker-dealer but does not have an SEC registration number, provide its *legal entity identifier* (if any)

Administrator

Yes No

26. (a) Does the *private fund* use an administrator other than your firm?

☒ ☐

If the answer to question 26.(a) is "yes," respond to questions (b) through (f) below. If the *private fund* uses more than one administrator, you must complete questions (b) through (f) separately for each administrator.

Additional Administrator Information : 1 Record(s) Filed.

If the answer to question 26.(a) is "yes," respond to questions (b) through (f) below. If the *private fund* uses more than one administrator, you must complete questions (b) through (f) separately for each administrator.

(b) Name of administrator:

NORTHERN TRUST CORPORATION

(c) Location of administrator (city, state and country):

City:

NEW YORK

State:

New York

Country:

United States

Yes No

(d) Is the administrator a *related person* of your firm?

☐ ☒

(e) Does the administrator prepare and send investor account statements to the *private fund's* investors?

☒ Yes (provided to all investors) ☐ Some (provided to some but not all investors) ☒ No (provided to no investors)

(f) If the answer to question 26.(e) is "no" or "some," who sends the investor account statements to the (rest of the) *private fund's* investors? If investor account statements are not sent to the (rest of the) *private fund's* investors, respond "not applicable."
NOT APPLICABLE.

27. During your last fiscal year, what percentage of the *private fund's* assets (by value) was valued by a *person*, such as an administrator, that is not your *related person*?

0%

Include only those assets where (i) such *person* carried out the valuation procedure established for that asset, if any, including obtaining any relevant quotes, and (ii) the valuation used for purposes of investor subscriptions, redemptions or distributions, and fee calculations (including allocations) was the valuation determined by such *person*.

Marketers

Yes No

28. (a) Does the *private fund* use the services of someone other than you or your *employees* for marketing purposes?

☐ ☒

You must answer "yes" whether the *person* acts as a placement agent, consultant, finder, introducer, municipal advisor or other solicitor, or similar *person*. If the answer to question 28.(a) is "yes," respond to questions (b) through (g) below for each such marketer the *private fund* uses. If the *private fund* uses more than one marketer you must complete questions (b) through (g) separately for each marketer.

No Information Filed

A. PRIVATE FUND

Information About the *Private Fund*

1. (a) Name of the *private fund*:

(b) *Private fund* identification number:
(include the "805-" prefix also)

2. Under the laws of what state or country is the *private fund* organized.

State:
Delaware

Country:
United States

3. (a) Name(s) of General Partner, Manager, Trustee, or Directors (or *persons* serving in a similar capacity):

No Information Filed

(b) If filing an *umbrella registration*, identify the *filing adviser* and/or *relying adviser(s)* that sponsor(s) or manage(s) this *private fund*.

No Information Filed

4. The *private fund* (check all that apply; you must check at least one):

☒ (1) qualifies for the exclusion from the definition of investment company under section 3(c)(1) of the Investment Company Act of 1940

☐ (2) qualifies for the exclusion from the definition of investment company under section 3(c)(7) of the Investment Company Act of 1940

5. List the name and country, in English, of each *foreign financial regulatory authority* with which the *private fund* is registered.

No Information Filed

6. (a) Is this a "master fund" in a master-feeder arrangement?

Yes No

☐ ☒

(b) If yes, what is the name and *private fund* identification number (if any) of the feeder funds investing in this *private fund*?

No Information Filed

(c) Is this a "feeder fund" in a master-feeder arrangement?

Yes No

☐ ☒

(d) If yes, what is the name and *private fund* identification number (if any) of the master fund in which this *private fund* invests?

Name of *private fund*:

Private fund identification number:
(include the "805-" prefix also)

NOTE: You must complete question 6 for each master-feeder arrangement regardless of whether you are filing a single Schedule D, Section 7.B.(1) for the master-feeder arrangement or reporting on the funds separately.

7. If you are filing a single Schedule D, Section 7.B.(1) for a master-feeder arrangement according to the instructions to this Section 7.B.(1), for each of the feeder funds answer the following questions:

No Information Filed

NOTE: For purposes of questions 6 and 7, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

8. (a) Is this *private fund* a "fund of funds"?

Yes No

☐ ☒

NOTE: For purposes of this question only, answer "yes" if the fund invests 10 percent or more of its total assets in other pooled investment vehicles, regardless of whether they are also *private funds* or registered investment companies.

(b) If yes, does the *private fund* invest in funds managed by you or by a *related person*?

☐ ☐

9. During your last fiscal year, did the *private fund* invest in securities issued by investment companies registered under the Investment Company Act of 1940 (other than "money market funds," to the extent provided in Instruction 6.e.)?

Yes No

☐ ☒

10. What type of fund is the *private fund*?

☐ hedge fund ☐ liquidity fund ☐ private equity fund ☐ real estate fund ☐ securitized asset fund ☐ venture capital fund ☒ Other *private fund*
FAMILY OFFICE INVESTMENT VEHICLE

NOTE: For definitions of these fund types, please see Instruction 6 of the Instructions to Part 1A.

11. Current gross asset value of the *private fund*:

\$ 50,499,668

Ownership

12. Minimum investment commitment required of an investor in the *private fund*:

\$ 0

NOTE: Report the amount routinely required of investors who are not your *related persons* (even if different from the amount set forth in the organizational documents of the fund).

13. Approximate number of the *private fund's* beneficial owners:

39

14. What is the approximate percentage of the *private fund* beneficially owned by you and your *related persons*:

0%

15. (a) What is the approximate percentage of the *private fund* beneficially owned (in the aggregate) by funds of funds:

0%

Yes No

(b) If the *private fund* qualifies for the exclusion from the definition of investment company under section 3(c)(1) of the Investment Company Act of 1940, are sales of the fund limited to *qualified clients*? ☐ Yes ☒ No

16. What is the approximate percentage of the *private fund* beneficially owned by non-*United States persons*:

0%

Your Advisory Services

Yes No

17. (a) Are you a subadviser to this *private fund*? ☐ Yes ☒ No

(b) If the answer to question 17.(a) is "yes," provide the name and SEC file number, if any, of the adviser of the *private fund*. If the answer to question 17.(a) is "no," leave this question blank.

No Information Filed

Yes No

18. (a) Do any investment advisers (other than the investment advisers listed in Section 7.B.(1).A.3.(b)) advise the *private fund*? ☐ Yes ☒ No

(b) If the answer to question 18.(a) is "yes," provide the name and SEC file number, if any, of the other advisers to the *private fund*. If the answer to question 18.(a) is "no," leave this question blank.

No Information Filed

Yes No

19. Are your *clients* solicited to invest in the *private fund*? ☐ Yes ☒ No

NOTE: For purposes of this question, do not consider feeder funds of the *private fund*.

20. Approximately what percentage of your *clients* has invested in the *private fund*?

0%

Private Offering

Yes No

21. Has the *private fund* ever relied on an exemption from registration of its securities under Regulation D of the Securities Act of 1933? ☐ Yes ☒ No

22. If yes, provide the *private fund's* Form D file number (if any):

No Information Filed

B. SERVICE PROVIDERS

Auditors

Yes No

23. (a) (1) Are the *private fund's* financial statements subject to an annual audit? ☐ Yes ☒ No

(2) If the answer to question 23.(a)(1) is "yes," are the financial statements prepared in accordance with U S GAAP? ☐ Yes ☒ No

If the answer to question 23.(a)(1) is "yes," respond to questions (b) through (h) below. If the *private fund* uses more than one auditing firm, you must complete questions (b) through (f) separately for each auditing firm

No Information Filed

Yes No

- (g) Are the *private fund's* audited financial statements for the most recently completed fiscal year distributed to the *private fund's* investors? ☐ Yes ☒ No ☐ Report Not Yet Received
- (h) Do all of the reports prepared by the auditing firm for the *private fund* since your last *annual updating amendment* contain unqualified opinions?
- ☐ Yes ☒ No ☐ Report Not Yet Received

If you check "Report Not Yet Received," you must promptly file an amendment to your Form ADV to update your response when the report is available.

Prime Broker

Yes No

24. (a) Does the *private fund* use one or more prime brokers? ☐ Yes ☒ No

If the answer to question 24.(a) is "yes," respond to questions (b) through (e) below for each prime broker the *private fund* uses. If the *private fund* uses more than one prime broker, you must complete questions (b) through (e) separately for each prime broker.

No Information Filed

Custodian

Yes No

25. (a) Does the *private fund* use any custodians (including the prime brokers listed above) to hold some or all of its assets? ☐ Yes ☒ No

If the answer to question 25.(a) is "yes," respond to questions (b) through (g) below for each custodian the *private fund* uses. If the *private fund* uses more than one custodian, you must complete questions (b) through (g) separately for each custodian.

Additional Custodian Information : 1 Record(s) Filed.

If the answer to question 25.(a) is "yes," respond to questions (b) through (g) below for each custodian the *private fund* uses. If the *private fund* uses more than one custodian, you must complete questions (b) through (g) separately for each custodian.

(b) Legal name of custodian:
NORTHERN TRUST SECURITIES, INC.

(c) Primary business name of custodian:
NORTHERN TRUST SECURITIES, INC.

(d) The location of the custodian's office responsible for custody of the *private fund's* assets (city, state and country):

City:	State:	Country:
NEW YORK	New York	United States

Yes No

(e) Is the custodian a *related person* of your firm? ☐ Yes ☒ No

(f) If the custodian is a broker-dealer, provide its SEC registration number (if any):

CRD Number (if any):

(g) If the custodian is not a broker-dealer, or is a broker-dealer but does not have an SEC registration number, provide its *legal entity identifier* (if any)

Administrator

Yes No

26. (a) Does the *private fund* use an administrator other than your firm? ☐ Yes ☒ No

If the answer to question 26.(a) is "yes," respond to questions (b) through (f) below. If the *private fund* uses more than one administrator, you must complete questions (b) through (f) separately for each administrator.

Additional Administrator Information : 1 Record(s) Filed.

If the answer to question 26.(a) is "yes," respond to questions (b) through (f) below. If the *private fund* uses more than one administrator, you must complete questions (b) through (f) separately for each administrator.

(b) Name of administrator:

NORTHERN TRUST CORPORATION

(c) Location of administrator (city, state and country):

City:

NEW YORK

State:

New York

Country:

United States

Yes No

(d) Is the administrator a *related person* of your firm?

☐ ☒

(e) Does the administrator prepare and send investor account statements to the *private fund's* investors?

☐ Yes (provided to all investors) ☐ Some (provided to some but not all investors) ☒ No (provided to no investors)

(f) If the answer to question 26.(e) is "no" or "some," who sends the investor account statements to the (rest of the) *private fund's* investors? If investor account statements are not sent to the (rest of the) *private fund's* investors, respond "not applicable."
NOT APPLICABLE.

27. During your last fiscal year, what percentage of the *private fund's* assets (by value) was valued by a *person*, such as an administrator, that is not your *related person*?

0%

Include only those assets where (i) such *person* carried out the valuation procedure established for that asset, if any, including obtaining any relevant quotes, and (ii) the valuation used for purposes of investor subscriptions, redemptions or distributions, and fee calculations (including allocations) was the valuation determined by such *person*.

Marketers

Yes No

28. (a) Does the *private fund* use the services of someone other than you or your *employees* for marketing purposes?

☐ ☒

You must answer "yes" whether the *person* acts as a placement agent, consultant, finder, introducer, municipal advisor or other solicitor, or similar *person*. If the answer to question 28.(a) is "yes," respond to questions (b) through (g) below for each such marketer the *private fund* uses. If the *private fund* uses more than one marketer you must complete questions (b) through (g) separately for each marketer.

No Information Filed

A. PRIVATE FUND

Information About the Private Fund

1. (a) Name of the *private fund*:

(b) *Private fund* identification number:
(include the "805-" prefix also)

2. Under the laws of what state or country is the *private fund* organized:

State:

Delaware

Country:

United States

3. (a) Name(s) of General Partner, Manager, Trustee, or Directors (or *persons* serving in a similar capacity):

No Information Filed

(b) If filing an *umbrella registration*, identify the *filing adviser* and/or *relying adviser(s)* that sponsor(s) or manage(s) this *private fund*.

No Information Filed

4 The *private fund* (check all that apply, you must check at least one):

- ☒ (1) qualifies for the exclusion from the definition of investment company under section 3(c)(1) of the Investment Company Act of 1940
☐ (2) qualifies for the exclusion from the definition of investment company under section 3(c)(7) of the Investment Company Act of 1940

5. List the name and country, in English, of each *foreign financial regulatory authority* with which the *private fund* is registered

No Information Filed

Yes No

6. (a) Is this a "master fund" in a master-feeder arrangement?

☐ ☒

(b) If yes, what is the name and *private fund* identification number (if any) of the feeder funds investing in this *private fund*?

No Information Filed

Yes No

(c) Is this a "feeder fund" in a master-feeder arrangement?

☐ ☒

(d) If yes, what is the name and *private fund* identification number (if any) of the master fund in which this *private fund* invests?

Name of *private fund*:

Private fund identification number:

(include the "805-" prefix also)

NOTE: You must complete question 6 for each master-feeder arrangement regardless of whether you are filing a single Schedule D, Section 7.B.(1) for the master-feeder arrangement or reporting on the funds separately.

7. If you are filing a single Schedule D, Section 7.B.(1) for a master-feeder arrangement according to the instructions to this Section 7.B.(1), for each of the feeder funds answer the following questions:

No Information Filed

NOTE: For purposes of questions 6 and 7, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

Yes No

8. (a) Is this *private fund* a "fund of funds"?

☐ ☒

NOTE: For purposes of this question only, answer "yes" if the fund invests 10 percent or more of its total assets in other pooled investment vehicles, regardless of whether they are also *private funds* or registered investment companies.

(b) If yes, does the *private fund* invest in funds managed by you or by a *related person*?

☐ ☒

Yes No

9. During your last fiscal year, did the *private fund* invest in securities issued by investment companies registered under the Investment Company Act of 1940 (other than "money market funds," to the extent provided in Instruction 6.e.)?

☐ ☒

10. What type of fund is the *private fund*?

☒ hedge fund ☐ liquidity fund ☐ private equity fund ☐ real estate fund ☐ securitized asset fund ☐ venture capital fund ☒ Other *private fund*:
 FAMILY OFFICE INVESTMENT VEHICLE

NOTE: For definitions of these fund types, please see Instruction 6 of the Instructions to Part 1A.

11. Current gross asset value of the *private fund*:

\$ 35,858,642

Ownership

12. Minimum investment commitment required of an investor in the *private fund*:

\$ 0

NOTE: Report the amount routinely required of investors who are not your *related persons* (even if different from the amount set forth in the organizational documents of the fund).

13. Approximate number of the *private fund's* beneficial owners:

2

14. What is the approximate percentage of the *private fund* beneficially owned by you and your *related persons*.

0%

15 (a) What is the approximate percentage of the *private fund* beneficially owned (in the aggregate) by funds of funds:

0%

Yes No

(b) If the *private fund* qualifies for the exclusion from the definition of investment company under section 3(c)(1) of the Investment Company Act of 1940, are sales of the fund limited to *qualified clients*? ☒ ☐

16. What is the approximate percentage of the *private fund* beneficially owned by non-*United States persons*:

0%

Your Advisory Services

Yes No

17. (a) Are you a subadviser to this *private fund*? ☐ ☒

(b) If the answer to question 17.(a) is "yes," provide the name and SEC file number, if any, of the adviser of the *private fund*. If the answer to question 17.(a) is "no," leave this question blank.

No Information Filed

Yes No

18. (a) Do any investment advisers (other than the investment advisers listed in Section 7.B.(1).A.3.(b)) advise the *private fund*? ☐ ☒

(b) If the answer to question 18.(a) is "yes," provide the name and SEC file number, if any, of the other advisers to the *private fund*. If the answer to question 18.(a) is "no," leave this question blank.

No Information Filed

Yes No

19. Are your *clients* solicited to invest in the *private fund*? ☐ ☒

NOTE: For purposes of this question, do not consider feeder funds of the *private fund*.

20. Approximately what percentage of your *clients* has invested in the *private fund*?

0%

Private Offering

Yes No

21. Has the *private fund* ever relied on an exemption from registration of its securities under Regulation D of the Securities Act of 1933? ☐ ☒

22. If yes, provide the *private fund's* Form D file number (if any):

No Information Filed

B. SERVICE PROVIDERS

Auditors

Yes No

23. (a) (1) Are the *private fund's* financial statements subject to an annual audit? ☐ ☒

(2) If the answer to question 23.(a)(1) is "yes," are the financial statements prepared in accordance with U.S. GAAP? ☐ ☒

If the answer to question 23.(a)(1) is "yes," respond to questions (b) through (h) below. If the *private fund* uses more than one auditing firm, you must complete questions (b) through (f) separately for each auditing firm.

No Information Filed

Yes No

(g) Are the *private fund's* audited financial statements for the most recently completed fiscal year distributed to the *private fund's* investors? ☐ ☒

(h) Do all of the reports prepared by the auditing firm for the *private fund* since your last *annual updating amendment* contain unqualified opinions? ☐ Yes ☐ No ☐ Report Not Yet Received

If you check "Report Not Yet Received," you must promptly file an amendment to your Form ADV to update your response when the report is available.

Prime Broker

Yes No

24. (a) Does the *private fund* use one or more prime brokers? ☐ ☒

If the answer to question 24.(a) is "yes," respond to questions (b) through (e) below for each prime broker the *private fund* uses. If the *private fund* uses more than one prime broker, you must complete questions (b) through (e) separately for each prime broker.

No Information Filed

Custodian

Yes No

25. (a) Does the *private fund* use any custodians (including the prime brokers listed above) to hold some or all of its assets?

☒ ☐

If the answer to question 25.(a) is "yes," respond to questions (b) through (g) below for each custodian the *private fund* uses. If the *private fund* uses more than one custodian, you must complete questions (b) through (g) separately for each custodian.

Additional Custodian Information : 1 Record(s) Filed.

If the answer to question 25.(a) is "yes," respond to questions (b) through (g) below for each custodian the *private fund* uses. If the *private fund* uses more than one custodian, you must complete questions (b) through (g) separately for each custodian.

- (b) Legal name of custodian:

NORTHERN TRUST SECURITIES, INC.

- (c) Primary business name of custodian:

NORTHERN TRUST SECURITIES, INC.

- (d) The location of the custodian's office responsible for custody of the *private fund's* assets (city, state and country):

City:

NEW YORK

State:

New York

Country:

United States

Yes No

- (e) Is the custodian a *related person* of your firm?

☐ ☒

- (f) If the custodian is a broker-dealer, provide its SEC registration number (if any):

CRD Number (if any):

- (g) If the custodian is not a broker-dealer, or is a broker-dealer but does not have an SEC registration number, provide its *legal entity* identifier (if any)

Administrator

Yes No

26. (a) Does the *private fund* use an administrator other than your firm?

☒ ☐

If the answer to question 26.(a) is "yes," respond to questions (b) through (f) below. If the *private fund* uses more than one administrator, you must complete questions (b) through (f) separately for each administrator.

Additional Administrator Information : 1 Record(s) Filed.

If the answer to question 26.(a) is "yes," respond to questions (b) through (f) below. If the *private fund* uses more than one administrator, you must complete questions (b) through (f) separately for each administrator.

- (b) Name of administrator:

NORTHERN TRUST CORPORATION

- (c) Location of administrator (city, state and country):

City:

NEW YORK

State:

New York

Country:

United States

Yes No

- (d) Is the administrator a *related person* of your firm?

☐ ☒

- (e) Does the administrator prepare and send investor account statements to the *private fund's* investors?

☒ Yes (provided to all investors) ☐ Some (provided to some but not all investors) ☐ No (provided to no investors)

(f) If the answer to question 26 (e) is "no" or "some," who sends the investor account statements to the (rest of the) *private fund's* investors? If investor account statements are not sent to the (rest of the) *private fund's* investors, respond "not applicable."
NOT APPLICABLE.

27. During your last fiscal year, what percentage of the *private fund's* assets (by value) was valued by a *person*, such as an administrator, that is not your *related person*?

0%

Include only those assets where (i) such *person* carried out the valuation procedure established for that asset, if any, including obtaining any relevant quotes, and (ii) the valuation used for purposes of investor subscriptions, redemptions or distributions, and fee calculations (including allocations) was the valuation determined by such *person*.

Marketers

Yes No

28. (a) Does the *private fund* use the services of someone other than you or your *employees* for marketing purposes?

☐ Yes ☒ No

You must answer "yes" whether the *person* acts as a placement agent, consultant, finder, introducer, municipal advisor or other solicitor, or similar *person*. If the answer to question 28.(a) is "yes," respond to questions (b) through (g) below for each such marketer the *private fund* uses. If the *private fund* uses more than one marketer you must complete questions (b) through (g) separately for each marketer.

No Information Filed

A. PRIVATE FUND

Information About the Private Fund

1. (a) Name of the *private fund*:

(b) *Private fund* identification number:
(include the "805-" prefix also)

2. Under the laws of what state or country is the *private fund* organized:

State:
Delaware

Country:
United States

3. (a) Name(s) of General Partner, Manager, Trustee, or Directors (or *persons* serving in a similar capacity):

No Information Filed

(b) If filing an *umbrella registration*, identify the *filing adviser* and/or *relying adviser(s)* that sponsor(s) or manage(s) this *private fund*.

No Information Filed

4. The *private fund* (check all that apply; you must check at least one):

- ☒ (1) qualifies for the exclusion from the definition of investment company under section 3(c)(1) of the Investment Company Act of 1940
☐ (2) qualifies for the exclusion from the definition of investment company under section 3(c)(7) of the Investment Company Act of 1940

5. List the name and country, in English, of each *foreign financial regulatory authority* with which the *private fund* is registered.

No Information Filed

6. (a) Is this a "master fund" in a master-feeder arrangement?

Yes No

☐ Yes ☒ No

(b) If yes, what is the name and *private fund* identification number (if any) of the feeder funds investing in this *private fund*?

No Information Filed

Yes No

☐ Yes ☒ No

(c) Is this a "feeder fund" in a master-feeder arrangement?

(d) If yes, what is the name and *private fund* identification number (if any) of the master fund in which this *private fund* invests?

Name of *private fund*:

Private fund identification number:
(include the "805-" prefix also)

NOTE: You must complete question 6 for each master-feeder arrangement regardless of whether you are filing a single Schedule D, Section 7 B.(1) for the master-feeder arrangement or reporting on the funds separately.

7. If you are filing a single Schedule D, Section 7.B.(1) for a master-feeder arrangement according to the instructions to this Section 7.B.(1), for each of the feeder funds answer the following questions:

No Information Filed

NOTE: For purposes of questions 6 and 7, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

8. (a) Is this *private fund* a "fund of funds"?

Yes No

☐ ☒

NOTE: For purposes of this question only, answer "yes" if the fund invests 10 percent or more of its total assets in other pooled investment vehicles, regardless of whether they are also *private funds* or registered investment companies.

- (b) If yes, does the *private fund* invest in funds managed by you or by a *related person*?

☐ ☐

9. During your last fiscal year, did the *private fund* invest in securities issued by investment companies registered under the Investment Company Act of 1940 (other than "money market funds," to the extent provided in Instruction 6.e.)?

Yes No

☐ ☒

10. What type of fund is the *private fund*?

☐ hedge fund ☐ liquidity fund ☐ private equity fund ☐ real estate fund ☐ securitized asset fund ☐ venture capital fund ☒ Other *private fund*:
FAMILY OFFICE INVESTMENT VEHICLE

NOTE: For definitions of these fund types, please see Instruction 6 of the Instructions to Part 1A.

11. Current gross asset value of the *private fund*:
\$ 792,973,628

Ownership

12. Minimum investment commitment required of an investor in the *private fund*:
\$ 0

NOTE: Report the amount routinely required of investors who are not your *related persons* (even if different from the amount set forth in the organizational documents of the fund).

13. Approximate number of the *private fund's* beneficial owners:
104

14. What is the approximate percentage of the *private fund* beneficially owned by you and your *related persons*:
0%

15. (a) What is the approximate percentage of the *private fund* beneficially owned (in the aggregate) by funds of funds:
0%

Yes No

- (b) If the *private fund* qualifies for the exclusion from the definition of investment company under section 3(c)(1) of the Investment Company Act of 1940, are sales of the fund limited to *qualified clients*?

☒ ☐

16. What is the approximate percentage of the *private fund* beneficially owned by non-United States persons:
0%

Your Advisory Services

Yes No

17. (a) Are you a subadviser to this *private fund*?

☐ ☐

- (b) If the answer to question 17 (a) is "yes," provide the name and SEC file number, if any, of the adviser of the *private fund*. If the answer to

question 17.(a) is "no," leave this question blank.

No Information Filed

Yes No

18. (a) Do any investment advisers (other than the investment advisers listed in Section 7.B.(1).A.3.(b)) advise the *private fund*? ☐ ☒

(b) If the answer to question 18.(a) is "yes," provide the name and SEC file number, if any, of the other advisers to the *private fund*. If the answer to question 18.(a) is "no," leave this question blank.

No Information Filed

Yes No

19. Are your *clients* solicited to invest in the *private fund*? ☐ ☒

NOTE: For purposes of this question, do not consider feeder funds of the *private fund*.

20. Approximately what percentage of your *clients* has invested in the *private fund*?

0%

Private Offering

Yes No

21. Has the *private fund* ever relied on an exemption from registration of its securities under Regulation D of the Securities Act of 1933? ☐ ☒

22. If yes, provide the *private fund's* Form D file number (if any):

Form D file number: [REDACTED]

B. SERVICE PROVIDERS

Auditors

Yes No

23. (a) (1) Are the *private fund's* financial statements subject to an annual audit? ☐ ☒

(2) If the answer to question 23.(a)(1) is "yes," are the financial statements prepared in accordance with U.S. GAAP? ☐ ☒

If the answer to question 23.(a)(1) is "yes," respond to questions (b) through (h) below. If the *private fund* uses more than one auditing firm, you must complete questions (b) through (f) separately for each auditing firm.

Additional Auditor Information : 1 Record(s) Filed.

If the answer to question 23.(a)(1) is "yes," respond to questions (b) through (h) below. If the *private fund* uses more than one auditing firm, you must complete questions (b) through (f) separately for each auditing firm.

(b) Name of the auditing firm:

KPMG LLP

(c) The location of the auditing firm's office responsible for the *private fund's* audit (city, state and country):

City:

COLUMBUS

State:

Ohio

Country:

United States

Yes No

(d) Is the auditing firm an *independent public accountant*? ☐ ☒

(e) Is the auditing firm registered with the Public Company Accounting Oversight Board? ☐ ☒

If yes, Public Company Accounting Oversight Board-Assigned Number:

(f) If "yes" to (e) above, is the auditing firm subject to regular inspection by the Public Company Accounting Oversight Board in accordance with its rules? ☐ ☒

Yes No

(g) Are the *private fund's* audited financial statements for the most recently completed fiscal year distributed to the *private fund's* investors? ☐ ☒

(h) Do all of the reports prepared by the auditing firm for the *private fund* since your last *annual updating amendment* contain unqualified opinions? ☐ ☒

☒ Yes ☐ No ☐ Report Not Yet Received

If you check "Report Not Yet Received," you must promptly file an amendment to your Form ADV to update your response when the report is available

Prime Broker

Yes No

24. (a) Does the
- private fund*
- use one or more prime brokers?

C C

If the answer to question 24.(a) is "yes," respond to questions (b) through (e) below for each prime broker the *private fund* uses. If the *private fund* uses more than one prime broker, you must complete questions (b) through (e) separately for each prime broker.

No Information Filed

Custodian

Yes No

25. (a) Does the
- private fund*
- use any custodians (including the prime brokers listed above) to hold some or all of its assets?

C C

If the answer to question 25.(a) is "yes," respond to questions (b) through (g) below for each custodian the *private fund* uses. If the *private fund* uses more than one custodian, you must complete questions (b) through (g) separately for each custodian.

Additional Custodian Information : 1 Record(s) Filed.

If the answer to question 25.(a) is "yes," respond to questions (b) through (g) below for each custodian the *private fund* uses. If the *private fund* uses more than one custodian, you must complete questions (b) through (g) separately for each custodian.

- (b) Legal name of custodian:

JPMORGAN CHASE & CO.

- (c) Primary business name of custodian:

JPMORGAN CHASE & CO.

- (d) The location of the custodian's office responsible for custody of the
- private fund's*
- assets (city, state and country):

City:

NEW YORK

State:

New York

Country:

United States

- (e) Is the custodian a
- related person*
- of your firm?

Yes No

C C

- (f) If the custodian is a broker-dealer, provide its SEC registration number (if any):

CRD Number (if any):

- (g) If the custodian is not a broker-dealer, or is a broker-dealer but does not have an SEC registration number, provide its
- legal entity identifier*
- (if any)

Administrator

Yes No

26. (a) Does the
- private fund*
- use an administrator other than your firm?

C C

If the answer to question 26.(a) is "yes," respond to questions (b) through (f) below. If the *private fund* uses more than one administrator, you must complete questions (b) through (f) separately for each administrator.

Additional Administrator Information : 1 Record(s) Filed.

If the answer to question 26.(a) is "yes," respond to questions (b) through (f) below. If the *private fund* uses more than one administrator, you must complete questions (b) through (f) separately for each administrator.

- (b) Name of administrator:

KATAHDIN ASSET MANAGEMENT LLC

- (c) Location of administrator (city, state and country).

City:

COLUMBUS

State:

Ohio

Country:

United States

- (d) Is the administrator a
- related person*
- of your firm?

Yes No

C C

(e) Does the administrator prepare and send investor account statements to the *private fund's* investors?

☒ Yes (provided to all investors) ☐ Some (provided to some but not all investors) ☐ No (provided to no investors)

(f) If the answer to question 26.(e) is "no" or "some," who sends the investor account statements to the (rest of the) *private fund's* investors? If investor account statements are not sent to the (rest of the) *private fund's* investors, respond "not applicable."

27. During your last fiscal year, what percentage of the *private fund's* assets (by value) was valued by a *person*, such as an administrator, that is not your *related person*?

0%

Include only those assets where (i) such *person* carried out the valuation procedure established for that asset, if any, including obtaining any relevant quotes, and (ii) the valuation used for purposes of investor subscriptions, redemptions or distributions, and fee calculations (including allocations) was the valuation determined by such *person*.

Marketers

Yes No

28. (a) Does the *private fund* use the services of someone other than you or your *employees* for marketing purposes?

☒ ☐

You must answer "yes" whether the *person* acts as a placement agent, consultant, finder, introducer, municipal advisor or other solicitor, or similar *person*. If the answer to question 28.(a) is "yes," respond to questions (b) through (g) below for each such marketer the *private fund* uses. If the *private fund* uses more than one marketer you must complete questions (b) through (g) separately for each marketer.

No Information Filed

A. PRIVATE FUND

Information About the *Private Fund*

1., (a) Name of the *private fund*:

(b) *Private fund* identification number:
(include the "805-" prefix also)

2. Under the laws of what state or country is the *private fund* organized:

State:
Wyoming

Country:
United States

3. (a) Name(s) of General Partner, Manager, Trustee, or Directors (or *persons* serving in a similar capacity):

No Information Filed

(b) If filing an *umbrella registration*, identify the *filing adviser* and/or *relying adviser(s)* that sponsor(s) or manage(s) this *private fund*.

No Information Filed

4. The *private fund* (check all that apply; you must check at least one):

- ☒ (1) qualifies for the exclusion from the definition of investment company under section 3(c)(1) of the Investment Company Act of 1940
☐ (2) qualifies for the exclusion from the definition of investment company under section 3(c)(7) of the Investment Company Act of 1940

5. List the name and country, in English, of each *foreign financial regulatory authority* with which the *private fund* is registered.

No Information Filed

Yes No

6. (a) Is this a "master fund" in a master-feeder arrangement?

☐ ☐

(b) If yes, what is the name and *private fund* identification number (if any) of the feeder funds investing in this *private fund*?

No Information Filed

Yes No

(c) Is this a "feeder fund" in a master-feeder arrangement?

☐ ☐

(d) If yes, what is the name and *private fund* identification number (if any) of the master fund in which this *private fund* invests?

Name of *private fund*:

Private fund identification number:

(include the "805-" prefix also)

NOTE: You must complete question 6 for each master-feeder arrangement regardless of whether you are filing a single Schedule D, Section 7 B.(1) for the master-feeder arrangement or reporting on the funds separately.

7. If you are filing a single Schedule D, Section 7.B.(1) for a master-feeder arrangement according to the instructions to this Section 7.B.(1), for each of the feeder funds answer the following questions:

No Information Filed

NOTE: For purposes of questions 6 and 7, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

8. (a) Is this *private fund* a "fund of funds"?

Yes No

☐ ☒

NOTE: For purposes of this question only, answer "yes" if the fund invests 10 percent or more of its total assets in other pooled investment vehicles, regardless of whether they are also *private funds* or registered investment companies.

- (b) If yes, does the *private fund* invest in funds managed by you or by a *related person*?

☐ ☐

Yes No

9. During your last fiscal year, did the *private fund* invest in securities issued by investment companies registered under the Investment Company Act of 1940 (other than "money market funds," to the extent provided in Instruction 6.e.)?

☐ ☒

10. What type of fund is the *private fund*?

☐ hedge fund ☐ liquidity fund ☒ private equity fund ☐ real estate fund ☐ securitized asset fund ☐ venture capital fund ☐ Other *private fund*:

NOTE: For definitions of these fund types, please see Instruction 6 of the Instructions to Part 1A.

11. Current gross asset value of the *private fund*:

\$ 0

Ownership

12. Minimum investment commitment required of an investor in the *private fund*:

\$ 100,000

NOTE: Report the amount routinely required of investors who are not your *related persons* (even if different from the amount set forth in the organizational documents of the fund).

13. Approximate number of the *private fund's* beneficial owners:

13

14. What is the approximate percentage of the *private fund* beneficially owned by you and your *related persons*:

0%

15. (a) What is the approximate percentage of the *private fund* beneficially owned (in the aggregate) by funds of funds:

10%

Yes No

- (b) If the *private fund* qualifies for the exclusion from the definition of investment company under section 3(c)(1) of the Investment Company Act of 1940, are sales of the fund limited to *qualified clients*?

☐ ☐

16. What is the approximate percentage of the *private fund* beneficially owned by non-United States persons:

0%

Your Advisory Services

Yes No

- (b) If the answer to question 17.(a) is "yes," provide the name and SEC file number, if any, of the adviser of the *private fund*. If the answer to question 17.(a) is "no," leave this question blank.

Name of adviser to private fund	SEC file number	CRD number
GATES CAPITAL PARTNERS, LLC		

Yes No

18. (a) Do any investment advisers (other than the investment advisers listed in Section 7.B.(1).A 3 (b)) advise the *private fund*?

- (b) If the answer to question 18.(a) is "yes," provide the name and SEC file number, if any, of the other advisers to the *private fund*. If the answer to question 18.(a) is "no," leave this question blank.

No Information Filed

Yes No

19. Are your *clients* solicited to invest in the *private fund*?

NOTE: For purposes of this question, do not consider feeder funds of the *private fund*.

20. Approximately what percentage of your *clients* has invested in the *private fund*?

1%

Private Offering

Yes No

21. Has the *private fund* ever relied on an exemption from registration of its securities under Regulation D of the Securities Act of 1933?

22. If yes, provide the *private fund's* Form D file number (if any):

Form D file number

B. SERVICE PROVIDERS

Auditors

Yes No

23. (a) (1) Are the *private fund's* financial statements subject to an annual audit?

- (2) If the answer to question 23.(a)(1) is "yes," are the financial statements prepared in accordance with U.S. GAAP?

If the answer to question 23.(a)(1) is "yes," respond to questions (b) through (h) below. If the *private fund* uses more than one auditing firm, you must complete questions (b) through (f) separately for each auditing firm.

Additional Auditor Information : 1 Record(s) Filed.

If the answer to question 23.(a)(1) is "yes," respond to questions (b) through (h) below. If the *private fund* uses more than one auditing firm, you must complete questions (b) through (f) separately for each auditing firm.

- (b) Name of the auditing firm:

EKS&H LLLP

- (c) The location of the auditing firm's office responsible for the *private fund's* audit (city, state and country):

City:

DENVER

State:

Colorado

Country:

United States

Yes No

- (d) Is the auditing firm an *independent public accountant*?

- (e) Is the auditing firm registered with the Public Company Accounting Oversight Board?

If yes, Public Company Accounting Oversight Board-Assigned Number:

34

- (f) If "yes" to (e) above, is the auditing firm subject to regular inspection by the Public Company Accounting Oversight Board in accordance with its rules?

Yes No

- (g) Are the *private fund's* audited financial statements for the most recently completed fiscal year distributed to the *private fund's* investors?

- (h) Do all of the reports prepared by the auditing firm for the *private fund* since your last *annual updating amendment* contain unqualified opinions?

☒ Yes ☐ No ☐ Report Not Yet Received

If you check "Report Not Yet Received," you must promptly file an amendment to your Form ADV to update your response when the report is available

Prime Broker

Yes No

24. (a) Does the *private fund* use one or more prime brokers?

☐ ☒

If the answer to question 24.(a) is "yes," respond to questions (b) through (e) below for each prime broker the *private fund* uses. If the *private fund* uses more than one prime broker, you must complete questions (b) through (e) separately for each prime broker.

No Information Filed

Custodian

Yes No

25. (a) Does the *private fund* use any custodians (including the prime brokers listed above) to hold some or all of its assets?

☐ ☒

If the answer to question 25.(a) is "yes," respond to questions (b) through (g) below for each custodian the *private fund* uses. If the *private fund* uses more than one custodian, you must complete questions (b) through (g) separately for each custodian.

No Information Filed

Administrator

Yes No

26. (a) Does the *private fund* use an administrator other than your firm?

☐ ☒

If the answer to question 26.(a) is "yes," respond to questions (b) through (f) below. If the *private fund* uses more than one administrator, you must complete questions (b) through (f) separately for each administrator.

No Information Filed

27. During your last fiscal year, what percentage of the *private fund's* assets (by value) was valued by a *person*, such as an administrator, that is not your *related person*?

0%

Include only those assets where (i) such *person* carried out the valuation procedure established for that asset, if any, including obtaining any relevant quotes, and (ii) the valuation used for purposes of investor subscriptions, redemptions or distributions, and fee calculations (including allocations) was the valuation determined by such *person*.

Marketers

Yes No

28. (a) Does the *private fund* use the services of someone other than you or your *employees* for marketing purposes?

☐ ☒

You must answer "yes" whether the *person* acts as a placement agent, consultant, finder, introducer, municipal advisor or other solicitor, or similar *person*. If the answer to question 28.(a) is "yes," respond to questions (b) through (g) below for each such marketer the *private fund* uses. If the *private fund* uses more than one marketer you must complete questions (b) through (g) separately for each marketer.

No Information Filed

A. PRIVATE FUND

Information About the Private Fund

1. (a) Name of the *private fund*:

(b) *Private fund* identification number:
(include the "805-" prefix also)

2. Under the laws of what state or country is the *private fund* organized.

State:
Wyoming

Country:
United States

3. (a) Name(s) of General Partner, Manager, Trustee, or Directors (or *persons* serving in a similar capacity):

No Information Filed

- (b) If filing an *umbrella registration*, identify the *filing adviser* and/or *relying adviser(s)* that sponsor(s) or manage(s) this *private fund*.

No Information Filed

4. The *private fund* (check all that apply; you must check at least one):

- ☒ (1) qualifies for the exclusion from the definition of investment company under section 3(c)(1) of the Investment Company Act of 1940
☐ (2) qualifies for the exclusion from the definition of investment company under section 3(c)(7) of the Investment Company Act of 1940

5. List the name and country, in English, of each *foreign financial regulatory authority* with which the *private fund* is registered.

No Information Filed

6. (a) Is this a "master fund" in a master-feeder arrangement?

Yes No

☐ ☒

- (b) If yes, what is the name and *private fund* identification number (if any) of the feeder funds investing in this *private fund*?

No Information Filed

- (c) Is this a "feeder fund" in a master-feeder arrangement?

Yes No

☐ ☒

- (d) If yes, what is the name and *private fund* identification number (if any) of the master fund in which this *private fund* invests?

Name of *private fund*:

Private fund identification number:
(include the "805-" prefix also)

NOTE: You must complete question 6 for each master-feeder arrangement regardless of whether you are filing a single Schedule D, Section 7.B.(1) for the master-feeder arrangement or reporting on the funds separately.

7. If you are filing a single Schedule D, Section 7.B.(1) for a master-feeder arrangement according to the instructions to this Section 7.B.(1), for each of the feeder funds answer the following questions:

No Information Filed

NOTE: For purposes of questions 6 and 7, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

8. (a) Is this *private fund* a "fund of funds"?

Yes No

☐ ☒

NOTE: For purposes of this question only, answer "yes" if the fund invests 10 percent or more of its total assets in other pooled investment vehicles, regardless of whether they are also *private funds* or registered investment companies.

- (b) If yes, does the *private fund* invest in funds managed by you or by a *related person*?

☐ ☒

9. During your last fiscal year, did the *private fund* invest in securities issued by investment companies registered under the Investment Company Act of 1940 (other than "money market funds," to the extent provided in Instruction 6.e.)?

Yes No

☐ ☒

10. What type of fund is the *private fund*?

☐ hedge fund ☐ liquidity fund ☒ private equity fund ☐ real estate fund ☐ securitized asset fund ☐ venture capital fund ☐ Other *private fund*:

NOTE: For definitions of these fund types, please see Instruction 6 of the Instructions to Part 1A.

11. Current gross asset value of the *private fund*:

\$ 0

Ownership

12. Minimum investment commitment required of an investor in the *private fund*:

\$ 100,000

NOTE: Report the amount routinely required of investors who are not your *related persons* (even if different from the amount set forth in the organizational documents of the fund).

13. Approximate number of the *private fund's* beneficial owners:

20

14. What is the approximate percentage of the *private fund* beneficially owned by you and your *related persons*:

0%

15. (a) What is the approximate percentage of the *private fund* beneficially owned (in the aggregate) by funds of funds:

10%

Yes No

- (b) If the *private fund* qualifies for the exclusion from the definition of investment company under section 3(c)(1) of the Investment Company Act of 1940, are sales of the fund limited to *qualified clients*? ☒ ☐

16. What is the approximate percentage of the *private fund* beneficially owned by non-United States persons:

0%

Your Advisory Services

Yes No

17. (a) Are you a subadviser to this *private fund*? ☒ ☐

- (b) If the answer to question 17.(a) is "yes," provide the name and SEC file number, if any, of the adviser of the *private fund*. If the answer to question 17.(a) is "no," leave this question blank.

Name of adviser to private fund	SEC file number	CRD number

Yes No

18. (a) Do any investment advisers (other than the investment advisers listed in Section 7.B.(1).A.3.(b)) advise the *private fund*? ☒ ☐

- (b) If the answer to question 18.(a) is "yes," provide the name and SEC file number, if any, of the other advisers to the *private fund*. If the answer to question 18.(a) is "no," leave this question blank.

No Information Filed

Yes No

19. Are your *clients* solicited to invest in the *private fund*? ☒ ☐

NOTE: For purposes of this question, do not consider feeder funds of the *private fund*.

20. Approximately what percentage of your *clients* has invested in the *private fund*?

1%

Private Offering

Yes No

21. Has the *private fund* ever relied on an exemption from registration of its securities under Regulation D of the Securities Act of 1933? ☒ ☐

22. If yes, provide the *private fund's* Form D file number (if any):

Form D file number

B. SERVICE PROVIDERS

Auditors

Yes No

23. (a) (1) Are the *private fund's* financial statements subject to an annual audit? ☒ ☐

- (2) If the answer to question 23.(a)(1) is "yes," are the financial statements prepared in accordance with U.S. GAAP? ☒ ☐

If the answer to question 23.(a)(1) is "yes," respond to questions (b) through (h) below. If the *private fund* uses more than one auditing firm, you must complete questions (b) through (f) separately for each auditing firm.

Additional Auditor Information : 1 Record(s) Filed.

If the answer to question 23.(a)(1) is "yes," respond to questions (b) through (h) below. If the *private fund* uses more than one auditing firm, you must complete questions (b) through (f) separately for each auditing firm.

(b) Name of the auditing firm:

EKS&H LLLP

(c) The location of the auditing firm's office responsible for the *private fund's* audit (city, state and country):

City:

DENVER

State:

Colorado

Country:

United States

Yes No

(d) Is the auditing firm an *independent public accountant*?

☒ Yes ☐ No

(e) Is the auditing firm registered with the Public Company Accounting Oversight Board?

☒ Yes ☐ No

If yes, Public Company Accounting Oversight Board-Assigned Number:

34

(f) If "yes" to (e) above, is the auditing firm subject to regular inspection by the Public Company Accounting Oversight Board in accordance with its rules?

☒ Yes ☐ No

Yes No

(g) Are the *private fund's* audited financial statements for the most recently completed fiscal year distributed to the *private fund's* investors?

☒ Yes ☐ No

(h) Do all of the reports prepared by the auditing firm for the *private fund* since your last *annual updating amendment* contain unqualified opinions?

☒ Yes ☐ No ☐ Report Not Yet Received

If you check "Report Not Yet Received," you must promptly file an amendment to your Form ADV to update your response when the report is available.

Prime Broker

Yes No

24. (a) Does the *private fund* use one or more prime brokers?

☐ Yes ☒ No

If the answer to question 24.(a) is "yes," respond to questions (b) through (e) below for each prime broker the *private fund* uses. If the *private fund* uses more than one prime broker, you must complete questions (b) through (e) separately for each prime broker.

No Information Filed

Custodian

Yes No

25. (a) Does the *private fund* use any custodians (including the prime brokers listed above) to hold some or all of its assets?

☐ Yes ☒ No

If the answer to question 25.(a) is "yes," respond to questions (b) through (g) below for each custodian the *private fund* uses. If the *private fund* uses more than one custodian, you must complete questions (b) through (g) separately for each custodian.

No Information Filed

Administrator

Yes No

26. (a) Does the *private fund* use an administrator other than your firm?

☐ Yes ☒ No

If the answer to question 26.(a) is "yes," respond to questions (b) through (f) below. If the *private fund* uses more than one administrator, you must complete questions (b) through (f) separately for each administrator.

No Information Filed

27. During your last fiscal year, what percentage of the *private fund's* assets (by value) was valued by a *person*, such as an administrator, that is not your *related person*?

0%

Include only those assets where (i) such *person* carried out the valuation procedure established for that asset, if any, including obtaining any

relevant quotes, and (ii) the valuation used for purposes of investor subscriptions, redemptions or distributions, and fee calculations (including allocations) was the valuation determined by such *person*.

Marketers

28. (a) Does the *private fund* use the services of someone other than you or your *employees* for marketing purposes? Yes No
☐ ☒

You must answer "yes" whether the *person* acts as a placement agent, consultant, finder, introducer, municipal advisor or other solicitor, or similar *person*. If the answer to question 28.(a) is "yes," respond to questions (b) through (g) below for each such marketer the *private fund* uses. If the *private fund* uses more than one marketer you must complete questions (b) through (g) separately for each marketer.

No Information Filed

A. PRIVATE FUND

Information About the Private Fund

1. (a) Name of the *private fund*:

(b) *Private fund* identification number:
(include the "805-" prefix also)

2. Under the laws of what state or country is the *private fund* organized:

State:
Delaware

Country:
United States

3. (a) Name(s) of General Partner, Manager, Trustee, or Directors (or *persons* serving in a similar capacity):

No Information Filed

(b) If filing an *umbrella registration*, identify the *filing adviser* and/or *relying adviser(s)* that sponsor(s) or manage(s) this *private fund*.

No Information Filed

4. The *private fund* (check all that apply; you must check at least one):

- ☒ (1) qualifies for the exclusion from the definition of investment company under section 3(c)(1) of the Investment Company Act of 1940
☐ (2) qualifies for the exclusion from the definition of investment company under section 3(c)(7) of the Investment Company Act of 1940

5. List the name and country, in English, of each *foreign financial regulatory authority* with which the *private fund* is registered.

No Information Filed

6. (a) Is this a "master fund" in a master-feeder arrangement? Yes No
☐ ☒

(b) If yes, what is the name and *private fund* identification number (if any) of the feeder funds investing in this *private fund*?

No Information Filed

(c) Is this a "feeder fund" in a master-feeder arrangement? Yes No
☐ ☒

(d) If yes, what is the name and *private fund* identification number (if any) of the master fund in which this *private fund* invests?

Name of *private fund*:

Private fund identification number:
(include the "805-" prefix also)

NOTE: You must complete question 6 for each master-feeder arrangement regardless of whether you are filing a single Schedule D, Section 7.B.(1) for the master-feeder arrangement or reporting on the funds separately.

7. If you are filing a single Schedule D, Section 7.B.(1) for a master-feeder arrangement according to the instructions to this Section 7.B.(1), for each of the feeder funds answer the following questions.

NOTE: For purposes of questions 6 and 7, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

8. (a) Is this *private fund* a "fund of funds"? Yes No
☐ ☒

NOTE: For purposes of this question only, answer "yes" if the fund invests 10 percent or more of its total assets in other pooled investment vehicles, regardless of whether they are also *private funds* or registered investment companies.

- (b) If yes, does the *private fund* invest in funds managed by you or by a *related person*? ☐ ☒

9. During your last fiscal year, did the *private fund* invest in securities issued by investment companies registered under the Investment Company Act of 1940 (other than "money market funds," to the extent provided in Instruction 6.e.)? Yes No
☐ ☒

10. What type of fund is the *private fund*?

☐ hedge fund ☐ liquidity fund ☐ private equity fund ☐ real estate fund ☐ securitized asset fund ☐ venture capital fund ☒ Other *private fund*:
FAMILY OFFICE

NOTE: For definitions of these fund types, please see Instruction 6 of the Instructions to Part 1A.

11. Current gross asset value of the *private fund*:
\$ 74,134,942

Ownership

12. Minimum investment commitment required of an investor in the *private fund*:
\$ 0

NOTE: Report the amount routinely required of investors who are not your *related persons* (even if different from the amount set forth in the organizational documents of the fund).

13. Approximate number of the *private fund's* beneficial owners:
33

14. What is the approximate percentage of the *private fund* beneficially owned by you and your *related persons*:
0%

15. (a) What is the approximate percentage of the *private fund* beneficially owned (in the aggregate) by funds of funds:
0%

- (b) If the *private fund* qualifies for the exclusion from the definition of investment company under section 3(c)(1) of the Investment Company Act of 1940, are sales of the fund limited to *qualified clients*? Yes No
☒ ☐

16. What is the approximate percentage of the *private fund* beneficially owned by non-United States persons:
0%

Your Advisory Services

17. (a) Are you a subadviser to this *private fund*? Yes No
☐ ☒
(b) If the answer to question 17.(a) is "yes," provide the name and SEC file number, if any, of the adviser of the *private fund*. If the answer to question 17.(a) is "no," leave this question blank.

No Information Filed

18. (a) Do any investment advisers (other than the investment advisers listed in Section 7.B.(1).A.3.(b)) advise the *private fund*? Yes No
☐ ☒
(b) If the answer to question 18.(a) is "yes," provide the name and SEC file number, if any, of the other advisers to the *private fund*. If the answer to question 18.(a) is "no," leave this question blank.

No Information Filed

19. Are your *clients* solicited to invest in the *private fund*? Yes No
☐ ☒

NOTE: For purposes of this question, do not consider feeder funds of the private fund.

20. Approximately what percentage of your *clients* has invested in the *private fund*?

0%

Private Offering

21. Has the *private fund* ever relied on an exemption from registration of its securities under Regulation D of the Securities Act of 1933? Yes No
☐ ☒

22. If yes, provide the *private fund's* Form D file number (if any):

No Information Filed

B. SERVICE PROVIDERS

Auditors

23. (a) (1) Are the *private fund's* financial statements subject to an annual audit? Yes No
☐ ☒
(2) If the answer to question 23.(a)(1) is "yes," are the financial statements prepared in accordance with U.S. GAAP? Yes No
☐ ☒

If the answer to question 23.(a)(1) is "yes," respond to questions (b) through (h) below. If the *private fund* uses more than one auditing firm, you must complete questions (b) through (f) separately for each auditing firm.

No Information Filed

- (g) Are the *private fund's* audited financial statements for the most recently completed fiscal year distributed to the *private fund's* investors? Yes No
☐ ☒
(h) Do all of the reports prepared by the auditing firm for the *private fund* since your last *annual updating amendment* contain unqualified opinions? Yes No Report Not Yet Received
☐ ☐ ☐

If you check "Report Not Yet Received," you must promptly file an amendment to your Form ADV to update your response when the report is available.

Prime Broker

24. (a) Does the *private fund* use one or more prime brokers? Yes No
☐ ☒

If the answer to question 24.(a) is "yes," respond to questions (b) through (e) below for each prime broker the *private fund* uses. If the *private fund* uses more than one prime broker, you must complete questions (b) through (e) separately for each prime broker.

No Information Filed

Custodian

25. (a) Does the *private fund* use any custodians (including the prime brokers listed above) to hold some or all of its assets? Yes No
☒ ☐

If the answer to question 25.(a) is "yes," respond to questions (b) through (g) below for each custodian the *private fund* uses. If the *private fund* uses more than one custodian, you must complete questions (b) through (g) separately for each custodian.

Additional Custodian Information : 1 Record(s) Filed.

If the answer to question 25.(a) is "yes," respond to questions (b) through (g) below for each custodian the *private fund* uses. If the *private fund* uses more than one custodian, you must complete questions (b) through (g) separately for each custodian.

(b) Legal name of custodian:
NORTHERN TRUST SECURITIES, INC.

(c) Primary business name of custodian:
NORTHERN TRUST SECURITIES, INC.

(d) The location of the custodian's office responsible for custody of the *private fund's* assets (city, state and country)
City: State: Country:

(e) Is the custodian a *related person* of your firm?

Yes No

☐ ☒

(f) If the custodian is a broker-dealer, provide its SEC registration number (if any):

CRD Number (if any):

(g) If the custodian is not a broker-dealer, or is a broker-dealer but does not have an SEC registration number, provide its *legal entity identifier* (if any)

Administrator

Yes No

26. (a) Does the *private fund* use an administrator other than your firm?

☒ ☐

If the answer to question 26.(a) is "yes," respond to questions (b) through (f) below. If the *private fund* uses more than one administrator, you must complete questions (b) through (f) separately for each administrator.

Additional Administrator Information: 1 Record(s) Filed.

If the answer to question 26.(a) is "yes," respond to questions (b) through (f) below. If the *private fund* uses more than one administrator, you must complete questions (b) through (f) separately for each administrator.

(b) Name of administrator:

NORTHERN TRUST CORPORATION

(c) Location of administrator (city, state and country):

City:

NEW YORK

State:

New York

Country:

United States

Yes No

(d) Is the administrator a *related person* of your firm?

☐ ☒

(e) Does the administrator prepare and send investor account statements to the *private fund's* investors?

☐ Yes (provided to all investors) ☐ Some (provided to some but not all investors) ☒ No (provided to no investors)

(f) If the answer to question 26.(e) is "no" or "some," who sends the investor account statements to the (rest of the) *private fund's* investors? If investor account statements are not sent to the (rest of the) *private fund's* investors, respond "not applicable."
NOT APPLICABLE.

27. During your last fiscal year, what percentage of the *private fund's* assets (by value) was valued by a *person*, such as an administrator, that is not your *related person*?

0%

Include only those assets where (i) such *person* carried out the valuation procedure established for that asset, if any, including obtaining any relevant quotes, and (ii) the valuation used for purposes of investor subscriptions, redemptions or distributions, and fee calculations (including allocations) was the valuation determined by such *person*.

Marketers

Yes No

28. (a) Does the *private fund* use the services of someone other than you or your *employees* for marketing purposes?

☐ ☒

You must answer "yes" whether the *person* acts as a placement agent, consultant, finder, introducer, municipal advisor or other solicitor, or similar *person*. If the answer to question 28.(a) is "yes," respond to questions (b) through (g) below for each such marketer the *private fund* uses. If the *private fund* uses more than one marketer you must complete questions (b) through (g) separately for each marketer.

No Information Filed

1. (a) Name of the *private fund*:

(b) *Private fund* identification number:
(include the "805-" prefix also)

2. Under the laws of what state or country is the *private fund* organized:

State:
Delaware

Country:
United States

3. (a) Name(s) of General Partner, Manager, Trustee, or Directors (or *persons* serving in a similar capacity):

No Information Filed

(b) If filing an *umbrella registration*, identify the *filing adviser* and/or *relying adviser(s)* that sponsor(s) or manage(s) this *private fund*.

No Information Filed

4. The *private fund* (check all that apply; you must check at least one):

- ☒ (1) qualifies for the exclusion from the definition of investment company under section 3(c)(1) of the Investment Company Act of 1940
☐ (2) qualifies for the exclusion from the definition of investment company under section 3(c)(7) of the Investment Company Act of 1940

5. List the name and country, in English, of each *foreign financial regulatory authority* with which the *private fund* is registered.

No Information Filed

6. (a) Is this a "master fund" in a master-feeder arrangement?

Yes No

☐ ☒

(b) If yes, what is the name and *private fund* identification number (if any) of the feeder funds investing in this *private fund*?

No Information Filed

(c) Is this a "feeder fund" in a master-feeder arrangement?

Yes No

☐ ☒

(d) If yes, what is the name and *private fund* identification number (if any) of the master fund in which this *private fund* invests?

Name of *private fund*:

Private fund identification number:
(include the "805-" prefix also)

NOTE: You must complete question 6 for each master-feeder arrangement regardless of whether you are filing a single Schedule D, Section 7.B.(1) for the master-feeder arrangement or reporting on the funds separately.

7. If you are filing a single Schedule D, Section 7.B.(1) for a master-feeder arrangement according to the instructions to this Section 7.B.(1), for each of the feeder funds answer the following questions:

No Information Filed

NOTE: For purposes of questions 6 and 7, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

8. (a) Is this *private fund* a "fund of funds"?

Yes No

☐ ☒

NOTE: For purposes of this question only, answer "yes" if the fund invests 10 percent or more of its total assets in other pooled investment vehicles, regardless of whether they are also *private funds* or registered investment companies.

(b) If yes, does the *private fund* invest in funds managed by you or by a *related person*?

☐ ☒

9. During your last fiscal year, did the *private fund* invest in securities issued by investment companies registered under the Investment Company Act of 1940 (other than "money market funds," to the extent provided in Instruction 6.e.)?

Yes No

☐ ☒

10. What type of fund is the *private fund*?

☐ hedge fund ☐ liquidity fund ☐ private equity fund ☐ real estate fund ☐ securitized asset fund ☐ venture capital fund ☒ Other *private fund*.
FAMILY OFFICE INVESTMENT VEHICLE

NOTE: For definitions of these fund types, please see Instruction 6 of the Instructions to Part 1A

11. Current gross asset value of the *private fund*:

\$ 6,063,024

Ownership

12. Minimum investment commitment required of an investor in the *private fund*:

\$ 0

NOTE: Report the amount routinely required of investors who are not your *related persons* (even if different from the amount set forth in the organizational documents of the fund).

13. Approximate number of the *private fund's* beneficial owners:

107

14. What is the approximate percentage of the *private fund* beneficially owned by you and your *related persons*:

0%

15. (a) What is the approximate percentage of the *private fund* beneficially owned (in the aggregate) by funds of funds:

0%

Yes No

(b) If the private fund qualifies for the exclusion from the definition of investment company under section 3(c)(1) of the Investment Company Act of 1940, are sales of the fund limited to *qualified clients*? ☒ ☐

16. What is the approximate percentage of the *private fund* beneficially owned by non-*United States persons*:

0%

Your Advisory Services

Yes No

17. (a) Are you a subadviser to this *private fund*? ☐ ☒

(b) If the answer to question 17.(a) is "yes," provide the name and SEC file number, if any, of the adviser of the *private fund*. If the answer to question 17.(a) is "no," leave this question blank.

No Information Filed

Yes No

18. (a) Do any investment advisers (other than the investment advisers listed in Section 7.B.(1).A.3.(b)) advise the *private fund*? ☐ ☒

(b) If the answer to question 18.(a) is "yes," provide the name and SEC file number, if any, of the other advisers to the *private fund*. If the answer to question 18.(a) is "no," leave this question blank.

No Information Filed

Yes No

19. Are your *clients* solicited to invest in the *private fund*? ☐ ☒

NOTE: For purposes of this question, do not consider feeder funds of the *private fund*.

20. Approximately what percentage of your *clients* has invested in the *private fund*?

0%

Private Offering

Yes No

21. Has the *private fund* ever relied on an exemption from registration of its securities under Regulation D of the Securities Act of 1933? ☐ ☒

22. If yes, provide the *private fund's* Form D file number (if any):

No Information Filed

B. SERVICE PROVIDERS

Auditors

Yes No

23. (a) (1) Are the *private fund's* financial statements subject to an annual audit?☒ ☐

(2) If the answer to question 23.(a)(1) is "yes," are the financial statements prepared in accordance with U.S. GAAP?

☒ ☐

If the answer to question 23.(a)(1) is "yes," respond to questions (b) through (h) below. If the *private fund* uses more than one auditing firm, you must complete questions (b) through (f) separately for each auditing firm.

Additional Auditor Information : 1 Record(s) Filed.

If the answer to question 23.(a)(1) is "yes," respond to questions (b) through (h) below. If the *private fund* uses more than one auditing firm, you must complete questions (b) through (f) separately for each auditing firm.

(b) Name of the auditing firm:

KPMG LLP

(c) The location of the auditing firm's office responsible for the *private fund's* audit (city, state and country):

City:

COLUMBUS

State:

Ohio

Country:

United States

Yes No

(d) Is the auditing firm an *independent public accountant*?☒ ☐

(e) Is the auditing firm registered with the Public Company Accounting Oversight Board?

☒ ☐

If yes, Public Company Accounting Oversight Board-Assigned Number.

185

(f) If "yes" to (e) above, is the auditing firm subject to regular inspection by the Public Company Accounting Oversight Board in accordance with its rules?

☒ ☐

Yes No

(g) Are the *private fund's* audited financial statements for the most recently completed fiscal year distributed to the *private fund's* investors?☒ ☐(h) Do all of the reports prepared by the auditing firm for the *private fund* since your last *annual updating amendment* contain unqualified opinions?☒ Yes ☐ No ☐ Report Not Yet Received

If you check "Report Not Yet Received," you must promptly file an amendment to your Form ADV to update your response when the report is available.

Prime Broker

Yes No

24. (a) Does the *private fund* use one or more prime brokers?☐ ☒

If the answer to question 24.(a) is "yes," respond to questions (b) through (e) below for each prime broker the *private fund* uses. If the *private fund* uses more than one prime broker, you must complete questions (b) through (e) separately for each prime broker.

No Information Filed

Custodian

Yes No

25. (a) Does the *private fund* use any custodians (including the prime brokers listed above) to hold some or all of its assets?☐ ☒

If the answer to question 25.(a) is "yes," respond to questions (b) through (g) below for each custodian the *private fund* uses. If the *private fund* uses more than one custodian, you must complete questions (b) through (g) separately for each custodian.

Additional Custodian Information : 1 Record(s) Filed.

If the answer to question 25.(a) is "yes," respond to questions (b) through (g) below for each custodian the *private fund* uses. If the *private fund* uses more than one custodian, you must complete questions (b) through (g) separately for each custodian.

(b) Legal name of custodian:

JPMORGAN CHASE & CO.

(c) Primary business name of custodian.

JPMORGAN CHASE & CO.

(d) The location of the custodian's office responsible for custody of the *private fund's* assets (city, state and country)

City:

NEW YORK

State:

New York

Country

United States

Yes No

(e) Is the custodian a *related person* of your firm?

☐ ☒

(f) If the custodian is a broker-dealer, provide its SEC registration number (if any):

CRD Number (if any):

(g) If the custodian is not a broker-dealer, or is a broker-dealer but does not have an SEC registration number, provide its *legal entity* identifier (if any)

Administrator

Yes No

26. (a) Does the *private fund* use an administrator other than your firm?

☐ ☒

If the answer to question 26.(a) is "yes," respond to questions (b) through (f) below. If the *private fund* uses more than one administrator, you must complete questions (b) through (f) separately for each administrator.

Additional Administrator Information : 1 Record(s) Filed.

If the answer to question 26.(a) is "yes," respond to questions (b) through (f) below. If the *private fund* uses more than one administrator, you must complete questions (b) through (f) separately for each administrator.

(b) Name of administrator:

KATAHDIN ASSET MANAGEMENT LLC

(c) Location of administrator (city, state and country):

City:

COLUMBUS

State:

Ohio

Country:

United States

Yes No

(d) Is the administrator a *related person* of your firm?

☐ ☒

(e) Does the administrator prepare and send investor account statements to the *private fund's* investors?

☒ Yes (provided to all investors) ☐ Some (provided to some but not all investors) ☐ No (provided to no investors)

(f) If the answer to question 26.(e) is "no" or "some," who sends the investor account statements to the (rest of the) *private fund's* investors? If investor account statements are not sent to the (rest of the) *private fund's* investors, respond "not applicable."

27. During your last fiscal year, what percentage of the *private fund's* assets (by value) was valued by a *person*, such as an administrator, that is not your *related person*?

0%

Include only those assets where (i) such *person* carried out the valuation procedure established for that asset, if any, including obtaining any relevant quotes, and (ii) the valuation used for purposes of investor subscriptions, redemptions or distributions, and fee calculations (including allocations) was the valuation determined by such *person*.

Marketers

Yes No

28. (a) Does the *private fund* use the services of someone other than you or your *employees* for marketing purposes?

☐ ☒

You must answer "yes" whether the *person* acts as a placement agent, consultant, finder, introducer, municipal advisor or other solicitor, or similar *person*. If the answer to question 28.(a) is "yes," respond to questions (b) through (g) below for each such marketer the *private fund* uses. If the *private fund* uses more than one marketer you must complete questions (b) through (g) separately for each marketer.

No Information Filed

SECTION 7.B.(2) Private Fund Reporting

1. Name of the *private fund*:
ABERDEEN ASIA PARTNERS III, L.P.

2. *Private fund* identification number:
(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing
Name:
ABERDEEN CAPITAL MANAGEMENT, LLC
SEC File Number:

4. Are your *clients* solicited to invest in this *private fund*?

Yes No

☐ ☒

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:
ABERDEEN ENERGY & RESOURCES PARTNERS II, L.P.

2. *Private fund* identification number:
(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing
Name:
ABERDEEN CAPITAL MANAGEMENT, LLC
SEC File Number:

4. Are your *clients* solicited to invest in this *private fund*?

Yes No

☐ ☒

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:
ABERDEEN ENERGY & RESOURCES PARTNERS III, L.P.

2. *Private fund* identification number:
(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing
Name:
ABERDEEN CAPITAL MANAGEMENT, LLC
SEC File Number:

- 4 Are your *clients* solicited to invest in this *private fund*? YES NO
☐ ☐

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

ABERDEEN ENERGY & RESOURCES PARTNERS IV, L.P.

2. *Private fund* identification number:
(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing

Name:

ABERDEEN CAPITAL MANAGEMENT, LLC

SEC File Number:

4. Are your *clients* solicited to invest in this *private fund*? Yes No
☐ ☐

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

ABERDEEN INTERNATIONAL PARTNERS II, L.P.

2. *Private fund* identification number:
(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing

Name:

ABERDEEN CAPITAL MANAGEMENT, LLC

SEC File Number:

4. Are your *clients* solicited to invest in this *private fund*? Yes No
☐ ☐

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

ABERDEEN INTERNATIONAL PARTNERS III, L.P.

2. *Private fund* identification number:
(include the "805-" prefix also)

3 Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B (1) of Schedule D of its Form ADV filing

Name:

ABERDEEN CAPITAL MANAGEMENT, LLC

SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*?

☐ ☒

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

ABERDEEN INTERNATIONAL PARTNERS, L.P.

2. *Private fund* identification number:

(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing

Name:

ABERDEEN CAPITAL MANAGEMENT, LLC

SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*?

☐ ☒

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

ABERDEEN NEXT GENERATION PARTNERS III, L.P.

2. *Private fund* identification number:

(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing

Name:

ABERDEEN CAPITAL MANAGEMENT, LLC

SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*?

☐ ☒

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

ABERDEEN NEXT GENERATION PARTNERS IV, L.P.

2. *Private fund identification number:*
(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing
- Name:
ABERDEEN CAPITAL MANAGEMENT, LLC
- SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*?

☐ ☒

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:
ABERDEEN NEXT GENERATION PARTNERS V, L.P.

2. *Private fund identification number:*
(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing
- Name:
ABERDEEN CAPITAL MANAGEMENT, LLC
- SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*?

☐ ☒

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:
ABERDEEN REAL ASSETS PARTNERS, L.P.

2. *Private fund identification number:*
(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing
- Name:
ABERDEEN CAPITAL MANAGEMENT, LLC
- SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*?

☐ ☒

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund") A fund would also be a "feeder fund"

investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

ABERDEEN REAL ESTATE PARTNERS II, L.P.

2. *Private fund* identification number:

(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing

Name:

ABERDEEN CAPITAL MANAGEMENT, LLC

SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*?

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

ABERDEEN REAL ESTATE PARTNERS III, L.P.

2. *Private fund* identification number:

(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing

Name:

ABERDEEN CAPITAL MANAGEMENT, LLC

SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*?

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

ABERDEEN U.S. PRIVATE EQUITY II, L.P.

2. *Private fund* identification number:

(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing

Name:

ABERDEEN CAPITAL MANAGEMENT, LLC

Yes No

4. Are your *clients* solicited to invest in this *private fund*? ☐ ☒

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

ABERDEEN U.S. PRIVATE EQUITY III, L.P.

2. *Private fund* identification number:

(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing

Name:

ABERDEEN CAPITAL MANAGEMENT, LLC

SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*? ☐ ☒

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

ABERDEEN U.S. PRIVATE EQUITY IV, L.P.

2. *Private fund* identification number:

(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing

Name:

ABERDEEN CAPITAL MANAGEMENT, LLC

SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*? ☐ ☒

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

ABERDEEN U.S. PRIVATE EQUITY L.P.

2. *Private fund* identification number:

(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing
- Name:
ABERDEEN CAPITAL MANAGEMENT, LLC
- SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*? ☐ ☒

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

ABERDEEN U.S. PRIVATE EQUITY V, L.P.

2. *Private fund* identification number:
(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing
- Name:
ABERDEEN CAPITAL MANAGEMENT, LLC
- SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*? ☐ ☒

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

ABERDEEN U.S. PRIVATE EQUITY VI, L.P.

2. *Private fund* identification number:
(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing
- Name:
ABERDEEN CAPITAL MANAGEMENT, LLC
- SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*? ☐ ☒

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

ABERDEEN U.S. PRIVATE EQUITY VII, LP

2. *Private fund* identification number:

(include the "805-" prefix also)

)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing

Name:

ABERDEEN CAPITAL MANAGEMENT, LLC

SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*?

☐ ☒

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

ABERDEEN VENTURE PARTNERS III, L.P.

2. *Private fund* identification number:

(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing

Name:

ABERDEEN CAPITAL MANAGEMENT, LLC

SEC File Number:

{

Yes No

4. Are your *clients* solicited to invest in this *private fund*?

☐ ☒

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

ABERDEEN VENTURE PARTNERS IV, L.P.

2. *Private fund* identification number:

(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing

Name:

ABERDEEN CAPITAL MANAGEMENT, LLC

SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*?

☐ Yes ☒ No

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

ABERDEEN VENTURE PARTNERS IX, LP

2. *Private fund* identification number:

(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing

Name:

ABERDEEN CAPITAL MANAGEMENT, LLC

SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*?

☐ Yes ☒ No

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

ABERDEEN VENTURE PARTNERS V, L.P.

2. *Private fund* identification number:

(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing

Name:

ABERDEEN CAPITAL MANAGEMENT, LLC

SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*?

☐ Yes ☒ No

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

ABERDEEN VENTURE PARTNERS VI, L.P.

2. *Private fund* identification number:

(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B (1) of Schedule D of its Form ADV filing

Name:

ABERDEEN CAPITAL MANAGEMENT, LLC

SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*? ☐ ☒

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

ABERDEEN VENTURE PARTNERS VII, LP

2. *Private fund* identification number:

(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing

Name:

ABERDEEN CAPITAL MANAGEMENT, LLC

SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*? ☐ ☒

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

ABERDEEN VENTURE PARTNERS VIII SPV-A, LP

2. *Private fund* identification number:

(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing

Name:

ABERDEEN CAPITAL MANAGEMENT, LLC

SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*? ☐ ☒

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

ABERDEEN VENTURE PARTNERS VIII, LP

2. *Private fund* identification number:
(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing

Name:

ABERDEEN CAPITAL MANAGEMENT, LLC

SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*?

☐ ☒

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

ABERDEEN VENTURE PARTNERS X, L.P.

2. *Private fund* identification number:
(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing

Name:

ABERDEEN CAPITAL MANAGEMENT, LLC

SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*?

☐ ☒

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

ADAMS STREET - DENSO GLOBAL PRIVATE EQUITY INVESTMENTS FUND LP

2. *Private fund* identification number:
(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing

Name:

ADAMS STREET PARTNERS, LLC

SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*?

☐ ☒

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

ADAMS STREET - VGV SECONDARY TARGET MANDATE FUND LP

2. *Private fund* identification number:

(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing

Name:

ADAMS STREET PARTNERS, LLC

SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*?

☐ ☒

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

ADAMS STREET -ALPS CO-INV TARGETED MANDATE FUND LP

2. *Private fund* identification number:

(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing

Name:

ADAMS STREET PARTNERS, LLC

SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*?

☐ ☒

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

ADAMS STREET -ALPS STRATEGIC PE FUND LP

2. *Private fund* identification number:

(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing

Name:

ADAMS STREET PARTNERS, LLC

SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*?

C G

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

ADAMS STREET -PE GENESIS FUND I LP

2. *Private fund* identification number:
(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing
Name:

ADAMS STREET PARTNERS, LLC

SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*?

C G

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

ADAMS STREET -SK VENTURE FUND LP

2. *Private fund* identification number:
(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing
Name:

ADAMS STREET PARTNERS, LLC

SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*?

C G

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

ADAMS STREET 1847 FUND, L.P.

2. *Private fund* identification number.
(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing

Name:

ADAMS STREET PARTNERS, LLC

SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*?

☐ ☒

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

ADAMS STREET 2006 GLOBAL OPPORTUNITIES PORTFOLIO

2. *Private fund* identification number:

(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing

Name:

ADAMS STREET PARTNERS, LLC

SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*?

☐ ☒

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

ADAMS STREET 2007 GLOBAL OPPORTUNITIES PORTFOLIO, LP

2. *Private fund* identification number:

(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing

Name:

ADAMS STREET PARTNERS, LLC

SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*?

☐ ☒

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*.

2. *Private fund* identification number:
(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing
Name:

ADAMS STREET PARTNERS, LLC

SEC File Number:

4. Are your *clients* solicited to invest in this *private fund*?

Yes No

☐ ☐

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

ADAMS STREET 2011 EMERGING MARKETS FUND LP

2. *Private fund* identification number:
(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing
Name:

ADAMS STREET PARTNERS, LLC

SEC File Number:

4. Are your *clients* solicited to invest in this *private fund*?

Yes No

☐ ☐

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

ADAMS STREET 2011 NON-US DEVELOPED MARKETS FUND LP

2. *Private fund* identification number:
(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing
Name:

ADAMS STREET PARTNERS, LLC

SEC File Number:

4. Are your *clients* solicited to invest in this *private fund*?

Yes No

☐ ☐

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one

or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

ADAMS STREET 2011 US FUND LP

2. *Private fund* identification number:

(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing Name:

ADAMS STREET PARTNERS, LLC

SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*? ☐ ☒

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

ADAMS STREET 2012 DEVELOPED MARKETS FUND LP

2. *Private fund* identification number:

(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing Name:

ADAMS STREET PARTNERS, LLC

SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*? ☐ ☒

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

ADAMS STREET 2012 EMERGING MARKETS FUND LP

2. *Private fund* identification number:

(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7 B.(1) of Schedule D of its Form ADV filing Name:

ADAMS STREET PARTNERS, LLC

SEC File Number.

Yes No

4. Are your *clients* solicited to invest in this *private fund*?

☐ ☒

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

ADAMS STREET 2012 US FUND LP

2. *Private fund* identification number:
(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing
Name:

ADAMS STREET PARTNERS, LLC

SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*?

☐ ☒

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

ADAMS STREET 2013 DEVELOPED MARKETS FUND LP

2. *Private fund* identification number:
(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing
Name:

ADAMS STREET PARTNERS, LLC

SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*?

☐ ☒

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

ADAMS STREET 2013 EMERGING MARKETS FUND LP

2. *Private fund* identification number
(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing
- Name:
ADAMS STREET PARTNERS, LLC
- SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*?

☐ ☒

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

ADAMS STREET 2013 US FUND LP

2. *Private fund* identification number:
(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing
- Name:
ADAMS STREET PARTNERS, LLC
- SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*?

☐ ☒

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

ADAMS STREET 2014 DEVELOPED MARKETS FUND LP

2. *Private fund* identification number:
(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing
- Name:
ADAMS STREET PARTNERS, LLC
- SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*?

☐ ☒

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

ADAMS STREET 2014 EMERGING MARKETS FUND LP

2. *Private fund* identification number:
(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing

Name:

ADAMS STREET PARTNERS, LLC

SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*?

☐ ☐

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

ADAMS STREET 2014 US FUND LP

2. *Private fund* identification number:
(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing

Name:

ADAMS STREET PARTNERS, LLC

SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*?

☐ ☐

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

ADAMS STREET 2015 NON-US FUND LP

2. *Private fund* identification number:
(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing

Name:

ADAMS STREET PARTNERS, LLC

SEC File Number:

Yes No

4 Are your *clients* solicited to invest in this *private fund*?

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

ADAMS STREET 2015 US FUND LP

2. *Private fund* identification number:

(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing

Name:

ADAMS STREET PARTNERS, LLC

SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*?

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

ADAMS STREET 2016 NON-US FUND LP

2. *Private fund* identification number:

(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing

Name:

ADAMS STREET PARTNERS, LLC

SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*?

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

ADAMS STREET 2016 US FUND LP

2. *Private fund* identification number:

(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing Name.

ADAMS STREET PARTNERS, LLC

SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*?

☐ ☒

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

ADAMS STREET 2017 NON-US FUND LP

2. *Private fund* identification number:
(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing Name:

ADAMS STREET PARTNERS, LLC

SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*?

☐ ☒

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

ADAMS STREET 2017 US FUND L.P.

2. *Private fund* identification number:
(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing Name:

ADAMS STREET PARTNERS, LLC

SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*?

☐ ☒

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

ADAMS STREET 2018 NON-US FUND LP

2. *Private fund* identification number:
(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7 B.(1) of Schedule D of its Form ADV filing

Name:

ADAMS STREET PARTNERS, LLC

SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*?

☐ ☒

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

ADAMS STREET 2018 US FUND LP

2. *Private fund* identification number:
(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing

Name:

ADAMS STREET PARTNERS, LLC

SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*?

☐ ☒

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

ADAMS STREET AP7 PE INVESTMENT LP

2. *Private fund* identification number:
(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing

Name:

ADAMS STREET PARTNERS, LLC

SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*?

☐ ☒

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

ADAMS STREET ENERGY & NATURAL RESOURCES FUND LP

2. *Private fund* identification number:

(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing

Name:

ADAMS STREET PARTNERS, LLC

SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*?

☐ ☒

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

ADAMS STREET GLOBAL OPPORTUNITES SECONDARY FUND II-A, LP

2. *Private fund* identification number:

(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing

Name:

ADAMS STREET PARTNERS, LLC

SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*?

☐ ☒

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

ADAMS STREET GLOBAL OPPORTUNITIES SECONDARY FUND

2. *Private fund* identification number:

(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing

Name:

ADAMS STREET PARTNERS, LLC

SEC File Number:

Yes No

4. Are your clients solicited to invest in this private fund?

☐ ☐

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the private fund:

ADAMS STREET GLOBAL OPPORTUNITIES SECONDARY FUND II, LP

2. Private fund identification number:

(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this private fund in Section 7.B.(1) of Schedule D of its Form ADV filing

Name:

ADAMS STREET PARTNERS, LLC

SEC File Number:

Yes No

4. Are your clients solicited to invest in this private fund?

☐ ☐

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the private fund:

ADAMS STREET GLOBAL SECONDARY FUND 6 LP

2. Private fund identification number:

(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this private fund in Section 7.B.(1) of Schedule D of its Form ADV filing

Name:

ADAMS STREET PARTNERS, LLC

SEC File Number:

Yes No

4. Are your clients solicited to invest in this private fund?

☐ ☐

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the private fund:

ADAMS STREET GLOBAL SMB WPERP FUND L.P.

2. Private fund identification number:

(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing
- Name:
ADAMS STREET PARTNERS, LLC
- SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*?

☐ ☒

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:
ADAMS STREET GLOBAL VENTURE MANDATE FUND II LP

2. *Private fund* identification number:
(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing
- Name:
ADAMS STREET PARTNERS, LLC
- SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*?

☐ ☒

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:
ADAMS STREET GLOBAL VENTURE MANDATE FUND L.P.

2. *Private fund* identification number:
(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing
- Name:
ADAMS STREET PARTNERS, LLC
- SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*?

☐ ☒

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*

2. *Private fund* identification number:
(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing
- Name:
ADAMS STREET PARTNERS, LLC
- SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*? ☐ ☒

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:
ADAMS STREET PARTNERSHIP FUND - 2002 NON-US FUND, L.P.

2. *Private fund* identification number:
(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing
- Name:
ADAMS STREET PARTNERS, LLC
- SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*? ☐ ☒

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:
ADAMS STREET PARTNERSHIP FUND - 2002 U.S FUND, L.P.

2. *Private fund* identification number:
(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing
- Name:
ADAMS STREET PARTNERS, LLC
- SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*? ☐ ☒

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one

or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

ADAMS STREET PARTNERSHIP FUND - 2003 NON-US FUND, L.P.

2. *Private fund* identification number:
(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing
Name:

ADAMS STREET PARTNERS, LLC

SEC File Number:

4. Are your *clients* solicited to invest in this *private fund*?

Yes No

☐ ☒

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

ADAMS STREET PARTNERSHIP FUND - 2003 U.S. FUND, L.P.

2. *Private fund* identification number:
(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing
Name:

ADAMS STREET PARTNERS, LLC

SEC File Number:

4. Are your *clients* solicited to invest in this *private fund*?

Yes No

☐ ☒

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

ADAMS STREET PARTNERSHIP FUND - 2004 NON-US FUND, L.P.

2. *Private fund* identification number:
(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing
Name:

Yes No

4. Are your *clients* solicited to invest in this *private fund*? ☐ ☒

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

ADAMS STREET PARTNERSHIP FUND - 2004 U.S. FUND, L.P.

2. *Private fund* identification number:
(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing
Name:

ADAMS STREET PARTNERS, LLC

SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*? ☐ ☒

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

ADAMS STREET PARTNERSHIP FUND - 2005 NON-US FUND, L.P.

2. *Private fund* identification number:
(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing
Name:

ADAMS STREET PARTNERS, LLC

SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*? ☐ ☒

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*

ADAMS STREET PARTNERSHIP FUND - 2005 U.S. FUND, L.P.

2. *Private fund* identification number.
(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing

Name:

ADAMS STREET PARTNERS, LLC

SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*?

☐ ☒

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

ADAMS STREET PARTNERSHIP FUND - 2006 NON-US FUND, LP

2. *Private fund* identification number:
(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing

Name:

ADAMS STREET PARTNERS, LLC

SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*?

☐ ☒

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

ADAMS STREET PARTNERSHIP FUND - 2006 US FUND

2. *Private fund* identification number:
(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing

Name:

ADAMS STREET PARTNERS, LLC

SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*?

☐ ☒

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

ADAMS STREET PARTNERSHIP FUND - 2007 NON-US FUND, LP

2. *Private fund* identification number:

(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing

Name:

ADAMS STREET PARTNERS, LLC

SEC File Number:

4. Are your *clients* solicited to invest in this *private fund*?

Yes No

☐ ☐

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

ADAMS STREET PARTNERSHIP FUND - 2007 US FUND, L P.

2. *Private fund* identification number:

(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing

Name:

ADAMS STREET PARTNERS, LLC

SEC File Number:

4. Are your *clients* solicited to invest in this *private fund*?

Yes No

☐ ☐

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

ADAMS STREET PARTNERSHIP FUND - 2008 NON-US FUND, LP

2. *Private fund* identification number:

(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing

Name:

ADAMS STREET PARTNERS, LLC

SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*?

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*.

ADAMS STREET PARTNERSHIP FUND - 2008 U.S. FUND, LP

2. *Private fund* identification number:
(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing
Name:

ADAMS STREET PARTNERS, LLC

SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*?

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

ADAMS STREET PARTNERSHIP FUND - 2009 NON-US EMERGING MARKETS FUND, L.P.

2. *Private fund* identification number:
(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing
Name:

ADAMS STREET PARTNERS, LLC

SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*?

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

ADAMS STREET PARTNERSHIP FUND - 2009 NON-US EMERGING MARKETS FUND-A, L.P.

2. *Private fund* identification number:
(include the "805-" prefix also)

3 Name and SEC File number of adviser that provides information about this *private fund* in Section 7 B (1) of Schedule D of its Form ADV filing

Name:

ADAMS STREET PARTNERS, LLC

SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*?

☐ ☒

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

ADAMS STREET PARTNERSHIP FUND - 2009 U.S. FUND, LP

2. *Private fund* identification number:

(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing

Name:

ADAMS STREET PARTNERS, LLC

SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*?

☐ ☒

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

ADAMS STREET PARTNERSHIP FUND - 2010 NON-US EMERGING MARKETS FUND, L.P.

2. *Private fund* identification number:

(include the "805-" prefix also)

805-661111

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing

Name:

ADAMS STREET PARTNERS, LLC

SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*?

☐ ☒

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1 Name of the *private fund*

ADAMS STREET PARTNERSHIP FUND - 2010 U.S. FUND, LP

2. *Private fund* identification number
(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing
- Name:
ADAMS STREET PARTNERS, LLC
- SEC File Number:

4. Are your *clients* solicited to invest in this *private fund*?

Yes No

☐ ☒

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

ADAMS STREET PARTNERSHIP FUND - 2010 U.S. FUND, LP - SERIES B L.P.

2. *Private fund* identification number:
(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing
- Name:
ADAMS STREET PARTNERS, LLC
- SEC File Number:

4. Are your *clients* solicited to invest in this *private fund*?

Yes No

☐ ☒

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

ADAMS STREET PARTNERSHIP FUND 2009 NON-US DEVELOPED MARKETS FUND

2. *Private fund* identification number:
(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing
- Name:
ADAMS STREET PARTNERS, LLC
- SEC File Number:

4. Are your *clients* solicited to invest in this *private fund*?

Yes No

☐ ☒

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:
ADAMS STREET PARTNERSHIP FUND 2010 NON-US DEVELOPED MARKETS FUND
2. *Private fund* identification number:
(include the "805-" prefix also)
3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing
Name:
ADAMS STREET PARTNERS, LLC
SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*? ☐ Yes ☒ No
- In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:
ADAMS STREET PEP ASIA FUND 2018 LP
2. *Private fund* identification number:
(include the "805-" prefix also)
3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing
Name:
ADAMS STREET PARTNERS, LLC
SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*? ☐ Yes ☒ No
- In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:
ADAMS STREET PEP NORTH AMERICA FUND 2018 LP
2. *Private fund* identification number:
(include the "805-" prefix also)
3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing
Name:
ADAMS STREET PARTNERS, LLC
SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*?

C C

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

ADAMS STREET PEP SECONDARY FUND 2016 LP

2. *Private fund* identification number:

(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing

Name:

ADAMS STREET PARTNERS, LLC

SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*?

C C

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

ADAMS STREET PEP SECONDARY FUND 2017 LP

2. *Private fund* identification number:

(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing

Name:

ADAMS STREET PARTNERS, LLC

SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*?

C C

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

ADAMS STREET RSP LP

2. *Private fund* identification number:

(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing
- Name
ADAMS STREET PARTNERS, LLC
- SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*?

☐ ☒

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

ADAMS STREET SIFAI FUND LP

2. *Private fund* identification number:
(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing
- Name:
ADAMS STREET PARTNERS, LLC
- SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*?

☐ ☒

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

ADAMS STREET UNIPENSION US SMB FUND LP

2. *Private fund* identification number:
(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing
- Name:
ADAMS STREET PARTNERS, LLC
- SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*?

☐ ☒

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

2. *Private fund* identification number:
(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing

Name:

ADAMS STREET PARTNERS, LLC

SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*?

☐ ☒

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

ADAMS STREET VENTURE INNOVATION FUND II LP

2. *Private fund* identification number:
(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing

Name:

ADAMS STREET PARTNERS, LLC

SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*?

☐ ☒

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

ADAMS STREET VENTURE INNOVATION FUND L.P.

2. *Private fund* identification number:
(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing

Name:

ADAMS STREET PARTNERS, LLC

SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*?

☐ ☒

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one

or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund

1. Name of the *private fund*:

ADAMS STREET- SCERS FUND, LLC

2. *Private fund* identification number:
(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing
Name:

ADAMS STREET PARTNERS, LLC

SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*?

☐ ☒

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

BANK OF NEW YORK MELLON AS TRUSTEE FOR THE HP INC. MASTER TRUST (F/K/A EDS RETIREMENT PLAN TRUST

2. *Private fund* identification number:
(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing
Name:

ADAMS STREET PARTNERS, LLC

SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*?

☐ ☒

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

BRINSON NON-U.S. PARTNERSHIP FUND - 2003 PRIMARY FUND, L.P.

2. *Private fund* identification number:
(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing
Name:

Yes No

4. Are your *clients* solicited to invest in this *private fund*?

C C

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

BRINSON NON-U.S. PARTNERSHIP FUND-2000 PRIMARY FUND, LP

2. *Private fund* identification number:
(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing
Name:

ADAMS STREET PARTNERS, LLC

SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*?

C C

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

BRINSON NON-U.S. PARTNERSHIP FUND-2002 PRIMARY FUND, LP

2. *Private fund* identification number:
(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing
Name:

ADAMS STREET PARTNERS, LLC

SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*?

C C

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

BRINSON NON-U.S. PARTNERSHIP FUND-2002 SECONDARY FUND, LP

2. *Private fund* identification number:
(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing
- Name:
ADAMS STREET PARTNERS, LLC
- SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*?

☒ ☐

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

BRINSON NON-U.S. PARTNERSHIP FUND-2004 PRIMARY FUND, LP

2. *Private fund* identification number:
(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing
- Name:
ADAMS STREET PARTNERS, LLC
- SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*?

☒ ☐

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

BRINSON NON-U.S. PARTNERSHIP FUND-2004 SECONDARY FUND, LP

2. *Private fund* identification number:
(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing
- Name:
ADAMS STREET PARTNERS, LLC
- SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*?

☒ ☐

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

BRINSON PARTNERSHIP FUND - 1999 PRIMARY FUND, L.P.

2. *Private fund* identification number:

(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing

Name:

ADAMS STREET PARTNERS, LLC

SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*?

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

BRINSON PARTNERSHIP FUND - 2000 PRIMARY FUND, L.P.

2. *Private fund* identification number:

(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing

Name:

ADAMS STREET PARTNERS, LLC

SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*?

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

BRINSON PARTNERSHIP FUND - 2001 PRIMARY FUND, L.P.

2. *Private fund* identification number:

(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing

Name:

ADAMS STREET PARTNERS, LLC

SEC File Number:

Yes No

FORM ADV

UNIFORM APPLICATION FOR INVESTMENT ADVISER REGISTRATION AND REPORT BY EXEMPT REPORTING ADVISERS

Primary Business Name: VANGUARD GROUP INC

CRD Number:

Other-Than-Annual Amendment - All Sections

Rev. 10/2017

4/30/2019 1:30:36 PM

WARNING: Complete this form truthfully. False statements or omissions may result in denial of your application, revocation of your registration, or criminal prosecution. You must keep this form updated by filing periodic amendments. See Form ADV General Instruction 4.

Item 1 Identifying Information

Responses to this Item tell us who you are, where you are doing business, and how we can contact you. If you are filing an *umbrella registration*, the information in Item 1 should be provided for the *filing adviser* only. General Instruction 5 provides information to assist you with filing an *umbrella registration*.

A. Your full legal name (if you are a sole proprietor, your last, first, and middle names):

THE VANGUARD GROUP, INC.

B. (1) Name under which you primarily conduct your advisory business, if different from Item 1.A.

VANGUARD GROUP INC

List on Section 1.B. of Schedule D any additional names under which you conduct your advisory business.

(2) If you are using this Form ADV to register more than one investment adviser under an *umbrella registration*, check this box ☐

If you check this box, complete a Schedule R for each relying adviser.

C. If this filing is reporting a change in your legal name (Item 1.A.) or primary business name (Item 1.B.(1)), enter the new name and specify whether the name change is of

☐ your legal name or ☐ your primary business name:

D. (1) If you are registered with the SEC as an investment adviser, your SEC file number:

(2) If you report to the SEC as an *exempt reporting adviser*, your SEC file number:

(3) If you have one or more Central Index Key numbers assigned by the SEC ("CIK Numbers"), all of your CIK numbers:

No Information Filed

E. (1) If you have a number ("CRD Number") assigned by the FINRA's CRD system or by the IARD system, your CRD number:

If your firm does not have a CRD number, skip this Item 1.E. Do not provide the CRD number of one of your officers, employees, or affiliates.

(2) If you have additional CRD Numbers, your additional CRD numbers:

No Information Filed

F. Principal Office and Place of Business

(1) Address (do not use a P.O. Box):

Number and Street 1:

100 VANGUARD BLVD

City:

MALVERN

State:

Pennsylvania

Number and Street 2:

V26

Country:

United States

ZIP+4/Postal Code:

19355

If this address is a private residence, check this box: ☐

List on Section 1.F. of Schedule D any office, other than your principal office and place of business, at which you conduct investment advisory business. If you are applying for registration, or are registered, with one or more state securities authorities, you must list all of your offices in the state or states to which you are applying for registration or with whom you are registered. If you are applying for SEC registration, if you are registered only with the SEC, or if you are reporting to the SEC as an exempt reporting adviser, list the largest twenty-five offices in terms of numbers of employees as of the end of your most recently completed fiscal year

(2) Days of week that you normally conduct business at your principal office and place of business:

☒ Monday - Friday ☐ Other

Normal business hours at this location:

8 30AM - 5:30PM

(3) Telephone number at this location:

610-669-1000

(4) Facsimile number at this location, if any:

610-669-6600

(5) What is the total number of offices, other than your principal office and place of business, at which you conduct investment advisory business as of

☐ \$50 billion or more

For purposes of Item 1.O. only, "assets" refers to your total assets, rather than the assets you manage on behalf of clients. Determine your total assets using the total assets shown on the balance sheet for your most recent fiscal year end.

P. Provide your *Legal Entity Identifier* if you have one:

A *legal entity identifier* is a unique number that companies use to identify each other in the financial marketplace. You may not have a *legal entity identifier*.

SECTION 1.B. Other Business Names

No Information Filed

SECTION 1.F. Other Offices

No Information Filed

SECTION 1.I. Website Addresses

List your website addresses, including addresses for accounts on publicly available social media platforms where you control the content (including, but not limited to, Twitter, Facebook and/or LinkedIn). You must complete a separate Schedule D Section 1.I. for each website or account on a publicly available social media platform.

Address of Website/Account on Publicly Available Social Media Platform: [HTTP://WWW.VANGUARD.COM](http://www.vanguard.com)

Address of Website/Account on Publicly Available Social Media Platform: [HTTPS://WWW.FACEBOOK.COM/VANGUARD](https://www.facebook.com/vanguard)

Address of Website/Account on Publicly Available Social Media Platform: [HTTPS://TWITTER.COM/VANGUARD_GROUP](https://twitter.com/vanguard_group)

Address of Website/Account on Publicly Available Social Media Platform: [HTTPS://PLUS.GOOGLE.COM/+VANGUARD#+VANGUARD/POSTS](https://plus.google.com/+vanguard/+vanguard/posts)

Address of Website/Account on Publicly Available Social Media Platform: [HTTPS://WWW.YOUTUBE.COM/USER/VANGUARD](https://www.youtube.com/user/vanguard)

Address of Website/Account on Publicly Available Social Media Platform: [HTTPS://TWITTER.COM/VANGUARD_FA](https://twitter.com/vanguard_fa)

Address of Website/Account on Publicly Available Social Media Platform: [HTTPS://WWW.LINKEDIN.COM/COMPANY/VANGUARD](https://www.linkedin.com/company/vanguard)

Address of Website/Account on Publicly Available Social Media Platform: [HTTPS://TWITTER.COM/VANGUARD_INSTL](https://twitter.com/vanguard_instl)

SECTION 1.L. Location of Books and Records

Complete the following information for each location at which you keep your books and records, other than your *principal office and place of business*. You must complete a separate Schedule D, Section 1 L. for each location.

Name of entity where books and records are kept:
IRON MOUNTAIN INC

Number and Street 1.

Number and Street 2.

2500 HENDERSON DRIVE

City:
SHARON HILL

State:
Pennsylvania

Country:
United States

ZIP+4/Postal Code:
19079

If this address is a private residence, check this box: ☐

Telephone Number:
610-725-0200 X3008

Facsimile number, if any:

This is (check one):

- ☐ one of your branch offices or affiliates.
☒ a third-party unaffiliated recordkeeper.
☐ other.

Briefly describe the books and records kept at this location.

STORAGE OF CLIENT AND OTHER FILES CONTAINING CONTRACTS, CORRESPONDENCE, RECOMMENDATIONS AND TRANSACTIONS, IN ADDITION TO PROGRAMMING CODE.

SECTION 1.M Registration with Foreign Financial Regulatory Authorities

No Information Filed

Item 2 SEC Registration/Reporting

Responses to this Item help us (and you) determine whether you are eligible to register with the SEC. Complete this Item 2.A. only if you are applying for SEC registration or submitting an *annual updating amendment* to your SEC registration. If you are filing an *umbrella registration*, the information in Item 2 should be provided for the *filing adviser* only.

A. To register (or remain registered) with the SEC, you must check **at least one** of the Items 2.A.(1) through 2.A.(12), below. If you are submitting an *annual updating amendment* to your SEC registration and you are no longer eligible to register with the SEC, check Item 2.A.(13). Part 1A Instruction 2 provides information to help you determine whether you may affirmatively respond to each of these items.

You (the adviser):

- ☒ (1) are a **large advisory firm** that either:
- (a) has regulatory assets under management of \$100 million (in U.S. dollars) or more; or
 - (b) has regulatory assets under management of \$90 million (in U.S. dollars) or more at the time of filing its most recent *annual updating amendment* and is registered with the SEC;
- ☐ (2) are a **mid-sized advisory firm** that has regulatory assets under management of \$25 million (in U.S. dollars) or more but less than \$100 million (in U.S. dollars) and you are either:
- (a) not required to be registered as an adviser with the *state securities authority* of the state where you maintain your *principal office and place of business*; or
 - (b) not subject to examination by the *state securities authority* of the state where you maintain your *principal office and place of business*;
*Click **HERE** for a list of states in which an investment adviser, if registered, would not be subject to examination by the state securities authority.*
- (3) Reserved
- ☐ (4) have your *principal office and place of business* **outside the United States**;
- ☒ (5) are an **investment adviser (or subadviser) to an investment company** registered under the Investment Company Act of 1940;
- ☐ (6) are an **investment adviser to a company which has elected to be a business development company** pursuant to section 54 of the Investment Company Act of 1940 and has not withdrawn the election, and you have at least \$25 million of regulatory assets under management;
- ☐ (7) are a **pension consultant** with respect to assets of plans having an aggregate value of at least \$200,000,000 that qualifies for the exemption in rule 203A-2(a),
- ☐ (8) are a **related adviser** under rule 203A-2(b) that *controls, is controlled by, or is under common control with*, an investment adviser that is registered with the SEC, and your *principal office and place of business* is the same as the registered adviser;
If you check this box, complete Section 2.A (8) of Schedule D.
- ☐ (9) are an **adviser** relying on rule 203A-2(c) because you **expect to be eligible for SEC registration within 120 days**;
If you check this box, complete Section 2.A.(9) of Schedule D.
- ☐ (10) are a **multi-state adviser** that is required to register in 15 or more states and is relying on rule 203A-2(d),
If you check this box, complete Section 2.A (10) of Schedule D.

- ☐ (11) are an **Internet adviser** relying on rule 203A-2(e);
- ☐ (12) have **received an SEC order** exempting you from the prohibition against registration with the SEC;
- If you check this box, complete Section 2.A.(12) of Schedule D.*
- ☐ (13) are **no longer eligible** to remain registered with the SEC.

State Securities Authority Notice Filings and State Reporting by Exempt Reporting Advisers

- C. Under state laws, SEC-registered advisers may be required to provide to *state securities authorities* a copy of the Form ADV and any amendments they file with the SEC. These are called *notice filings*. In addition, *exempt reporting advisers* may be required to provide *state securities authorities* with a copy of reports and any amendments they file with the SEC. If this is an initial application or report, check the box(es) next to the state(s) that you would like to receive notice of this and all subsequent filings or reports you submit to the SEC. If this is an amendment to direct your *notice filings* or reports to additional state(s), check the box(es) next to the state(s) that you would like to receive notice of this and all subsequent filings or reports you submit to the SEC. If this is an amendment to your registration to stop your *notice filings* or reports from going to state(s) that currently receive them, uncheck the box(es) next to those state(s).

Jurisdictions

<input type="checkbox"/> AL	<input type="checkbox"/> IL	<input type="checkbox"/> NE	<input type="checkbox"/> SC
<input type="checkbox"/> AK	<input type="checkbox"/> IN	<input type="checkbox"/> NV	<input type="checkbox"/> SD
<input type="checkbox"/> AZ	<input type="checkbox"/> IA	<input type="checkbox"/> NH	<input type="checkbox"/> TN
<input type="checkbox"/> AR	<input type="checkbox"/> KS	<input type="checkbox"/> NJ	<input type="checkbox"/> TX
<input type="checkbox"/> CA	<input type="checkbox"/> KY	<input type="checkbox"/> NM	<input type="checkbox"/> UT
<input type="checkbox"/> CO	<input type="checkbox"/> LA	<input type="checkbox"/> NY	<input type="checkbox"/> VT
<input type="checkbox"/> CT	<input type="checkbox"/> ME	<input type="checkbox"/> NC	<input type="checkbox"/> VI
<input type="checkbox"/> DE	<input type="checkbox"/> MD	<input type="checkbox"/> ND	<input type="checkbox"/> VA
<input type="checkbox"/> DC	<input type="checkbox"/> MA	<input type="checkbox"/> OH	<input type="checkbox"/> WA
<input type="checkbox"/> FL	<input type="checkbox"/> MI	<input type="checkbox"/> OK	<input type="checkbox"/> WV
<input type="checkbox"/> GA	<input type="checkbox"/> MN	<input type="checkbox"/> OR	<input type="checkbox"/> WI
<input type="checkbox"/> GU	<input type="checkbox"/> MS	<input type="checkbox"/> PA	<input type="checkbox"/> WY
<input type="checkbox"/> HI	<input type="checkbox"/> MO	<input type="checkbox"/> PR	
<input type="checkbox"/> ID	<input type="checkbox"/> MT	<input type="checkbox"/> RI	

If you are amending your registration to stop your notice filings or reports from going to a state that currently receives them and you do not want to pay that state's notice filing or report filing fee for the coming year, your amendment must be filed before the end of the year (December 31).

SECTION 2.A.(8) Related Adviser

If you are relying on the exemption in rule 203A-2(b) from the prohibition on registration because you *control*, are *controlled by*, or are under common *control* with an investment adviser that is registered with the SEC and your *principal office and place of business* is the same as that of the registered adviser, provide the following information:

Name of Registered Investment Adviser

CRD Number of Registered Investment Adviser

SEC Number of Registered Investment Adviser

SECTION 2.A.(9) Investment Adviser Expecting to be Eligible for Commission Registration within 120 Days

If you are relying on rule 203A-2(c), the exemption from the prohibition on registration available to an adviser that expects to be eligible for SEC registration within 120 days, you are required to make certain representations about your eligibility for SEC registration. By checking the appropriate boxes, you will be deemed to have made the required representations. You must make both of these representations:

- ☐ I am not registered or required to be registered with the SEC or a *state securities authority* and I have a reasonable expectation that I will be eligible to register with the SEC within 120 days after the date my registration with the SEC becomes effective.
- ☐ I undertake to withdraw from SEC registration if, on the 120th day after my registration with the SEC becomes effective, I would be prohibited by Section 203A(a) of the Advisers Act from registering with the SEC

SECTION 2.A.(10) Multi-State Adviser

If you are relying on rule 203A-2(d), the multi-state adviser exemption from the prohibition on registration, you are required to make certain representations about your eligibility for SEC registration. By checking the appropriate boxes, you will be deemed to have made the required representations:

If you are applying for registration as an investment adviser with the SEC, you must make both of these representations:

- ☒ I have reviewed the applicable state and federal laws and have concluded that I am required by the laws of 15 or more states to register as an investment adviser with the *state securities authorities* in those states.
- ☐ I undertake to withdraw from SEC registration if I file an amendment to this registration indicating that I would be required by the laws of fewer than 15 states to register as an investment adviser with the *state securities authorities* of those states.

If you are submitting your *annual updating amendment*, you must make this representation:

- ☐ Within 90 days prior to the date of filing this amendment, I have reviewed the applicable state and federal laws and have concluded that I am required by the laws of at least 15 states to register as an investment adviser with the *state securities authorities* in those states.

SECTION 2.A. (12) SEC Exemptive Order

If you are relying upon an SEC order exempting you from the prohibition on registration, provide the following information:

Application Number:

803-

Date of order:

Item 3 Form of Organization

If you are filing an *umbrella registration*, the information in Item 3 should be provided for the *filing adviser* only.

A. How are you organized?

- ☒ Corporation
- ☐ Sole Proprietorship
- ☐ Limited Liability Partnership (LLP)
- ☐ Partnership
- ☐ Limited Liability Company (LLC)
- ☐ Limited Partnership (LP)
- ☐ Other (specify):

If you are changing your response to this Item, see Part 1A Instruction 4.

B. In what month does your fiscal year end each year?

DECEMBER

C. Under the laws of what state or country are you organized?

State Country
Pennsylvania United States

If you are a partnership, provide the name of the state or country under whose laws your partnership was formed. If you are a sole proprietor, provide the name of the state or country where you reside.

If you are changing your response to this Item, see Part 1A Instruction 4.

Item 4 Successions

A. Are you, at the time of this filing, succeeding to the business of a registered investment adviser, including, for example, a change of your structure or legal status (e.g., form of organization or state of incorporation)?

Yes No

☐ ☒

If "yes", complete Item 4.B. and Section 4 of Schedule D.

B. Date of Succession: (MM/DD/YYYY)

If you have already reported this succession on a previous Form ADV filing, do not report the succession again. Instead, check "No." See Part 1A Instruction 4.

SECTION 4 Successions

No Information Filed

Item 5 Information About Your Advisory Business - Employees, Clients, and Compensation

Responses to this Item help us understand your business, assist us in preparing for on-site examinations, and provide us with data we use when making regulatory policy. Part 1A Instruction 5.a. provides additional guidance to newly formed advisers for completing this Item 5.

Employees

If you are organized as a sole proprietorship, include yourself as an employee in your responses to Item 5.A. and Items 5.B.(1), (2), (3), (4), and (5). If an employee performs more than one function, you should count that employee in each of your responses to Items 5.B.(1), (2), (3), (4), and (5).

- A. Approximately how many employees do you have? Include full- and part-time employees but do not include any clerical workers.

490

- B. (1) Approximately how many of the employees reported in 5.A. perform investment advisory functions (including research)?

369

- (2) Approximately how many of the employees reported in 5.A. are registered representatives of a broker-dealer?

41

- (3) Approximately how many of the employees reported in 5.A. are registered with one or more state securities authorities as investment adviser representatives?

5

- (4) Approximately how many of the employees reported in 5.A. are registered with one or more state securities authorities as investment adviser representatives for an investment adviser other than you?

0

- (5) Approximately how many of the employees reported in 5.A. are licensed agents of an insurance company or agency?

0

- (6) Approximately how many firms or other persons solicit advisory clients on your behalf?

0

In your response to Item 5.B.(6), do not count any of your employees and count a firm only once – do not count each of the firm's employees that solicit on your behalf.

Clients

In your responses to Items 5.C. and 5.D. do not include as "clients" the investors in a private fund you advise, unless you have a separate advisory relationship with those investors.

- C. (1) To approximately how many clients for whom you do not have regulatory assets under management did you provide investment advisory services during your most recently completed fiscal year?

0

- (2) Approximately what percentage of your clients are non-United States persons?

42%

- D. For purposes of this Item 5.D., the category "individuals" includes trusts, estates, and 401(k) plans and IRAs of individuals and their family members, but does not include businesses organized as sole proprietorships.

The category "business development companies" consists of companies that have made an election pursuant to section 54 of the Investment Company Act of 1940. Unless you provide advisory services pursuant to an investment advisory contract to an investment company registered under the Investment Company Act of 1940, do not answer (d)(1) or (d)(3) below.

Indicate the approximate number of your clients and amount of your total regulatory assets under management (reported in Item 5.F. below) attributable to each of the following type of client. If you have fewer than 5 clients in a particular category (other than (d), (e), and (f)) you may check Item 5.D.(2) rather than respond to Item 5.D.(1).

The aggregate amount of regulatory assets under management reported in Item 5.D.(3) should equal the total amount of regulatory assets under management reported in Item 5.F.(2)(c) below.

If a client fits into more than one category, select one category that most accurately represents the client to avoid double counting clients and assets. If you advise a registered investment company, business development company, or pooled investment vehicle, report those assets in categories (d), (e), and (f) as applicable.

Type of Client	(1) Number of Client(s)	(2) Fewer than 5 Clients	(3) Amount of Regulatory Assets under Management
(a) Individuals (other than high net worth individuals)	0	<input checked="" type="checkbox"/>	\$ 0
(b) High net worth individuals	0	<input type="checkbox"/>	\$ 0
(c) Banking or thrift institutions	0	<input type="checkbox"/>	\$ 0
(d) Investment companies	191		\$ 4,517,093,504,250
(e) Business development companies	0		\$ 0

(f) Pooled investment vehicles (other than investment companies and business development companies)	63		\$ 13,045,219,361
(g) Pension and profit sharing plans (but not the plan participants or government pension plans)	0	<input type="checkbox"/>	\$ 0
(h) Charitable organizations	0	<input type="checkbox"/>	\$ 0
(i) State or municipal government entities (including government pension plans)	0	<input type="checkbox"/>	\$ 0
(j) Other investment advisers	0	<input type="checkbox"/>	\$ 0
(k) Insurance companies	0	<input type="checkbox"/>	\$ 0
(l) Sovereign wealth funds and foreign official institutions	0	<input type="checkbox"/>	\$ 0
(m) Corporations or other businesses not listed above	0	<input type="checkbox"/>	\$ 0
(n) Other:	0	<input type="checkbox"/>	\$ 0

Compensation Arrangements

E. You are compensated for your investment advisory services by (check all that apply):

- ☒ (1) A percentage of assets under your management
☐ (2) Hourly charges
☐ (3) Subscription fees (for a newsletter or periodical)
☐ (4) Fixed fees (other than subscription fees)
☐ (5) Commissions
☐ (6) Performance-based fees
☒ (7) Other (specify): ALLOCATED SHARE OF VANGUARD'S TOTAL COST OF OPERATIONS

Item 5 Information About Your Advisory Business - Regulatory Assets Under Management

Regulatory Assets Under Management

		Yes	No
F. (1) Do you provide continuous and regular supervisory or management services to securities portfolios?		<input checked="" type="checkbox"/>	<input type="checkbox"/>
(2) If yes, what is the amount of your regulatory assets under management and total number of accounts?			
	U.S. Dollar Amount		Total Number of Accounts
Discretionary:	(a) \$ 4,530,138,723,611		(d) 254
Non-Discretionary:	(b) \$ 0		(e) 0
Total:	(c) \$ 4,530,138,723,611		(f) 254

Part 1A Instruction 5.b. explains how to calculate your regulatory assets under management. You must follow these instructions carefully when completing this Item.

(3) What is the approximate amount of your total regulatory assets under management (reported in Item 5.F.(2)(c) above) attributable to clients who are non-United States persons?

\$ 13,045,219,361

Item 5 Information About Your Advisory Business - Advisory Activities

Advisory Activities

G. What type(s) of advisory services do you provide? Check all that apply.

- ☐ (1) Financial planning services
☐ (2) Portfolio management for individuals and/or small businesses
☒ (3) Portfolio management for investment companies (as well as "business development companies" that have made an election pursuant to section 54 of the Investment Company Act of 1940)
☒ (4) Portfolio management for pooled investment vehicles (other than investment companies)
☒ (5) Portfolio management for businesses (other than small businesses) or institutional clients (other than registered investment companies and other pooled investment vehicles)
☐ (6) Pension consulting services
☒ (7) Selection of other advisers (including private fund managers)
☒ (8) Publication of periodicals or newsletters
☐ (9) Security ratings or pricing services
☐ (10) Market timing services
☐ (11) Educational seminars/workshops
☐ (12) Other(specify):

Do not check Item 5.G.(3) unless you provide advisory services pursuant to an investment advisory contract to an investment company registered under the Investment Company Act of 1940, including as a subadviser. If you check Item 5.G.(3), report the 811 or 814 number of the investment company or investment companies to which you provide advice in Section 5.G.(3) of Schedule D

H. If you provide financial planning services, to how many clients did you provide these services during your last fiscal year?

☒ 0

- ☐ 1 - 10
☐ 11 - 25
☐ 26 - 50
☐ 51 - 100
☐ 101 - 250
☐ 251 - 500
☐ More than 500

If more than 500, how many?
(round to the nearest 500)

In your responses to this Item 5.H., do not include as "clients" the investors in a private fund you advise, unless you have a separate advisory relationship with those investors.

- | | | Yes | No |
|--|----|-----------------------|-----------------------|
| I. (1) Do you participate in a wrap fee program? | | <input type="radio"/> | <input type="radio"/> |
| (2) If you participate in a wrap fee program, what is the amount of your regulatory assets under management attributable to acting as: | | | |
| (a) sponsor to a wrap fee program | \$ | | |
| (b) portfolio manager for a wrap fee program? | \$ | | |
| (c) sponsor to and portfolio manager for the same wrap fee program? | \$ | | |

If you report an amount in Item 5.I.(2)(c), do not report that amount in Item 5.I.(2)(a) or Item 5.I.(2)(b).

If you are a portfolio manager for a wrap fee program, list the names of the programs, their sponsors and related information in Section 5.I.(2) of Schedule D.

If your involvement in a wrap fee program is limited to recommending wrap fee programs to your clients, or you advise a mutual fund that is offered through a wrap fee program, do not check Item 5.I.(1) or enter any amounts in response to Item 5.I.(2).

- | | | Yes | No |
|---|--|-----------------------|-----------------------|
| J. (1) In response to Item 4.B. of Part 2A of Form ADV, do you indicate that you provide investment advice only with respect to limited types of investments? | | <input type="radio"/> | <input type="radio"/> |
| (2) Do you report client assets in Item 4.E. of Part 2A that are computed using a different method than the method used to compute your regulatory assets under management? | | <input type="radio"/> | <input type="radio"/> |

K. Separately Managed Account Clients

- | | | Yes | No |
|--|--|-----------------------|-----------------------|
| (1) Do you have regulatory assets under management attributable to clients other than those listed in Item 5.D.(3)(d)-(f) (separately managed account clients)? | | <input type="radio"/> | <input type="radio"/> |
| If yes, complete Section 5.K.(1) of Schedule D. | | | |
| (2) Do you engage in borrowing transactions on behalf of any of the separately managed account clients that you advise? | | <input type="radio"/> | <input type="radio"/> |
| If yes, complete Section 5.K.(2) of Schedule D. | | | |
| (3) Do you engage in derivative transactions on behalf of any of the separately managed account clients that you advise? | | <input type="radio"/> | <input type="radio"/> |
| If yes, complete Section 5.K.(2) of Schedule D. | | | |
| (4) After subtracting the amounts in Item 5.D.(3)(d)-(f) above from your total regulatory assets under management, does any custodian hold ten percent or more of this remaining amount of regulatory assets under management? | | <input type="radio"/> | <input type="radio"/> |
| If yes, complete Section 5.K.(3) of Schedule D for each custodian. | | | |

SECTION 5.G.(3) Advisers to Registered Investment Companies and Business Development Companies

If you check Item 5 G (3), what is the SEC file number (811 or 814 number) of each of the registered investment companies and business development companies to which you act as an adviser pursuant to an advisory contract? You must complete a separate Schedule D Section 5.G.(3) for each registered investment company and business development company to which you act as an adviser.

SEC File Number

Provide the regulatory assets under management of all parallel managed accounts related to a registered investment company (or series thereof) or business development company that you advise

No Information Filed

SEC File Number

Provide the regulatory assets under management of all *parallel managed accounts* related to a registered investment company (or series thereof) or business development company that you advise.

No Information Filed

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No Information Filed

SECTION 5.I.(2) Wrap Fee Programs

No Information Filed

SECTION 5.K.(1) Separately Managed Accounts

After subtracting the amounts reported in Item 5.D.(3)(d)-(f) from your total regulatory assets under management, indicate the approximate percentage of this remaining amount attributable to each of the following categories of assets. If the remaining amount is at least \$10 billion in regulatory assets under management, complete Question (a). If the remaining amount is less than \$10 billion in regulatory assets under management, complete Question (b).

Any regulatory assets under management reported in Item 5.D.(3)(d), (e), and (f) should not be reported below.

If you are a subadviser to a separately managed account, you should only provide information with respect to the portion of the account that you subadvise.

End of year refers to the date used to calculate your regulatory assets under management for purposes of your *annual updating amendment*. Mid-year is the date six months before the end of year date. Each column should add up to 100% and numbers should be rounded to the nearest percent.

Investments in derivatives, registered investment companies, business development companies, and pooled investment vehicles should be reported in those categories. Do not report those investments based on related or underlying portfolio assets. Cash equivalents include bank deposits, certificates of deposit, bankers' acceptances and similar bank instruments.

Some assets could be classified into more than one category or require discretion about which category applies. You may use your own internal methodologies and the conventions of your service providers in determining how to categorize assets, so long as the methodologies or conventions are consistently applied and consistent with information you report internally and to current and prospective clients. However, you should not double count assets, and your responses must be consistent with any instructions or other guidance relating to this Section.

(a) Asset Type	Mid-year	End of year
(i) Exchange-Traded Equity Securities	%	%
(ii) Non Exchange-Traded Equity Securities	%	%
(iii) U.S. Government/Agency Bonds	%	%
(iv) U.S. State and Local Bonds	%	%
(v) <i>Sovereign Bonds</i>	%	%
(vi) Investment Grade Corporate Bonds	%	%
(vii) Non-Investment Grade Corporate Bonds	%	%
(viii) Derivatives	%	%
(ix) Securities Issued by Registered Investment Companies or Business Development Companies	%	%
(x) Securities Issued by Pooled Investment Vehicles (other than Registered Investment Companies or Business Development Companies)	%	%
(xi) Cash and Cash Equivalents	%	%
(xii) Other	%	%

Generally describe any assets included in "Other"

(b) Asset Type	End of year
(i) Exchange-Traded Equity Securities	%
(ii) Non Exchange-Traded Equity Securities	%
(iii) U.S. Government/Agency Bonds	%
(iv) U.S. State and Local Bonds	%
(v) <i>Sovereign Bonds</i>	%
(vi) Investment Grade Corporate Bonds	%
(vii) Non-Investment Grade Corporate Bonds	%
(viii) Derivatives	%
(ix) Securities Issued by Registered Investment Companies or Business Development Companies	%
(x) Securities Issued by Pooled Investment Vehicles (other than Registered Investment Companies or Business Development Companies)	%
(xi) Cash and Cash Equivalents	%
(xii) Other	%

Generally describe any assets included in "Other"

SECTION 5.K.(2) Separately Managed Accounts - Use of Borrowings and Derivatives

☐ No information is required to be reported in this Section 5.K.(2) per the instructions of this Section 5.K.(2)

If your regulatory assets under management attributable to separately managed accounts are at least \$10 billion, you should complete Question (a). If your regulatory assets under management attributable to separately managed accounts are at least \$500 million but less than \$10 billion, you should complete Question (b).

- (a) In the table below, provide the following information regarding the separately managed accounts you advise. If you are a subadviser to a separately managed account, you should only provide information with respect to the portion of the account that you subadvise. End of year refers to the date used to calculate your regulatory assets under management for purposes of your *annual updating amendment*. Mid-year is the date six months before the end of year date.

In column 1, indicate the regulatory assets under management attributable to separately managed accounts associated with each level of gross notional exposure. For purposes of this table, the gross notional exposure of an account is the percentage obtained by dividing (i) the sum of (a) the dollar amount of any *borrowings* and (b) the *gross notional value* of all derivatives, by (ii) the regulatory assets under management of the account.

In column 2, provide the dollar amount of *borrowings* for the accounts included in column 1.

In column 3, provide aggregate *gross notional value* of derivatives divided by the aggregate regulatory assets under management of the accounts included in column 1 with respect to each category of derivatives specified in 3(a) through (f).

You may, but are not required to, complete the table with respect to any separately managed account with regulatory assets under management of less than \$10,000,000.

Any regulatory assets under management reported in Item 5.D.(3)(d), (e), and (f) should not be reported below.

(i) Mid-Year

Gross Notional Exposure	(1) Regulatory Assets Under Management	(2) Borrowings	(3) Derivative Exposures					
			(a) Interest Rate Derivative	(b) Foreign Exchange Derivative	(c) Credit Derivative	(d) Equity Derivative	(e) Commodity Derivative	(f) Other Derivative
Less than 10%	\$	\$	0 %	0 %	0 %	0 %	0 %	0 %
10-149%	\$	\$ 0	0 %	0 %	0 %	0 %	0 %	0 %
150% or more	\$ 0	\$ 0	0 %	0 %	0 %	0 %	0 %	0 %

Optional: Use the space below to provide a narrative description of the strategies and/or manner in which *borrowings* and derivatives are used in the management of the separately managed accounts that you advise.

(ii) End of Year

Gross Notional Exposure	(1) Regulatory Assets Under Management	(2) Borrowings	(3) Derivative Exposures					
			(a) Interest Rate Derivative	(b) Foreign Exchange Derivative	(c) Credit Derivative	(d) Equity Derivative	(e) Commodity Derivative	(f) Other Derivative
Less than 10%	\$ 0	\$ 0	0 %	0 %	0 %	0 %	0 %	0 %
10-149%	\$ 0	\$ 0	0 %	0 %	0 %	0 %	0 %	0 %
150% or more	\$ 0	\$ 0	0 %	0 %	0 %	0 %	0 %	0 %

Optional: Use the space below to provide a narrative description of the strategies and/or manner in which *borrowings* and derivatives are used in the management of the separately managed accounts that you advise.

- (b) In the table below, provide the following information regarding the separately managed accounts you advise as of the date used to calculate your regulatory assets under management for purposes of your *annual updating amendment*. If you are a subadviser to a separately managed account, you should only provide information with respect to the portion of the account that you subadvise.

In column 1, indicate the regulatory assets under management attributable to separately managed accounts associated with each level of gross notional exposure. For purposes of this table, the gross notional exposure of an account is the percentage obtained by dividing (i) the sum of (a) the dollar amount of any *borrowings* and (b) the *gross notional value* of all derivatives, by (ii) the regulatory assets under management of the account.

In column 2, provide the dollar amount of *borrowings* for the accounts included in column 1.

You may, but are not required to, complete the table with respect to any separately managed accounts with regulatory assets under management of less than \$10,000,000.

Any regulatory assets under management reported in Item 5.D.(3)(d), (e), and (f) should not be reported below.

Gross Notional Exposure	(1) Regulatory Assets Under Management	(2) Borrowings
Less than 10%	\$ 0	\$ 0
10-149%	\$ 0	\$ 0
150% or more	\$ 0	\$ 0

Optional: Use the space below to provide a narrative description of the strategies and/or manner in which *borrowings* and derivatives are used in the management of the separately managed accounts that you advise.

SECTION 5.K.(3) Custodians for Separately Managed Accounts

No Information Filed

Item 6 Other Business Activities

In this Item, we request information about your firm's other business activities.

A. You are actively engaged in business as a (check all that apply):

- ☒ (1) broker-dealer (registered or unregistered)
- ☒ (2) registered representative of a broker-dealer
- ☒ (3) commodity pool operator or commodity trading advisor (whether registered or exempt from registration)
- ☐ (4) futures commission merchant
- ☐ (5) real estate broker, dealer, or agent
- ☐ (6) insurance broker or agent
- ☐ (7) bank (including a separately identifiable department or division of a bank)
- ☐ (8) trust company
- ☐ (9) registered municipal advisor
- ☐ (10) registered security-based swap dealer
- ☐ (11) major security-based swap participant
- ☐ (12) accountant or accounting firm
- ☐ (13) lawyer or law firm
- ☐ (14) other financial product salesperson (specify):

If you engage in other business using a name that is different from the names reported in Items 1.A. or 1.B.(1), complete Section 6.A. of Schedule D.

- B. (1) Are you actively engaged in any other business not listed in Item 6.A. (other than giving investment advice)? Yes No
☒ ☐
- (2) If yes, is this other business your primary business? Yes No
☒ ☐

If "yes," describe this other business on Section 6.B.(2) of Schedule D, and if you engage in this business under a different name, provide that name.

- (3) Do you sell products or provide services other than investment advice to your advisory clients? Yes No
☒ ☐

If "yes," describe this other business on Section 6.B.(3) of Schedule D, and if you engage in this business under a different name, provide that name.

SECTION 6.A. Names of Your Other Businesses

No Information Filed

SECTION 6.B.(2) Description of Primary Business

Describe your primary business (not your investment advisory business):

VGI PROVIDES ITS CLIENTS WITH CORPORATE, MANAGEMENT & ADMINISTRATIVE MUTUAL FUND SERVICES, INCLUDING LEGAL, ACCOUNTING, TRANSFER AGENCY & DISTRIBUTION SERVICES.

If you engage in that business under a different name, provide that name:

SECTION 6.B.(3) Description of Other Products and Services

Describe other products or services you sell to your client. You may omit products and services that you listed in Section 6.B.(2) above. SAME AS 6.B.(2).

If you engage in that business under a different name, provide that name:

Item 7 Financial Industry Affiliations

In this Item, we request information about your financial industry affiliations and activities. This information identifies areas in which conflicts of interest may occur between you and your clients.

A. This part of Item 7 requires you to provide information about you and your *related persons*, including foreign affiliates. Your *related persons* are all of your

advisory affiliates and any person that is under common control with you.

You have a *related person* that is a (check all that apply):

- ☒ (1) broker-dealer, municipal securities dealer, or government securities broker or dealer (registered or unregistered)
- ☒ (2) other investment adviser (including financial planners)
- ☒ (3) registered municipal advisor
- ☒ (4) registered security-based swap dealer
- ☒ (5) major security-based swap participant
- ☒ (6) commodity pool operator or commodity trading advisor (whether registered or exempt from registration)
- ☒ (7) futures commission merchant
- ☒ (8) banking or thrift institution
- ☒ (9) trust company
- ☒ (10) accountant or accounting firm
- ☒ (11) lawyer or law firm
- ☒ (12) insurance company or agency
- ☒ (13) pension consultant
- ☒ (14) real estate broker or dealer
- ☒ (15) sponsor or syndicator of limited partnerships (or equivalent), excluding pooled investment vehicles
- ☒ (16) sponsor, general partner, managing member (or equivalent) of pooled investment vehicles

Note that Item 7.A. should not be used to disclose that some of your employees perform investment advisory functions or are registered representatives of a broker-dealer. The number of your firm's employees who perform investment advisory functions should be disclosed under Item 5.B.(1). The number of your firm's employees who are registered representatives of a broker-dealer should be disclosed under Item 5.B.(2).

Note that if you are filing an umbrella registration, you should not check Item 7.A.(2) with respect to your relying advisers, and you do not have to complete Section 7.A. in Schedule D for your relying advisers. You should complete a Schedule R for each relying adviser.

For each related person, including foreign affiliates that may not be registered or required to be registered in the United States, complete Section 7.A. of Schedule D.

You do not need to complete Section 7.A. of Schedule D for any related person if: (1) you have no business dealings with the related person in connection with advisory services you provide to your clients; (2) you do not conduct shared operations with the related person; (3) you do not refer clients or business to the related person, and the related person does not refer prospective clients or business to you; (4) you do not share supervised persons or premises with the related person; and (5) you have no reason to believe that your relationship with the related person otherwise creates a conflict of interest with your clients.

You must complete Section 7.A. of Schedule D for each related person acting as qualified custodian in connection with advisory services you provide to your clients (other than any mutual fund transfer agent pursuant to rule 206(4)-2(b)(1)), regardless of whether you have determined the related person to be operationally independent under rule 206(4)-2 of the Advisers Act.

SECTION 7.A. Financial Industry Affiliations

Complete a separate Schedule D Section 7.A. for each *related person* listed in Item 7.A.

1. Legal Name of *Related Person*:

VANGUARD ASSET MANAGEMENT, LIMITED

2. Primary Business Name of *Related Person*:

VANGUARD ASSET MANAGEMENT, LIMITED

3. *Related Person's* SEC File Number (if any) (e.g., 801-, 8-, 866-, 802-)

-

or

Other

4. *Related Person's*

(a) CRD Number (if any):

(b) CIK Number(s) (if any):

No Information Filed

5. *Related Person is:* (check all that apply)

- (a) ☐ broker-dealer, municipal securities dealer, or government securities broker or dealer
- (b) ☒ other investment adviser (including financial planners)
- (c) ☐ registered municipal advisor
- (d) ☐ registered security-based swap dealer
- (e) ☐ major security-based swap participant
- (f) ☐ commodity pool operator or commodity trading advisor (whether registered or exempt from registration)
- (g) ☐ futures commission merchant
- (h) ☐ banking or thrift institution
- (i) ☐ trust company
- (j) ☐ accountant or accounting firm

- (k) ☐ lawyer or law firm
 (l) ☐ insurance company or agency
 (m) ☐ pension consultant
 (n) ☐ real estate broker or dealer
 (o) ☐ sponsor or syndicator of limited partnerships (or equivalent), excluding pooled investment vehicles
 (p) ☐ sponsor, general partner, managing member (or equivalent) of pooled investment vehicles

Yes No

6. Do you control or are you controlled by the related person? ☒ Yes ☐ No
7. Are you and the related person under common control? ☐ Yes ☒ No
8. (a) Does the related person act as a qualified custodian for your clients in connection with advisory services you provide to clients? ☐ Yes ☒ No
 (b) If you are registering or registered with the SEC and you have answered "yes," to question 8.(a) above, have you overcome the presumption that you are not operationally independent (pursuant to rule 206(4)-2(d)(5)) from the related person and thus are not required to obtain a surprise examination for your clients' funds or securities that are maintained at the related person? ☐ Yes ☒ No
 (c) If you have answered "yes" to question 8.(a) above, provide the location of the related person's office responsible for custody of your clients' assets:
 Number and Street 1: _____ Number and Street 2: _____
 City: _____ State: _____ Country: _____ ZIP+4/Postal Code: _____
 If this address is a private residence, check this box: ☐

Yes No

9. (a) If the related person is an investment adviser, is it exempt from registration? ☐ Yes ☒ No
 (b) If the answer is yes, under what exemption?
 FOREIGN PRIVATE ADVISER EXEMPTION
10. (a) Is the related person registered with a foreign financial regulatory authority? ☐ Yes ☒ No
 (b) If the answer is yes, list the name and country, in English of each foreign financial regulatory authority with which the related person is registered.

Name of Country/English Name of Foreign Financial Regulatory Authority
United Kingdom - Financial Conduct Authority
11. Do you and the related person share any supervised persons? ☐ Yes ☒ No
12. Do you and the related person share the same physical location? ☐ Yes ☒ No

1. Legal Name of Related Person:
 VANGUARD INVESTMENTS CANADA INC.
2. Primary Business Name of Related Person:
 VANGUARD INVESTMENTS CANADA INC.
3. Related Person's SEC File Number (if any) (e.g., 801-, 8-, 866-, 802-)

Other

4. Related Person's
 (a) CRD Number (if any):
 (b) CIK Number(s) (if any):

No Information Filed

5. Related Person is: (check all that apply)
- (a) ☐ broker-dealer, municipal securities dealer, or government securities broker or dealer
 (b) ☒ other investment adviser (including financial planners)
 (c) ☐ registered municipal advisor
 (d) ☐ registered security-based swap dealer
 (e) ☐ major security-based swap participant
 (f) ☐ commodity pool operator or commodity trading advisor (whether registered or exempt from registration)
 (g) ☐ futures commission merchant
 (h) ☐ banking or thrift institution
 (i) ☐ trust company
 (j) ☐ accountant or accounting firm
 (k) ☐ lawyer or law firm
 (l) ☐ insurance company or agency
 (m) ☐ pension consultant
 (n) ☐ real estate broker or dealer

(o) ☐ sponsor or syndicator of limited partnerships (or equivalent), excluding pooled investment vehicles
 (p) ☒ sponsor, general partner, managing member (or equivalent) of pooled investment vehicles

6. Do you *control* or are you *controlled* by the *related person*? Yes No
☒ ☐

7. Are you and the *related person* under common *control*? ☐ ☒

8. (a) Does the *related person* act as a qualified custodian for your *clients* in connection with advisory services you provide to *clients*? ☐ ☒
 (b) If you are registering or registered with the SEC and you have answered "yes," to question 8.(a) above, have you overcome the presumption that you are not operationally independent (pursuant to rule 206(4)-2(d)(5)) from the *related person* and thus are not required to obtain a surprise examination for your *clients'* funds or securities that are maintained at the *related person*? ☐ ☒
 (c) If you have answered "yes" to question 8.(a) above, provide the location of the *related person's* office responsible for *custody* of your *clients'* assets:
 Number and Street 1: _____ Number and Street 2: _____
 City: _____ State: _____ Country: _____ ZIP+4/Postal Code: _____
 If this address is a private residence, check this box: ☐

9. (a) If the *related person* is an investment adviser, is it exempt from registration? Yes No
☒ ☐
 (b) If the answer is yes, under what exemption?
 PRIVATE FUND ADVISER

10. (a) Is the *related person* registered with a *foreign financial regulatory authority*? ☐ ☒
 (b) If the answer is yes, list the name and country, in English of each *foreign financial regulatory authority* with which the *related person* is registered.

Name of Country/English Name of Foreign Financial Regulatory Authority
Canada - Ontario Securities Commission

11. Do you and the *related person* share any *supervised persons*? ☒ ☐

12. Do you and the *related person* share the same physical location? ☐ ☒

1. Legal Name of *Related Person*:
 VANGUARD INVESTMENTS UK, LIMITED

2. Primary Business Name of *Related Person*:
 VANGUARD INVESTMENTS UK, LIMITED

3. *Related Person's* SEC File Number (if any) (e.g., 801-, 8-, 866-, 802-)
 or
 Other _____

4. *Related Person's*
 (a) CRD Number (if any): _____
 (b) CIK Number(s) (if any): _____
 No Information Filed

5. *Related Person* is: (check all that apply)

(a) ☐ broker-dealer, municipal securities dealer, or government securities broker or dealer
 (b) ☒ other investment adviser (including financial planners)
 (c) ☐ registered municipal advisor
 (d) ☐ registered security-based swap dealer
 (e) ☐ major security-based swap participant
 (f) ☐ commodity pool operator or commodity trading advisor (whether registered or exempt from registration)
 (g) ☐ futures commission merchant
 (h) ☐ banking or thrift institution
 (i) ☐ trust company
 (j) ☐ accountant or accounting firm
 (k) ☐ lawyer or law firm
 (l) ☐ insurance company or agency
 (m) ☐ pension consultant
 (n) ☐ real estate broker or dealer
 (o) ☐ sponsor or syndicator of limited partnerships (or equivalent), excluding pooled investment vehicles
 (p) ☒ sponsor, general partner, managing member (or equivalent) of pooled investment vehicles

7. Are you and the *related person* under common control? C C
8. (a) Does the *related person* act as a qualified custodian for your *clients* in connection with advisory services you provide to *clients*? C C
(b) If you are registering or registered with the SEC and you have answered "yes," to question 8.(a) above, have you overcome the presumption that you are not operationally independent (pursuant to rule 206(4)-2(d)(5)) from the *related person* and thus are not required to obtain a surprise examination for your *clients'* funds or securities that are maintained at the *related person*? C C
(c) If you have answered "yes" to question 8.(a) above, provide the location of the *related person's* office responsible for *custody* of your *clients'* assets:
Number and Street 1: _____ Number and Street 2: _____
City: _____ State: _____ Country: _____ ZIP+4/Postal Code: _____
If this address is a private residence, check this box: ☐
9. (a) If the *related person* is an investment adviser, is it exempt from registration? Yes No
C C
(b) If the answer is yes, under what exemption?
PRIVATE FUND ADVISER
10. (a) Is the *related person* registered with a *foreign financial regulatory authority*? C C
(b) If the answer is yes, list the name and country, in English of each *foreign financial regulatory authority* with which the *related person* is registered.
- | Name of Country/English Name of Foreign Financial Regulatory Authority |
|--|
| United Kingdom - Financial Conduct Authority |
11. Do you and the *related person* share any supervised persons? C C
12. Do you and the *related person* share the same physical location? C C

1. Legal Name of Related Person:
VGI INSURANCE, INC.
2. Primary Business Name of Related Person:
VGI INSURANCE, INC.
3. Related Person's SEC File Number (if any) (e.g., 801-, 8-, 866-, 802-)
-
or
Other
4. Related Person's
(a) CRD Number (if any):

(b) CIK Number(s) (if any):

No Information Filed
5. Related Person is: (check all that apply)
- (a) ☐ broker-dealer, municipal securities dealer, or government securities broker or dealer
 - (b) ☐ other investment adviser (including financial planners)
 - (c) ☐ registered municipal advisor
 - (d) ☐ registered security-based swap dealer
 - (e) ☐ major security-based swap participant
 - (f) ☐ commodity pool operator or commodity trading advisor (whether registered or exempt from registration)
 - (g) ☐ futures commission merchant
 - (h) ☐ banking or thrift institution
 - (i) ☐ trust company
 - (j) ☐ accountant or accounting firm
 - (k) ☐ lawyer or law firm
 - (l) ☒ insurance company or agency
 - (m) ☐ pension consultant
 - (n) ☐ real estate broker or dealer
 - (o) ☐ sponsor or syndicator of limited partnerships (or equivalent), excluding pooled investment vehicles
 - (p) ☐ sponsor, general partner, managing member (or equivalent) of pooled investment vehicles

6 Do you control or are you controlled by the *related person*? Yes No
C C

7 Are you and the *related person* under common control? C C

8. (a) Does the *related person* act as a qualified custodian for your *clients* in connection with advisory services you provide to *clients*? ☐ Yes ☐ No
- (b) If you are registering or registered with the SEC and you have answered "yes," to question 8.(a) above, have you overcome the presumption that you are not operationally independent (pursuant to rule 206(4)-2(d)(5)) from the *related person* and thus are not required to obtain a surprise examination for your *clients'* funds or securities that are maintained at the *related person*? ☐ Yes ☐ No
- (c) If you have answered "yes" to question 8.(a) above, provide the location of the *related person's* office responsible for *custody of your clients' assets*:
- Number and Street 1: _____ Number and Street 2: _____
- City: _____ State: _____ Country: _____ ZIP+4/Postal Code: _____
- If this address is a private residence, check this box: ☐
9. (a) If the *related person* is an investment adviser, is it exempt from registration? ☐ Yes ☐ No
- (b) If the answer is yes, under what exemption? _____
10. (a) Is the *related person* registered with a *foreign financial regulatory authority*? ☐ Yes ☐ No
- (b) If the answer is yes, list the name and country, in English of each *foreign financial regulatory authority* with which the *related person* is registered. _____
No Information Filed
11. Do you and the *related person* share any *supervised persons*? ☐ Yes ☐ No
12. Do you and the *related person* share the same physical location? ☐ Yes ☐ No

1. Legal Name of *Related Person*:
VANGUARD NATIONAL TRUST COMPANY, N.A.
2. Primary Business Name of *Related Person*:
VANGUARD NATIONAL TRUST COMPANY
3. *Related Person's* SEC File Number (if any) (e.g., 801-, 8-, 866-, 802-)
-
or
Other
4. *Related Person's*
(a) CRD Number (if any):
(b) CIK Number(s) (if any):
No Information Filed
5. *Related Person is*: (check all that apply)
- (a) ☐ broker-dealer, municipal securities dealer, or government securities broker or dealer
- (b) ☐ other investment adviser (including financial planners)
- (c) ☐ registered municipal advisor
- (d) ☐ registered security-based swap dealer
- (e) ☐ major security-based swap participant
- (f) ☐ commodity pool operator or commodity trading advisor (whether registered or exempt from registration)
- (g) ☐ futures commission merchant
- (h) ☒ banking or thrift institution
- (i) ☒ trust company
- (j) ☐ accountant or accounting firm
- (k) ☐ lawyer or law firm
- (l) ☐ insurance company or agency
- (m) ☐ pension consultant
- (n) ☐ real estate broker or dealer
- (o) ☐ sponsor or syndicator of limited partnerships (or equivalent), excluding pooled investment vehicles
- (p) ☐ sponsor, general partner, managing member (or equivalent) of pooled investment vehicles

6. Do you *control* or are you *controlled by the related person*? ☐ Yes ☐ No
7. Are you and the *related person* under common *control*? ☐ Yes ☐ No
8. (a) Does the *related person* act as a qualified custodian for your *clients* in connection with advisory services you provide to *clients*? ☐ Yes ☐ No
- (b) If you are registering or registered with the SEC and you have answered "yes," to question 8.(a) above, have you overcome the presumption that you are not operationally independent (pursuant to rule 206(4)-2(d)(5)) from the *related person* and thus are not required to obtain a surprise examination for your *clients'* funds or securities that are maintained at the *related person*? ☐ Yes ☐ No
- (c) If you have answered "yes" to question 8.(a) above, provide the location of the *related person's* office responsible for *custody of your clients' assets*:
- Number and Street 1: _____ Number and Street 2: _____

City:	State:	Country:	ZIP+4/Postal Code:
If this address is a private residence, check this box: <input type="checkbox"/>			

	Yes No
9. (a) If the <i>related person</i> is an investment adviser, is it exempt from registration?	<input type="radio"/> <input type="radio"/>
(b) If the answer is yes, under what exemption?	
10. (a) Is the <i>related person</i> registered with a <i>foreign financial regulatory authority</i> ?	<input type="radio"/> <input type="radio"/>
(b) If the answer is yes, list the name and country, in English of each <i>foreign financial regulatory authority</i> with which the <i>related person</i> is registered.	
No Information Filed	
11. Do you and the <i>related person</i> share any <i>supervised persons</i> ?	<input type="radio"/> <input type="radio"/>
12. Do you and the <i>related person</i> share the same physical location?	<input type="radio"/> <input type="radio"/>

<p>1. Legal Name of <i>Related Person</i>: VANGUARD GLOBAL ADVISERS, LLC</p> <p>2. Primary Business Name of <i>Related Person</i>: VANGUARD GLOBAL ADVISERS, LLC</p> <p>3. <i>Related Person's</i> SEC File Number (if any) (e.g., 801-, 8-, 866-, 802-) Other</p> <p>4. <i>Related Person's</i> (a) CRD Number (if any): No Information Filed</p> <p>5. <i>Related Person</i> is: (check all that apply)</p> <ul style="list-style-type: none"> (a) <input type="checkbox"/> broker-dealer, municipal securities dealer, or government securities broker or dealer (b) <input checked="" type="checkbox"/> other investment adviser (including financial planners) (c) <input type="checkbox"/> registered municipal advisor (d) <input type="checkbox"/> registered security-based swap dealer (e) <input type="checkbox"/> major security-based swap participant (f) <input type="checkbox"/> commodity pool operator or commodity trading advisor (whether registered or exempt from registration) (g) <input type="checkbox"/> futures commission merchant (h) <input type="checkbox"/> banking or thrift institution (i) <input type="checkbox"/> trust company (j) <input type="checkbox"/> accountant or accounting firm (k) <input type="checkbox"/> lawyer or law firm (l) <input type="checkbox"/> insurance company or agency (m) <input type="checkbox"/> pension consultant (n) <input type="checkbox"/> real estate broker or dealer (o) <input type="checkbox"/> sponsor or syndicator of limited partnerships (or equivalent), excluding pooled investment vehicles (p) <input type="checkbox"/> sponsor, general partner, managing member (or equivalent) of pooled investment vehicles <p>6. Do you <i>control</i> or are you <i>controlled</i> by the <i>related person</i>?</p> <p>7. Are you and the <i>related person</i> under common <i>control</i>?</p> <p>8. (a) Does the <i>related person</i> act as a qualified custodian for your <i>clients</i> in connection with advisory services you provide to <i>clients</i>?</p> <p>(b) If you are registering or registered with the SEC and you have answered "yes," to question 8 (a) above, have you overcome the presumption that you are not operationally independent (pursuant to rule 206(4)-2(d)(5)) from the <i>related person</i> and thus are not required to obtain a surprise examination for your <i>clients'</i> funds or securities that are maintained at the <i>related person</i>?</p> <p>(c) If you have answered "yes" to question 8.(a) above, provide the location of the <i>related person's</i> office responsible for <i>custody</i> of your <i>clients'</i> assets:</p> <table border="0" style="width: 100%;"> <tr> <td style="width: 50%;">Number and Street 1:</td> <td style="width: 50%;">Number and Street 2:</td> </tr> <tr> <td>City:</td> <td>Country:</td> </tr> <tr> <td>State:</td> <td>ZIP+4/Postal Code:</td> </tr> <tr> <td colspan="2">If this address is a private residence, check this box: <input type="checkbox"/></td> </tr> </table>	Number and Street 1:	Number and Street 2:	City:	Country:	State:	ZIP+4/Postal Code:	If this address is a private residence, check this box: <input type="checkbox"/>		Yes No
Number and Street 1:	Number and Street 2:								
City:	Country:								
State:	ZIP+4/Postal Code:								
If this address is a private residence, check this box: <input type="checkbox"/>									
<p>9. (a) If the <i>related person</i> is an investment adviser, is it exempt from registration?</p> <p>(b) If the answer is yes, under what exemption?</p>	Yes No								

10. (a) Is the *related person* registered with a *foreign financial regulatory authority* ? C C
(b) If the answer is yes, list the name and country, in English of each *foreign financial regulatory authority* with which the *related person* is registered.
No Information Filed

11. Do you and the *related person* share any *supervised persons*? C C

12. Do you and the *related person* share the same physical location? C C

1. Legal Name of *Related Person*:

VANGUARD INVESTMENTS HONG KONG LIMITED

2. Primary Business Name of *Related Person*:

VANGUARD INVESTMENTS HONG KONG LIMITED

3. *Related Person's* SEC File Number (if any) (e.g., 801-, 8-, 866-, 802-)

-

or

Other

4. *Related Person's*

(a) CRD Number (if any):

(b) CIK Number(s) (if any):

No Information Filed

5. *Related Person* is: (check all that apply)

- (a) ☐ broker-dealer, municipal securities dealer, or government securities broker or dealer
(b) ☐ other investment adviser (including financial planners)
(c) ☐ registered municipal advisor
(d) ☐ registered security-based swap dealer
(e) ☐ major security-based swap participant
(f) ☐ commodity pool operator or commodity trading advisor (whether registered or exempt from registration)
(g) ☐ futures commission merchant
(h) ☐ banking or thrift institution
(i) ☐ trust company
(j) ☐ accountant or accounting firm
(k) ☐ lawyer or law firm
(l) ☐ insurance company or agency
(m) ☐ pension consultant
(n) ☐ real estate broker or dealer
(o) ☐ sponsor or syndicator of limited partnerships (or equivalent), excluding pooled investment vehicles
(p) ☒ sponsor, general partner, managing member (or equivalent) of pooled investment vehicles

6. Do you *control* or are you *controlled* by the *related person*? Yes No
C C

7. Are you and the *related person* under common *control*? C C

8. (a) Does the *related person* act as a qualified custodian for your *clients* in connection with advisory services you provide to *clients*? C C

(b) If you are registering or registered with the SEC and you have answered "yes," to question 8.(a) above, have you overcome the presumption that you are not operationally independent (pursuant to rule 206(4)-2(d)(5)) from the *related person* and thus are not required to obtain a surprise examination for your *clients'* funds or securities that are maintained at the *related person*? C C

(c) If you have answered "yes" to question 8.(a) above, provide the location of the *related person's* office responsible for *custody* of your *clients'* assets:

Number and Street 1:

Number and Street 2:

City:

State:

Country:

ZIP+4/Postal Code.

If this address is a private residence, check this box: ☐

9. (a) If the *related person* is an investment adviser, is it exempt from registration? Yes No
C C

(b) If the answer is yes, under what exemption?

10. (a) Is the *related person* registered with a *foreign financial regulatory authority* ? C C

(b) If the answer is yes, list the name and country, in English of each *foreign financial regulatory authority* with which the *related person* is registered.

Name of Country/English Name of Foreign Financial Regulatory Authority

Hong Kong - Securities and Futures Commission

11. Do you and the *related person* share any *supervised persons*? C C

12. Do you and the *related person* share the same physical location?

1. Legal Name of *Related Person*:
VANGUARD INVESTMENTS AUSTRALIA LIMITED

2. Primary Business Name of *Related Person*:
VANGUARD INVESTMENTS AUSTRALIA LIMITED

3. *Related Person's* SEC File Number (if any) (e.g., 801-, 8-, 866-, 802-)

Other

4. *Related Person's*

(a) CRD Number (if any):

(b) CIK Number(s) (if any):

No Information Filed

5. *Related Person* is: (check all that apply)

- (a) ☐ broker-dealer, municipal securities dealer, or government securities broker or dealer
(b) ☒ other investment adviser (including financial planners)
(c) ☐ registered municipal advisor
(d) ☐ registered security-based swap dealer
(e) ☐ major security-based swap participant
(f) ☐ commodity pool operator or commodity trading advisor (whether registered or exempt from registration)
(g) ☐ futures commission merchant
(h) ☐ banking or thrift institution
(i) ☐ trust company
(j) ☐ accountant or accounting firm
(k) ☐ lawyer or law firm
(l) ☐ insurance company or agency
(m) ☐ pension consultant
(n) ☐ real estate broker or dealer
(o) ☐ sponsor or syndicator of limited partnerships (or equivalent), excluding pooled investment vehicles
(p) ☒ sponsor, general partner, managing member (or equivalent) of pooled investment vehicles

6. Do you *control* or are you *controlled by* the *related person*?

Yes No

7. Are you and the *related person* under common *control*?

8. (a) Does the *related person* act as a qualified custodian for your *clients* in connection with advisory services you provide to *clients*?

(b) If you are registering or registered with the SEC and you have answered "yes," to question 8.(a) above, have you overcome the presumption that you are not operationally independent (pursuant to rule 206(4)-2(d)(5)) from the *related person* and thus are not required to obtain a surprise examination for your *clients'* funds or securities that are maintained at the *related person*?

(c) If you have answered "yes" to question 8.(a) above, provide the location of the *related person's* office responsible for *custody* of your *clients'* assets:

Number and Street 1:

Number and Street 2:

City:

State:

Country:

ZIP+4/Postal Code:

If this address is a private residence, check this box: ☐

Yes No

9. (a) If the *related person* is an investment adviser, is it exempt from registration?

(b) If the answer is yes, under what exemption?

FOREIGN PRIVATE ADVISER EXEMPTION

10. (a) Is the *related person* registered with a *foreign financial regulatory authority*?

(b) If the answer is yes, list the name and country, in English of each *foreign financial regulatory authority* with which the *related person* is registered.

Name of Country/English Name of Foreign Financial Regulatory Authority

Australia - Australian Securities and Investments Commission

11. Do you and the *related person* share any *supervised persons*?

12. Do you and the *related person* share the same physical location?

1. Legal Name of *Related Person*:
VANGUARD GROUP (IRELAND) LIMITED

2. Primary Business Name of *Related Person*:
VANGUARD GROUP (IRELAND) LIMITED

3. *Related Person's* SEC File Number (if any) (e.g., 801-, 8-, 866-, 802-)

-
or
Other

4. *Related Person's*

(a) CRD Number (if any):

(b) CIK Number(s) (if any):

No Information Filed

5. *Related Person* is: (check all that apply)

- (a) ☐ broker-dealer, municipal securities dealer, or government securities broker or dealer
(b) ☐ other investment adviser (including financial planners)
(c) ☐ registered municipal advisor
(d) ☐ registered security-based swap dealer
(e) ☐ major security-based swap participant
(f) ☐ commodity pool operator or commodity trading advisor (whether registered or exempt from registration)
(g) ☐ futures commission merchant
(h) ☐ banking or thrift institution
(i) ☐ trust company
(j) ☐ accountant or accounting firm
(k) ☐ lawyer or law firm
(l) ☐ insurance company or agency
(m) ☐ pension consultant
(n) ☐ real estate broker or dealer
(o) ☐ sponsor or syndicator of limited partnerships (or equivalent), excluding pooled investment vehicles
(p) ☒ sponsor, general partner, managing member (or equivalent) of pooled investment vehicles

6. Do you *control* or are you *controlled* by the *related person*?

Yes No

☐ ☐

7. Are you and the *related person* under common *control*?

☐ ☐

8. (a) Does the *related person* act as a qualified custodian for your *clients* in connection with advisory services you provide to *clients*?

☐ ☐

(b) If you are registering or registered with the SEC and you have answered "yes," to question 8.(a) above, have you overcome the presumption that you are not operationally independent (pursuant to rule 206(4)-2(d)(5)) from the *related person* and thus are not required to obtain a surprise examination for your *clients'* funds or securities that are maintained at the *related person*?

☐ ☐

(c) If you have answered "yes" to question 8.(a) above, provide the location of the *related person's* office responsible for *custody* of your *clients'* assets:

Number and Street 1:

Number and Street 2:

City:

State:

Country:

ZIP+4/Postal Code:

If this address is a private residence, check this box: ☐

Yes No

☐ ☐

9. (a) If the *related person* is an investment adviser, is it exempt from registration?

(b) If the answer is yes, under what exemption?

10. (a) Is the *related person* registered with a *foreign financial regulatory authority*?

☐ ☐

(b) If the answer is yes, list the name and country, in English of each *foreign financial regulatory authority* with which the *related person* is registered.

Name of Country/English Name of Foreign Financial Regulatory Authority

Ireland - Central Bank of Ireland

11. Do you and the *related person* share any *supervised persons*?

☐ ☐

12. Do you and the *related person* share the same physical location?

☐ ☐

1 Legal Name of *Related Person*:
VANGUARD FIDUCIARY TRUST COMPANY

2 Primary Business Name of *Related Person*:

3. *Related Person's* SEC File Number (if any) (e.g., 801-, 8-, 866-, 802-)

or

Other

4. *Related Person's*

(a) CRD Number (if any):

(b) CIK Number(s) (if any):

No Information Filed

5. *Related Person is:* (check all that apply)

- (a) ☐ broker-dealer, municipal securities dealer, or government securities broker or dealer
- (b) ☐ other investment adviser (including financial planners)
- (c) ☐ registered municipal advisor
- (d) ☐ registered security-based swap dealer
- (e) ☐ major security-based swap participant
- (f) ☐ commodity pool operator or commodity trading advisor (whether registered or exempt from registration)
- (g) ☐ futures commission merchant
- (h) ☐ banking or thrift institution
- (i) ☒ trust company
- (j) ☐ accountant or accounting firm
- (k) ☐ lawyer or law firm
- (l) ☐ insurance company or agency
- (m) ☐ pension consultant
- (n) ☐ real estate broker or dealer
- (o) ☐ sponsor or syndicator of limited partnerships (or equivalent), excluding pooled investment vehicles
- (p) ☐ sponsor, general partner, managing member (or equivalent) of pooled investment vehicles

Yes No

6. Do you *control* or are you *controlled* by the *related person*?

C C

7. Are you and the *related person* under common *control*?

C C

8. (a) Does the *related person* act as a qualified custodian for your *clients* in connection with advisory services you provide to *clients*?

C C

(b) If you are registering or registered with the SEC and you have answered "yes," to question 8.(a) above, have you overcome the presumption that you are not operationally independent (pursuant to rule 206(4)-2(d)(5)) from the *related person* and thus are not required to obtain a surprise examination for your *clients'* funds or securities that are maintained at the *related person*?

C C

(c) If you have answered "yes" to question 8.(a) above, provide the location of the *related person's* office responsible for custody of your *clients'* assets:

Number and Street 1:

Number and Street 2:

City:

State:

Country:

ZIP+4/Postal Code:

If this address is a private residence, check this box: ☐

Yes No

9. (a) If the *related person* is an investment adviser, is it exempt from registration?

C C

(b) If the answer is yes, under what exemption?

10. (a) Is the *related person* registered with a *foreign financial regulatory authority*?

C C

(b) If the answer is yes, list the name and country, in English of each *foreign financial regulatory authority* with which the *related person* is registered

No Information Filed

11. Do you and the *related person* share any *supervised persons*?

C C

12. Do you and the *related person* share the same physical location?

C C

1. Legal Name of *Related Person*:

VANGUARD ADVISERS, INC.

2. Primary Business Name of *Related Person*.

VANGUARD ADVISERS, INC.

3. *Related Person's* SEC File Number (if any) (e.g., 801-, 8-, 866-, 802-)

Other

4. *Related Person's*

(a) CRD Number (if any):

(b) CIK Number(s) (if any):

No Information Filed

5. *Related Person is:* (check all that apply)

- (a) ☐ broker-dealer, municipal securities dealer, or government securities broker or dealer
(b) ☒ other investment adviser (including financial planners)
(c) ☒ registered municipal advisor
(d) ☐ registered security-based swap dealer
(e) ☐ major security-based swap participant
(f) ☐ commodity pool operator or commodity trading advisor (whether registered or exempt from registration)
(g) ☐ futures commission merchant
(h) ☐ banking or thrift institution
(i) ☐ trust company
(j) ☐ accountant or accounting firm
(k) ☐ lawyer or law firm
(l) ☐ insurance company or agency
(m) ☐ pension consultant
(n) ☐ real estate broker or dealer
(o) ☐ sponsor or syndicator of limited partnerships (or equivalent), excluding pooled investment vehicles
(p) ☐ sponsor, general partner, managing member (or equivalent) of pooled investment vehicles

Yes No

6. Do you *control* or are you *controlled* by the *related person*?

☐ ☐

7. Are you and the *related person* under common *control*?

☐ ☐

8. (a) Does the *related person* act as a qualified custodian for your *clients* in connection with advisory services you provide to *clients*?

☐ ☐

(b) If you are registering or registered with the SEC and you have answered "yes," to question 8.(a) above, have you overcome the presumption that you are not operationally independent (pursuant to rule 206(4)-2(d)(5)) from the *related person* and thus are not required to obtain a surprise examination for your *clients'* funds or securities that are maintained at the *related person*?

☐ ☐

(c) If you have answered "yes" to question 8.(a) above, provide the location of the *related person's* office responsible for *custody* of your *clients'* assets:

Number and Street 1:

Number and Street 2:

City:

State:

Country:

ZIP+4/Postal Code:

If this address is a private residence, check this box: ☐

Yes No

9. (a) If the *related person* is an investment adviser, is it exempt from registration?

☐ ☐

(b) If the answer is yes, under what exemption?

10. (a) Is the *related person* registered with a *foreign financial regulatory authority*?

☐ ☐

(b) If the answer is yes, list the name and country, in English of each *foreign financial regulatory authority* with which the *related person* is registered.

No Information Filed

11. Do you and the *related person* share any *supervised persons*?

☐ ☐

12. Do you and the *related person* share the same physical location?

☐ ☐

1. Legal Name of *Related Person*:

VANGUARD MARKETING CORPORATION

2. Primary Business Name of *Related Person*:

VANGUARD MARKETING CORPORATION

3. *Related Person's* SEC File Number (if any) (e.g., 801-, 8-, 866-, 802-)

or

Other

4. *Related Person's*

(a) CRD Number (if any):

(b) CIK Number(s) (if any):

5. *Related Person* is: (check all that apply)

- (a) ☒ broker-dealer, municipal securities dealer, or government securities broker or dealer
 (b) ☐ other investment adviser (including financial planners)
 (c) ☐ registered municipal advisor
 (d) ☐ registered security-based swap dealer
 (e) ☐ major security-based swap participant
 (f) ☐ commodity pool operator or commodity trading advisor (whether registered or exempt from registration)
 (g) ☐ futures commission merchant
 (h) ☐ banking or thrift institution
 (i) ☐ trust company
 (j) ☐ accountant or accounting firm
 (k) ☐ lawyer or law firm
 (l) ☐ insurance company or agency
 (m) ☐ pension consultant
 (n) ☐ real estate broker or dealer
 (o) ☐ sponsor or syndicator of limited partnerships (or equivalent), excluding pooled investment vehicles
 (p) ☐ sponsor, general partner, managing member (or equivalent) of pooled investment vehicles

Yes No

6. Do you *control* or are you *controlled* by the *related person*?

Yes No

7. Are you and the *related person* under common *control*?

Yes No

8. (a) Does the *related person* act as a qualified custodian for your *clients* in connection with advisory services you provide to *clients*?

Yes No

- (b) If you are registering or registered with the SEC and you have answered "yes," to question 8.(a) above, have you overcome the presumption that you are not operationally independent (pursuant to rule 206(4)-2(d)(5)) from the *related person* and thus are not required to obtain a surprise examination for your *clients'* funds or securities that are maintained at the *related person*?

Yes No

- (c) If you have answered "yes" to question 8.(a) above, provide the location of the *related person's* office responsible for *custody* of your *clients'* assets:

Number and Street 1:

Number and Street 2:

City:

State:

Country:

ZIP+4/Postal Code:

If this address is a private residence, check this box: ☐

Yes No

9. (a) If the *related person* is an investment adviser, is it exempt from registration?

Yes No

- (b) If the answer is yes, under what exemption?

10. (a) Is the *related person* registered with a *foreign financial regulatory authority*?

Yes No

- (b) If the answer is yes, list the name and country, in English of each *foreign financial regulatory authority* with which the *related person* is registered.

No Information Filed

11. Do you and the *related person* share any *supervised persons*?

Yes No

12. Do you and the *related person* share the same physical location?

Yes No

Item 7 Private Fund Reporting

Yes No

B. Are you an adviser to any *private fund*?

Yes No

If "yes," then for each private fund that you advise, you must complete a Section 7.B.(1) of Schedule D, except in certain circumstances described in the next sentence and in Instruction 6 of the Instructions to Part 1A. If you are registered or applying for registration with the SEC or reporting as an SEC exempt reporting adviser, and another SEC-registered adviser or SEC exempt reporting adviser reports this information with respect to any such private fund in Section 7.B.(1) of Schedule D of its Form ADV (e.g., if you are a subadviser), do not complete Section 7.B.(1) of Schedule D with respect to that private fund. You must, instead, complete Section 7.B.(2) of Schedule D.

In either case, if you seek to preserve the anonymity of a private fund client by maintaining its identity in your books and records in numerical or alphabetical code, or similar designation, pursuant to rule 204-2(d), you may identify the private fund in Section 7.B.(1) or 7.B.(2) of Schedule D using the same code or designation in place of the fund's name.

SECTION 7.B.(1) Private Fund Reporting

A. PRIVATE FUND

Information About the Private Fund

1. (a) Name of the *private fund*:

ASF PRIVATE FUND

- (b) *Private fund* identification number:
(include the "805-" prefix also)

2. Under the laws of what state or country is the *private fund* organized:

State:

Country:

Cayman Islands

3. (a) Name(s) of General Partner, Manager, Trustee, or Directors (or *persons* serving in a similar capacity):

Name of General Partner, Manager, Trustee, or Director

VGMF I (CAYMAN) LIMITED

- (b) If filing an *umbrella registration*, identify the *filing adviser* and/or *relying adviser(s)* that sponsor(s) or manage(s) this *private fund*.

No Information Filed

4. The *private fund* (check all that apply; you must check at least one):

- ☐ (1) qualifies for the exclusion from the definition of investment company under section 3(c)(1) of the Investment Company Act of 1940
☒ (2) qualifies for the exclusion from the definition of investment company under section 3(c)(7) of the Investment Company Act of 1940

5. List the name and country, in English, of each *foreign financial regulatory authority* with which the *private fund* is registered.

Name of Country/English Name of Foreign Financial Regulatory Authority

Other - CAYMAN ISLANDS REGISTRAR OF TRUSTS

6. (a) Is this a "master fund" in a master-feeder arrangement?

Yes No

☐ ☒

- (b) If yes, what is the name and *private fund* identification number (if any) of the feeder funds investing in this *private fund*?

No Information Filed

- (c) Is this a "feeder fund" in a master-feeder arrangement?

Yes No

☐ ☒

- (d) If yes, what is the name and *private fund* identification number (if any) of the master fund in which this *private fund* invests?

Name of *private fund*:

Private fund identification number:
(include the "805-" prefix also)

NOTE: You must complete question 6 for each master-feeder arrangement regardless of whether you are filing a single Schedule D, Section 7.B.(1) for the master-feeder arrangement or reporting on the funds separately.

7. If you are filing a single Schedule D, Section 7.B.(1) for a master-feeder arrangement according to the instructions to this Section 7.B.(1), for each of the feeder funds answer the following questions:

No Information Filed

NOTE: For purposes of questions 6 and 7, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

8. (a) Is this *private fund* a "fund of funds"?

Yes No

☐ ☒

NOTE. For purposes of this question only, answer "yes" if the fund invests 10 percent or more of its total assets in other pooled investment vehicles, regardless of whether they are also *private funds* or registered investment companies.

- (b) If yes, does the *private fund* invest in funds managed by you or by a *related person*?

☐ ☒

Yes No

9. During your last fiscal year, did the *private fund* invest in securities issued by investment companies registered under the Investment Company Act of 1940 (other than "money market funds," to the extent provided in Instruction 6.e.)? ☐ Yes ☒ No

10. What type of fund is the *private fund*?

☒ hedge fund ☐ liquidity fund ☐ private equity fund ☐ real estate fund ☐ securitized asset fund ☐ venture capital fund ☐ Other *private fund*:

NOTE: For definitions of these fund types, please see Instruction 6 of the Instructions to Part 1A.

11. Current gross asset value of the *private fund*:

\$ 20,235,794

Ownership

12. Minimum investment commitment required of an investor in the *private fund*:

\$ 1

NOTE: Report the amount routinely required of investors who are not your *related persons* (even if different from the amount set forth in the organizational documents of the fund).

13. Approximate number of the *private fund's* beneficial owners:

1

14. What is the approximate percentage of the *private fund* beneficially owned by you and your *related persons*:

100%

15. (a) What is the approximate percentage of the *private fund* beneficially owned (in the aggregate) by funds of funds:

0%

Yes No

(b) If the *private fund* qualifies for the exclusion from the definition of investment company under section 3(c)(1) of the Investment Company Act of 1940, are sales of the fund limited to *qualified clients*? ☐ Yes ☒ No

16. What is the approximate percentage of the *private fund* beneficially owned by non-United States persons:

0%

Your Advisory Services

Yes No

17. (a) Are you a subadviser to this *private fund*? ☐ Yes ☒ No

(b) If the answer to question 17.(a) is "yes," provide the name and SEC file number, if any, of the adviser of the *private fund*. If the answer to question 17.(a) is "no," leave this question blank.

No Information Filed

Yes No

18. (a) Do any investment advisers (other than the investment advisers listed in Section 7.B.(1).A.3.(b)) advise the *private fund*? ☐ Yes ☒ No

(b) If the answer to question 18.(a) is "yes," provide the name and SEC file number, if any, of the other advisers to the *private fund*. If the answer to question 18.(a) is "no," leave this question blank.

No Information Filed

Yes No

19. Are your *clients* solicited to invest in the *private fund*? ☐ Yes ☒ No

NOTE: For purposes of this question, do not consider feeder funds of the *private fund*.

20. Approximately what percentage of your *clients* has invested in the *private fund*?

1%

Private Offering

Yes No

21. Has the *private fund* ever relied on an exemption from registration of its securities under Regulation D of the Securities Act of 1933? ☐ Yes ☒ No

22. If yes, provide the *private fund's* Form D file number (if any):

No Information Filed

Auditors

23. (a) (1) Are the *private fund's* financial statements subject to an annual audit?

Yes No

☐ ☒

(2) If the answer to question 23.(a)(1) is "yes," are the financial statements prepared in accordance with U.S. GAAP?

☐ ☒

If the answer to question 23.(a)(1) is "yes," respond to questions (b) through (h) below. If the *private fund* uses more than one auditing firm, you must complete questions (b) through (f) separately for each auditing firm.

No Information Filed

Yes No

(g) Are the *private fund's* audited financial statements for the most recently completed fiscal year distributed to the *private fund's* investors?

☐ ☒

(h) Do all of the reports prepared by the auditing firm for the *private fund* since your last *annual updating amendment* contain unqualified opinions?

☐ Yes ☒ No ☐ Report Not Yet Received

If you check "Report Not Yet Received," you must promptly file an amendment to your Form ADV to update your response when the report is available.

Prime Broker

Yes No

24. (a) Does the *private fund* use one or more prime brokers?

☐ ☒

If the answer to question 24.(a) is "yes," respond to questions (b) through (e) below for each prime broker the *private fund* uses. If the *private fund* uses more than one prime broker, you must complete questions (b) through (e) separately for each prime broker.

No Information Filed

Custodian

Yes No

25. (a) Does the *private fund* use any custodians (including the prime brokers listed above) to hold some or all of its assets?

☒ ☐

If the answer to question 25.(a) is "yes," respond to questions (b) through (g) below for each custodian the *private fund* uses. If the *private fund* uses more than one custodian, you must complete questions (b) through (g) separately for each custodian.

Additional Custodian Information : 1 Record(s) Filed.

If the answer to question 25.(a) is "yes," respond to questions (b) through (g) below for each custodian the *private fund* uses. If the *private fund* uses more than one custodian, you must complete questions (b) through (g) separately for each custodian.

(b) Legal name of custodian:

BROWN BROTHERS HARRIMAN & CO

(c) Primary business name of custodian:

BROWN BROTHERS HARRIMAN & CO

(d) The location of the custodian's office responsible for custody of the *private fund's* assets (city, state and country):

City:

NEW YORK

State:

New York

Country:

United States

Yes No

(e) Is the custodian a *related person* of your firm?

☐ ☒

(f) If the custodian is a broker-dealer, provide its SEC registration number (if any):

CRD Number (if any):

(g) If the custodian is not a broker-dealer, or is a broker-dealer but does not have an SEC registration number, provide its *legal entity identifier* (if any)

Administrator

26. (a) Does the *private fund* use an administrator other than your firm?

C C

If the answer to question 26.(a) is "yes," respond to questions (b) through (f) below. If the *private fund* uses more than one administrator, you must complete questions (b) through (f) separately for each administrator.

No Information Filed

27. During your last fiscal year, what percentage of the *private fund's* assets (by value) was valued by a *person*, such as an administrator, that is not your *related person*?

0%

Include only those assets where (i) such *person* carried out the valuation procedure established for that asset, if any, including obtaining any relevant quotes, and (ii) the valuation used for purposes of investor subscriptions, redemptions or distributions, and fee calculations (including allocations) was the valuation determined by such *person*.

Marketers

Yes No

28. (a) Does the *private fund* use the services of someone other than you or your *employees* for marketing purposes?

C C

You must answer "yes" whether the *person* acts as a placement agent, consultant, finder, introducer, municipal advisor or other solicitor, or similar *person*. If the answer to question 28.(a) is "yes," respond to questions (b) through (g) below for each such marketer the *private fund* uses. If the *private fund* uses more than one marketer you must complete questions (b) through (g) separately for each marketer.

No Information Filed

A. PRIVATE FUND

Information About the Private Fund

1. (a) Name of the *private fund*:

MPF PRIVATE FUND

- (b) *Private fund* identification number:

(include the "805-" prefix also)

2. Under the laws of what state or country is the *private fund* organized:

State:

Country:

Cayman Islands

3. (a) Name(s) of General Partner, Manager, Trustee, or Directors (or *persons* serving in a similar capacity):

Name of General Partner, Manager, Trustee, or Director

VGMF I (CAYMAN) LIMITED

- (b) If filing an *umbrella registration*, identify the *filing adviser* and/or *relying adviser(s)* that sponsor(s) or manage(s) this *private fund*.

No Information Filed

4. The *private fund* (check all that apply; you must check at least one):

- ☐ (1) qualifies for the exclusion from the definition of investment company under section 3(c)(1) of the Investment Company Act of 1940
☒ (2) qualifies for the exclusion from the definition of investment company under section 3(c)(7) of the Investment Company Act of 1940

5. List the name and country, in English, of each *foreign financial regulatory authority* with which the *private fund* is registered.

Name of Country/English Name of Foreign Financial Regulatory Authority

Other - CAYMAN ISLANDS REGISTRAR OF TRUSTS

Yes No

6. (a) Is this a "master fund" in a master-feeder arrangement?

C C

- (b) If yes, what is the name and *private fund* identification number (if any) of the feeder funds investing in this *private fund*?

No Information Filed

(c) Is this a "feeder fund" in a master-feeder arrangement?

☐ ☒

(d) If yes, what is the name and *private fund* identification number (if any) of the master fund in which this *private fund* invests?

Name of *private fund*:

Private fund identification number:

(include the "805-" prefix also)

NOTE: You must complete question 6 for each master-feeder arrangement regardless of whether you are filing a single Schedule D, Section 7.B.(1) for the master-feeder arrangement or reporting on the funds separately.

7. If you are filing a single Schedule D, Section 7.B.(1) for a master-feeder arrangement according to the instructions to this Section 7.B.(1), for each of the feeder funds answer the following questions:

No Information Filed

NOTE: For purposes of questions 6 and 7, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

Yes No

8. (a) Is this *private fund* a "fund of funds"?

☐ ☒

NOTE: For purposes of this question only, answer "yes" if the fund invests 10 percent or more of its total assets in other pooled investment vehicles, regardless of whether they are also *private funds* or registered investment companies.

(b) If yes, does the *private fund* invest in funds managed by you or by a *related person*?

☐ ☒

Yes No

9. During your last fiscal year, did the *private fund* invest in securities issued by investment companies registered under the Investment Company Act of 1940 (other than "money market funds," to the extent provided in Instruction 6.e.)?

☐ ☒

10. What type of fund is the *private fund*?

☒ hedge fund ☐ liquidity fund ☐ private equity fund ☐ real estate fund ☐ securitized asset fund ☐ venture capital fund ☐ Other *private fund*:

NOTE: For definitions of these fund types, please see Instruction 6 of the Instructions to Part 1A.

11. Current gross asset value of the *private fund*:

\$ 146,755,273

Ownership

12. Minimum investment commitment required of an investor in the *private fund*:

\$ 1

NOTE: Report the amount routinely required of investors who are not your *related persons* (even if different from the amount set forth in the organizational documents of the fund).

13. Approximate number of the *private fund's* beneficial owners:

1

14. What is the approximate percentage of the *private fund* beneficially owned by you and your *related persons*:

100%

15. (a) What is the approximate percentage of the *private fund* beneficially owned (in the aggregate) by funds of funds:

100%

Yes No

(b) If the *private fund* qualifies for the exclusion from the definition of investment company under section 3(c)(1) of the Investment Company Act of 1940, are sales of the fund limited to *qualified clients*?

☐ ☒

16. What is the approximate percentage of the *private fund* beneficially owned by non-United States persons:

0%

Your Advisory Services17. (a) Are you a subadviser to this *private fund*?

Yes No

☐ ☒(b) If the answer to question 17.(a) is "yes," provide the name and SEC file number, if any, of the adviser of the *private fund*. If the answer to question 17.(a) is "no," leave this question blank.

No Information Filed

18. (a) Do any investment advisers (other than the investment advisers listed in Section 7.B.(1).A.3.(b)) advise the *private fund*?

Yes No

☐ ☒(b) If the answer to question 18.(a) is "yes," provide the name and SEC file number, if any, of the other advisers to the *private fund*. If the answer to question 18.(a) is "no," leave this question blank.

No Information Filed

19. Are your *clients* solicited to invest in the *private fund*?

Yes No

☐ ☒NOTE: For purposes of this question, do not consider feeder funds of the *private fund*.20. Approximately what percentage of your *clients* has invested in the *private fund*?

1%

Private Offering21. Has the *private fund* ever relied on an exemption from registration of its securities under Regulation D of the Securities Act of 1933?

Yes No

☐ ☒22. If yes, provide the *private fund's* Form D file number (if any):

No Information Filed

B. SERVICE PROVIDERS**Auditors**23. (a) (1) Are the *private fund's* financial statements subject to an annual audit?

Yes No

☐ ☒

(2) If the answer to question 23.(a)(1) is "yes," are the financial statements prepared in accordance with U.S. GAAP?

☐ ☒If the answer to question 23.(a)(1) is "yes," respond to questions (b) through (h) below. If the *private fund* uses more than one auditing firm, you must complete questions (b) through (f) separately for each auditing firm.

No Information Filed

(g) Are the *private fund's* audited financial statements for the most recently completed fiscal year distributed to the *private fund's* investors?

Yes No

☐ ☒(h) Do all of the reports prepared by the auditing firm for the *private fund* since your last *annual updating amendment* contain unqualified opinions?☒ Yes ☐ No ☐ Report Not Yet Received

If you check "Report Not Yet Received," you must promptly file an amendment to your Form ADV to update your response when the report is available.

Prime Broker24. (a) Does the *private fund* use one or more prime brokers?

Yes No

☐ ☒If the answer to question 24.(a) is "yes," respond to questions (b) through (e) below for each prime broker the *private fund* uses. If the *private fund* uses more than one prime broker, you must complete questions (b) through (e) separately for each prime broker.

No Information Filed

Custodian25. (a) Does the *private fund* use any custodians (including the prime brokers listed above) to hold some or all of its assets?

Yes No

☐ ☒If the answer to question 25.(a) is "yes," respond to questions (b) through (g) below for each custodian the *private fund* uses. If the *private fund* uses more than one custodian, you must complete questions (b) through (g) separately for each custodian.

Additional Custodian Information : 1 Record(s) Filed.

If the answer to question 25.(a) is "yes," respond to questions (b) through (g) below for each custodian the *private fund* uses. If the *private fund* uses more than one custodian, you must complete questions (b) through (g) separately for each custodian.

(b) Legal name of custodian:

BROWN BROTHERS HARRIMAN & CO

(c) Primary business name of custodian:

BROWN BROTHERS HARRIMAN & CO

(d) The location of the custodian's office responsible for *custody* of the *private fund's* assets (city, state and country):

City:

NEW YORK

State:

New York

Country:

United States

Yes No

(e) Is the custodian a *related person* of your firm?

☐ Yes ☒ No

(f) If the custodian is a broker-dealer, provide its SEC registration number (if any):

-

CRD Number (if any):

(g) If the custodian is not a broker-dealer, or is a broker-dealer but does not have an SEC registration number, provide its *legal entity identifier* (if any)

Administrator

Yes No

26. (a) Does the *private fund* use an administrator other than your firm?

☐ Yes ☒ No

If the answer to question 26.(a) is "yes," respond to questions (b) through (f) below. If the *private fund* uses more than one administrator, you must complete questions (b) through (f) separately for each administrator.

No Information Filed

27. During your last fiscal year, what percentage of the *private fund's* assets (by value) was valued by a *person*, such as an administrator, that is not your *related person*?

0%

Include only those assets where (i) such *person* carried out the valuation procedure established for that asset, if any, including obtaining any relevant quotes, and (ii) the valuation used for purposes of investor subscriptions, redemptions or distributions, and fee calculations (including allocations) was the valuation determined by such *person*.

Marketers

Yes No

28. (a) Does the *private fund* use the services of someone other than you or your *employees* for marketing purposes?

☐ Yes ☒ No

You must answer "yes" whether the *person* acts as a placement agent, consultant, finder, introducer, municipal advisor or other solicitor, or similar *person*. If the answer to question 28.(a) is "yes," respond to questions (b) through (g) below for each such marketer the *private fund* uses. If the *private fund* uses more than one marketer you must complete questions (b) through (g) separately for each marketer.

No Information Filed

SECTION 7.B.(2) *Private Fund* Reporting

1 Name of the *private fund*:

VANGUARD DEVELOPED ALL-CAP EX NORTH AMERICA EQUITY INDEX POOLED FUND

2. *Private fund* identification number.

(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing

Name:

VANGUARD INVESTMENTS CANADA INC.

SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*?

☐ ☐

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

VANGUARD GLOBAL ALL-CAP EX CANADA EQUITY INDEX POOLED FUND

2. *Private fund* identification number:

(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing

Name:

VANGUARD INVESTMENTS CANADA INC.

SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*?

☐ ☐

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

VANGUARD GLOBAL BALANCED FUND

2. *Private fund* identification number:

(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing

Name:

VANGUARD INVESTMENTS CANADA INC.

SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*?

☐ ☐

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:
VANGUARD GLOBAL DIVIDEND FUND

2. *Private fund* identification number:
(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing
Name:
VANGUARD INVESTMENTS CANADA INC.
SEC File Number:

4. Are your *clients* solicited to invest in this *private fund*?

Yes No

☐ ☒

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:
VANGUARD GLOBAL LIQUIDITY FACTOR ETF

2. *Private fund* identification number:
(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing
Name:
VANGUARD INVESTMENTS CANADA INC.
SEC File Number:

4. Are your *clients* solicited to invest in this *private fund*?

Yes No

☐ ☒

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:
VANGUARD INTERNATIONAL GROWTH FUND

2. *Private fund* identification number:
(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing
Name:
VANGUARD INVESTMENTS CANADA INC.
SEC File Number:

4. Are your *clients* solicited to invest in this *private fund*?



In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

VANGUARD SHORT-TERM INVESTMENT POOLED FUND

2. *Private fund* identification number:
(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing

Name:

VANGUARD INVESTMENTS CANADA INC.

SEC File Number:

4. Are your *clients* solicited to invest in this *private fund*?



In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

VANGUARD TARGET RETIREMENT 2015 POOLED FUND

2. *Private fund* identification number:
(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing

Name:

VANGUARD INVESTMENTS CANADA INC.

SEC File Number:

4. Are your *clients* solicited to invest in this *private fund*?



In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

VANGUARD WINDSOR U.S. VALUE FUND

2. *Private fund* identification number:
(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing

Name:

VANGUARD INVESTMENTS CANADA INC.

SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*?

☐ ☒

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

Item 8 Participation or Interest in *Client* Transactions

In this Item, we request information about your participation and interest in your *clients*' transactions. This information identifies additional areas in which conflicts of interest may occur between you and your *clients*. Newly-formed advisers should base responses to these questions on the types of participation and interest that you expect to engage in during the next year.

Like Item 7, Item 8 requires you to provide information about you and your *related persons*, including foreign affiliates.

Proprietary Interest in *Client* Transactions

- A. Do you or any *related person*:

Yes No

- (1) buy securities for yourself from advisory *clients*, or sell securities you own to advisory *clients* (principal transactions)? ☐ ☒
- (2) buy or sell for yourself securities (other than shares of mutual funds) that you also recommend to advisory *clients*? ☐ ☒
- (3) recommend securities (or other investment products) to advisory *clients* in which you or any *related person* has some other proprietary (ownership) interest (other than those mentioned in Items 8.A.(1) or (2))? ☐ ☒

Sales Interest in *Client* Transactions

- B. Do you or any *related person*:

Yes No

- (1) as a broker-dealer or registered representative of a broker-dealer, execute securities trades for brokerage customers in which advisory *client* securities are sold to or bought from the brokerage customer (agency cross transactions)? ☐ ☒
- (2) recommend to advisory *clients*, or act as a purchaser representative for advisory *clients* with respect to, the purchase of securities for which you or any *related person* serves as underwriter or general or managing partner? ☒ ☐
- (3) recommend purchase or sale of securities to advisory *clients* for which you or any *related person* has any other sales interest (other than the receipt of sales commissions as a broker or registered representative of a broker-dealer)? ☒ ☐

Investment or Brokerage Discretion

- C. Do you or any *related person* have *discretionary authority* to determine the:

Yes No

- (1) securities to be bought or sold for a *client's* account? ☒ ☐
- (2) amount of securities to be bought or sold for a *client's* account? ☒ ☐
- (3) broker or dealer to be used for a purchase or sale of securities for a *client's* account? ☒ ☐
- (4) commission rates to be paid to a broker or dealer for a *client's* securities transactions? ☒ ☐

- D. If you answer "yes" to C.(3) above, are any of the brokers or dealers *related persons*? ☒ ☐

- E. Do you or any *related person* recommend brokers or dealers to *clients*? ☒ ☐

- F. If you answer "yes" to E. above, are any of the brokers or dealers *related persons*? ☒ ☐

- G. (1) Do you or any *related person* receive research or other products or services other than execution from a broker-dealer or a third party ("soft dollar benefits") in connection with *client* securities transactions? ☒ ☐
- (2) If "yes" to G.(1) above, are all the "soft dollar benefits" you or any *related persons* receive eligible "research or brokerage services" under section 28(e) of the Securities Exchange Act of 1934? ☒ ☐

- H. (1) Do you or any *related person*, directly or indirectly, compensate any *person* that is not an *employee* for *client* referrals? ☐ ☒
- (2) Do you or any *related person*, directly or indirectly, provide any *employee* compensation that is specifically related to obtaining *clients* for the firm (cash or non-cash compensation in addition to the *employee's* regular salary)? ☒ ☐

- I. Do you or any *related person*, including any *employee*, directly or indirectly, receive compensation from any *person* (other than you or any *related person*) for *client* referrals? ☐ ☒

In your response to Item 8.I., do not include the regular salary you pay to an *employee*.

In responding to Items 8 H. and 8.I., consider all cash and non-cash compensation that you or a *related person* gave to (in answering Item 8.H.) or received from (in answering Item 8.I.) any *person* in exchange for *client* referrals, including any bonus that is based, at least in part, on the number or amount of *client*

Item 9 Custody

In this Item, we ask you whether you or a *related person* has *custody of client* (other than *clients* that are investment companies registered under the Investment Company Act of 1940) assets and about your custodial practices.

- | | | | | |
|----|-----|--|-----------------------|----------------------------------|
| A. | (1) | Do you have <i>custody of any advisory clients</i> : | Yes | No |
| | (a) | cash or bank accounts? | <input type="radio"/> | <input checked="" type="radio"/> |
| | (b) | securities? | <input type="radio"/> | <input checked="" type="radio"/> |

If you are registering or registered with the SEC, answer "No" to Item 9.A.(1)(a) and (b) if you have custody solely because (i) you deduct your advisory fees directly from your clients' accounts, or (ii) a related person has custody of client assets in connection with advisory services you provide to clients, but you have overcome the presumption that you are not operationally independent (pursuant to Advisers Act rule 206(4)-2(d)(5)) from the related person.

- (2) If you checked "yes" to Item 9.A.(1)(a) or (b), what is the approximate amount of *client* funds and securities and total number of *clients* for which you have custody:

U.S. Dollar Amount	Total Number of <i>Clients</i>
(a) \$	(b)

If you are registering or registered with the SEC and you have custody solely because you deduct your advisory fees directly from your clients' accounts, do not include the amount of those assets and the number of those clients in your response to Item 9.A.(2). If your related person has custody of client assets in connection with advisory services you provide to clients, do not include the amount of those assets and number of those clients in your response to 9.A.(2). Instead, include that information in your response to Item 9.B.(2).

- | | | | | |
|----|-----|--|-----------------------|----------------------------------|
| B. | (1) | In connection with advisory services you provide to <i>clients</i> , do any of your <i>related persons</i> have custody of any of your advisory <i>clients</i> : | Yes | No |
| | (a) | cash or bank accounts? | <input type="radio"/> | <input checked="" type="radio"/> |
| | (b) | securities? | <input type="radio"/> | <input checked="" type="radio"/> |

You are required to answer this item regardless of how you answered Item 9.A.(1)(a) or (b).

- (2) If you checked "yes" to Item 9.B.(1)(a) or (b), what is the approximate amount of *client* funds and securities and total number of *clients* for which your *related persons* have custody:

U.S. Dollar Amount	Total Number of <i>Clients</i>
(a) \$	(b)

- C. If you or your *related persons* have custody of *client* funds or securities in connection with advisory services you provide to *clients*, check all the following that apply:
- | | |
|---|--------------------------|
| (1) A qualified custodian(s) sends account statements at least quarterly to the investors in the pooled investment vehicle(s) you manage. | <input type="checkbox"/> |
| (2) An <i>independent public accountant</i> audits annually the pooled investment vehicle(s) that you manage and the audited financial statements are distributed to the investors in the pools. | <input type="checkbox"/> |
| (3) An <i>independent public accountant</i> conducts an annual surprise examination of <i>client</i> funds and securities. | <input type="checkbox"/> |
| (4) An <i>independent public accountant</i> prepares an internal control report with respect to custodial services when you or your <i>related persons</i> are qualified custodians for <i>client</i> funds and securities. | <input type="checkbox"/> |

If you checked Item 9.C.(2), C.(3) or C.(4), list in Section 9.C. of Schedule D the accountants that are engaged to perform the audit or examination or prepare an internal control report. (If you checked Item 9.C.(2), you do not have to list auditor information in Section 9.C. of Schedule D if you already provided this information with respect to the private funds you advise in Section 7.B.(1) of Schedule D).

- | | | | |
|----|--|-----------------------|----------------------------------|
| D. | Do you or your <i>related person(s)</i> act as qualified custodians for your <i>clients</i> in connection with advisory services you provide to <i>clients</i> ? | Yes | No |
| | (1) you act as a qualified custodian | <input type="radio"/> | <input checked="" type="radio"/> |
| | (2) your <i>related person(s)</i> act as qualified custodian(s) | <input type="radio"/> | <input checked="" type="radio"/> |

If you checked "yes" to Item 9.D.(2), all related persons that act as qualified custodians (other than any mutual fund transfer agent pursuant to rule 206(4)-2(b)(1)) must be identified in Section 7.A. of Schedule D, regardless of whether you have determined the related person to be operationally independent under rule 206(4)-2 of the Advisers Act.

- E. If you are filing your *annual updating amendment* and you were subject to a surprise examination by an *independent public accountant* during your last fiscal year, provide the date (MM/YYYY) the examination commenced:

- F. If you or your *related persons* have custody of *client* funds or securities, how many *persons*, including, but not limited to, you and your *related persons*, act as qualified custodians for your *clients* in connection with advisory services you provide to *clients*?

SECTION 9.C. Independent Public Accountant

No Information Filed

Item 10. Control Persons

In this Item, we ask you to identify every *person* that, directly or indirectly, *controls* you. If you are filing an *umbrella registration*, the information in Item 10 should be provided for the *filing adviser* only.

If you are submitting an initial application or report, you must complete Schedule A and Schedule B. Schedule A asks for information about your direct owners and executive officers. Schedule B asks for information about your indirect owners. If this is an amendment and you are updating information you reported on either Schedule A or Schedule B (or both) that you filed with your initial application or report, you must complete Schedule C.

Yes No

- A. Does any *person* not named in Item 1.A. or Schedules A, B, or C, directly or indirectly, *control* your management or policies?

☐ ☒

If yes, complete Section 10.A. of Schedule D.

- B. If any *person* named in Schedules A, B, or C or in Section 10.A. of Schedule D is a public reporting company under Sections 12 or 15(d) of the Securities Exchange Act of 1934, please complete Section 10.B. of Schedule D.

SECTION 10.A. Control Persons

No Information Filed

SECTION 10.B. Control Person Public Reporting Companies

No Information Filed

Item 11. Disclosure Information

In this Item, we ask for information about your disciplinary history and the disciplinary history of all your *advisory affiliates*. We use this information to determine whether to grant your application for registration, to decide whether to revoke your registration or to place limitations on your activities as an investment adviser, and to identify potential problem areas to focus on during our on-site examinations. One event may result in "yes" answers to more than one of the questions below. In accordance with General Instruction 5 to Form ADV, "you" and "your" include the *filing adviser* and all *relying advisers* under an *umbrella registration*.

Your *advisory affiliates* are: (1) all of your current *employees* (other than *employees* performing only clerical, administrative, support or similar functions); (2) all of your officers, partners, or directors (or any *person* performing similar functions); and (3) all *persons* directly or indirectly *controlling* you or *controlled* by you. If you are a "separately identifiable department or division" (SID) of a bank, see the Glossary of Terms to determine who your *advisory affiliates* are.

If you are registered or registering with the SEC or if you are an exempt reporting adviser, you may limit your disclosure of any event listed in Item 11 to ten years following the date of the event. If you are registered or registering with a state, you must respond to the questions as posed; you may, therefore, limit your disclosure to ten years following the date of an event only in responding to Items 11.A.(1), 11.A.(2), 11.B.(1), 11.B.(2), 11.D.(4), and 11.H.(1)(a). For purposes of calculating this ten-year period, the date of an event is the date the final order, judgment, or decree was entered, or the date any rights of appeal from preliminary orders, judgments, or decrees lapsed.

You must complete the appropriate Disclosure Reporting Page ("DRP") for "yes" answers to the questions in this Item 11.

Yes No

- Do any of the events below involve you or any of your *supervised persons*?

☐ ☒

For "yes" answers to the following questions, complete a Criminal Action DRP:

- A. In the past ten years, have you or any *advisory affiliate*:

Yes No

- (1) been convicted of or pled guilty or nolo contendere ("no contest") in a domestic, foreign, or military court to any *felony*?
- (2) been *charged* with any *felony*?

☐ ☒☐ ☒

If you are registered or registering with the SEC, or if you are reporting as an exempt reporting adviser, you may limit your response to Item 11.A.(2) to charges that are currently pending.

- B. In the past ten years, have you or any *advisory affiliate*:

- (1) been convicted of or pled guilty or nolo contendere ("no contest") in a domestic, foreign, or military court to a *misdemeanor* involving: investments or an *investment-related* business, or any fraud, false statements, or omissions, wrongful taking of property, bribery, perjury, forgery, counterfeiting, extortion, or a conspiracy to commit any of these offenses?
- (2) been *charged* with a *misdemeanor* listed in Item 11.B.(1)?

☐ ☒☐ ☒☐ ☒

If you are registered or registering with the SEC, or if you are reporting as an exempt reporting adviser, you may limit your response to Item 11.B.(2) to charges that are currently pending.

For "yes" answers to the following questions, complete a Regulatory Action DRP:

- | | Yes | No |
|--|-----------------------|-----------------------|
| C. Has the SEC or the Commodity Futures Trading Commission (CFTC) ever: | | |
| (1) found you or any advisory affiliate to have made a false statement or omission? | <input type="radio"/> | <input type="radio"/> |
| (2) found you or any advisory affiliate to have been involved in a violation of SEC or CFTC regulations or statutes? | <input type="radio"/> | <input type="radio"/> |
| (3) found you or any advisory affiliate to have been a cause of an investment-related business having its authorization to do business denied, suspended, revoked, or restricted? | <input type="radio"/> | <input type="radio"/> |
| (4) entered an order against you or any advisory affiliate in connection with investment-related activity? | <input type="radio"/> | <input type="radio"/> |
| (5) imposed a civil money penalty on you or any advisory affiliate, or ordered you or any advisory affiliate to cease and desist from any activity? | <input type="radio"/> | <input type="radio"/> |
| D. Has any other federal regulatory agency, any state regulatory agency, or any foreign financial regulatory authority: | | |
| (1) ever found you or any advisory affiliate to have made a false statement or omission, or been dishonest, unfair, or unethical? | <input type="radio"/> | <input type="radio"/> |
| (2) ever found you or any advisory affiliate to have been involved in a violation of investment-related regulations or statutes? | <input type="radio"/> | <input type="radio"/> |
| (3) ever found you or any advisory affiliate to have been a cause of an investment-related business having its authorization to do business denied, suspended, revoked, or restricted? | <input type="radio"/> | <input type="radio"/> |
| (4) in the past ten years, entered an order against you or any advisory affiliate in connection with an investment-related activity? | <input type="radio"/> | <input type="radio"/> |
| (5) ever denied, suspended, or revoked your or any advisory affiliate's registration or license, or otherwise prevented you or any advisory affiliate, by order, from associating with an investment-related business or restricted your or any advisory affiliate's activity? | <input type="radio"/> | <input type="radio"/> |
| E. Has any self-regulatory organization or commodities exchange ever: | | |
| (1) found you or any advisory affiliate to have made a false statement or omission? | <input type="radio"/> | <input type="radio"/> |
| (2) found you or any advisory affiliate to have been involved in a violation of its rules (other than a violation designated as a "minor rule violation" under a plan approved by the SEC)? | <input type="radio"/> | <input type="radio"/> |
| (3) found you or any advisory affiliate to have been the cause of an investment-related business having its authorization to do business denied, suspended, revoked, or restricted? | <input type="radio"/> | <input type="radio"/> |
| (4) disciplined you or any advisory affiliate by expelling or suspending you or the advisory affiliate from membership, barring or suspending you or the advisory affiliate from association with other members, or otherwise restricting your or the advisory affiliate's activities? | <input type="radio"/> | <input type="radio"/> |
| F. Has an authorization to act as an attorney, accountant, or federal contractor granted to you or any advisory affiliate ever been revoked or suspended? | <input type="radio"/> | <input type="radio"/> |
| G. Are you or any advisory affiliate now the subject of any regulatory proceeding that could result in a "yes" answer to any part of Item 11.C., 11.D., or 11.E.? | <input type="radio"/> | <input type="radio"/> |

For "yes" answers to the following questions, complete a Civil Judicial Action DRP:

- | | Yes | No |
|--|-----------------------|-----------------------|
| H. (1) Has any domestic or foreign court: | | |
| (a) in the past ten years, enjoined you or any advisory affiliate in connection with any investment-related activity? | <input type="radio"/> | <input type="radio"/> |
| (b) ever found that you or any advisory affiliate were involved in a violation of investment-related statutes or regulations? | <input type="radio"/> | <input type="radio"/> |
| (c) ever dismissed, pursuant to a settlement agreement, an investment-related civil action brought against you or any advisory affiliate by a state or foreign financial regulatory authority? | <input type="radio"/> | <input type="radio"/> |
| (2) Are you or any advisory affiliate now the subject of any civil proceeding that could result in a "yes" answer to any part of Item 11.H.(1)? | <input type="radio"/> | <input type="radio"/> |

Item 12 Small Businesses

The SEC is required by the Regulatory Flexibility Act to consider the effect of its regulations on small entities. In order to do this, we need to determine whether you meet the definition of "small business" or "small organization" under rule 0-7.

Answer this Item 12 only if you are registered or registering with the SEC and you indicated in response to Item 5.F.(2)(c) that you have regulatory assets under management of less than \$25 million. You are not required to answer this Item 12 if you are filing for initial registration as a state adviser, amending a current state registration, or switching from SEC to state registration.

For purposes of this Item 12 only:

- Total Assets refers to the total assets of a firm, rather than the assets managed on behalf of clients. In determining your or another person's total assets, you may use the total assets shown on a current balance sheet (but use total assets reported on a consolidated balance sheet with subsidiaries included, if that amount is larger).
- Control means the power to direct or cause the direction of the management or policies of a person, whether through ownership of securities, by contract, or otherwise. Any person that directly or indirectly has the right to vote 25 percent or more of the voting securities, or is entitled to 25 percent or more of the profits, of another person is presumed to control the other person.

- | | Yes | No |
|--|-----------------------|-----------------------|
| A. Did you have total assets of \$5 million or more on the last day of your most recent fiscal year? | <input type="radio"/> | <input type="radio"/> |

If "yes," you do not need to answer Items 12.B. and 12.C.

B. Do you:

- (1) *control* another investment adviser that had regulatory assets under management (calculated in response to Item 5.F.(2)(c) of Form ADV) of \$25 million or more on the last day of its most recent fiscal year? ☐ ☐
- (2) *control* another *person* (other than a natural person) that had total assets of \$5 million or more on the last day of its most recent fiscal year? ☐ ☐

C. Are you:

- (1) *controlled* by or under common *control* with another investment adviser that had regulatory assets under management (calculated in response to Item 5.F.(2)(c) of Form ADV) of \$25 million or more on the last day of its most recent fiscal year? ☐ ☐
- (2) *controlled* by or under common *control* with another *person* (other than a natural person) that had total assets of \$5 million or more on the last day of its most recent fiscal year? ☐ ☐

Schedule A

Direct Owners and Executive Officers

- Complete Schedule A only if you are submitting an initial application or report. Schedule A asks for information about your direct owners and executive officers. Use Schedule C to amend this information.
- Direct Owners and Executive Officers. List below the names of:
 - each Chief Executive Officer, Chief Financial Officer, Chief Operations Officer, Chief Legal Officer, Chief Compliance Officer (Chief Compliance Officer is required if you are registered or applying for registration and cannot be more than one individual), director, and any other individuals with similar status or functions;
 - if you are organized as a corporation, each shareholder that is a direct owner of 5% or more of a class of your voting securities, unless you are a public reporting company (a company subject to Section 12 or 15(d) of the Exchange Act);
Direct owners include any *person* that owns, beneficially owns, has the right to vote, or has the power to sell or direct the sale of, 5% or more of a class of your voting securities. For purposes of this Schedule, a *person* beneficially owns any securities: (i) owned by his/her child, stepchild, grandchild, parent, stepparent, grandparent, spouse, sibling, mother-in-law, father-in-law, son-in-law, daughter-in-law, brother-in-law, or sister-in-law, sharing the same residence; or (ii) that he/she has the right to acquire, within 60 days, through the exercise of any option, warrant, or right to purchase the security.
 - if you are organized as a partnership, all general partners and those limited and special partners that have the right to receive upon dissolution, or have contributed, 5% or more of your capital;
 - in the case of a trust that directly owns 5% or more of a class of your voting securities, or that has the right to receive upon dissolution, or has contributed, 5% or more of your capital, the trust and each trustee; and
 - if you are organized as a limited liability company ("LLC"), (i) those members that have the right to receive upon dissolution, or have contributed, 5% or more of your capital, and (ii) if managed by elected managers, all elected managers.
- Do you have any indirect owners to be reported on Schedule B? ☐ Yes ☒ No
- In the DE/FE/I column below, enter "DE" if the owner is a domestic entity, "FE" if the owner is an entity incorporated or domiciled in a foreign country, or "I" if the owner or executive officer is an individual.
- Complete the Title or Status column by entering board/management titles; status as partner, trustee, sole proprietor, elected manager, shareholder, or member; and for shareholders or members, the class of securities owned (if more than one is issued).
- Ownership codes are: NA - less than 5% B - 10% but less than 25% D - 50% but less than 75%
A - 5% but less than 10% C - 25% but less than 50% E - 75% or more
- (a) In the *Control Person* column, enter "Yes" if the *person* has *control* as defined in the Glossary of Terms to Form ADV, and enter "No" if the *person* does not have *control*. Note that under this definition, most executive officers and all 25% owners, general partners, elected managers, and trustees are *control persons*.
(b) In the PR column, enter "PR" if the owner is a public reporting company under Sections 12 or 15(d) of the Exchange Act.
(c) Complete each column.

FULL LEGAL NAME (Individuals: Last Name, First Name, Middle Name)	DE/FE/I	Title or Status	Date Title or Status Acquired MM/YYYY	Ownership Code	Control Person	PR	CRD No. If None: S.S. No. and Date of Birth, IRS Tax No. or Employer ID No.
VANGUARD ADMIRAL FUNDS	DE	STOCKHOLDER	12/1992	NA	N	N	
VANGUARD OHIO TAX-FREE FUNDS	DE	STOCKHOLDER	06/1990	NA	N	N	
VANGUARD VALLEY FORGE FUNDS	DE	STOCKHOLDER	11/1992	NA	N	N	
VANGUARD TAX-MANAGED FUNDS	DE	STOCKHOLDER	09/1994	NA	N	N	
VANGUARD WHITEHALL FUNDS	DE	STOCKHOLDER	02/1996	NA	N	N	
VANGUARD HORIZON FUNDS	DE	STOCKHOLDER	06/1995	NA	N	N	
VANGUARD SCOTTSDALE FUNDS	DE	STOCKHOLDER	11/2009	NA	N	N	
VANGUARD NEW JERSEY TAX-FREE FUNDS	DE	STOCKHOLDER	09/1987	NA	N	N	
VANGUARD CALIFORNIA TAX-FREE FUNDS	DE	STOCKHOLDER	10/1985	NA	N	N	
VANGUARD NEW YORK TAX-FREE FUNDS	DE	STOCKHOLDER	01/1986	NA	N	N	
VANGUARD PENNSYLVANIA TAX-FREE FUNDS	DE	STOCKHOLDER	01/1986	NA	N	N	
VANGUARD CONVERTIBLE SECURITIES FUND	DE	STOCKHOLDER	04/1986	NA	N	N	
VANGUARD QUANTITATIVE FUNDS	DE	STOCKHOLDER	08/1986	NA	N	N	
VANGUARD VARIABLE INSURANCE	DE	STOCKHOLDER	04/1991	NA	N	N	

FUNDS						
VANGUARD MASSACHUSETTS TAX-EXEMPT FUNDS	DE	STOCKHOLDER	07/1992	NA	N	N
VANGUARD WELLINGTON FUND	DE	STOCKHOLDER	05/1975	NA	N	N
VANGUARD WINDSOR FUNDS	DE	STOCKHOLDER	05/1975	NA	N	N
VANGUARD WORLD FUND	DE	STOCKHOLDER	05/1975	NA	N	N
VANGUARD TRUSTEES' EQUITY FUND	DE	STOCKHOLDER	02/1980	NA	N	N
VANGUARD EXPLORER FUND	DE	STOCKHOLDER	12/1975	NA	N	N
VANGUARD MORGAN GROWTH FUND	DE	STOCKHOLDER	05/1975	NA	N	N
VANGUARD WELLESLEY INCOME FUND	DE	STOCKHOLDER	05/1975	NA	N	N
VANGUARD INDEX FUNDS	DE	STOCKHOLDER	08/1976	C	Y	N
VANGUARD BOND INDEX FUNDS	DE	STOCKHOLDER	12/1986	B	N	N
VANGUARD FENWAY FUNDS	DE	STOCKHOLDER	11/1987	NA	N	N
VANGUARD MALVERN FUNDS	DE	STOCKHOLDER	11/1988	NA	N	N
VANGUARD INTERNATIONAL EQUITY INDEX FUNDS	DE	STOCKHOLDER	04/1990	NA	N	N
VANGUARD FIXED INCOME SECURITIES FUNDS	DE	STOCKHOLDER	05/1975	NA	N	N
VANGUARD MONEY MARKET RESERVES	DE	STOCKHOLDER	05/1975	NA	N	N
VANGUARD MUNICIPAL BOND FUNDS	DE	STOCKHOLDER	09/1977	NA	N	N
VANGUARD SPECIALIZED FUNDS	DE	STOCKHOLDER	10/1983	NA	N	N
VANGUARD CHESTER FUNDS	DE	STOCKHOLDER	08/1984	NA	N	N
BUCKLEY, MORTIMER, JOSEPH	I	CHAIRMAN OF THE BOARD, CHIEF EXECUTIVE OFFICER, AND PRESIDENT	01/2019	NA	Y	N
PEROLD, ANDRE, FRANCOIS	I	DIRECTOR	12/2004	NA	Y	N
GUTMANN, AMY	I	DIRECTOR	06/2006	NA	Y	N
VANGUARD MONTGOMERY FUNDS	DE	STOCKHOLDER	11/2007	NA	N	N
FULLWOOD, EMERSON, U	I	DIRECTOR	01/2008	NA	Y	N
VOLANAKIS, PETER, FREDERICK	I	DIRECTOR	12/2008	NA	Y	N
NORRIS, JAMES, MAURICE	I	MANAGING DIRECTOR	03/2009	NA	Y	N
LOUGHREY, FRANCIS, JOSEPH	I	DIRECTOR	10/2009	NA	Y	N
VANGUARD STAR FUNDS	DE	STOCKHOLDER	03/2009	A	N	N
VANGUARD CHARLOTTE FUNDS	DE	STOCKHOLDER	10/2011	NA	N	N
KING, MARTHA, GEIGER	I	MANAGING DIRECTOR	03/2012	NA	Y	N
MCISAAC, CHRISTOPHER, DAVIS	I	MANAGING DIRECTOR	03/2012	NA	Y	N
MALPASS, SCOTT, CHARLES	I	DIRECTOR	03/2012	NA	Y	N
LOUGHRIDGE, MARK	I	DIRECTOR	03/2012	NA	Y	N
MARCANTE, JOHN, THOMAS	I	MANAGING DIRECTOR AND CHIEF INFORMATION OFFICER	03/2013	NA	Y	N
RAMPULLA, THOMAS, MARK	I	MANAGING DIRECTOR	07/2015	NA	Y	N
RISI, KARIN, ANN	I	MANAGING DIRECTOR	07/2015	NA	Y	N
HOUSTON, SARAH, LIANE	I	CHIEF AUDIT EXECUTIVE	07/2015	NA	Y	N
ROLLINGS, MICHAEL, THOMAS	I	MANAGING DIRECTOR AND CHIEF FINANCIAL OFFICER	06/2016	NA	Y	N
ROBINSON, ANNE, ELIZABETH	I	GENERAL COUNSEL, MANAGING DIRECTOR, AND SECRETARY	09/2016	NA	Y	N
JAMES, JOHN, MARK	I	MANAGING DIRECTOR	12/2016	NA	Y	N
MULLIGAN, DEANNA, MARIE	I	DIRECTOR	07/2017	NA	Y	N
RASKIN, SARAH, BLOOM	I	DIRECTOR	07/2017	NA	Y	N
DAVIS, GREGORY	I	MANAGING DIRECTOR AND CHIEF INVESTMENT OFFICER	07/2017	NA	Y	N
VANGUARD INSTITUTIONAL INDEX FUNDS	DE	STOCKHOLDER	02/2018	A	N	N
SCHADL, JOHN	I	CHIEF COMPLIANCE OFFICER	03/2019	NA	Y	N
BRENNAN, JOSEPH, PATRICK	I	MANAGING DIRECTOR AND CHIEF RISK OFFICER	09/2018	NA	Y	N

Schedule B

Indirect Owners

1. Complete Schedule B only if you are submitting an initial application or report. Schedule B asks for information about your indirect owners; you must first complete Schedule A, which asks for information about your direct owners. Use Schedule C to amend this information
2. Indirect Owners With respect to each owner listed on Schedule A (except individual owners), list below

- (a) in the case of an owner that is a corporation, each of its shareholders that beneficially owns; has the right to vote, or has the power to sell or direct the sale of, 25% or more of a class of a voting security of that corporation;

For purposes of this Schedule, a *person* beneficially owns any securities: (i) owned by his/her child, stepchild, grandchild, parent, stepparent, grandparent, spouse, sibling, mother-in-law, father-in-law, son-in-law, daughter-in-law, brother-in-law, or sister-in-law, sharing the same residence; or (ii) that he/she has the right to acquire, within 60 days, through the exercise of any option, warrant, or right to purchase the security.

- (b) in the case of an owner that is a partnership, all general partners and those limited and special partners that have the right to receive upon dissolution, or have contributed, 25% or more of the partnership's capital;
- (c) in the case of an owner that is a trust, the trust and each trustee; and
- (d) in the case of an owner that is a limited liability company ("LLC"), (i) those members that have the right to receive upon dissolution, or have contributed, 25% or more of the LLC's capital, and (ii) if managed by elected managers, all elected managers.

3. Continue up the chain of ownership listing all 25% owners at each level. Once a public reporting company (a company subject to Sections 12 or 15(d) of the Exchange Act) is reached, no further ownership information need be given.
4. In the DE/FE/I column below, enter "DE" if the owner is a domestic entity, "FE" if the owner is an entity incorporated or domiciled in a foreign country, or "I" if the owner is an individual.
5. Complete the Status column by entering the owner's status as partner, trustee, elected manager, shareholder, or member; and for shareholders or members, the class of securities owned (if more than one is issued).
6. Ownership codes are: C - 25% but less than 50% E - 75% or more
D - 50% but less than 75% F - Other (general partner, trustee, or elected manager)
7. (a) In the *Control Person* column, enter "Yes" if the *person* has *control* as defined in the Glossary of Terms to Form ADV, and enter "No" if the *person* does not have *control*. Note that under this definition, most executive officers and all 25% owners, general partners, elected managers, and trustees are *control persons*.
- (b) In the PR column, enter "PR" if the owner is a public reporting company under Sections 12 or 15(d) of the Exchange Act.
- (c) Complete each column.

No Information Filed

Schedule D - Miscellaneous

You may use the space below to explain a response to an Item or to provide any other information.

Please note that two individuals in Schedule A, Amy Gutmann and Mark Loughridge, do not have middle names.

Schedule R

No Information Filed

DRP Pages

CRIMINAL DISCLOSURE REPORTING PAGE (ADV)

No Information Filed

REGULATORY ACTION DISCLOSURE REPORTING PAGE (ADV)

GENERAL INSTRUCTIONS

This Disclosure Reporting Page (DRP ADV) is an ☐ INITIAL **OR** ☒ AMENDED response used to report details for affirmative responses to Items 11.C., 11.D., 11.E., 11.F. or 11.G. of Form ADV.

Regulatory Action

Check item(s) being responded to:

- | | | | | |
|----------------------------------|---|----------------------------------|----------------------------------|----------------------------------|
| <input type="checkbox"/> 11.C(1) | <input type="checkbox"/> 11.C(2) | <input type="checkbox"/> 11.C(3) | <input type="checkbox"/> 11.C(4) | <input type="checkbox"/> 11.C(5) |
| <input type="checkbox"/> 11.D(1) | <input type="checkbox"/> 11.D(2) | <input type="checkbox"/> 11.D(3) | <input type="checkbox"/> 11.D(4) | <input type="checkbox"/> 11.D(5) |
| <input type="checkbox"/> 11.E(1) | <input checked="" type="checkbox"/> 11.E(2) | <input type="checkbox"/> 11.E(3) | <input type="checkbox"/> 11.E(4) | |
| <input type="checkbox"/> 11.F. | <input type="checkbox"/> 11.G. | | | |

Use a separate DRP for each event or *proceeding*. The same event or *proceeding* may be reported for more than one *person* or entity using one DRP. File with a completed Execution Page

One event may result in more than one affirmative answer to Items 11.C., 11.D., 11.E., 11.F. or 11.G. Use only one DRP to report details related to the same event. If an event gives rise to actions by more than one regulator, provide details for each action on a separate DRP.

PART I

A. The *person(s)* or entity(ies) for whom this *DRP* is being filed is (are):

- ☐ You (the advisory firm)
- ☐ You and one or more of your *advisory affiliates*
- ☒ One or more of your *advisory affiliates*

If this *DRP* is being filed for an *advisory affiliate*, give the full name of the *advisory affiliate* below (for individuals, Last name, First name, Middle name). If the *advisory affiliate* has a *CRD* number, provide that number. If not, indicate "non-registered" by checking the appropriate box.

ADV *DRP* - ADVISORY AFFILIATE***CRD***

Number:

This *advisory affiliate* is ☒ a Firm ☐ an IndividualRegistered: ☒ Yes ☐ No

Name: VANGUARD MARKETING
CORPORATION
(For individuals, Last, First,
Middle)

- ☐ This *DRP* should be removed from the *ADV* record because the *advisory affiliate(s)* is no longer associated with the adviser.
- ☐ This *DRP* should be removed from the *ADV* record because: (1) the event or *proceeding* occurred more than ten years ago or (2) the adviser is registered or applying for registration with the SEC or reporting as an *exempt reporting adviser* with the SEC and the event was resolved in the adviser's or *advisory affiliate's* favor.

If you are registered or registering with a *state securities authority*, you may remove a *DRP* for an event you reported only in response to Item 11.D(4), and only if that event occurred more than ten years ago. If you are registered or registering with the SEC, you may remove a *DRP* for any event listed in Item 11 that occurred more than ten years ago.

- ☐ This *DRP* should be removed from the *ADV* record because it was filed in error, such as due to a clerical or data-entry mistake. Explain the circumstances:

B. If the *advisory affiliate* is registered through the *IARD* system or *CRD* system, has the *advisory affiliate* submitted a *DRP* (with Form *ADV*, *BD* or *U-4*) to the *IARD* or *CRD* for the event? If the answer is "Yes," no other information on this *DRP* must be provided.

☒ Yes ☐ No

NOTE: The completion of this form does not relieve the *advisory affiliate* of its obligation to update its *IARD* or *CRD* records.

PART II

1. Regulatory Action initiated by:

☐ SEC ☐ Other Federal ☐ State ☒ SRO ☐ Foreign

(Full name of regulator, foreign financial regulatory authority, federal, state, or SRO)

2. Principal Sanction:

Other Sanctions:

3. Date Initiated (MM/DD/YYYY):

☐ Exact ☐ Explanation

If not exact, provide explanation:

4. Docket/Case Number:

5. *Advisory Affiliate* Employing Firm when activity occurred which led to the regulatory action (if applicable):

6. Principal Product Type:

Other Product Types:

7. Describe the allegations related to this regulatory action (your response must fit within the space provided).

8. Current Status? ☐ Pending ☐ On Appeal ☐ Final

9. If on appeal, regulatory action appealed to (SEC, SRO, Federal or State Court) and Date Appeal Filed:

If Final or On Appeal, complete all items below. For Pending Actions, complete Item 13 only.

10. How was matter resolved:

11. Resolution Date (MM/DD/YYYY):

☐ Exact ☐ Explanation

If not exact, provide explanation:

12. Resolution Detail:

A. Were any of the following Sanctions *Ordered* (check all appropriate items)?

☐ Monetary/Fine Amount: \$

☐ Revocation/Expulsion/Denial

☐ Censure

☐ Bar

☐ Disgorgement/Restitution

☐ Cease and Desist/Injunction

☐ Suspension

B. Other Sanctions *Ordered*:

Sanction detail: if suspended, *enjoined* or barred, provide duration including start date and capacities affected (General Securities Principal, Financial Operations Principal, etc.). If requalification by exam/retraining was a condition of the sanction, provide length of time given to requalify/retrain, type of exam required and whether condition has been satisfied. If disposition resulted in a fine, penalty, restitution, disgorgement or monetary compensation, provide total amount, portion levied against you or an *advisory affiliate*, date paid and if any portion of penalty was waived:

13. Provide a brief summary of details related to the action status and (or) disposition and include relevant terms, conditions and dates (your response must fit within the space provided).

GENERAL INSTRUCTIONS

This Disclosure Reporting Page (DRP ADV) is an ☐ INITIAL **OR** ☒ AMENDED response used to report details for affirmative responses to Items 11.C., 11.D., 11.E., 11.F. or 11.G. of Form ADV.

Regulatory Action

Check item(s) being responded to:

☐ 11.C(1)

☐ 11.C(2)

☐ 11.C(3)

☐ 11.C(4)

☐ 11.C(5)

☐ 11.D(1)

☒ 11.D(2)

☐ 11.D(3)

☒ 11.D(4)

☐ 11.D(5)

☐ 11.E(1)

☐ 11.E(2)

☐ 11.E(3)

☐ 11.E(4)

☐ 11.F.

☐ 11.G.

Use a separate DRP for each event or *proceeding*. The same event or *proceeding* may be reported for more than one *person* or entity using one DRP. File with a completed Execution Page.

One event may result in more than one affirmative answer to Items 11.C., 11.D., 11.E., 11.F. or 11.G. Use only one DRP to report details related to the same event. If an event gives rise to actions by more than one regulator, provide details for each action on a separate DRP.

PART I

A. The *person(s)* or entity(ies) for whom this DRP is being filed is (are):

☐ You (the advisory firm)

☐ You and one or more of your *advisory affiliates*

☒ One or more of your *advisory affiliates*

If this DRP is being filed for an *advisory affiliate*, give the full name of the *advisory affiliate* below (for individuals, Last name, First name, Middle name). If the *advisory affiliate* has a CRD number, provide that number. If not, indicate "non-registered" by checking the appropriate box.

ADV DRP - ADVISORY AFFILIATE

CRD

Number

Registered: ☒ Yes ☐ No

Name: VANGUARD ADVISERS INC
(For individuals, Last, First, Middle)

This *advisory affiliate* is ☒ a Firm ☐ an Individual

- ☐ This DRP should be removed from the ADV record because the *advisory affiliate(s)* is no longer associated with the adviser.
- ☐ This DRP should be removed from the ADV record because: (1) the event or *proceeding* occurred more than ten years ago or (2) the adviser is registered or applying for registration with the SEC or reporting as an *exempt reporting adviser* with the SEC and the event was resolved in the adviser's or *advisory affiliate's* favor.

If you are registered or registering with a *state securities authority*, you may remove a DRP for an event you reported only in response to Item 11.D(4), and only if that event occurred more than ten years ago. If you are registered or registering with the SEC, you may remove a DRP for any event listed in Item 11 that occurred more than ten years ago.

- ☐ This DRP should be removed from the ADV record because it was filed in error, such as due to a clerical or data-entry mistake. Explain the circumstances:

- B. If the *advisory affiliate* is registered through the IARD system or CRD system, has the *advisory affiliate* submitted a DRP (with Form ADV, BD or U-4) to the IARD or CRD for the event? If the answer is "Yes," no other information on this DRP must be provided.

☒ Yes ☐ No

NOTE: The completion of this form does not relieve the *advisory affiliate* of its obligation to update its IARD or CRD records.

PART II

1. Regulatory Action initiated by:

☐ SEC ☐ Other Federal ☐ State ☐ SRO ☐ Foreign

(Full name of regulator, *foreign financial regulatory authority*, federal, state, or SRO)

2. Principal Sanction:

Other Sanctions:

3. Date Initiated (MM/DD/YYYY):

☐ Exact ☐ Explanation

If not exact, provide explanation:

4. Docket/Case Number:

5. *Advisory Affiliate* Employing Firm when activity occurred which led to the regulatory action (if applicable):

6. Principal Product Type:

Other Product Types:

7. Describe the allegations related to this regulatory action (your response must fit within the space provided):

8. Current Status? ☐ Pending ☐ On Appeal ☐ Final

9. If on appeal, regulatory action appealed to (SEC, SRO, Federal or State Court) and Date Appeal Filed:

If Final or On Appeal, complete all items below. For Pending Actions, complete Item 13 only.

10. How was matter resolved:

11. Resolution Date (MM/DD/YYYY)

☐ Exact ☐ Explanation

If not exact, provide explanation:

12. Resolution Detail:

- A. Were any of the following Sanctions *Ordered* (check all appropriate items)?

☐ Monetary/Fine Amount: \$

☐ Revocation/Expulsion/Denial

☐ Censure

☐ Bar

☐ Disgorgement/Restitution

☐ Cease and Desist/Injunction

☐ Suspension

- B. Other Sanctions *Ordered*.

Sanction detail. If suspended, *enjoined* or barred, provide duration including start date and capacities affected (General Securities Principal,

Financial Operations Principal, etc.). If requalification by exam/retraining was a condition of the sanction, provide length of time given to requalify/retrain, type of exam required and whether condition has been satisfied. If disposition resulted in a fine, penalty, restitution, disgorgement or monetary compensation, provide total amount, portion levied against you or an *advisory affiliate*, date paid and if any portion of penalty was waived:

13. Provide a brief summary of details related to the action status and (or) disposition and include relevant terms, conditions and dates (your response must fit within the space provided).

CIVIL JUDICIAL ACTION DISCLOSURE REPORTING PAGE (ADV)

No Information Filed

Part 2

Exemption from brochure delivery requirements for SEC-registered advisers

SEC rules exempt SEC-registered advisers from delivering a firm brochure to some kinds of clients. If these exemptions excuse you from delivering a brochure to *all* of your advisory clients, you do not have to prepare a brochure.

Yes No

Are you exempt from delivering a brochure to all of your clients under these rules?

☐ ☒

If no, complete the ADV Part 2 filing below.

Amend, retire or file new brochures:

Execution Pages

DOMESTIC INVESTMENT ADVISER EXECUTION PAGE

You must complete the following Execution Page to Form ADV. This execution page must be signed and attached to your initial submission of Form ADV to the SEC and all amendments.

Appointment of Agent for Service of Process

By signing this Form ADV Execution Page, you, the undersigned adviser, irrevocably appoint the Secretary of State or other legally designated officer, of the state in which you maintain your *principal office and place of business* and any other state in which you are submitting a *notice filing*, as your agents to receive service, and agree that such *persons* may accept service on your behalf, of any notice, subpoena, summons, *order instituting proceedings*, demand for arbitration, or other process or papers, and you further agree that such service may be made by registered or certified mail, in any federal or state action, administrative *proceeding* or arbitration brought against you in any place subject to the jurisdiction of the United States, if the action, *proceeding*, or arbitration (a) arises out of any activity in connection with your investment advisory business that is subject to the jurisdiction of the United States, and (b) is *founded*, directly or indirectly, upon the provisions of: (i) the Securities Act of 1933, the Securities Exchange Act of 1934, the Trust Indenture Act of 1939, the Investment Company Act of 1940, or the Investment Advisers Act of 1940, or any rule or regulation under any of these acts, or (ii) the laws of the state in which you maintain your *principal office and place of business* or of any state in which you are submitting a *notice filing*.

Signature

I, the undersigned, sign this Form ADV on behalf of, and with the authority of, the investment adviser. The investment adviser and I both certify, under penalty of perjury under the laws of the United States of America, that the information and statements made in this ADV, including exhibits and any other information submitted, are true and correct, and that I am signing this Form ADV Execution Page as a free and voluntary act.

I certify that the adviser's books and records will be preserved and available for inspection as required by law. Finally, I authorize any *person* having custody or possession of these books and records to make them available to federal and state regulatory representatives.

Signature:

Date: MM/DD/YYYY

JOHN E. SCHADL

04/30/2019

Printed Name:

Title:

JOHN E. SCHADL

CHIEF COMPLIANCE OFFICER

Adviser CRD Number:

105958

NON-RESIDENT INVESTMENT ADVISER EXECUTION PAGE

You must complete the following Execution Page to Form ADV. This execution page must be signed and attached to your initial submission of Form ADV to the SEC and all amendments

1. Appointment of Agent for Service of Process

By signing this Form ADV Execution Page, you, the undersigned adviser, irrevocably appoint each of the Secretary of the SEC, and the Secretary of State or other legally designated officer, of any other state in which you are submitting a *notice filing*, as your agents to receive service, and agree that such persons may accept service on your behalf, of any notice, subpoena, summons, *order instituting proceedings*, demand for arbitration, or other process or papers, and you further agree that such service may be made by registered or certified mail, in any federal or state action, administrative *proceeding* or arbitration brought against you in any place subject to the jurisdiction of the United States, if the action, *proceeding* or arbitration (a) arises out of any activity in connection with your investment advisory business that is subject to the jurisdiction of the United States, and (b) is *founded*, directly or indirectly, upon the provisions of: (i) the Securities Act of 1933, the Securities Exchange Act of 1934, the Trust Indenture Act of 1939, the Investment Company Act of 1940, or the Investment Advisers Act of 1940, or any rule or regulation under any of these acts, or (ii) the laws of any state in which you are submitting a *notice filing*.

2. Appointment and Consent: Effect on Partnerships

If you are organized as a partnership, this irrevocable power of attorney and consent to service of process will continue in effect if any partner withdraws from or is admitted to the partnership, provided that the admission or withdrawal does not create a new partnership. If the partnership dissolves, this irrevocable power of attorney and consent shall be in effect for any action brought against you or any of your former partners.

3. *Non-Resident* Investment Adviser Undertaking Regarding Books and Records

By signing this Form ADV, you also agree to provide, at your own expense, to the U.S. Securities and Exchange Commission at its principal office in Washington D.C., at any Regional or District Office of the Commission, or at any one of its offices in the United States, as specified by the Commission, correct, current, and complete copies of any or all records that you are required to maintain under Rule 204-2 under the Investment Advisers Act of 1940. This undertaking shall be binding upon you, your heirs, successors and assigns, and any *person* subject to your written irrevocable consents or powers of attorney or any of your general partners and *managing agents*.

Signature

I, the undersigned, sign this Form ADV on behalf of, and with the authority of, the *non-resident* investment adviser. The investment adviser and I both certify, under penalty of perjury under the laws of the United States of America, that the information and statements made in this ADV, including exhibits and any other information submitted, are true and correct, and that I am signing this Form ADV Execution Page as a free and voluntary act.

I certify that the adviser's books and records will be preserved and available for inspection as required by law. Finally, I authorize any *person* having *custody* or possession of these books and records to make them available to federal and state regulatory representatives.

Signature:

Date: MM/DD/YYYY

Printed Name:

Title:

Adviser CRD Number:

JPMORGAN CHASE
BANK, N.A.

02019-9946

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT
AND AFFIDAVIT**

SECTION I -- GENERAL INFORMATION

A. Legal name of the Disclosing Party submitting this EDS. Include d/b/a/ if applicable:

JPMorgan Chase Bank, N.A.

Check ONE of the following three boxes:

Indicate whether the Disclosing Party submitting this EDS is:

1. ☒ the Applicant

OR

2. ☐ a legal entity currently holding, or anticipated to hold within six months after City action on the contract, transaction or other undertaking to which this EDS pertains (referred to below as the "Matter"), a direct or indirect interest in excess of 7.5% in the Applicant. State the Applicant's legal name: _____

OR

3. ☐ a legal entity with a direct or indirect right of control of the Applicant (see Section II(B)(1))
State the legal name of the entity in which the Disclosing Party holds a right of control: _____

B. Business address of the Disclosing Party: 1111 Polaris Parkway

Columbus, OH 43240

C. Telephone: (312)732-6988 Fax: _____ Email: joanne.meulendyke@jpmorgan.com

D. Name of contact person: Joanne Meulendyke

E. Federal Employer Identification No. (if you have one): _____

F. Brief description of the Matter to which this EDS pertains. (Include project number and location of property, if applicable): _____

The City has distributed an RFP for Depository Certification to remain in the pool eligible to provide banking services and products to the City of Chicago
This certification also includes the Chicago Public Schools

G. Which City agency or department is requesting this EDS? City of Chicago Department of Finance

If the Matter is a contract being handled by the City's Department of Procurement Services, please complete the following:

Specification # _____ and Contract # _____

SECTION II -- DISCLOSURE OF OWNERSHIP INTERESTS

A. NATURE OF THE DISCLOSING PARTY

1. Indicate the nature of the Disclosing Party:

- | | |
|---|--|
| <input type="checkbox"/> Person | <input type="checkbox"/> Limited liability company |
| <input type="checkbox"/> Publicly registered business corporation | <input type="checkbox"/> Limited liability partnership |
| <input type="checkbox"/> Privately held business corporation | <input type="checkbox"/> Joint venture |
| <input type="checkbox"/> Sole proprietorship | <input type="checkbox"/> Not-for-profit corporation |
| <input type="checkbox"/> General partnership | (Is the not-for-profit corporation also a 501(c)(3))? |
| <input type="checkbox"/> Limited partnership | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| <input type="checkbox"/> Trust | <input checked="" type="checkbox"/> Other (please specify) |
| | National Banking Association |

2. For legal entities, the state (or foreign country) of incorporation or organization, if applicable:

Disclosing party is organized under the federal laws of the United States of America.

3. For legal entities not organized in the State of Illinois: Has the organization registered to do business in the State of Illinois as a foreign entity?

☐ Yes ☒ No ☐ Organized in Illinois

B. IF THE DISCLOSING PARTY IS A LEGAL ENTITY:

1. List below the full names and titles, if applicable, of: (i) all executive officers and all directors of the entity; (ii) **for not-for-profit corporations**, all members, if any, which are legal entities (if there are no such members, write "no members which are legal entities"); (iii) **for trusts, estates or other similar entities**, the trustee, executor, administrator, or similarly situated party; (iv) **for general or limited partnerships, limited liability companies, limited liability partnerships or joint ventures**, each general partner, managing member, manager or any other person or legal entity that directly or indirectly controls the day-to-day management of the Applicant.

NOTE: Each legal entity listed below must submit an EDS on its own behalf.

Name	Title
------	-------

SEE ATTACHMENT A

2. Please provide the following information concerning each person or legal entity having a direct or indirect, current or prospective (i.e. within 6 months after City action) beneficial interest (including ownership) in excess of 7.5% of the Applicant. Examples of such an interest include shares in a corporation, partnership interest in a partnership or joint venture, interest of a member or manager in a

limited liability company, or interest of a beneficiary of a trust, estate or other similar entity. If none, state "None."

NOTE: Each legal entity listed below may be required to submit an EDS on its own behalf.

Name	Business Address	Percentage Interest in the Applicant
JPMorgan Chase & Co.	383 Madison Avenue	100%
New York, New York 10179		

SECTION III -- INCOME OR COMPENSATION TO, OR OWNERSHIP BY, CITY ELECTED OFFICIALS

Has the Disclosing Party provided any income or compensation to any City elected official during the 12-month period preceding the date of this EDS? ☐ Yes ☒ No

Does the Disclosing Party reasonably expect to provide any income or compensation to any City elected official during the 12-month period following the date of this EDS? ☐ Yes ☒ No

If "yes" to either of the above, please identify below the name(s) of such City elected official(s) and describe such income or compensation:

SEE ATTACHMENT A

Does any City elected official or, to the best of the Disclosing Party's knowledge after reasonable inquiry, any City elected official's spouse or domestic partner, have a financial interest (as defined in Chapter 2-156 of the Municipal Code of Chicago ("MCC")) in the Disclosing Party?

☐ Yes ☒ No

If "yes," please identify below the name(s) of such City elected official(s) and/or spouse(s)/domestic partner(s) and describe the financial interest(s).

SECTION IV -- DISCLOSURE OF SUBCONTRACTORS AND OTHER RETAINED PARTIES

The Disclosing Party must disclose the name and business address of each subcontractor, attorney, lobbyist (as defined in MCC Chapter 2-156), accountant, consultant and any other person or entity whom the Disclosing Party has retained or expects to retain in connection with the Matter, as well as the nature of the relationship, and the total amount of the fees paid or estimated to be paid. The Disclosing Party is not required to disclose employees who are paid solely through the Disclosing Party's regular payroll. If the Disclosing Party is uncertain whether a disclosure is required under this Section, the Disclosing Party must either ask the City whether disclosure is required or make the disclosure.

Name (indicate whether retained or anticipated to be retained)	Business Address	Relationship to Disclosing Party (subcontractor, attorney, lobbyist, etc.)	Fees (<u>indicate whether paid or estimated.</u>) NOTE: "hourly rate" or "t.b.d." is not an acceptable response.
--	------------------	--	---

(Add sheets if necessary)

☒ Check here if the Disclosing Party has not retained, nor expects to retain, any such persons or entities.

SECTION V -- CERTIFICATIONS

A. COURT-ORDERED CHILD SUPPORT COMPLIANCE

Under MCC Section 2-92-415, substantial owners of business entities that contract with the City must remain in compliance with their child support obligations throughout the contract's term.

Has any person who directly or indirectly owns 10% or more of the Disclosing Party been declared in arrearage on any child support obligations by any Illinois court of competent jurisdiction?

☐ Yes ☐ No ☒ No person directly or indirectly owns 10% or more of the Disclosing Party.

If "Yes," has the person entered into a court-approved agreement for payment of all support owed and is the person in compliance with that agreement?

☐ Yes ☐ No

B. FURTHER CERTIFICATIONS

1. [This paragraph 1 applies only if the Matter is a contract being handled by the City's Department of Procurement Services.] In the 5-year period preceding the date of this EDS, neither the Disclosing Party nor any Affiliated Entity [see definition in (5) below] has engaged, in connection with the performance of any public contract, the services of an integrity monitor, independent private sector inspector general, or integrity compliance consultant (i.e., an individual or entity with legal, auditing, investigative, or other similar skills, designated by a public agency to help the agency monitor the activity of specified agency vendors as well as help the vendors reform their business practices so they can be considered for agency contracts in the future, or continue with a contract in progress).

2. The Disclosing Party and its Affiliated Entities are not delinquent in the payment of any fine, fee, tax or other source of indebtedness owed to the City of Chicago, including, but not limited to, water and sewer charges, license fees, parking tickets, property taxes and sales taxes, nor is the Disclosing Party delinquent in the payment of any tax administered by the Illinois Department of Revenue.

SEE ATTACHMENT A

3. The Disclosing Party and, if the Disclosing Party is a legal entity, all of those persons or entities identified in Section II(B)(1) of this EDS: **SEE ATTACHMENT A**

- a. are not presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from any transactions by any federal, state or local unit of government;
- b. have not, during the 5 years before the date of this EDS, been convicted of a criminal offense, adjudged guilty, or had a civil judgment rendered against them in connection with: obtaining, attempting to obtain, or performing a public (federal, state or local) transaction or contract under a public transaction; a violation of federal or state antitrust statutes; fraud; embezzlement; theft; forgery; bribery; falsification or destruction of records; making false statements; or receiving stolen property;
- c. are not presently indicted for, or criminally or civilly charged by, a governmental entity (federal, state or local) with committing any of the offenses set forth in subparagraph (b) above;
- d. have not, during the 5 years before the date of this EDS, had one or more public transactions (federal, state or local) terminated for cause or default; and
- e. have not, during the 5 years before the date of this EDS, been convicted, adjudged guilty, or found liable in a civil proceeding, or in any criminal or civil action, including actions concerning environmental violations, instituted by the City or by the federal government, any state, or any other unit of local government.

4. The Disclosing Party understands and shall comply with the applicable requirements of MCC Chapters 2-56 (Inspector General) and 2-156 (Governmental Ethics).

5. Certifications (5), (6) and (7) concern: **SEE ATTACHMENT A**

- the Disclosing Party;
- any "Contractor" (meaning any contractor or subcontractor used by the Disclosing Party in connection with the Matter, including but not limited to all persons or legal entities disclosed under Section IV, "Disclosure of Subcontractors and Other Retained Parties");
- any "Affiliated Entity" (meaning a person or entity that, directly or indirectly: controls the Disclosing Party, is controlled by the Disclosing Party, or is, with the Disclosing Party, under common control of another person or entity). Indicia of control include, without limitation: interlocking management or ownership; identity of interests among family members, shared facilities and equipment; common use of employees; or organization of a business entity following the ineligibility of a business entity to do business with federal or state or local government, including the City, using substantially the same management, ownership, or principals as the ineligible entity. With respect to Contractors, the term Affiliated Entity means a person or entity that directly or indirectly controls the Contractor, is controlled by it, or, with the Contractor, is under common control of another person or entity;
- any responsible official of the Disclosing Party, any Contractor or any Affiliated Entity or any other official, agent or employee of the Disclosing Party, any Contractor or any Affiliated Entity, acting pursuant to the direction or authorization of a responsible official of the Disclosing Party, any Contractor or any Affiliated Entity (collectively "Agents").

Neither the Disclosing Party, nor any Contractor, nor any Affiliated Entity of either the Disclosing Party or any Contractor, nor any Agents have, during the 5 years before the date of this EDS, or, with respect to a Contractor, an Affiliated Entity, or an Affiliated Entity of a Contractor during the 5 years before the date of such Contractor's or Affiliated Entity's contract or engagement in connection with the Matter:

- a. bribed or attempted to bribe, or been convicted or adjudged guilty of bribery or attempting to bribe, a public officer or employee of the City, the State of Illinois, or any agency of the federal government or of any state or local government in the United States of America, in that officer's or employee's official capacity;
 - b. agreed or colluded with other bidders or prospective bidders, or been a party to any such agreement, or been convicted or adjudged guilty of agreement or collusion among bidders or prospective bidders, in restraint of freedom of competition by agreement to bid a fixed price or otherwise; or
 - c. made an admission of such conduct described in subparagraph (a) or (b) above that is a matter of record, but have not been prosecuted for such conduct; or
 - d. violated the provisions referenced in MCC Subsection 2-92-320(a)(4)(Contracts Requiring a Base Wage); (a)(5)(Debarment Regulations); or (a)(6)(Minimum Wage Ordinance).
6. Neither the Disclosing Party, nor any Affiliated Entity or Contractor, or any of their employees, officials, agents or partners, is barred from contracting with any unit of state or local government as a result of engaging in or being convicted of (1) bid-rigging in violation of 720 ILCS 5/33E-3; (2) bid-rotating in violation of 720 ILCS 5/33E-4; or (3) any similar offense of any state or of the United States of America that contains the same elements as the offense of bid-rigging or bid-rotating.
7. Neither the Disclosing Party nor any Affiliated Entity is listed on a Sanctions List maintained by the United States Department of Commerce, State, or Treasury, or any successor federal agency.
8. [FOR APPLICANT ONLY] (i) Neither the Applicant nor any "controlling person" [see MCC Chapter 1-23, Article I for applicability and defined terms] of the Applicant is currently indicted or charged with, or has admitted guilt of, or has ever been convicted of, or placed under supervision for, any criminal offense involving actual, attempted, or conspiracy to commit bribery, theft, fraud, forgery, perjury, dishonesty or deceit against an officer or employee of the City or any "sister agency"; and (ii) the Applicant understands and acknowledges that compliance with Article I is a continuing requirement for doing business with the City. NOTE: If MCC Chapter 1-23, Article I applies to the Applicant, that Article's permanent compliance timeframe supersedes 5-year compliance timeframes in this Section V.
9. [FOR APPLICANT ONLY] The Applicant and its Affiliated Entities will not use, nor permit their subcontractors to use, any facility listed as having an active exclusion by the U.S. EPA on the federal System for Award Management ("SAM").
10. [FOR APPLICANT ONLY] The Applicant will obtain from any contractors/subcontractors hired or to be hired in connection with the Matter certifications equal in form and substance to those in Certifications (2) and (9) above and will not, without the prior written consent of the City, use any such

contractor/subcontractor that does not provide such certifications or that the Applicant has reason to believe has not provided or cannot provide truthful certifications.

11. If the Disclosing Party is unable to certify to any of the above statements in this Part B (Further Certifications), the Disclosing Party must explain below:

SEE ATTACHMENT A

If the letters "NA," the word "None," or no response appears on the lines above, it will be conclusively presumed that the Disclosing Party certified to the above statements.

12. To the best of the Disclosing Party's knowledge after reasonable inquiry, the following is a complete list of all current employees of the Disclosing Party who were, at any time during the 12-month period preceding the date of this EDS, an employee, or elected or appointed official, of the City of Chicago (if none, indicate with "N/A" or "none").

SEE ATTACHMENT A

13. To the best of the Disclosing Party's knowledge after reasonable inquiry, the following is a complete list of all gifts that the Disclosing Party has given or caused to be given, at any time during the 12-month period preceding the execution date of this EDS, to an employee, or elected or appointed official, of the City of Chicago. For purposes of this statement, a "gift" does not include: (i) anything made generally available to City employees or to the general public, or (ii) food or drink provided in the course of official City business and having a retail value of less than \$25 per recipient, or (iii) a political contribution otherwise duly reported as required by law (if none, indicate with "N/A" or "none"). As to any gift listed below, please also list the name of the City recipient.

SEE ATTACHMENT A

C. CERTIFICATION OF STATUS AS FINANCIAL INSTITUTION

1. The Disclosing Party certifies that the Disclosing Party (check one)

☒ is ☐ is not

a "financial institution" as defined in MCC Section 2-32-455(b).

2. If the Disclosing Party IS a financial institution, then the Disclosing Party pledges:

"We are not and will not become a predatory lender as defined in MCC Chapter 2-32. We further pledge that none of our affiliates is, and none of them will become, a predatory lender as defined in MCC Chapter 2-32. We understand that becoming a predatory lender or becoming an affiliate of a predatory lender may result in the loss of the privilege of doing business with the City."

If the Disclosing Party is unable to make this pledge because it or any of its affiliates (as defined in MCC Section 2-32-455(b)) is a predatory lender within the meaning of MCC Chapter 2-32, explain here (attach additional pages if necessary):

If the letters "NA," the word "None," or no response appears on the lines above, it will be conclusively presumed that the Disclosing Party certified to the above statements.

D. CERTIFICATION REGARDING FINANCIAL INTEREST IN CITY BUSINESS

Any words or terms defined in MCC Chapter 2-156 have the same meanings if used in this Part D.

1. In accordance with MCC Section 2-156-110: To the best of the Disclosing Party's knowledge after reasonable inquiry, does any official or employee of the City have a financial interest in his or her own name or in the name of any other person or entity in the Matter?

☐ Yes ☒ No SEE ATTACHMENT A

NOTE: If you checked "Yes" to Item D(1), proceed to Items D(2) and D(3). If you checked "No" to Item D(1), skip Items D(2) and D(3) and proceed to Part E.

2. Unless sold pursuant to a process of competitive bidding, or otherwise permitted, no City elected official or employee shall have a financial interest in his or her own name or in the name of any other person or entity in the purchase of any property that (i) belongs to the City, or (ii) is sold for taxes or assessments, or (iii) is sold by virtue of legal process at the suit of the City (collectively, "City Property Sale"). Compensation for property taken pursuant to the City's eminent domain power does not constitute a financial interest within the meaning of this Part D.

Does the Matter involve a City Property Sale?

☐ Yes ☐ No

3. If you checked "Yes" to Item D(1), provide the names and business addresses of the City officials or employees having such financial interest and identify the nature of the financial interest:

Name	Business Address	Nature of Financial Interest

4. The Disclosing Party further certifies that no prohibited financial interest in the Matter will be acquired by any City official or employee. SEE ATTACHMENT A

E. CERTIFICATION REGARDING SLAVERY ERA BUSINESS

Please check either (1) or (2) below. If the Disclosing Party checks (2), the Disclosing Party must disclose below or in an attachment to this EDS all information required by (2). Failure to comply with these disclosure requirements may make any contract entered into with the City in connection with the Matter voidable by the City.

 1. The Disclosing Party verifies that the Disclosing Party has searched any and all records of the Disclosing Party and any and all predecessor entities regarding records of investments or profits from slavery or slaveholder insurance policies during the slavery era (including insurance policies issued to slaveholders that provided coverage for damage to or injury or death of their slaves), and the Disclosing Party has found no such records.

 X 2. The Disclosing Party verifies that, as a result of conducting the search in step (1) above, the Disclosing Party has found records of investments or profits from slavery or slaveholder insurance policies. The Disclosing Party verifies that the following constitutes full disclosure of all such records, including the names of any and all slaves or slaveholders described in those records:
SEE ATTACHMENT B

SECTION VI -- CERTIFICATIONS FOR FEDERALLY FUNDED MATTERS

NOTE: If the Matter is federally funded, complete this Section VI. If the Matter is not federally funded, proceed to Section VII. For purposes of this Section VI, tax credits allocated by the City and proceeds of debt obligations of the City are not federal funding.

A. CERTIFICATION REGARDING LOBBYING

1. List below the names of all persons or entities registered under the federal Lobbying Disclosure Act of 1995, as amended, who have made lobbying contacts on behalf of the Disclosing Party with respect to the Matter: (Add sheets if necessary):
NOT APPLICABLE

(If no explanation appears or begins on the lines above, or if the letters "NA" or if the word "None" appear, it will be conclusively presumed that the Disclosing Party means that NO persons or entities registered under the Lobbying Disclosure Act of 1995, as amended, have made lobbying contacts on behalf of the Disclosing Party with respect to the Matter.)

2. The Disclosing Party has not spent and will not expend any federally appropriated funds to pay any person or entity listed in paragraph A(1) above for his or her lobbying activities or to pay any person or entity to influence or attempt to influence an officer or employee of any agency, as defined by applicable federal law, a member of Congress, an officer or employee of Congress, or an employee

of a member of Congress, in connection with the award of any federally funded contract, making any federally funded grant or loan, entering into any cooperative agreement, or to extend, continue, renew, amend, or modify any federally funded contract, grant, loan, or cooperative agreement.

3. The Disclosing Party will submit an updated certification at the end of each calendar quarter in which there occurs any event that materially affects the accuracy of the statements and information set forth in paragraphs A(1) and A(2) above.

4. The Disclosing Party certifies that either: (i) it is not an organization described in section 501(c)(4) of the Internal Revenue Code of 1986; or (ii) it is an organization described in section 501(c)(4) of the Internal Revenue Code of 1986 but has not engaged and will not engage in "Lobbying Activities," as that term is defined in the Lobbying Disclosure Act of 1995, as amended.

5. If the Disclosing Party is the Applicant, the Disclosing Party must obtain certifications equal in form and substance to paragraphs A(1) through A(4) above from all subcontractors before it awards any subcontract and the Disclosing Party must maintain all such subcontractors' certifications for the duration of the Matter and must make such certifications promptly available to the City upon request.

B. CERTIFICATION REGARDING EQUAL EMPLOYMENT OPPORTUNITY

If the Matter is federally funded, federal regulations require the Applicant and all proposed subcontractors to submit the following information with their bids or in writing at the outset of negotiations.

Is the Disclosing Party the Applicant?

☐ Yes

☐ No

If "Yes," answer the three questions below:

1. Have you developed and do you have on file affirmative action programs pursuant to applicable federal regulations? (See 41 CFR Part 60-2.)

☐ Yes

☐ No

2. Have you filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance Programs, or the Equal Employment Opportunity Commission all reports due under the applicable filing requirements?

☐ Yes

☐ No

☐ Reports not required

3. Have you participated in any previous contracts or subcontracts subject to the equal opportunity clause?

☐ Yes

☐ No

If you checked "No" to question (1) or (2) above, please provide an explanation:

SECTION VII -- FURTHER ACKNOWLEDGMENTS AND CERTIFICATION

The Disclosing Party understands and agrees that:

A. The certifications, disclosures, and acknowledgments contained in this EDS will become part of any contract or other agreement between the Applicant and the City in connection with the Matter, whether procurement, City assistance, or other City action, and are material inducements to the City's execution of any contract or taking other action with respect to the Matter. The Disclosing Party understands that it must comply with all statutes, ordinances, and regulations on which this EDS is based.

B. The City's Governmental Ethics Ordinance, MCC Chapter 2-156, imposes certain duties and obligations on persons or entities seeking City contracts, work, business, or transactions. The full text of this ordinance and a training program is available on line at www.cityofchicago.org/Ethics, and may also be obtained from the City's Board of Ethics, 740 N. Sedgwick St., Suite 500, Chicago, IL 60610, (312) 744-9660. The Disclosing Party must comply fully with this ordinance.

C. If the City determines that any information provided in this EDS is false, incomplete or inaccurate, any contract or other agreement in connection with which it is submitted may be rescinded or be void or voidable, and the City may pursue any remedies under the contract or agreement (if not rescinded or void), at law, or in equity, including terminating the Disclosing Party's participation in the Matter and/or declining to allow the Disclosing Party to participate in other City transactions. Remedies at law for a false statement of material fact may include incarceration and an award to the City of treble damages.

D. It is the City's policy to make this document available to the public on its Internet site and/or upon request. Some or all of the information provided in, and appended to, this EDS may be made publicly available on the Internet, in response to a Freedom of Information Act request, or otherwise. By completing and signing this EDS, the Disclosing Party waives and releases any possible rights or claims which it may have against the City in connection with the public release of information contained in this EDS and also authorizes the City to verify the accuracy of any information submitted in this EDS.

E. The information provided in this EDS must be kept current. In the event of changes, the Disclosing Party must supplement this EDS up to the time the City takes action on the Matter. If the Matter is a contract being handled by the City's Department of Procurement Services, the Disclosing Party must update this EDS as the contract requires. **NOTE:** With respect to Matters subject to MCC Chapter 1-23, Article I (imposing **PERMANENT INELIGIBILITY** for certain specified offenses), the information provided herein regarding eligibility must be kept current for a longer period, as required by MCC Chapter 1-23 and Section 2-154-020.

CERTIFICATION

Under penalty of perjury, the person signing below: (1) warrants that he/she is authorized to execute this EDS, and all applicable Appendices, on behalf of the Disclosing Party, and (2) warrants that all certifications and statements contained in this EDS, and all applicable Appendices, are true, accurate and complete as of the date furnished to the City.

JPMorgan Chase Bank, N.A.

(Print or type exact legal name of Disclosing Party)

By: Joanne Meulendyke
(Sign here)

Joanne Meulendyke

(Print or type name of person signing)

Authorized Officer

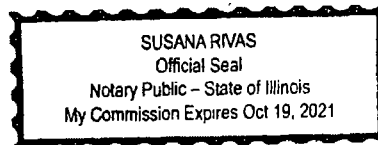
(Print or type title of person signing)

Signed and sworn to before me on (date) November 9th 2019,

at COOK County, IL (state).

Susana Rivas
Notary Public

Commission expires: Oct. 19, 2021



**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
APPENDIX A**

**FAMILIAL RELATIONSHIPS WITH ELECTED CITY OFFICIALS
AND DEPARTMENT HEADS**

This Appendix is to be completed only by (a) the Applicant, and (b) any legal entity which has a direct ownership interest in the Applicant exceeding 7.5%. It is not to be completed by any legal entity which has only an indirect ownership interest in the Applicant.

Under MCC Section 2-154-015, the Disclosing Party must disclose whether such Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof currently has a "familial relationship" with any elected city official or department head. A "familial relationship" exists if, as of the date this EDS is signed, the Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof is related to the mayor, any alderman, the city clerk, the city treasurer or any city department head as spouse or domestic partner or as any of the following, whether by blood or adoption: parent, child, brother or sister, aunt or uncle, niece or nephew, grandparent, grandchild, father-in-law, mother-in-law, son-in-law, daughter-in-law, stepfather or stepmother, stepson or stepdaughter, stepbrother or stepsister or half-brother or half-sister.

"Applicable Party" means (1) all executive officers of the Disclosing Party listed in Section II.B.1.a., if the Disclosing Party is a corporation; all partners of the Disclosing Party, if the Disclosing Party is a general partnership; all general partners and limited partners of the Disclosing Party, if the Disclosing Party is a limited partnership; all managers, managing members and members of the Disclosing Party, if the Disclosing Party is a limited liability company; (2) all principal officers of the Disclosing Party; and (3) any person having more than a 7.5% ownership interest in the Disclosing Party. "Principal officers" means the president, chief operating officer, executive director, chief financial officer, treasurer or secretary of a legal entity or any person exercising similar authority.

Does the Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof currently have a "familial relationship" with an elected city official or department head?

☐ Yes

☒ No

To the Authorized Representative's knowledge, information and belief after reasonable inquiry as of November 2019.

If yes, please identify below (1) the name and title of such person, (2) the name of the legal entity to which such person is connected; (3) the name and title of the elected city official or department head to whom such person has a familial relationship, and (4) the precise nature of such familial relationship.

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
APPENDIX B**

BUILDING CODE SCOFFLAW/PROBLEM LANDLORD CERTIFICATION

This Appendix is to be completed only by (a) the Applicant, and (b) any legal entity which has a direct ownership interest in the Applicant exceeding 7.5% (an "Owner"). It is not to be completed by any legal entity which has only an indirect ownership interest in the Applicant.

1. Pursuant to MCC Section 2-154-010, is the Applicant or any Owner identified as a building code scofflaw or problem landlord pursuant to MCC Section 2-92-416? *

☐ Yes ☒ No

2. If the Applicant is a legal entity publicly traded on any exchange, is any officer or director of the Applicant identified as a building code scofflaw or problem landlord pursuant to MCC Section 2-92-416? *

☐ Yes ☐ No ☒ The Applicant is not publicly traded on any exchange.

3. If yes to (1) or (2) above, please identify below the name of each person or legal entity identified as a building code scofflaw or problem landlord and the address of each building or buildings to which the pertinent code violations apply.

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
APPENDIX C**

PROHIBITION ON WAGE & SALARY HISTORY SCREENING - CERTIFICATION

This Appendix is to be completed only by an Applicant that is completing this EDS as a “contractor” as defined in MCC Section 2-92-385. That section, which should be consulted (www.amlegal.com), generally covers a party to any agreement pursuant to which they: (i) receive City of Chicago funds in consideration for services, work or goods provided (including for legal or other professional services), or (ii) pay the City money for a license, grant or concession allowing them to conduct a business on City premises.

On behalf of an Applicant that is a contractor pursuant to MCC Section 2-92-385, I hereby certify that the Applicant is in compliance with MCC Section 2-92-385(b)(1) and (2), which prohibit: (i) screening job applicants based on their wage or salary history, or (ii) seeking job applicants’ wage or salary history from current or former employers. I also certify that the Applicant has adopted a policy that includes those prohibitions.

☒ Yes

☐ No

☐ N/A – I am not an Applicant that is a “contractor” as defined in MCC Section 2-92-385.

This certification shall serve as the affidavit required by MCC Section 2-92-385(c)(1).

If you checked “no” to the above, please explain.

**ATTACHMENT A
TO
CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
FILED BY
JPMORGAN CHASE BANK, N.A.
(as the Disclosing Party and the Applicant)**

Responses contained in the corresponding EDS and this Attachment A are true, accurate and complete based on the undersigned's knowledge, information and belief, upon due inquiry by relying on information provided by other employees of the Disclosing Party or its affiliates or subsidiaries. Certain sections of this EDS are in the process of being updated. The Disclosing Party will provide the City of Chicago with an update to this Disclosure Statement if there are any material changes to the matters disclosed herein.

SECTION II B.1

Directors:

Linda B. Bammann
James A. Bell
Stephen B. Burke
Todd A. Combs
James S. Crown
James Dimon
Timothy P. Flynn
Mellody Hobson
Laban P. Jackson, Jr.
Michael A. Neal
Lee R. Raymond

Executive Officers/Operating Committee:

Ashley Bacon	Chief Risk Officer
Lori A. Beer	Chief Information Officer
James Dimon	Chief Executive Officer, President
Mary E. Erdoes	Chief Executive Officer of Asset & Wealth Management
Stacey Friedman	General Counsel
Robin Leopold	Head of Human Resources
Douglas B. Petno	Chief Executive Officer of Commercial Banking
Jennifer A. Piepszak	Chief Financial Officer
Daniel E. Pinto	Chief Executive Officer of the Corporate & Investment Bank
Peter L. Scher	Head of Corporate Responsibility
Gordon A. Smith	Chief Executive Officer of Consumer & Community Banking

Notes regarding additional, select officer titles with JPMorgan Chase Bank, N.A.:

Stephen Burke	Non-executive Chairman of the Board
Molly Carpenter	Secretary
Matthew Cherwin	Treasurer and Chief Investment Officer
Bret P. Dooley	Controller
Frank Pearn	Chief Compliance Officer
Louis Rauchenberger	General Auditor

SECTION III: INCOME OR COMPENSATION TO, OR OWNERSHIP BY, CITY ELECTED OFFICIALS

Based on knowledge and belief, upon due inquiry, the Disclosing Party does not reasonably expect to provide any income or compensation to any City elected official during the 12- month period following the date of this EDS.

SECTION IV: DISCLOSURE OF SUBCONTRACTORS AND OTHER RETAINED PARTIES

With respect to Section IV, the Authorized Representative certifies based on the Authorized Representative's knowledge, information and belief, upon due inquiry, that the Disclosing Party has not retained a subcontractor, attorney, lobbyist, accountant, or consultant in connection with the Matter.

SECTION V: CERTIFICATIONS

B. FURTHER CERTIFICATIONS

B.2 The Authorized Representative certifies on behalf of the Disclosing Party, as to the statements contained in Section V. B.2 that based on the Authorized Representative's knowledge, information, and belief, upon due inquiry, that neither the Disclosing Party nor its affiliates are delinquent in paying any fine, fee, tax or other charge owed to the State of Illinois or the City of Chicago except for taxes that are being contested in good faith by appropriate legal proceeding and possible delinquencies in paying a fine, fee, tax or other charge related to (i) property mortgaged to the Disclosing Party or its affiliates, (ii) property owned by the Disclosing Party or its affiliates and leased to others, (iii) foreclosed property now owned by the Disclosing Party or its affiliates, (iv) property owned or held by the Disclosing Party or its affiliates as a fiduciary or nominee, and (v) fines, fees, taxes or other charges that are being contested in good faith by the Disclosing Party or its affiliates by appropriate legal proceeding. If there are any outstanding claims that the Disclosing Party is notified of that Disclosing Party was not aware of previously, Disclosing Party will immediately address them.

B.3 (a-e) With respect to Section V, B.3 (a-e) of the EDS, JPMorgan Chase & Co and JPMorgan Chase Bank, N.A. (hereinafter the "Disclosing Party") certify based on the Disclosing Party's knowledge, information, and belief, upon due inquiry, that such statements are accurate with respect to the executive officers and directors of the Disclosing Party. Based on the Disclosing Party's knowledge, information, and belief, upon due inquiry, JPMorgan Chase & Co. and/or its subsidiaries (collectively, the "Firm") are defendants or putative defendants in numerous legal proceedings, including private civil litigations and regulatory/government investigations. The litigations range from individual actions involving a single plaintiff to class action lawsuits with potentially millions of class members. Investigations involve both formal and informal proceedings, by both governmental agencies and self-regulatory organizations. These legal proceedings are at varying stages of adjudication, arbitration or investigation, and involve each of the Firm's lines of business and geographies and a wide variety of claims (including common law tort and contract claims and statutory antitrust, securities and consumer protection claims), some of which present novel legal theories. Based on current knowledge, the Firm believes it has asserted meritorious defenses to the claims asserted against it in its currently outstanding legal proceedings, intends to defend itself vigorously in all such

matters and does not believe that any pending legal proceeding would have a material effect on the Firm's performance of the services contemplated by the RFP. For further discussion, please refer to JPMorgan Chase & Co.'s publicly-filed disclosures, including its most recent Annual Report on Form 10-K and Quarterly Reports on Form 10-Q filed with the U.S. Securities and Exchange Commission (available at: <https://investor.shareholder.com/jpmorganchase/sec.cfm>). Moreover, the following matters may be of interest:

On May 20, 2015, JPMorgan Chase & Co. entered a plea of guilty to a single violation of federal antitrust law. Additional information regarding the plea and resolutions of other investigations related to the Firm's foreign exchange activities is available via May 20, 2015 press release (available at <http://investor.shareholder.com/jpmorganchase/releasedetail.cfm?ReleaseID=914105>). Judgment consistent with the terms of the plea agreement referenced in the press release was entered on January 10, 2017.

JPMorgan Chase Bank, N.A., a national banking association with operations throughout the world, has facilities in numerous jurisdictions, but to our knowledge, we are not aware of any such infringements, penalties, pending actions and/or prosecutions for breach of environmental laws other than as follows:

JPMorgan has entered into the following consent orders with the New York State Department of Environmental Conservation within the past five (5) years:

In the Matter of the Alleged Violation of Title 10 of Article 17 of the Environmental Conservation Law, as implemented pursuant to Part 613 of Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York by JPMorgan Chase & Co., Case No. PBS.OT.2-611102.6.2018.

In the Matter of the Alleged Violation of Title 10 of Article 17 of the Environmental Conservation Law, as implemented pursuant to Part 613 of Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York by JPMorgan Chase & Co., Case No. PBS.OT.2-611103.6.2018.

As a result of environmental audits that JPMorgan Chase Bank, N.A. and certain affiliated entities (JPMC) voluntarily conducted of JPMC's operations in 2014, 2015 and 2016, the Company discovered a number of compliance issues that it voluntarily self-disclosed to the U.S. Environmental Protection Agency (EPA), and JPMC subsequently voluntarily entered into a Consent Agreement and Final Order with EPA in June 2017 (In re: JPMorgan Chase Bank, N.A., Docket Nos. CWA-HQ-2017-6001, EPCRA-HQ-2017-6001, CAA-HQ-2017-6001, RCRA-HQ-2017-6001). None of the issues discovered resulted in any harm to the environment or to human health. In addition, from time to time JPMC may receive notices alleging minor compliance issues from state and/or local environmental agencies. In those instances, JPMC works with the agencies to address the issues promptly.

B.5 (a-d);

B.8

The Disclosing Party certifies the accuracy of the statements contained in sections 5, 6, and 7 of Section V only as to the Disclosing Party and its executive officers and directors. Based on the Disclosing Party's knowledge, information, and belief, upon due inquiry, JPMorgan Chase & Co. and/or its subsidiaries (collectively, the "Firm") are defendants or putative defendants in numerous legal proceedings, including private civil litigations and

regulatory/government investigations. The litigations range from individual actions involving a single plaintiff to class action lawsuits with potentially millions of class members. Investigations involve both formal and informal proceedings, by both governmental agencies and self-regulatory organizations. These legal proceedings are at varying stages of adjudication, arbitration or investigation, and involve each of the Firm's lines of business and geographies and a wide variety of claims (including common law tort and contract claims and statutory antitrust, securities and consumer protection claims), some of which present novel legal theories. Based on current knowledge, the Firm believes it has asserted meritorious defenses to the claims asserted against it in its currently outstanding legal proceedings, intends to defend itself vigorously in all such matters and does not believe that any pending legal proceeding would have a material effect on the Firm's performance of the services contemplated by the RFP. For further discussion, please refer to JPMorgan Chase & Co.'s publicly-filed disclosures, including its most recent Annual Report on Form 10-K and Quarterly Reports on Form 10-Q filed with the U.S. Securities and Exchange Commission (available at: <https://investor.shareholder.com/jpmorganchase/sec.cfm>). Moreover, the following matters may be of interest:

On May 20, 2015, JPMorgan Chase & Co. entered a plea of guilty to a single violation of federal antitrust law. Additional information regarding the plea and resolutions of other investigations related to the Firm's foreign exchange activities is available via May 20, 2015 press release (available at <http://investor.shareholder.com/jpmorganchase/releasedetail.cfm?ReleaseID=914105>). Judgment consistent with the terms of the plea agreement referenced in the press release was entered on January 10, 2017.

Furthermore, with respect to Section V. B.5. (d), the Minimum Wage ordinance, the Disclosing Party has not, during the five years before the execution date of this EDS, been determined to have violated the provisions of Municipal Code Section 2-92-320 (Minimum Wage Ordinance) as it relates to base wages.

B.11 Except as otherwise set forth in this Attachment A, the Authorized Representative on behalf of the Disclosing Party does not make any certification whatsoever with respect to any Applicable Party other than the Disclosing Party. The Authorized Representative on behalf of the Disclosing Party also certifies that it has not engaged any sub-contractor with respect to this transaction.

B.12 The Authorized Representative, on behalf of the Disclosing Party, certifies as to the statement in Section V, paragraph B.12 that, based on the Authorized Representative's knowledge, information, and belief, upon due inquiry, the following Bank employees were previously City of Chicago employees during the 12-month period preceding the execution date of this EDS:

- None

B.13 The Authorized Representative certifies as to the statement in Section V, paragraph B.13 that, based on the Authorized Representative's knowledge, information, and belief, upon due inquiry, the following gifts were provided by employees of the Bank to the following:

City Official Name	Date of Event	Event Name	Business meal cost per person (\$)
Gregg Cunningham	07-Jun-2019	Neighborhood Opportunity Fund Orientation-Round III	30.22
Martha Reynoso	07-Jun-2019	Neighborhood Opportunity Fund Orientation-Round III	30.22
Chip Hastings	07-Jun-2019	Neighborhood Opportunity Fund Orientation-Round III	30.22
Sophia Carey	07-Jun-2019	Neighborhood Opportunity Fund Orientation-Round III	30.22
Dorian Rico	07-Jun-2019	Neighborhood Opportunity Fund Orientation-Round III	30.22
Rosa Escareno	07-Jun-2019	Neighborhood Opportunity Fund Orientation-Round III	30.22
Lorielle Turner	07-Jun-2019	Neighborhood Opportunity Fund Orientation-Round III	30.22
Susana Soriano	07-Jun-2019	Neighborhood Opportunity Fund Orientation-Round III	30.22
Mary Kuhn	07-Jun-2019	Neighborhood Opportunity Fund Orientation-Round III	30.22
Kenya Merritt	07-Jun-2019	Neighborhood Opportunity Fund Orientation-Round III	30.22
Edwin Tumlos	07-Jun-2019	Neighborhood Opportunity Fund Orientation-Round III	30.22

D. INTEREST IN CITY BUSINESS

D.1 & D.4 As to the disclosures set forth in Section V, paragraphs D.1 & D.4, based on the Authorized Representative's knowledge, information, and belief, upon due inquiry, on behalf of the Disclosing Party, to the extent the Disclosing Party has any control the Authorized Representative certifies that no official or employee of the City of Chicago has a financial interest in his or her own name or in the name of any other person in this transaction.

**ATTACHMENT B
TO
CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
FILED BY
JPMORGAN CHASE BANK, N.A.
(as the Disclosing Party and the Applicant)**

The following response is true, accurate and complete based on the Authorized Representative's knowledge, information, and belief relying on information prepared on February 24, 2009, by a consultant at the direction of JPMorgan Chase & Co.

SECTION V -- CERTIFICATIONS

E. CERTIFICATION REGARDING SLAVERY ERA BUSINESS.

The Disclosing Party assumed its current name on November 13, 2004, when JPMorgan Chase Bank, a New York banking corporation, was converted into a national banking association under the name JPMorgan Chase Bank, National Association, and both Bank One, National Association (main office Chicago) and Bank One, National Association (main office Columbus) merged into it with the Disclosing Party being the surviving entity.

With regard to predecessors of the Disclosing Party as it existed prior to such merger ("JPMorgan Chase"), the Disclosing Party reports that J. Pierpont Morgan, Sr. was associated with George Peabody & Company and J.S. Morgan & Company (the "Peabody Firms") before he founded Drexel Morgan & Company, which ultimately became part of JPMorgan Chase. Capital supplied by Junius S. Morgan and J. Pierpont Morgan, Sr. appears to have been used to capitalize Drexel Morgan & Company in 1871. Upon the death of Junius S. Morgan, J.S. Morgan & Company came under the control of J. Pierpont Morgan, Sr. and became affiliated with J.P. Morgan & Co. Records indicate that the Peabody Firms had customers that appear to have used enslaved individuals.

JPMorgan Chase and the Bank One banks referred to above (collectively, "Bank One") had predecessor banks in states outside the South that purchased notes issued by, issued letters of credit or made loans to, and/or maintained correspondent accounts with municipalities, banks, companies and individuals located in Southern states where slavery was practiced during the slavery era. These municipalities, banks, companies and individuals are listed on Attachment I.

Bank One had predecessor banks before 1866 in three Southern states: Kentucky, Louisiana and Virginia. Searches revealed slavery-related information about two Louisiana banks, the Canal Bank (formed in 1831) and the Citizens Bank (formed in 1833), and the Lexington branch of the second Bank of Kentucky (formed in 1835). In 1924 Citizens Bank and Canal Bank merged. Predecessors of JPMorgan Chase had longstanding banking relationships with Canal Bank and its predecessors (see Attachment I), were creditors of Canal Bank and, in 1931, it appears that a predecessor of JPMorgan Chase led a group of investors that provided capital to Canal Bank and this predecessor of JPMorgan Chase became a shareholder and took a controlling management interest in the Canal Bank. The Canal Bank was placed into liquidation in March-May 1933 based on actions by the State of Louisiana and the federal government. In May 1933, The National Bank of Commerce in New Orleans was formed pursuant to an executive order approved by President Roosevelt and its assets included some of the deposits and loans of the old Canal Bank. Most of the capital for The National Bank of Commerce was provided by the Reconstruction Finance Corporation (owned by the U.S. government), with the remainder coming

from new shareholders. The U.S. government also provided over \$13 million toward the liquidation of the old Canal Bank. In 1947 and 1969, The National Bank of Commerce in New Orleans made two grants to Tulane University, which included archives of the Citizens Bank and Canal Bank. These materials are held at the Tulane Manuscripts Department, Special Collections Division, Howard-Tilton Memorial Library at Tulane University in New Orleans, Louisiana (collectively, the "Tulane Records"). In 1865, the First National Bank of Lexington (subsequently a part of First Security Corporation of Kentucky which was acquired by Bank One in 1992) was formed and assumed the operations of the Lexington Branch of the second Bank of Kentucky. Public records pertaining to the Lexington Branch of the second Bank of Kentucky have been discovered that contain records relevant to this certification (the "Lexington Records"). The Tulane Records, the Lexington Records and other records indicate that:

1. Citizens Bank and Canal Bank provided credit to plantation owners and accepted mortgages from them. The collateral covered by these mortgages included land, equipment and/or enslaved individuals. The available records do not always provide the names of enslaved individuals. The Disclosing Party, however, estimates that, from 1831 to 1865, taking into account the duplication and/or absence of exact data, approximately 21,000 enslaved individuals were listed among the collateral covered by mortgages given to the Louisiana banks.
2. The Lexington Branch of the second Bank of Kentucky also provided credit to plantation owners and accepted mortgages from them. The collateral covered by these mortgages included land, equipment and/or enslaved individuals. The available records do not always provide the names of enslaved individuals. The Disclosing Party, however, estimates that, from 1835 to 1865, taking into account the duplication and/or absence of exact data, approximately 55 enslaved individuals were listed among the collateral covered by mortgages given to the Lexington Branch of the second Bank of Kentucky.
3. When mortgages went unpaid, the banks could initiate foreclosure proceedings. When this occurred, the bank could take ownership of the collateral. The available records do not always provide the names of enslaved individuals. The Disclosing Party, however, estimates that, from 1831 to 1865, taking into account the duplication and/or absence of exact data, approximately 1,300 enslaved individuals were listed among the collateral that the Louisiana banks came to own. There is no evidence of foreclosure proceedings initiated by the Lexington Branch of the second Bank of Kentucky.

Attachment 2 lists information on mortgages as to which one of the Louisiana banks came to own enslaved individuals through foreclosure proceedings, including, where available, the names of those individuals and their prior or subsequent owners. Attachment 3 lists information on mortgages as to which one of the three banks held collateral that included enslaved individuals, including, where available, the names of those individuals and their prior or subsequent owners. The attachments will be supplemented as necessary to reflect any additional information located.

On September 25, 2008, the Disclosing Party acquired from the Federal Deposit Insurance Corporation, as the Receiver of Washington Mutual Bank, Henderson, NV (the "Receiver") certain assets of Washington Mutual Bank.

A review of the records of Washington Mutual Bank, including the records of its predecessor entities, has disclosed no evidence that Washington Mutual Bank nor any of its predecessors had any investments or profits from slavery, any direct involvement in the slave trade, any direct ownership in slaves, or any slaveholder insurance policies from the slavery era. There is evidence, however, that one predecessor entity, The Bowery Savings Bank, New York (1834)

("Bowery Savings"), purchased a \$100,000 bond of a slave holding state, North Carolina. A total of \$44,000 was paid to Bowery Savings by North Carolina in 1868 on account of the bond.

**ATTACHMENT 1
TO
ATTACHMENT B
TO
CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
FILED BY
JPMORGAN CHASE BANK, N.A.
(as the Disclosing Party and the Applicant)**

Agricultural Bank of Mississippi
Baltimore & Ohio Rail Road Company
Bank of Alabama
Bank of Alexandria (Virginia)
Bank of Ashland at Shelbyville
Bank of Augusta (Georgia)
Bank of Kentucky
Bank of Louisiana
Bank of Louisville
Bank of Metropolis
Bank of Mobile
Bank of Missouri
Bank of North Carolina
Bank of South Carolina
Bank of the State of Missouri
Bank of Tennessee
Bank of Virginia
Barnett, Ellison & Co.
Beers & Brunell
Beers & Co.
Canal & Rail Road Bank of Vicksburg
Carrolton Bank of New Orleans
Charleston Fire & Marine Insurance Company
Chattahoochee Rail Road and Banking Company
City Bank of New Orleans
Commercial & Rail Road Bank of Vicksburg
Commercial Bank of Manchester (Mississippi)
Commercial Bank of New Orleans
Commercial Bank of Selma
Corporation of the City of New Orleans
Corporation of the City of Savannah
Davis & Davis
Delaware & Hudson Canal Company
E.I. Forestall of New Orleans
ER Tyler of New Orleans
E. Warfield, Lexington, Kentucky
Exchange & Banking Company of New Orleans
Exchange Bank of Virginia at Richmond
Franklin Bank of Baltimore
First Bank of Richmond
Hunt, Morton & Quigby of Louisville (Kentucky)

J.D. Beers & Co.
Louisiana & Nashville Railroad Company
Mechanics & Traders Bank of New Orleans
Merchant & Planters Bank of Savannah
Merchants Bank of Baltimore
Mississippi Sound Company
Mr. Pastoret
Mr. S. Reid Irving & Co. (Cotton)
Nashville and Northwestern Rail Road Co.
New Orleans Canal & Banking Company
North Western Bank of Virginia
Philadelphia, Wilmington & Baltimore Rail Road Company
Planters & Mechanics Bank of Charleston
Planters & Mechanics Bank of Mobile
Planters & Merchants Bank of Charleston
Planters Bank of Jackson (Mississippi)
Planters Bank of Natchez
Planters Bank of Savannah
Planters Bank of Tennessee
Robert Kinder House
Ross & Coleman
South Western Rail Road Bank of Charleston
Southern Bank of Alabama
Southern Bank of Kentucky
Southern Life Insurance & Trust Company of Florida
Southern Trust Company
Southwestern Rail Road Bank (South Carolina)
S. Reid Irving & Company
State & Metcalf of Gainsville, Georgia
State of Alabama
State of Florida
State of Georgia
State of Mississippi
T.T. Crittenden, Lexington and Huntsville, Kentucky
Tuscumbice and Decatur Rail Road Company
Union Bank of Charleston
Union Bank of Florida
Union Bank of Tennessee

**ATTACHMENT 2
TO
ATTACHMENT B
TO
CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
FILED BY
JPMORGAN CHASE BANK, N.A.
(as the Disclosing Party and the Applicant)**

**ENSLAVED INDIVIDUALS OWNED BY
CITIZENS BANK OF LOUISIANA AND
NEW ORLEANS CANAL & BANKING COMPANY**

Due to their voluminous size, Attachments 2 and 3 are not attached hereto.

Please see the Economic Disclosure Statement of JPMorgan Chase & Co. for Attachments 2 and 3 in their entirety.

**ATTACHMENT 3
TO
ATTACHMENT B
TO
CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
FILED BY
JPMORGAN CHASE BANK, N.A.
(as the Disclosing Party and the Applicant)**

**ENSLAVED INDIVIDUALS MORTGAGED TO
CITIZENS BANK OF LOUISIANA,
NEW ORLEANS CANAL & BANKING COMPANY AND
LEXINGTON BRANCH OF THE SECOND BANK OF KENTUCKY**

Due to their voluminous size, Attachments 2 and 3 are not attached hereto.

Please see the Economic Disclosure Statement of JPMorgan Chase & Co. for Attachments 2 and 3 in their entirety.

FIRMWIDE
PLEASE POPULATE THE HIGHLIGHTED PORTIONS ONLY

Firm Name:	JPMorgan Chase Bank, N.A.
Primary Representative	Joanne M. Meulendyke
Primary Representative Email and Telephone:	(312) 732-6988 / joanne.meulendyke@jpmorgan.com
Headquarters Address:	1111 Polaris Parkway, Columbus, OH 43240
Chicago Public Finance Office Address	10 South Dearborn, Chicago, IL 60603
Total Number of Employees*:	141,994
Number of Employees in Illinois*:	11,501
Number of Employees in Chicago*:	6,710
Capital Position:	
Minority Designation:	N/A

*Please note that the employee data is for JPMorgan Chase Bank, N.A. employees located in the U.S. only, as of December 31, 2018

Job Categories	65,546						76,448						
	Male						Female						
	Overall Totals	White (Not Hispanic)	Black (Not Hispanic)	Hispanic	Asian	Native American	Two or More Races	White (Not Hispanic)	Black (Not Hispanic)	Hispanic	Asian	Native American	Two or More Races
Officials and Managers	33,100	11,708	1,123	1,579	4,384	32	260	8,313	1,578	1,683	2,149	33	258
Professionals	38,595	11,766	1,763	1,933	5,049	30	385	9,050	2,603	2,015	3,561	40	400
Technicians	150	50	13	16	16	0	3	17	19	8	6	0	2
Sales Workers	26,887	7,743	1,081	3,672	1,761	46	316	5,318	1,062	3,666	1,891	44	287
Office and Clerical	43,049	3,749	2,008	3,688	917	41	268	11,617	7,119	10,375	2,389	140	738
Craft Workers (Skilled)	5	4	0	1	0	0	0	0	0	0	0	0	0
Operatives (Semi-Skilled)	0												
Laborers	0												
Service Workers	208	36	44	41	15		5	14	26	21	2		4
Total	141,994	35,056	6,032	10,930	12,142	149	1,237	34,329	12,407	17,768	9,998	257	1,689

Male	Female	Total
46%	54%	100%

Job Categories	Overall Totals	White (Not Hispanic)	Black (Not Hispanic)	Hispanic	Asian	Native American	Two or More Races
Officials and Managers	23%	14%	2%	2%	5%	0%	0%
Professionals	27%	15%	3%	3%	6%	0%	1%
Technicians	0%	0%	0%	0%	0%	0%	0%
Sales Workers	19%	9%	2%	5%	3%	0%	0%
Office and Clerical	30%	11%	6%	10%	2%	0%	1%
Craft Workers (Skilled)	0%	0%	0%	0%	0%	0%	0%
Operatives (Semi-Skilled)	0%	0%	0%	0%	0%	0%	0%
Laborers	0%	0%	0%	0%	0%	0%	0%
Service Workers	0%	0%	0%	0%	0%	0%	0%
Total	100%	49%	13%	20%	16%	0%	2%

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT
AND AFFIDAVIT**

SECTION I -- GENERAL INFORMATION

A. Legal name of the Disclosing Party submitting this EDS. Include d/b/a/ if applicable:

JPMorgan Chase & Co.

Check ONE of the following three boxes:

Indicate whether the Disclosing Party submitting this EDS is:

1. ☐ the Applicant

OR

2. ☒ a legal entity currently holding, or anticipated to hold within six months after City action on the contract, transaction or other undertaking to which this EDS pertains (referred to below as the "Matter"), a direct or indirect interest in excess of 7.5% in the Applicant. State the Applicant's legal name: JPMorgan Chase Bank, N.A.

OR

3. ☐ a legal entity with a direct or indirect right of control of the Applicant (see Section II(B)(1))
State the legal name of the entity in which the Disclosing Party holds a right of control:

B. Business address of the Disclosing Party:

383 Madison Avenue

New York, NY 10179

C. Telephone: (312)732-6988

Fax:

Email: joanne.meulendyke@jpmorgan.com

D. Name of contact person: Joanne Meulendyke

E. Federal Employer Identification No. (if you have one):

F. Brief description of the Matter to which this EDS pertains. (Include project number and location of property, if applicable):

The City has distributed an RFP for Depository Certification to remain in the pool eligible to provide banking services and products to the City of Chicago
This certification also includes the Chicago Public Schools

G. Which City agency or department is requesting this EDS? City of Chicago Department of Finance

If the Matter is a contract being handled by the City's Department of Procurement Services, please complete the following:

Specification # _____ and Contract # _____

SECTION II -- DISCLOSURE OF OWNERSHIP INTERESTS

A. NATURE OF THE DISCLOSING PARTY

1. Indicate the nature of the Disclosing Party:

- | | |
|--|--|
| <input type="checkbox"/> Person | <input type="checkbox"/> Limited liability company |
| <input checked="" type="checkbox"/> Publicly registered business corporation | <input type="checkbox"/> Limited liability partnership |
| <input type="checkbox"/> Privately held business corporation | <input type="checkbox"/> Joint venture |
| <input type="checkbox"/> Sole proprietorship | <input type="checkbox"/> Not-for-profit corporation |
| <input type="checkbox"/> General partnership | (Is the not-for-profit corporation also a 501(c)(3))? |
| <input type="checkbox"/> Limited partnership | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| <input type="checkbox"/> Trust | <input type="checkbox"/> Other (please specify) |
-

2. For legal entities, the state (or foreign country) of incorporation or organization, if applicable:

Delaware

3. For legal entities not organized in the State of Illinois: Has the organization registered to do business in the State of Illinois as a foreign entity?

☒ Yes ☐ No ☐ Organized in Illinois

B. IF THE DISCLOSING PARTY IS A LEGAL ENTITY:

1. List below the full names and titles, if applicable, of: (i) all executive officers and all directors of the entity; (ii) **for not-for-profit corporations**, all members, if any, which are legal entities (if there are no such members, write "no members which are legal entities"); (iii) **for trusts, estates or other similar entities**, the trustee, executor, administrator, or similarly situated party; (iv) **for general or limited partnerships, limited liability companies, limited liability partnerships or joint ventures**, each general partner, managing member, manager or any other person or legal entity that directly or indirectly controls the day-to-day management of the Applicant.

NOTE: Each legal entity listed below must submit an EDS on its own behalf.

Name	Title
SEE ATTACHMENT A	
<hr/>	
<hr/>	
<hr/>	

2. Please provide the following information concerning each person or legal entity having a direct or indirect, current or prospective (i.e. within 6 months after City action) beneficial interest (including ownership) in excess of 7.5% of the Applicant. Examples of such an interest include shares in a corporation, partnership interest in a partnership or joint venture, interest of a member or manager in a

limited liability company, or interest of a beneficiary of a trust, estate or other similar entity. If none, state "None."

NOTE: Each legal entity listed below may be required to submit an EDS on its own behalf.

Name	Business Address	Percentage Interest in the Applicant
SEE ATTACHMENT A		

SECTION III -- INCOME OR COMPENSATION TO, OR OWNERSHIP BY, CITY ELECTED OFFICIALS

Has the Disclosing Party provided any income or compensation to any City elected official during the 12-month period preceding the date of this EDS? ☐ Yes ☒ No

Does the Disclosing Party reasonably expect to provide any income or compensation to any City elected official during the 12-month period following the date of this EDS? ☐ Yes ☒ No

If "yes" to either of the above, please identify below the name(s) of such City elected official(s) and describe such income or compensation:

SEE ATTACHMENT A

Does any City elected official or, to the best of the Disclosing Party's knowledge after reasonable inquiry, any City elected official's spouse or domestic partner, have a financial interest (as defined in Chapter 2-156 of the Municipal Code of Chicago ("MCC")) in the Disclosing Party?

☐ Yes ☒ No

If "yes," please identify below the name(s) of such City elected official(s) and/or spouse(s)/domestic partner(s) and describe the financial interest(s).

SECTION IV -- DISCLOSURE OF SUBCONTRACTORS AND OTHER RETAINED PARTIES

The Disclosing Party must disclose the name and business address of each subcontractor, attorney, lobbyist (as defined in MCC Chapter 2-156), accountant, consultant and any other person or entity whom the Disclosing Party has retained or expects to retain in connection with the Matter, as well as the nature of the relationship, and the total amount of the fees paid or estimated to be paid. The Disclosing Party is not required to disclose employees who are paid solely through the Disclosing Party's regular payroll. If the Disclosing Party is uncertain whether a disclosure is required under this Section, the Disclosing Party must either ask the City whether disclosure is required or make the disclosure.

Name (indicate whether retained or anticipated to be retained)	Business Address	Relationship to Disclosing Party (subcontractor, attorney, lobbyist, etc.)	Fees (indicate whether paid or estimated.) NOTE: "hourly rate" or "t.b.d." is not an acceptable response.
--	------------------	--	---

(Add sheets if necessary)

☒ Check here if the Disclosing Party has not retained, nor expects to retain, any such persons or entities.

SECTION V -- CERTIFICATIONS

A. COURT-ORDERED CHILD SUPPORT COMPLIANCE

Under MCC Section 2-92-415, substantial owners of business entities that contract with the City must remain in compliance with their child support obligations throughout the contract's term.

Has any person who directly or indirectly owns 10% or more of the Disclosing Party been declared in arrearage on any child support obligations by any Illinois court of competent jurisdiction?

☐ Yes ☐ No ☒ No person directly or indirectly owns 10% or more of the Disclosing Party.

If "Yes," has the person entered into a court-approved agreement for payment of all support owed and is the person in compliance with that agreement?

☐ Yes ☐ No

B. FURTHER CERTIFICATIONS

1. [This paragraph 1 applies only if the Matter is a contract being handled by the City's Department of Procurement Services.] In the 5-year period preceding the date of this EDS, neither the Disclosing Party nor any Affiliated Entity [see definition in (5) below] has engaged, in connection with the performance of any public contract, the services of an integrity monitor, independent private sector inspector general, or integrity compliance consultant (i.e., an individual or entity with legal, auditing, investigative, or other similar skills, designated by a public agency to help the agency monitor the activity of specified agency vendors as well as help the vendors reform their business practices so they can be considered for agency contracts in the future, or continue with a contract in progress).

2. The Disclosing Party and its Affiliated Entities are not delinquent in the payment of any fine, fee, tax or other source of indebtedness owed to the City of Chicago, including, but not limited to, water and sewer charges, license fees, parking tickets, property taxes and sales taxes, nor is the Disclosing Party delinquent in the payment of any tax administered by the Illinois Department of Revenue.

SEE ATTACHMENT A

3. The Disclosing Party and, if the Disclosing Party is a legal entity, all of those persons or entities identified in Section II(B)(1) of this EDS: **SEE ATTACHMENT A**

- a. are not presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from any transactions by any federal, state or local unit of government;
- b. have not, during the 5 years before the date of this EDS, been convicted of a criminal offense, adjudged guilty, or had a civil judgment rendered against them in connection with: obtaining, attempting to obtain, or performing a public (federal, state or local) transaction or contract under a public transaction; a violation of federal or state antitrust statutes; fraud; embezzlement; theft; forgery; bribery; falsification or destruction of records; making false statements; or receiving stolen property;
- c. are not presently indicted for, or criminally or civilly charged by, a governmental entity (federal, state or local) with committing any of the offenses set forth in subparagraph (b) above;
- d. have not, during the 5 years before the date of this EDS, had one or more public transactions (federal, state or local) terminated for cause or default; and
- e. have not, during the 5 years before the date of this EDS, been convicted, adjudged guilty, or found liable in a civil proceeding, or in any criminal or civil action, including actions concerning environmental violations, instituted by the City or by the federal government, any state, or any other unit of local government.

4. The Disclosing Party understands and shall comply with the applicable requirements of MCC Chapters 2-56 (Inspector General) and 2-156 (Governmental Ethics).

5. Certifications (5), (6) and (7) concern: **SEE ATTACHMENT A**

- the Disclosing Party;
- any "Contractor" (meaning any contractor or subcontractor used by the Disclosing Party in connection with the Matter, including but not limited to all persons or legal entities disclosed under Section IV, "Disclosure of Subcontractors and Other Retained Parties");
- any "Affiliated Entity" (meaning a person or entity that, directly or indirectly: controls the Disclosing Party, is controlled by the Disclosing Party, or is, with the Disclosing Party, under common control of another person or entity). Indicia of control include, without limitation: interlocking management or ownership; identity of interests among family members, shared facilities and equipment; common use of employees; or organization of a business entity following the ineligibility of a business entity to do business with federal or state or local government, including the City, using substantially the same management, ownership, or principals as the ineligible entity. With respect to Contractors, the term Affiliated Entity means a person or entity that directly or indirectly controls the Contractor, is controlled by it, or, with the Contractor, is under common control of another person or entity;
- any responsible official of the Disclosing Party, any Contractor or any Affiliated Entity or any other official, agent or employee of the Disclosing Party, any Contractor or any Affiliated Entity, acting pursuant to the direction or authorization of a responsible official of the Disclosing Party, any Contractor or any Affiliated Entity (collectively "Agents").

Neither the Disclosing Party, nor any Contractor, nor any Affiliated Entity of either the Disclosing Party or any Contractor, nor any Agents have, during the 5 years before the date of this EDS, or, with respect to a Contractor, an Affiliated Entity, or an Affiliated Entity of a Contractor during the 5 years before the date of such Contractor's or Affiliated Entity's contract or engagement in connection with the Matter:

- a. bribed or attempted to bribe, or been convicted or adjudged guilty of bribery or attempting to bribe, a public officer or employee of the City, the State of Illinois, or any agency of the federal government or of any state or local government in the United States of America, in that officer's or employee's official capacity;
 - b. agreed or colluded with other bidders or prospective bidders, or been a party to any such agreement, or been convicted or adjudged guilty of agreement or collusion among bidders or prospective bidders, in restraint of freedom of competition by agreement to bid a fixed price or otherwise; or
 - c. made an admission of such conduct described in subparagraph (a) or (b) above that is a matter of record, but have not been prosecuted for such conduct; or
 - d. violated the provisions referenced in MCC Subsection 2-92-320(a)(4)(Contracts Requiring a Base Wage); (a)(5)(Debarment Regulations); or (a)(6)(Minimum Wage Ordinance).
6. Neither the Disclosing Party, nor any Affiliated Entity or Contractor, or any of their employees, officials, agents or partners, is barred from contracting with any unit of state or local government as a result of engaging in or being convicted of (1) bid-rigging in violation of 720 ILCS 5/33E-3; (2) bid-rotating in violation of 720 ILCS 5/33E-4; or (3) any similar offense of any state or of the United States of America that contains the same elements as the offense of bid-rigging or bid-rotating.
7. Neither the Disclosing Party nor any Affiliated Entity is listed on a Sanctions List maintained by the United States Department of Commerce, State, or Treasury, or any successor federal agency.
8. [FOR APPLICANT ONLY] (i) Neither the Applicant nor any "controlling person" [see MCC Chapter 1-23, Article I for applicability and defined terms] of the Applicant is currently indicted or charged with, or has admitted guilt of, or has ever been convicted of, or placed under supervision for, any criminal offense involving actual, attempted, or conspiracy to commit bribery, theft, fraud, forgery, perjury, dishonesty or deceit against an officer or employee of the City or any "sister agency"; and (ii) the Applicant understands and acknowledges that compliance with Article I is a continuing requirement for doing business with the City. NOTE: If MCC Chapter 1-23, Article I applies to the Applicant, that Article's permanent compliance timeframe supersedes 5-year compliance timeframes in this Section V.
9. [FOR APPLICANT ONLY] The Applicant and its Affiliated Entities will not use, nor permit their subcontractors to use, any facility listed as having an active exclusion by the U.S. EPA on the federal System for Award Management ("SAM").
10. [FOR APPLICANT ONLY] The Applicant will obtain from any contractors/subcontractors hired or to be hired in connection with the Matter certifications equal in form and substance to those in Certifications (2) and (9) above and will not, without the prior written consent of the City, use any such

contractor/subcontractor that does not provide such certifications or that the Applicant has reason to believe has not provided or cannot provide truthful certifications.

11. If the Disclosing Party is unable to certify to any of the above statements in this Part B (Further Certifications), the Disclosing Party must explain below:

SEE ATTACHMENT A

If the letters "NA," the word "None," or no response appears on the lines above, it will be conclusively presumed that the Disclosing Party certified to the above statements.

12. To the best of the Disclosing Party's knowledge after reasonable inquiry, the following is a complete list of all current employees of the Disclosing Party who were, at any time during the 12-month period preceding the date of this EDS, an employee, or elected or appointed official, of the City of Chicago (if none, indicate with "N/A" or "none").

SEE ATTACHMENT A

13. To the best of the Disclosing Party's knowledge after reasonable inquiry, the following is a complete list of all gifts that the Disclosing Party has given or caused to be given, at any time during the 12-month period preceding the execution date of this EDS, to an employee, or elected or appointed official, of the City of Chicago. For purposes of this statement, a "gift" does not include: (i) anything made generally available to City employees or to the general public, or (ii) food or drink provided in the course of official City business and having a retail value of less than \$25 per recipient, or (iii) a political contribution otherwise duly reported as required by law (if none, indicate with "N/A" or "none"). As to any gift listed below, please also list the name of the City recipient.

SEE ATTACHMENT A

C. CERTIFICATION OF STATUS AS FINANCIAL INSTITUTION

1. The Disclosing Party certifies that the Disclosing Party (check one)

☒ is ☐ is not

a "financial institution" as defined in MCC Section 2-32-455(b).

2. If the Disclosing Party IS a financial institution, then the Disclosing Party pledges:

"We are not and will not become a predatory lender as defined in MCC Chapter 2-32. We further pledge that none of our affiliates is, and none of them will become, a predatory lender as defined in MCC Chapter 2-32. We understand that becoming a predatory lender or becoming an affiliate of a predatory lender may result in the loss of the privilege of doing business with the City."

If the Disclosing Party is unable to make this pledge because it or any of its affiliates (as defined in MCC Section 2-32-455(b)) is a predatory lender within the meaning of MCC Chapter 2-32, explain here (attach additional pages if necessary):

If the letters "NA," the word "None," or no response appears on the lines above, it will be conclusively presumed that the Disclosing Party certified to the above statements.

D. CERTIFICATION REGARDING FINANCIAL INTEREST IN CITY BUSINESS

Any words or terms defined in MCC Chapter 2-156 have the same meanings if used in this Part D.

1. In accordance with MCC Section 2-156-110: To the best of the Disclosing Party's knowledge after reasonable inquiry, does any official or employee of the City have a financial interest in his or her own name or in the name of any other person or entity in the Matter?

☐ Yes ☒ No SEE ATTACHMENT A

NOTE: If you checked "Yes" to Item D(1), proceed to Items D(2) and D(3). If you checked "No" to Item D(1), skip Items D(2) and D(3) and proceed to Part E.

2. Unless sold pursuant to a process of competitive bidding, or otherwise permitted, no City elected official or employee shall have a financial interest in his or her own name or in the name of any other person or entity in the purchase of any property that (i) belongs to the City, or (ii) is sold for taxes or assessments, or (iii) is sold by virtue of legal process at the suit of the City (collectively, "City Property Sale"). Compensation for property taken pursuant to the City's eminent domain power does not constitute a financial interest within the meaning of this Part D.

Does the Matter involve a City Property Sale?

☐ Yes ☐ No

3. If you checked "Yes" to Item D(1), provide the names and business addresses of the City officials or employees having such financial interest and identify the nature of the financial interest:

Name	Business Address	Nature of Financial Interest
<hr/>		
<hr/>		
<hr/>		

4. The Disclosing Party further certifies that no prohibited financial interest in the Matter will be acquired by any City official or employee. SEE ATTACHMENT A

E. CERTIFICATION REGARDING SLAVERY ERA BUSINESS

Please check either (1) or (2) below. If the Disclosing Party checks (2), the Disclosing Party must disclose below or in an attachment to this EDS all information required by (2). Failure to comply with these disclosure requirements may make any contract entered into with the City in connection with the Matter voidable by the City.

____ 1. The Disclosing Party verifies that the Disclosing Party has searched any and all records of the Disclosing Party and any and all predecessor entities regarding records of investments or profits from slavery or slaveholder insurance policies during the slavery era (including insurance policies issued to slaveholders that provided coverage for damage to or injury or death of their slaves), and the Disclosing Party has found no such records.

X 2. The Disclosing Party verifies that, as a result of conducting the search in step (1) above, the Disclosing Party has found records of investments or profits from slavery or slaveholder insurance policies. The Disclosing Party verifies that the following constitutes full disclosure of all such records, including the names of any and all slaves or slaveholders described in those records:

SEE ATTACHMENT B

SECTION VI -- CERTIFICATIONS FOR FEDERALLY FUNDED MATTERS

NOTE: If the Matter is federally funded, complete this Section VI. **If the Matter is not federally funded**, proceed to Section VII. For purposes of this Section VI, tax credits allocated by the City and proceeds of debt obligations of the City are not federal funding.

A. CERTIFICATION REGARDING LOBBYING

1. List below the names of all persons or entities registered under the federal Lobbying Disclosure Act of 1995, as amended, who have made lobbying contacts on behalf of the Disclosing Party with respect to the Matter: (Add sheets if necessary):

NOT APPLICABLE

(If no explanation appears or begins on the lines above, or if the letters "NA" or if the word "None" appear, it will be conclusively presumed that the Disclosing Party means that NO persons or entities registered under the Lobbying Disclosure Act of 1995, as amended, have made lobbying contacts on behalf of the Disclosing Party with respect to the Matter.)

2. The Disclosing Party has not spent and will not expend any federally appropriated funds to pay any person or entity listed in paragraph A(1) above for his or her lobbying activities or to pay any person or entity to influence or attempt to influence an officer or employee of any agency, as defined by applicable federal law, a member of Congress, an officer or employee of Congress, or an employee

of a member of Congress, in connection with the award of any federally funded contract, making any federally funded grant or loan, entering into any cooperative agreement, or to extend, continue, renew, amend, or modify any federally funded contract, grant, loan, or cooperative agreement.

3. The Disclosing Party will submit an updated certification at the end of each calendar quarter in which there occurs any event that materially affects the accuracy of the statements and information set forth in paragraphs A(1) and A(2) above.

4. The Disclosing Party certifies that either: (i) it is not an organization described in section 501(c)(4) of the Internal Revenue Code of 1986; or (ii) it is an organization described in section 501(c)(4) of the Internal Revenue Code of 1986 but has not engaged and will not engage in "Lobbying Activities," as that term is defined in the Lobbying Disclosure Act of 1995, as amended.

5. If the Disclosing Party is the Applicant, the Disclosing Party must obtain certifications equal in form and substance to paragraphs A(1) through A(4) above from all subcontractors before it awards any subcontract and the Disclosing Party must maintain all such subcontractors' certifications for the duration of the Matter and must make such certifications promptly available to the City upon request.

B. CERTIFICATION REGARDING EQUAL EMPLOYMENT OPPORTUNITY

If the Matter is federally funded, federal regulations require the Applicant and all proposed subcontractors to submit the following information with their bids or in writing at the outset of negotiations.

Is the Disclosing Party the Applicant?

☐ Yes

☐ No

If "Yes," answer the three questions below:

1. Have you developed and do you have on file affirmative action programs pursuant to applicable federal regulations? (See 41 CFR Part 60-2.)

☐ Yes

☐ No

2. Have you filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance Programs, or the Equal Employment Opportunity Commission all reports due under the applicable filing requirements?

☐ Yes

☐ No

☐ Reports not required

3. Have you participated in any previous contracts or subcontracts subject to the equal opportunity clause?

☐ Yes

☐ No

If you checked "No" to question (1) or (2) above, please provide an explanation:

SECTION VII -- FURTHER ACKNOWLEDGMENTS AND CERTIFICATION

The Disclosing Party understands and agrees that:

- A. The certifications, disclosures, and acknowledgments contained in this EDS will become part of any contract or other agreement between the Applicant and the City in connection with the Matter, whether procurement, City assistance, or other City action, and are material inducements to the City's execution of any contract or taking other action with respect to the Matter. The Disclosing Party understands that it must comply with all statutes, ordinances, and regulations on which this EDS is based.
- B. The City's Governmental Ethics Ordinance, MCC Chapter 2-156, imposes certain duties and obligations on persons or entities seeking City contracts, work, business, or transactions. The full text of this ordinance and a training program is available on line at www.cityofchicago.org/Ethics, and may also be obtained from the City's Board of Ethics, 740 N. Sedgwick St., Suite 500, Chicago, IL 60610, (312) 744-9660. The Disclosing Party must comply fully with this ordinance.
- C. If the City determines that any information provided in this EDS is false, incomplete or inaccurate, any contract or other agreement in connection with which it is submitted may be rescinded or be void or voidable, and the City may pursue any remedies under the contract or agreement (if not rescinded or void), at law, or in equity, including terminating the Disclosing Party's participation in the Matter and/or declining to allow the Disclosing Party to participate in other City transactions. Remedies at law for a false statement of material fact may include incarceration and an award to the City of treble damages.
- D. It is the City's policy to make this document available to the public on its Internet site and/or upon request. Some or all of the information provided in, and appended to, this EDS may be made publicly available on the Internet, in response to a Freedom of Information Act request, or otherwise. By completing and signing this EDS, the Disclosing Party waives and releases any possible rights or claims which it may have against the City in connection with the public release of information contained in this EDS and also authorizes the City to verify the accuracy of any information submitted in this EDS.
- E. The information provided in this EDS must be kept current. In the event of changes, the Disclosing Party must supplement this EDS up to the time the City takes action on the Matter. If the Matter is a contract being handled by the City's Department of Procurement Services, the Disclosing Party must update this EDS as the contract requires. **NOTE:** With respect to Matters subject to MCC Chapter 1-23, Article I (imposing **PERMANENT INELIGIBILITY** for certain specified offenses), the information provided herein regarding eligibility must be kept current for a longer period, as required by MCC Chapter 1-23 and Section 2-154-020.

CERTIFICATION

Under penalty of perjury, the person signing below: (1) warrants that he/she is authorized to execute this EDS, and all applicable Appendices, on behalf of the Disclosing Party, and (2) warrants that all certifications and statements contained in this EDS, and all applicable Appendices, are true, accurate and complete as of the date furnished to the City.

JPMorgan Chase & Co.

(Print or type exact legal name of Disclosing Party)

By: Jeffrey Sundhelmer

(Sign here)

Jeffrey Sundhelmer

(Print or type name of person signing)

Attorney in Fact

(Print or type title of person signing)

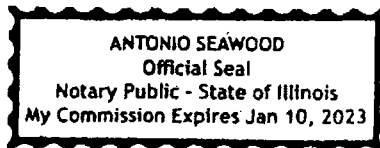
Signed and sworn to before me on (date) November 8th, 2019

at Cook County, IL (state).

Antonio Seawood

Notary Public

Commission expires: Jan 10, 2023



**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
APPENDIX A**

**FAMILIAL RELATIONSHIPS WITH ELECTED CITY OFFICIALS
AND DEPARTMENT HEADS**

This Appendix is to be completed only by (a) the Applicant, and (b) any legal entity which has a direct ownership interest in the Applicant exceeding 7.5%. It is not to be completed by any legal entity which has only an indirect ownership interest in the Applicant.

Under MCC Section 2-154-015, the Disclosing Party must disclose whether such Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof currently has a "familial relationship" with any elected city official or department head. A "familial relationship" exists if, as of the date this EDS is signed, the Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof is related to the mayor, any alderman, the city clerk, the city treasurer or any city department head as spouse or domestic partner or as any of the following, whether by blood or adoption: parent, child, brother or sister, aunt or uncle, niece or nephew, grandparent, grandchild, father-in-law, mother-in-law, son-in-law, daughter-in-law, stepfather or stepmother, stepson or stepdaughter, stepbrother or stepsister or half-brother or half-sister.

"Applicable Party" means (1) all executive officers of the Disclosing Party listed in Section II.B.1.a., if the Disclosing Party is a corporation; all partners of the Disclosing Party, if the Disclosing Party is a general partnership; all general partners and limited partners of the Disclosing Party, if the Disclosing Party is a limited partnership; all managers, managing members and members of the Disclosing Party, if the Disclosing Party is a limited liability company; (2) all principal officers of the Disclosing Party; and (3) any person having more than a 7.5% ownership interest in the Disclosing Party. "Principal officers" means the president, chief operating officer, executive director, chief financial officer, treasurer or secretary of a legal entity or any person exercising similar authority.

Does the Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof currently have a "familial relationship" with an elected city official or department head?

☐ Yes

☒ No

To the Authorized Representative's knowledge, information and belief after reasonable inquiry as of November 2019.

If yes, please identify below (1) the name and title of such person, (2) the name of the legal entity to which such person is connected; (3) the name and title of the elected city official or department head to whom such person has a familial relationship, and (4) the precise nature of such familial relationship.

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
APPENDIX B**

BUILDING CODE SCOFFLAW/PROBLEM LANDLORD CERTIFICATION

This Appendix is to be completed only by (a) the Applicant, and (b) any legal entity which has a direct ownership interest in the Applicant exceeding 7.5% (an "Owner"). It is not to be completed by any legal entity which has only an indirect ownership interest in the Applicant.

1. Pursuant to MCC Section 2-154-010, is the Applicant or any Owner identified as a building code scofflaw or problem landlord pursuant to MCC Section 2-92-416?

☐ Yes ☒ No

2. If the Applicant is a legal entity publicly traded on any exchange, is any officer or director of the Applicant identified as a building code scofflaw or problem landlord pursuant to MCC Section 2-92-416?

☐ Yes ☐ No ☒ The Applicant is not publicly traded on any exchange.

3. If yes to (1) or (2) above, please identify below the name of each person or legal entity identified as a building code scofflaw or problem landlord and the address of each building or buildings to which the pertinent code violations apply.

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
APPENDIX C**

PROHIBITION ON WAGE & SALARY HISTORY SCREENING - CERTIFICATION

This Appendix is to be completed only by an Applicant that is completing this EDS as a “contractor” as defined in MCC Section 2-92-385. That section, which should be consulted (www.amlegal.com), generally covers a party to any agreement pursuant to which they: (i) receive City of Chicago funds in consideration for services, work or goods provided (including for legal or other professional services), or (ii) pay the City money for a license, grant or concession allowing them to conduct a business on City premises.

On behalf of an Applicant that is a contractor pursuant to MCC Section 2-92-385, I hereby certify that the Applicant is in compliance with MCC Section 2-92-385(b)(1) and (2), which prohibit: (i) screening job applicants based on their wage or salary history, or (ii) seeking job applicants’ wage or salary history from current or former employers. I also certify that the Applicant has adopted a policy that includes those prohibitions.

☐ Yes

☐ No

☐ N/A – I am not an Applicant that is a “contractor” as defined in MCC Section 2-92-385.

This certification shall serve as the affidavit required by MCC Section 2-92-385(c)(1).

If you checked “no” to the above, please explain.

Not Applicable, as JPMorgan Chase & Co. is not the Applicant

**ATTACHMENT A
TO
CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
FILED BY
JPMORGAN CHASE & CO.
(as a Disclosing Party holding an interest in the Applicant)**

Responses contained in the corresponding EDS and this Attachment A are true, accurate and complete based on the Authorized Representative's knowledge, information and belief, upon due inquiry by relying on information provided by other employees of the Disclosing Party or its affiliates or subsidiaries. Certain sections of this EDS are the process of being updated. The Disclosing Party will provide the City of Chicago with an update to this Disclosure Statement if there are any material changes to the matters disclosed herein.

SECTION II B.1

Directors:

Linda B. Bammann
James A. Bell
Stephen B. Burke
Todd A. Combs
James S. Crown
James Dimon
Timothy P. Flynn
Melody Hobson
Laban P. Jackson, Jr.
Michael A. Neal
Lee R. Raymond

Executive Officers/Operating Committee:

Ashley Bacon	Chief Risk Officer
Lori A. Beer	Chief Information Officer
James Dimon	Chairman of the Board, Chief Executive Officer
Mary E. Erdoes	Chief Executive Officer of Asset & Wealth Management
Stacey Friedman	General Counsel
Robin Leopold	Head of Human Resources
Douglas B. Petno	Chief Executive Officer of Commercial Banking
Jennifer A. Piepszak	Chief Financial Officer
Daniel E. Pinto	Co-President, Co-Chief Operating Officer, Chief Executive Officer of the Corporate & Investment Bank
Peter L. Scher	Head of Corporate Responsibility
Gordon A. Smith	Co-President, Co-Chief Operating Officer, Chief Executive Officer of Consumer & Community Banking

SECTION II B.2: DISCLOSURE OF OWNERSHIP INTERESTS

See Attachment I to Attachment A.

SECTION III: INCOME OR COMPENSATION TO, OR OWNERSHIP BY, CITY ELECTED OFFICIALS

Based on knowledge and belief, upon due inquiry, the Disclosing Party does not reasonable expect to provide any income or compensation to any City elected official during the 12- month period following the date of this EDS.

SECTION IV: DISCLOSURE OF SUBCONTRACTORS AND OTHER RETAINED PARTIES

With respect to Section IV, the Authorized Representative certifies based on the Authorized Representative's knowledge, information, and belief, upon due inquiry, that the Disclosing Party has not retained a subcontractor, attorney, lobbyist, accountant, or consultant in connection with the Matter.

SECTION V: CERTIFICATIONS

B. FURTHER CERTIFICATIONS

B.2 The Authorized Representative certifies on behalf of the Disclosing Party, as to the statements contained in Section V.B.2 that based on the Authorized Representative's knowledge, information, and belief, upon due inquiry, that neither the Disclosing Party nor its affiliates are delinquent in paying any fine, fee, tax or other charge owed to the State of Illinois or the City of Chicago except for taxes that are being contested in good faith by appropriate legal proceeding and possible delinquencies in paying a fine, fee, tax or other charge related to (i) property mortgaged to the Disclosing Party or its affiliates, (ii) property owned by the Disclosing Party or its affiliates and leased to others, (iii) foreclosed property now owned by the Disclosing Party or its affiliates, (iv) property owned or held by the Disclosing Party or its affiliates as a fiduciary or nominee, and (v) fines, fees, taxes or other charges that are being contested in good faith by the Disclosing Party or its affiliates by appropriate legal proceeding. If there are any outstanding claims that the Disclosing Party is notified of that Disclosing Party was not aware of previously, Disclosing Party will immediately address them.

B.3 (a-e) With respect to Section V, B.3 (a-c) of the EDS, JPMorgan Chase & Co. and JPMorgan Chase Bank, N.A. (hereinafter the "Disclosing Party") certify based on the Disclosing Party's knowledge, information, and belief, upon due inquiry, that such statements are accurate with respect to the executive officers and directors of the Disclosing Party. Based on the Disclosing Party's knowledge, information, and belief, upon due inquiry, JPMorgan Chase & Co. and/or its subsidiaries (collectively, the "Firm") are defendants or putative defendants in numerous legal proceedings, including private civil litigations and regulatory/government investigations. The litigations range from individual actions involving a single plaintiff to class action lawsuits with potentially millions of class members. Investigations involve both formal and informal proceedings, by both governmental agencies and self-regulatory organizations. These legal proceedings are at varying stages of adjudication, arbitration or investigation, and involve each of the Firm's lines of business and geographies and a wide variety of claims (including common law tort and contract claims and statutory antitrust, securities and consumer protection claims), some of which present novel legal theories. Based on current knowledge, the Firm believes it has asserted meritorious defenses to the claims asserted against it in its

currently outstanding legal proceedings, intends to defend itself vigorously in all such matters and does not believe that any pending legal proceeding would have a material effect on the Firm's performance of the services contemplated by the RFP. For further discussion, please refer to JPMorgan Chase & Co.'s publicly-filed disclosures, including its most recent Annual Report on Form 10-K and Quarterly Reports on Form 10-Q filed with the U.S. Securities and Exchange Commission (available at: <https://investor.shareholder.com/jpmorganchase/sec.cfm>). Moreover, the following matters may be of interest:

On May 20, 2015, JPMorgan Chase & Co. entered a plea of guilty to a single violation of federal antitrust law. Additional information regarding the plea and resolutions of other investigations related to the Firm's foreign exchange activities is available via May 20, 2015 press release (available at <http://investor.shareholder.com/jpmorganchase/releasedetail.cfm?ReleaseID=914105>). Judgment consistent with the terms of the plea agreement referenced in the press release was entered on January 10, 2017.

JPMorgan Chase Bank, N.A., a national banking association with operations throughout the world, has facilities in numerous jurisdictions, but to our knowledge, we are not aware of any such infringements, penalties, pending actions and/or prosecutions for breach of environmental laws other than as follows:

JPMorgan has entered into the following consent orders with the New York State Department of Environmental Conservation within the past five (5) years:

In the Matter of the Alleged Violation of Title 10 of Article 17 of the Environmental Conservation Law, as implemented pursuant to Part 613 of Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York by JPMorgan Chase & Co., Case No. PBS.OT.2-611102.6.2018.

In the Matter of the Alleged Violation of Title 10 of Article 17 of the Environmental Conservation Law, as implemented pursuant to Part 613 of Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York by JPMorgan Chase & Co., Case No. PBS.OT.2-611103.6.2018.

As a result of environmental audits that JPMorgan Chase Bank, N.A. and certain affiliated entities (JPMC) voluntarily conducted of JPMC's operations in 2014, 2015 and 2016, the Company discovered a number of compliance issues that it voluntarily self-disclosed to the U.S. Environmental Protection Agency (EPA), and JPMC subsequently voluntarily entered into a Consent Agreement and Final Order with EPA in June 2017 (In re: JPMorgan Chase Bank, N.A., Docket Nos. CWA-HQ-2017-6001, EPCRA-HQ-2017-6001, CAA-HQ-2017-6001, RCRA-HQ-2017-6001). None of the issues discovered resulted in any harm to the environment or to human health. In addition, from time to time JPMC may receive notices alleging minor compliance issues from state and/or local environmental agencies. In those instances, JPMC works with the agencies to address the issues promptly.

B.5 (a-d):

The Disclosing Party certifies the accuracy of the statements contained in sections 5, 6, and 7 of Section V only as to the Disclosing Party and its executive officers and directors. Based on the Disclosing Party's knowledge, information, and belief, upon due inquiry, JPMorgan Chase & Co. and/or its subsidiaries are defendants or putative defendants in

numerous legal proceedings, including private civil litigations and regulatory/government investigations. The litigations range from individual actions involving a single plaintiff to class action lawsuits with potentially millions of class members. Investigations involve both formal and informal proceedings, by both governmental agencies and self-regulatory organizations. These legal proceedings are at varying stages of adjudication, arbitration or investigation, and involve each of the Firm's lines of business and geographies and a wide variety of claims (including common law tort and contract claims and statutory antitrust, securities and consumer protection claims), some of which present novel legal theories. Based on current knowledge, the Firm believes it has asserted meritorious defenses to the claims asserted against it in its currently outstanding legal proceedings, intends to defend itself vigorously in all such matters and does not believe that any pending legal proceeding would have a material effect on the Firm's performance of the services contemplated by the RFP. For further discussion, please refer to JPMorgan Chase & Co.'s publicly-filed disclosures, including its most recent Annual Report on Form 10-K and Quarterly Reports on Form 10-Q filed with the U.S. Securities and Exchange Commission (available at: <https://investor.shareholder.com/jpmorganchase/sec.cfm>). Moreover, the following matters may be of interest:

On May 20, 2015, JPMorgan Chase & Co. entered a plea of guilty to a single violation of federal antitrust law. Additional information regarding the plea and resolutions of other investigations related to the Firm's foreign exchange activities is available via May 20, 2015 press release (available at <http://investor.shareholder.com/jpmorganchase/releasedetail.cfm?ReleaseID=914105>). Judgment consistent with the terms of the plea agreement referenced in the press release was entered on January 10, 2017.

Furthermore, with respect to Section V. B.5. (d), the Minimum Wage ordinance, the Disclosing Party has not, during the five years before the execution date of this EDS, been determined to have violated the provisions of Municipal Code Section 2-92-320 (Minimum Wage Ordinance) as it relates to base wages.

- B.11* Except as otherwise set forth in this Attachment A, the Authorized Representative on behalf of the Disclosing Party does not make any certification whatsoever with respect to any Applicable Party other than the Disclosing Party. The Authorized Representative on behalf of the Disclosing Party also certifies that it has not engaged any sub-contractor with respect to this transaction.
- B.12* The Authorized Representative, on behalf of the Disclosing Party, certifies as to the statement in Section V, paragraph B.12 that, based on the Authorized Representative's knowledge, information, and belief, upon due inquiry, the following Disclosing Party employees were previously City of Chicago employees during the 12-month period preceding the execution date of this EDS:
- None
- B.13* The Authorized Representative certifies as to the statement in Section V, paragraph B.13 that, based on the Authorized Representative's knowledge, information, and belief, upon due inquiry, the following gifts were provided by employees of the Disclosing Party to the following:
- None

D. INTEREST IN CITY BUSINESS

D.1 & D.4 As to the disclosures set forth in Section V, paragraphs D.1 & D.4, based on the Authorized Representative's knowledge, information, and belief, upon due inquiry, on behalf of the Disclosing Party, to the extent the Disclosing Party has any control the Authorized Representative certifies that no official or employee of the City of Chicago has a financial interest in his or her own name or in the name of any other person in this transaction.

**ATTACHMENT 1
TO
ATTACHMENT A**

SECTION II B.2: DISCLOSURE OF OWNERSHIP INTERESTS

See following page. The Form ADV for the Vanguard Group is found at the following link:
[https://www.adviserinfo.sec.gov/IAPD/content/ViewForm/crd_iapd_stream_pdf.aspx?O
RG_PK=105958](https://www.adviserinfo.sec.gov/IAPD/content/ViewForm/crd_iapd_stream_pdf.aspx?ORG_PK=105958)

Pursuant to SEC filings, the companies included in the table below were the beneficial owners of more than 5% of our outstanding common stock as of December 31, 2018.

Name of beneficial owner	Address of beneficial owner	Common stock owned (#)	Percent owned (%)
The Vanguard Group ¹	100 Vanguard Blvd. Malvern, PA 19355	259,207,050	7.79

¹ The Vanguard Group owns the above holdings in its capacity as an investment advisor in accordance with SEC Rule 13d-1(b)(1)(i)(E). According to the Schedule 13G dated February 11, 2019, filed with the SEC, in the aggregate, Vanguard and the affiliated entities included in the Schedule 13G ("Vanguard") have sole dispositive power over 254,639,880 shares, shared dispositive power over 4,567,170 shares, sole voting power over 3,874,941 shares, and shared voting power over 772,915 shares of our common stock.

**ATTACHMENT B
TO
CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
FILED BY
JPMORGAN CHASE & CO.
(as a Disclosing Party holding an interest in the Applicant)**

The following response is true, accurate and complete based on the Authorized Representative's knowledge, information, and belief relying on information prepared on February 24, 2009, by a consultant at the direction of JPMorgan Chase & Co.

SECTION V -- CERTIFICATIONS

E. CERTIFICATION REGARDING SLAVERY ERA BUSINESS.

The Disclosing Party was formed on July 1, 2004, when JPMorgan Chase & Co. acquired Bank One Corporation ("Bank One").

With regard to predecessors of the Disclosing Party as it existed prior to the Bank One Corporation acquisition ("JPMorgan Chase"), the Disclosing Party reports that J. Pierpont Morgan, Sr. was associated with George Peabody & Company and J.S. Morgan & Company (the "Peabody Firms") before he founded Drexel Morgan & Company, which ultimately became part of JPMorgan Chase. Capital supplied by Junius S. Morgan and J. Pierpont Morgan, Sr. appears to have been used to capitalize Drexel Morgan & Company in 1871. Upon the death of Junius S. Morgan, J.S. Morgan & Company came under the control of J. Pierpont Morgan, Sr. and became affiliated with J.P. Morgan & Co. Records indicate that the Peabody Firms had customers that appear to have used enslaved individuals.

JPMorgan Chase and Bank One had predecessor banks in states outside the South that purchased notes issued by, issued letters of credit or made loans to, and/or maintained correspondent accounts with municipalities, banks, companies and individuals located in Southern states where slavery was practiced during the slavery era. These municipalities, banks, companies and individuals are listed on Attachment 1.

Bank One had predecessor banks before 1866 in three Southern states: Kentucky, Louisiana and Virginia. Searches revealed slavery-related information about two Louisiana banks, the Canal Bank (formed in 1831) and the Citizens Bank (formed in 1833), and the Lexington branch of the second Bank of Kentucky (formed in 1835). In 1924 Citizens Bank and Canal Bank merged. Predecessors of JPMorgan Chase had longstanding banking relationships with Canal Bank and its predecessors (see Attachment 1), were creditors of Canal Bank and, in 1931, it appears that a predecessor of JPMorgan Chase led a group of investors that provided capital to Canal Bank and this predecessor of JPMorgan Chase became a shareholder and took a controlling management interest in the Canal Bank. The Canal Bank was placed into liquidation in March-May 1933 based on actions by the State of Louisiana and the federal government. In May 1933, The National Bank of Commerce in New Orleans was formed pursuant to an executive order approved by President Roosevelt and its assets included some of the deposits and loans of the old Canal Bank. Most of the capital for The National Bank of Commerce was provided by the Reconstruction Finance Corporation (owned by the U.S. government), with the remainder coming from new shareholders. The U.S. government also provided over \$13 million toward the liquidation of the old Canal Bank. In 1947 and 1969, The National Bank of Commerce in New

Orleans made two grants to Tulane University, which included archives of the Citizens Bank and Canal Bank. These materials are held at the Tulane Manuscripts Department, Special Collections Division, Howard-Tilton Memorial Library at Tulane University in New Orleans, Louisiana (collectively, the "Tulane Records"). In 1865, the First National Bank of Lexington (subsequently a part of First Security Corporation of Kentucky which was acquired by Bank One in 1992) was formed and assumed the operations of the Lexington Branch of the second Bank of Kentucky. Public records pertaining to the Lexington Branch of the second Bank of Kentucky have been discovered that contain records relevant to this certification (the "Lexington Records"). The Tulane Records, the Lexington Records and other records indicate that:

1. Citizens Bank and Canal Bank provided credit to plantation owners and accepted mortgages from them. The collateral covered by these mortgages included land, equipment and/or enslaved individuals. The available records do not always provide the names of enslaved individuals. The Disclosing Party, however, estimates that, from 1831 to 1865, taking into account the duplication and/or absence of exact data, approximately 21,000 enslaved individuals were listed among the collateral covered by mortgages given to the Louisiana banks.
2. The Lexington Branch of the second Bank of Kentucky also provided credit to plantation owners and accepted mortgages from them. The collateral covered by these mortgages included land, equipment and/or enslaved individuals. The available records do not always provide the names of enslaved individuals. The Disclosing Party, however, estimates that, from 1835 to 1865, taking into account the duplication and/or absence of exact data, approximately 55 enslaved individuals were listed among the collateral covered by mortgages given to the Lexington Branch of the second Bank of Kentucky.
3. When mortgages went unpaid, the banks could initiate foreclosure proceedings. When this occurred, the bank could take ownership of the collateral. The available records do not always provide the names of enslaved individuals. The Disclosing Party, however, estimates that, from 1831 to 1865, taking into account the duplication and/or absence of exact data, approximately 1,300 enslaved individuals were listed among the collateral that the Louisiana banks came to own. There is no evidence of foreclosure proceedings initiated by the Lexington Branch of the second Bank of Kentucky.

Attachment 2 lists information on mortgages as to which one of the Louisiana banks came to own enslaved individuals through foreclosure proceedings, including, where available, the names of those individuals and their prior or subsequent owners. Attachment 3 lists information on mortgages as to which one of the three banks held collateral that included enslaved individuals, including, where available, the names of those individuals and their prior or subsequent owners. The attachments will be supplemented as necessary to reflect any additional information located.

On September 25, 2008, JPMorgan Chase Bank, National Association (a subsidiary of the Disclosing Party) acquired from the Federal Deposit Insurance Corporation, as the Receiver of Washington Mutual Bank, Henderson NV, certain assets of Washington Mutual Bank.

A review of the records of Washington Mutual Bank, including the records of its predecessor entities, has disclosed no evidence that Washington Mutual Bank nor any of its predecessors had any investments or profits from slavery, any direct involvement in the slave trade, any direct ownership in slaves, or any slaveholder insurance policies from the slavery era. There is evidence, however, that one predecessor entity, The Bowery Savings Bank, New York (1834)

("Bowery Savings"), purchased a \$100,000 bond of a slave holding state, North Carolina. A total of \$44,000 was paid to Bowery Savings by North Carolina in 1868 on account of the bond.

**ATTACHMENT 1
TO
ATTACHMENT B
TO
CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
FILED BY
JPMORGAN CHASE & CO.
(as a Disclosing Party holding an interest in the Applicant)**

Agricultural Bank of Mississippi
Baltimore & Ohio Rail Road Company
Bank of Alabama
Bank of Alexandria (Virginia)
Bank of Ashland at Shelbyville
Bank of Augusta (Georgia)
Bank of Kentucky
Bank of Louisiana
Bank of Louisville
Bank of Metropolis
Bank of Mobile
Bank of Missouri
Bank of North Carolina
Bank of South Carolina
Bank of the State of Missouri
Bank of Tennessee
Bank of Virginia
Barnett, Ellison & Co.
Beers & Brunell
Beers & Co.
Canal & Rail Road Bank of Vicksburg
Carrolton Bank of New Orleans
Charleston Fire & Marine Insurance Company
Chattahoochee Rail Road and Banking Company
City Bank of New Orleans
Commercial & Rail Road Bank of Vicksburg
Commercial Bank of Manchester (Mississippi)
Commercial Bank of New Orleans
Commercial Bank of Selma
Corporation of the City of New Orleans
Corporation of the City of Savannah
Davis & Davis
Delaware & Hudson Canal Company
E.I. Forestall of New Orleans
ER Tyler of New Orleans
E. Warfield, Lexington, Kentucky
Exchange & Banking Company of New Orleans
Exchange Bank of Virginia at Richmond
Franklin Bank of Baltimore
First Bank of Richmond

Hunt, Morton & Quigby of Louisville (Kentucky)
J.D. Beers & Co.
Louisiana & Nashville Railroad Company
Mechanics & Traders Bank of New Orleans
Merchant & Planters Bank of Savannah
Merchants Bank of Baltimore
Mississippi Sound Company
Mr. Pastoret
Mr. S. Reid Irving & Co. (Cotton)
Nashville and Northwestern Rail Road Co.
New Orleans Canal & Banking Company
North Western Bank of Virginia
Philadelphia, Wilmington & Baltimore Rail Road Company
Planters & Mechanics Bank of Charleston
Planters & Mechanics Bank of Mobile
Planters & Merchants Bank of Charleston
Planters Bank of Jackson (Mississippi)
Planters Bank of Natchez
Planters Bank of Savannah
Planters Bank of Tennessee
Robert Kinder House
Ross & Coleman
South Western Rail Road Bank of Charleston
Southern Bank of Alabama
Southern Bank of Kentucky
Southern Life Insurance & Trust Company of Florida
Southern Trust Company
Southwestern Rail Road Bank (South Carolina)
S. Reid Irving & Company
State & Metcalf of Gainsville, Georgia
State of Alabama
State of Florida
State of Georgia
State of Mississippi
T.T. Crittenden, Lexington and Huntsville, Kentucky
Tuscumbice and Decatur Rail Road Company
Union Bank of Charleston
Union Bank of Florida
Union Bank of Tennessee

**ATTACHMENT 2
TO
ATTACHMENT B
TO
CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
FILED BY
JPMORGAN CHASE & CO.
(as a Disclosing Party holding an interest in the Applicant)**

**ENSLAVED INDIVIDUALS OWNED BY
CITIZENS BANK OF LOUISIANA AND
NEW ORLEANS CANAL & BANKING COMPANY**

**ATTACHMENT 3
TO
ATTACHMENT B
TO
CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
FILED BY
JPMORGAN CHASE & CO.
(as a Disclosing Party holding an interest in the Applicant)**

ENSLAVED INDIVIDUALS MORTGAGED TO
CITIZENS BANK OF LOUISIANA,
NEW ORLEANS CANAL & BANKING COMPANY AND
LEXINGTON BRANCH OF THE SECOND BANK OF KENTUCKY

FORM ADV

UNIFORM APPLICATION FOR INVESTMENT ADVISER REGISTRATION AND REPORT BY EXEMPT REPORTING ADVISERS

Primary Business Name: VANGUARD GROUP INC

CRD Number:

Other-Than-Annual Amendment - All Sections

Rev. 10/2017

4/30/2019 1:30:36 PM

WARNING: Complete this form truthfully. False statements or omissions may result in denial of your application, revocation of your registration, or criminal prosecution. You must keep this form updated by filing periodic amendments. See Form ADV General Instruction 4.

Item 1 Identifying Information

Responses to this Item tell us who you are, where you are doing business, and how we can contact you. If you are filing an *umbrella registration*, the information in Item 1 should be provided for the *filing adviser* only. General Instruction 5 provides information to assist you with filing an *umbrella registration*.

A. Your full legal name (if you are a sole proprietor, your last, first, and middle names):

THE VANGUARD GROUP, INC.

B. (1) Name under which you primarily conduct your advisory business, if different from Item 1.A.

VANGUARD GROUP INC

List on Section 1.B. of Schedule D any additional names under which you conduct your advisory business.

(2) If you are using this Form ADV to register more than one investment adviser under an *umbrella registration*, check this box ☐

If you check this box, complete a Schedule R for each relying adviser.

C. If this filing is reporting a change in your legal name (Item 1.A.) or primary business name (Item 1.B.(1)), enter the new name and specify whether the name change is of

☐ your legal name or ☐ your primary business name:

D. (1) If you are registered with the SEC as an investment adviser, your SEC file number:

(2) If you report to the SEC as an *exempt reporting adviser*, your SEC file number:

(3) If you have one or more Central Index Key numbers assigned by the SEC ("CIK Numbers"), all of your CIK numbers:

No Information Filed

E. (1) If you have a number ("CRD Number") assigned by the FINRA's CRD system or by the IARD system, your CRD number:

If your firm does not have a CRD number, skip this Item 1.E. Do not provide the CRD number of one of your officers, employees, or affiliates.

(2) If you have additional CRD Numbers, your additional CRD numbers:

No Information Filed

F. Principal Office and Place of Business

(1) Address (do not use a P.O. Box):

Number and Street 1:

100 VANGUARD BLVD

City:

MALVERN

State:

Pennsylvania

Number and Street 2.

V26

Country:

United States

ZIP+4/Postal Code:

19355

If this address is a private residence, check this box ☐

List on Section 1.F. of Schedule D any office, other than your principal office and place of business, at which you conduct investment advisory business. If you are applying for registration, or are registered, with one or more state securities authorities, you must list all of your offices in the state or states to which you are applying for registration or with whom you are registered. If you are applying for SEC registration, if you are registered only with the SEC, or if you are reporting to the SEC as an exempt reporting adviser, list the largest twenty-five offices in terms of numbers of employees as of the end of your most recently completed fiscal year.

(2) Days of week that you normally conduct business at your principal office and place of business.

☒ Monday - Friday ☐ Other:

Normal business hours at this location:

8:30AM - 5:30PM

(3) Telephone number at this location:

610-669-1000

(4) Facsimile number at this location, if any

610-669-6600

(5) What is the total number of offices, other than your principal office and place of business, at which you conduct investment advisory business as of

1

Number and Street 1:		Number and Street 2:	
City:	State:	Country:	ZIP+4/Postal Code:

Number and Street 1:		Number and Street 2:	
City:	State:	Country:	ZIP+4/Postal Code:

☐ \$1 billion to less than \$10 billion

☐ \$10 billion to less than \$50 billion

\$50 billion or more

For purposes of Item 1.O. only, "assets" refers to your total assets, rather than the assets you manage on behalf of clients. Determine your total assets using the total assets shown on the balance sheet for your most recent fiscal year end.

P. Provide your Legal Entity Identifier if you have one:

5493002789CX3L0CJP65

A legal entity identifier is a unique number that companies use to identify each other in the financial marketplace. You may not have a legal entity identifier.

SECTION 1.B. Other Business Names

No Information Filed

SECTION 1.F. Other Offices

No Information Filed

SECTION 1.I. Website Addresses

List your website addresses, including addresses for accounts on publicly available social media platforms where you control the content (including, but not limited to, Twitter, Facebook and/or LinkedIn). You must complete a separate Schedule D Section 1.I. for each website or account on a publicly available social media platform.

Address of Website/Account on Publicly Available Social Media Platform: [HTTP://WWW.VANGUARD.COM](http://www.vanguard.com)

Address of Website/Account on Publicly Available Social Media Platform: [HTTPS://WWW.FACEBOOK.COM/VANGUARD](https://www.facebook.com/vanguard)

Address of Website/Account on Publicly Available Social Media Platform: [HTTPS://TWITTER.COM/VANGUARD_GROUP](https://twitter.com/vanguard_group)

Address of Website/Account on Publicly Available Social Media Platform: [HTTPS://PLUS.GOOGLE.COM/+VANGUARD#+VANGUARD/POSTS](https://plus.google.com/+vanguard/+vanguard/posts)

Address of Website/Account on Publicly Available Social Media Platform: [HTTPS://WWW.YOUTUBE.COM/USER/VANGUARD](https://www.youtube.com/user/vanguard)

Address of Website/Account on Publicly Available Social Media Platform: [HTTPS://TWITTER.COM/VANGUARD_FA](https://twitter.com/vanguard_fa)

Address of Website/Account on Publicly Available Social Media Platform: [HTTPS://WWW.LINKEDIN.COM/COMPANY/VANGUARD](https://www.linkedin.com/company/vanguard)

Address of Website/Account on Publicly Available Social Media Platform: [HTTPS://TWITTER.COM/VANGUARD_INSTL](https://twitter.com/vanguard_instl)

SECTION 1.L. Location of Books and Records

Complete the following information for each location at which you keep your books and records, other than your principal office and place of business. You must complete a separate Schedule D, Section 1.L. for each location

Name of entity where books and records are kept
IRON MOUNTAIN INC

Number and Street 1:

Number and Street 2

2500 HENDERSON DRIVE

City:
SHARON HILL

State:
Pennsylvania

Country:
United States

ZIP+4/Postal Code:
19079

If this address is a private residence, check this box: ☐

Telephone Number:
610-725-0200 X3008

Facsimile number, if any:

This is (check one):

☐ one of your branch offices or affiliates.

☒ a third-party unaffiliated recordkeeper.

☐ other.

Briefly describe the books and records kept at this location.

STORAGE OF CLIENT AND OTHER FILES CONTAINING CONTRACTS, CORRESPONDENCE, RECOMMENDATIONS AND TRANSACTIONS, IN ADDITION TO PROGRAMMING CODE.

SECTION 1.M. Registration with Foreign Financial Regulatory Authorities

No Information Filed

Item 2 SEC Registration/Reporting

Responses to this Item help us (and you) determine whether you are eligible to register with the SEC. Complete this Item 2.A. only if you are applying for SEC registration or submitting an *annual updating amendment* to your SEC registration. If you are filing an *umbrella registration*, the information in Item 2 should be provided for the *filing adviser* only.

A. To register (or remain registered) with the SEC, you must check **at least one** of the Items 2.A.(1) through 2.A.(12), below. If you are submitting an *annual updating amendment* to your SEC registration and you are no longer eligible to register with the SEC, check Item 2.A.(13). Part 1A Instruction 2 provides information to help you determine whether you may affirmatively respond to each of these items.

You (the adviser):

☒ (1) are a **large advisory firm** that either:

(a) has regulatory assets under management of \$100 million (in U.S. dollars) or more; or

(b) has regulatory assets under management of \$90 million (in U.S. dollars) or more at the time of filing its most recent *annual updating amendment* and is registered with the SEC;

☐ (2) are a **mid-sized advisory firm** that has regulatory assets under management of \$25 million (in U.S. dollars) or more but less than \$100 million (in U.S. dollars) and you are either:

(a) not required to be registered as an adviser with the *state securities authority* of the state where you maintain your *principal office and place of business*; or

(b) not subject to examination by the *state securities authority* of the state where you maintain your *principal office and place of business*;

Click **HERE** for a list of states in which an investment adviser, if registered, would not be subject to examination by the state securities authority.

(3) Reserved

☐ (4) have your *principal office and place of business* **outside the United States**;

☒ (5) are an **investment adviser (or subadviser) to an investment company** registered under the Investment Company Act of 1940;

☐ (6) are an **investment adviser to a company which has elected to be a business development company** pursuant to section 54 of the Investment Company Act of 1940 and has not withdrawn the election, and you have at least \$25 million of regulatory assets under management;

☐ (7) are a **pension consultant** with respect to assets of plans having an aggregate value of at least \$200,000,000 that qualifies for the exemption in rule 203A-2(a);

☐ (8) are a **related adviser** under rule 203A-2(b) that *controls*, is *controlled* by, or is under common *control* with, an investment adviser that is registered with the SEC, and your *principal office and place of business* is the same as the registered adviser;

If you check this box, complete Section 2.A.(8) of Schedule D.

☐ (9) are an **adviser** relying on rule 203A-2(c) because you **expect to be eligible for SEC registration within 120 days**;

If you check this box, complete Section 2.A.(9) of Schedule D.

☐ (10) are a **multi-state adviser** that is required to register in 15 or more states and is relying on rule 203A-2(d);

If you check this box, complete Section 2.A.(10) of Schedule D

- ☐ (11) are an **Internet adviser** relying on rule 203A-2(e);
- ☐ (12) have **received an SEC order** exempting you from the prohibition against registration with the SEC;
- If you check this box, complete Section 2.A.(12) of Schedule D.
- ☐ (13) are **no longer eligible** to remain registered with the SEC.

State Securities Authority Notice Filings and State Reporting by Exempt Reporting Advisers

- C. Under state laws, SEC-registered advisers may be required to provide to *state securities authorities* a copy of the Form ADV and any amendments they file with the SEC. These are called *notice filings*. In addition, *exempt reporting advisers* may be required to provide *state securities authorities* with a copy of reports and any amendments they file with the SEC. If this is an initial application or report, check the box(es) next to the state(s) that you would like to receive notice of this and all subsequent filings or reports you submit to the SEC. If this is an amendment to direct your *notice filings* or reports to additional state(s), check the box(es) next to the state(s) that you would like to receive notice of this and all subsequent filings or reports you submit to the SEC. If this is an amendment to your registration to stop your *notice filings* or reports from going to state(s) that currently receive them, uncheck the box(es) next to those state(s).

Jurisdictions

<input type="checkbox"/> AL	<input type="checkbox"/> IL	<input type="checkbox"/> NE	<input type="checkbox"/> SC
<input type="checkbox"/> AK	<input type="checkbox"/> IN	<input type="checkbox"/> NV	<input type="checkbox"/> SD
<input type="checkbox"/> AZ	<input type="checkbox"/> IA	<input type="checkbox"/> NH	<input type="checkbox"/> TN
<input type="checkbox"/> AR	<input type="checkbox"/> KS	<input type="checkbox"/> NJ	<input type="checkbox"/> TX
<input type="checkbox"/> CA	<input type="checkbox"/> KY	<input type="checkbox"/> NM	<input type="checkbox"/> UT
<input type="checkbox"/> CO	<input type="checkbox"/> LA	<input type="checkbox"/> NY	<input type="checkbox"/> VT
<input type="checkbox"/> CT	<input type="checkbox"/> ME	<input type="checkbox"/> NC	<input type="checkbox"/> VI
<input type="checkbox"/> DE	<input type="checkbox"/> MD	<input type="checkbox"/> ND	<input type="checkbox"/> VA
<input type="checkbox"/> DC	<input type="checkbox"/> MA	<input type="checkbox"/> OH	<input type="checkbox"/> WA
<input type="checkbox"/> FL	<input type="checkbox"/> MI	<input type="checkbox"/> OK	<input type="checkbox"/> WV
<input type="checkbox"/> GA	<input type="checkbox"/> MN	<input type="checkbox"/> OR	<input type="checkbox"/> WI
<input type="checkbox"/> GU	<input type="checkbox"/> MS	<input type="checkbox"/> PA	<input type="checkbox"/> WY
<input type="checkbox"/> HI	<input type="checkbox"/> MO	<input type="checkbox"/> PR	
<input type="checkbox"/> ID	<input type="checkbox"/> MT	<input type="checkbox"/> RI	

If you are amending your registration to stop your notice filings or reports from going to a state that currently receives them and you do not want to pay that state's notice filing or report filing fee for the coming year, your amendment must be filed before the end of the year (December 31).

SECTION 2.A.(8) Related Adviser

If you are relying on the exemption in rule 203A-2(b) from the prohibition on registration because you *control*, are *controlled* by, or are under common *control* with an investment adviser that is registered with the SEC and your *principal office and place of business* is the same as that of the registered adviser, provide the following information:

Name of Registered Investment Adviser

CRD Number of Registered Investment Adviser

SEC Number of Registered Investment Adviser

SECTION 2.A.(9) Investment Adviser Expecting to be Eligible for Commission Registration within 120 Days

If you are relying on rule 203A-2(c), the exemption from the prohibition on registration available to an adviser that expects to be eligible for SEC registration within 120 days, you are required to make certain representations about your eligibility for SEC registration. By checking the appropriate boxes, you will be deemed to have made the required representations. You must make both of these representations:

- ☐ I am not registered or required to be registered with the SEC or a *state securities authority* and I have a reasonable expectation that I will be eligible to register with the SEC within 120 days after the date my registration with the SEC becomes effective.
- ☐ I undertake to withdraw from SEC registration if, on the 120th day after my registration with the SEC becomes effective, I would be prohibited by Section 203A(a) of the Advisers Act from registering with the SEC

SECTION 2.A.(10) Multi-State Adviser

If you are relying on rule 203A-2(d), the multi-state adviser exemption from the prohibition on registration, you are required to make certain representations about your eligibility for SEC registration. By checking the appropriate boxes, you will be deemed to have made the required representations.

If you are applying for registration as an investment adviser with the SEC, you must make both of these representations.

- ☒ I have reviewed the applicable state and federal laws and have concluded that I am required by the laws of 15 or more states to register as an investment adviser with the *state securities authorities* in those states.
- ☐ I undertake to withdraw from SEC registration if I file an amendment to this registration indicating that I would be required by the laws of fewer than 15 states to register as an investment adviser with the *state securities authorities* of those states.

If you are submitting your *annual updating amendment*, you must make this representation:

- ☐ Within 90 days prior to the date of filing this amendment, I have reviewed the applicable state and federal laws and have concluded that I am required by the laws of at least 15 states to register as an investment adviser with the *state securities authorities* in those states.

SECTION 2.A.(12) SEC Exemptive Order

If you are relying upon an SEC order exempting you from the prohibition on registration, provide the following information:

Application Number:

803-

Date of order:

Item 3 Form of Organization

If you are filing an *umbrella registration*, the information in Item 3 should be provided for the *filing adviser* only.

A. How are you organized?

- ☒ Corporation
- ☐ Sole Proprietorship
- ☐ Limited Liability Partnership (LLP)
- ☐ Partnership
- ☐ Limited Liability Company (LLC)
- ☐ Limited Partnership (LP)
- ☐ Other (specify):

If you are changing your response to this Item, see Part 1A Instruction 4.

B. In what month does your fiscal year end each year?

DECEMBER

C. Under the laws of what state or country are you organized?

State Country
Pennsylvania United States

If you are a partnership, provide the name of the state or country under whose laws your partnership was formed. If you are a sole proprietor, provide the name of the state or country where you reside.

If you are changing your response to this Item, see Part 1A Instruction 4.

Item 4 Successions

A. Are you, at the time of this filing, succeeding to the business of a registered investment adviser, including, for example, a change of your structure or legal status (e.g., form of organization or state of incorporation)?

Yes No

☐ ☒

If "yes", complete Item 4.B. and Section 4 of Schedule D.

B. Date of Succession: (MM/DD/YYYY)

If you have already reported this succession on a previous Form ADV filing, do not report the succession again. Instead, check "No." See Part 1A Instruction 4.

SECTION 4 Successions

No Information Filed

Item 5 Information About Your Advisory Business - Employees, Clients, and Compensation

Responses to this Item help us understand your business, assist us in preparing for on-site examinations, and provide us with data we use when making regulatory policy. Part 1A Instruction 5.a. provides additional guidance to newly formed advisers for completing this Item 5.

Employees

If you are organized as a sole proprietorship, include yourself as an employee in your responses to Item 5.A. and Items 5.B.(1), (2), (3), (4), and (5). If an employee performs more than one function, you should count that employee in each of your responses to Items 5.B.(1), (2), (3), (4), and (5).

- A. Approximately how many *employees* do you have? Include full- and part-time *employees* but do not include any clerical workers.
490
- B. (1) Approximately how many of the *employees* reported in 5.A. perform investment advisory functions (including research)?
369
- (2) Approximately how many of the *employees* reported in 5.A. are registered representatives of a broker-dealer?
41
- (3) Approximately how many of the *employees* reported in 5.A. are registered with one or more *state securities authorities* as investment adviser representatives?
5
- (4) Approximately how many of the *employees* reported in 5.A. are registered with one or more *state securities authorities* as investment adviser representatives for an investment adviser other than you?
0
- (5) Approximately how many of the *employees* reported in 5.A. are licensed agents of an insurance company or agency?
0
- (6) Approximately how many firms or other *persons* solicit advisory *clients* on your behalf?
0

In your response to Item 5.B.(6), do not count any of your employees and count a firm only once – do not count each of the firm's employees that solicit on your behalf.

Clients

In your responses to Items 5.C. and 5.D. do not include as "clients" the investors in a private fund you advise, unless you have a separate advisory relationship with those investors.

- C. (1) To approximately how many *clients* for whom you do not have regulatory assets under management did you provide investment advisory services during your most recently completed fiscal year?
0
- (2) Approximately what percentage of your *clients* are non-United States persons?
42%
- D. For purposes of this Item 5.D., the category "individuals" includes trusts, estates, and 401(k) plans and IRAs of individuals and their family members, but does not include businesses organized as sole proprietorships.
The category "business development companies" consists of companies that have made an election pursuant to section 54 of the Investment Company Act of 1940. Unless you provide advisory services pursuant to an investment advisory contract to an investment company registered under the Investment Company Act of 1940, do not answer (d)(1) or (d)(3) below.

Indicate the approximate number of your *clients* and amount of your total regulatory assets under management (reported in Item 5.F. below) attributable to each of the following type of *client*. If you have fewer than 5 *clients* in a particular category (other than (d), (e), and (f)) you may check Item 5.D.(2) rather than respond to Item 5.D.(1).

The aggregate amount of regulatory assets under management reported in Item 5.D.(3) should equal the total amount of regulatory assets under management reported in Item 5.F.(2)(c) below.

If a *client* fits into more than one category, select one category that most accurately represents the *client* to avoid double counting *clients* and assets. If you advise a registered investment company, business development company, or pooled investment vehicle, report those assets in categories (d), (e), and (f) as applicable.

Type of Client	(1) Number of Client(s)	(2) Fewer than 5 Clients	(3) Amount of Regulatory Assets under Management
(a) Individuals (other than high net worth individuals)	0	<input type="checkbox"/>	\$ 0
(b) High net worth individuals	0	<input type="checkbox"/>	\$ 0
(c) Banking or thrift institutions	0	<input type="checkbox"/>	\$ 0
(d) Investment companies	191		\$ 4,517,093,504,250
(e) Business development companies	0		\$ 0

(f) Pooled investment vehicles (other than investment companies and business development companies)	63		\$13,045,219,361
(g) Pension and profit sharing plans (but not the plan participants or government pension plans)	0	<input type="checkbox"/>	\$ 0
(h) Charitable organizations	0	<input type="checkbox"/>	\$ 0
(i) State or municipal <i>government entities</i> (including government pension plans)	0	<input type="checkbox"/>	\$ 0
(j) Other investment advisers	0	<input type="checkbox"/>	\$ 0
(k) Insurance companies	0	<input type="checkbox"/>	\$ 0
(l) Sovereign wealth funds and foreign official institutions	0	<input type="checkbox"/>	\$ 0
(m) Corporations or other businesses not listed above	0	<input type="checkbox"/>	\$ 0
(n) Other:	0	<input type="checkbox"/>	\$ 0

Compensation Arrangements

E. You are compensated for your investment advisory services by (check all that apply):

- ☒ (1) A percentage of assets under your management
☐ (2) Hourly charges
☐ (3) Subscription fees (for a newsletter or periodical)
☐ (4) Fixed fees (other than subscription fees)
☐ (5) Commissions
☐ (6) *Performance-based fees*
☒ (7) Other (specify): ALLOCATED SHARE OF VANGUARD'S TOTAL COST OF OPERATIONS

Item 5 Information About Your Advisory Business - Regulatory Assets Under Management

Regulatory Assets Under Management

Yes No

F. (1) Do you provide continuous and regular supervisory or management services to securities portfolios? ☒ Yes ☐ No

(2) If yes, what is the amount of your regulatory assets under management and total number of accounts?

	U.S. Dollar Amount	Total Number of Accounts
Discretionary:	(a) \$ 4,530,138,723,611	(d) 254
Non-Discretionary:	(b) \$ 0	(e) 0
Total:	(c) \$ 4,530,138,723,611	(f) 254

Part 1A Instruction 5.b. explains how to calculate your regulatory assets under management. You must follow these instructions carefully when completing this Item.

(3) What is the approximate amount of your total regulatory assets under management (reported in Item 5.F.(2)(c) above) attributable to *clients* who are non-United States persons?

\$ 13,045,219,361

Item 5 Information About Your Advisory Business - Advisory Activities

Advisory Activities

G. What type(s) of advisory services do you provide? Check all that apply.

- ☐ (1) Financial planning services
☐ (2) Portfolio management for individuals and/or small businesses
☒ (3) Portfolio management for investment companies (as well as "business development companies" that have made an election pursuant to section 54 of the Investment Company Act of 1940)
☒ (4) Portfolio management for pooled investment vehicles (other than investment companies)
☒ (5) Portfolio management for businesses (other than small businesses) or institutional *clients* (other than registered investment companies and other pooled investment vehicles)
☐ (6) Pension consulting services
☒ (7) Selection of other advisers (including *private fund* managers)
☒ (8) Publication of periodicals or newsletters
☐ (9) Security ratings or pricing services
☐ (10) Market timing services
☐ (11) Educational seminars/workshops
☐ (12) Other(specify):

Do not check Item 5.G.(3) unless you provide advisory services pursuant to an investment advisory contract to an investment company registered under the Investment Company Act of 1940, including as a subadviser. If you check Item 5.G.(3), report the 811 or 814 number of the investment company or investment companies to which you provide advice in Section 5.G.(3) of Schedule D.

H. If you provide financial planning services, to how many *clients* did you provide these services during your last fiscal year?

☒ 0

No Information Filed

SEC File Number

Provide the regulatory assets under management of all *parallel managed accounts* related to a registered investment company (or series thereof) or business development company that you advise.

No Information Filed

SEC File Number

Provide the regulatory assets under management of all *parallel managed accounts* related to a registered investment company (or series thereof) or business development company that you advise.

No Information Filed

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No Information Filed

- ☐ 1 - 10
- ☐ 11 - 25
- ☐ 26 - 50
- ☐ 51 - 100
- ☐ 101 - 250
- ☐ 251 - 500
- ☐ More than 500

If more than 500, how many?
(round to the nearest 500)

In your responses to this Item 5.H., do not include as "clients" the investors in a private fund you advise, unless you have a separate advisory relationship with those investors.

- | | Yes | No |
|--|-----------------------|-----------------------|
| I. (1) Do you participate in a wrap fee program? | <input type="radio"/> | <input type="radio"/> |
| (2) If you participate in a wrap fee program, what is the amount of your regulatory assets under management attributable to acting as: | | |
| (a) sponsor to a wrap fee program | | |
| \$ | | |
| (b) portfolio manager for a wrap fee program? | | |
| \$ | | |
| (c) sponsor to and portfolio manager for the same wrap fee program? | | |
| \$ | | |

If you report an amount in Item 5.I.(2)(c), do not report that amount in Item 5.I.(2)(a) or Item 5.I.(2)(b).

If you are a portfolio manager for a wrap fee program, list the names of the programs, their sponsors and related information in Section 5.I.(2) of Schedule D.

If your involvement in a wrap fee program is limited to recommending wrap fee programs to your clients, or you advise a mutual fund that is offered through a wrap fee program, do not check Item 5.I.(1) or enter any amounts in response to Item 5.I.(2).

- | | Yes | No |
|---|-----------------------|-----------------------|
| J. (1) In response to Item 4.B. of Part 2A of Form ADV, do you indicate that you provide investment advice only with respect to limited types of investments? | <input type="radio"/> | <input type="radio"/> |
| (2) Do you report client assets in Item 4.E. of Part 2A that are computed using a different method than the method used to compute your regulatory assets under management? | <input type="radio"/> | <input type="radio"/> |

K. Separately Managed Account Clients

- | | Yes | No |
|--|-----------------------|-----------------------|
| (1) Do you have regulatory assets under management attributable to clients other than those listed in Item 5.D.(3)(d)-(f) (separately managed account clients)? | <input type="radio"/> | <input type="radio"/> |
| If yes, complete Section 5.K.(1) of Schedule D. | | |
| (2) Do you engage in borrowing transactions on behalf of any of the separately managed account clients that you advise? | <input type="radio"/> | <input type="radio"/> |
| If yes, complete Section 5.K.(2) of Schedule D. | | |
| (3) Do you engage in derivative transactions on behalf of any of the separately managed account clients that you advise? | <input type="radio"/> | <input type="radio"/> |
| If yes, complete Section 5.K.(2) of Schedule D. | | |
| (4) After subtracting the amounts in Item 5.D.(3)(d)-(f) above from your total regulatory assets under management, does any custodian hold ten percent or more of this remaining amount of regulatory assets under management? | <input type="radio"/> | <input type="radio"/> |
| If yes, complete Section 5.K.(3) of Schedule D for each custodian. | | |

SECTION 5.G.(3) Advisers to Registered Investment Companies and Business Development Companies

If you check Item 5.G.(3), what is the SEC file number (811 or 814 number) of each of the registered investment companies and business development companies to which you act as an adviser pursuant to an advisory contract? You must complete a separate Schedule D Section 5.G.(3) for each registered investment company and business development company to which you act as an adviser.

SEC File Number _____

Provide the regulatory assets under management of all parallel managed accounts related to a registered investment company (or series thereof) or business development company that you advise

SEC File Number

Provide the regulatory assets under management of all *parallel managed accounts* related to a registered investment company (or series thereof) or business development company that you advise.

No Information Filed

SEC File Number

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SEC File Number

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No Information Filed

SFC File Number

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No Information Filed

SEC File Number

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SEC File Number

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No Information Filed

SFC File Number

Provide the regulatory assets under management of all *parallel managed accounts* related to a registered investment company (or series thereof) or business development company that you advise.

No Information Filed

SECTION 5.I.(2) Wrap Fee Programs

No Information Filed

SECTION 5.K.(1) Separately Managed Accounts

After subtracting the amounts reported in Item 5.D.(3)(d)-(f) from your total regulatory assets under management, indicate the approximate percentage of this remaining amount attributable to each of the following categories of assets. If the remaining amount is at least \$10 billion in regulatory assets under management, complete Question (a). If the remaining amount is less than \$10 billion in regulatory assets under management, complete Question (b).

Any regulatory assets under management reported in Item 5.D.(3)(d), (e), and (f) should not be reported below.

If you are a subadviser to a separately managed account, you should only provide information with respect to the portion of the account that you subadvise.

End of year refers to the date used to calculate your regulatory assets under management for purposes of your *annual updating amendment*. Mid-year is the date six months before the end of year date. Each column should add up to 100% and numbers should be rounded to the nearest percent.

Investments in derivatives, registered investment companies, business development companies, and pooled investment vehicles should be reported in those categories. Do not report those investments based on related or underlying portfolio assets. Cash equivalents include bank deposits, certificates of deposit, bankers' acceptances and similar bank instruments.

Some assets could be classified into more than one category or require discretion about which category applies. You may use your own internal methodologies and the conventions of your service providers in determining how to categorize assets, so long as the methodologies or conventions are consistently applied and consistent with information you report internally and to current and prospective clients. However, you should not double count assets, and your responses must be consistent with any instructions or other guidance relating to this Section.

(a)

Asset Type	Mid-year	End of year
(i) Exchange-Traded Equity Securities	%	%
(ii) Non Exchange-Traded Equity Securities	%	%
(iii) U.S. Government/Agency Bonds	%	%
(iv) U.S. State and Local Bonds	%	%
(v) Sovereign Bonds	%	%
(vi) Investment Grade Corporate Bonds	%	%
(vii) Non-Investment Grade Corporate Bonds	%	%
(viii) Derivatives	%	%
(ix) Securities Issued by Registered Investment Companies or Business Development Companies	%	%
(x) Securities Issued by Pooled Investment Vehicles (other than Registered Investment Companies or Business Development Companies)	%	%
(xi) Cash and Cash Equivalents	%	%
(xii) Other	%	%

Generally describe any assets included in "Other"

(b)

Asset Type	End of year
(i) Exchange-Traded Equity Securities	%
(ii) Non Exchange-Traded Equity Securities	%
(iii) U.S. Government/Agency Bonds	%
(iv) U.S. State and Local Bonds	%
(v) Sovereign Bonds	%
(vi) Investment Grade Corporate Bonds	%
(vii) Non-Investment Grade Corporate Bonds	%
(viii) Derivatives	%
(ix) Securities Issued by Registered Investment Companies or Business Development Companies	%
(x) Securities Issued by Pooled Investment Vehicles (other than Registered Investment Companies or Business Development Companies)	%
(xi) Cash and Cash Equivalents	%
(xii) Other	%

Generally describe any assets included in "Other"

SECTION 5.K.(2) Separately Managed Accounts - Use of Borrowings and Derivatives

☐ No information is required to be reported in this Section 5.K.(2) per the instructions of this Section 5.K.(2)

If your regulatory assets under management attributable to separately managed accounts are at least \$10 billion, you should complete Question (a). If your regulatory assets under management attributable to separately managed accounts are at least \$500 million but less than \$10 billion, you should complete Question (b).

- (a) In the table below, provide the following information regarding the separately managed accounts you advise. If you are a subadvisor to a separately managed account, you should only provide information with respect to the portion of the account that you subadvise. End of year refers to the date used to calculate your regulatory assets under management for purposes of your *annual updating amendment*. Mid-year is the date six months before the end of year date.

In column 1, indicate the regulatory assets under management attributable to separately managed accounts associated with each level of gross notional exposure. For purposes of this table, the gross notional exposure of an account is the percentage obtained by dividing (i) the sum of (a) the dollar amount of any *borrowings* and (b) the *gross notional value* of all derivatives, by (ii) the regulatory assets under management of the account.

In column 2, provide the dollar amount of *borrowings* for the accounts included in column 1.

In column 3, provide aggregate *gross notional value* of derivatives divided by the aggregate regulatory assets under management of the accounts included in column 1 with respect to each category of derivatives specified in 3(a) through (f).

You may, but are not required to, complete the table with respect to any separately managed account with regulatory assets under management of less than \$10,000,000.

Any regulatory assets under management reported in Item 5.D.(3)(d), (e), and (f) should not be reported below.

(i) Mid-Year

Gross Notional Exposure	(1) Regulatory Assets Under Management	(2) Borrowings	(3) Derivative Exposures					
			(a) Interest Rate Derivative	(b) Foreign Exchange Derivative	(c) Credit Derivative	(d) Equity Derivative	(e) Commodity Derivative	(f) Other Derivative
Less than 10%	\$	\$	0 %	0 %	0 %	0 %	0 %	0 %
10-149%	\$	\$ 0	0 %	0 %	0 %	0 %	0 %	0 %
150% or more	\$ 0	\$ 0	0 %	0 %	0 %	0 %	0 %	0 %

Optional: Use the space below to provide a narrative description of the strategies and/or manner in which *borrowings* and derivatives are used in the management of the separately managed accounts that you advise.

(ii) End of Year

Gross Notional Exposure	(1) Regulatory Assets Under Management	(2) Borrowings	(3) Derivative Exposures					
			(a) Interest Rate Derivative	(b) Foreign Exchange Derivative	(c) Credit Derivative	(d) Equity Derivative	(e) Commodity Derivative	(f) Other Derivative
Less than 10%	\$ 0	\$ 0	0 %	0 %	0 %	0 %	0 %	0 %
10-149%	\$ 0	\$ 0	0 %	0 %	0 %	0 %	0 %	0 %
150% or more	\$ 0	\$ 0	0 %	0 %	0 %	0 %	0 %	0 %

Optional: Use the space below to provide a narrative description of the strategies and/or manner in which *borrowings* and derivatives are used in the management of the separately managed accounts that you advise.

- (b) In the table below, provide the following information regarding the separately managed accounts you advise as of the date used to calculate your regulatory assets under management for purposes of your *annual updating amendment*. If you are a subadvisor to a separately managed account, you should only provide information with respect to the portion of the account that you subadvise.

In column 1, indicate the regulatory assets under management attributable to separately managed accounts associated with each level of gross notional exposure. For purposes of this table, the gross notional exposure of an account is the percentage obtained by dividing (i) the sum of (a) the dollar amount of any *borrowings* and (b) the *gross notional value* of all derivatives, by (ii) the regulatory assets under management of the account.

In column 2, provide the dollar amount of *borrowings* for the accounts included in column 1.

You may, but are not required to, complete the table with respect to any separately managed accounts with regulatory assets under management of less than \$10,000,000.

Any regulatory assets under management reported in Item 5.D.(3)(d), (e), and (f) should not be reported below.

Gross Notional Exposure	(1) Regulatory Assets Under Management	(2) Borrowings
Less than 10%	\$ 0	\$ 0
10-149%	\$ 0	\$ 0
150% or more	\$ 0	\$ 0

Optional: Use the space below to provide a narrative description of the strategies and/or manner in which *borrowings* and derivatives are used in the management of the separately managed accounts that you advise.

SECTION 5.K.(3) Custodians for Separately Managed Accounts

No Information Filed

Item 6 Other Business Activities

In this Item, we request information about your firm's other business activities.

A. You are actively engaged in business as a (check all that apply):

- ☐ (1) broker-dealer (registered or unregistered)
- ☐ (2) registered representative of a broker-dealer
- ☒ (3) commodity pool operator or commodity trading advisor (whether registered or exempt from registration)
- ☐ (4) futures commission merchant
- ☐ (5) real estate broker, dealer, or agent
- ☐ (6) insurance broker or agent
- ☐ (7) bank (including a separately identifiable department or division of a bank)
- ☐ (8) trust company
- ☐ (9) registered municipal advisor
- ☐ (10) registered security-based swap dealer
- ☐ (11) major security-based swap participant
- ☐ (12) accountant or accounting firm
- ☐ (13) lawyer or law firm
- ☐ (14) other financial product salesperson (specify):

If you engage in other business using a name that is different from the names reported in Items 1.A. or 1.B.(1), complete Section 6.A. of Schedule D.

B. (1) Are you actively engaged in any other business not listed in Item 6.A. (other than giving investment advice)?

Yes No

☒ ☐

(2) If yes, is this other business your primary business?

☒ ☐

If "yes," describe this other business on Section 6.B.(2) of Schedule D, and if you engage in this business under a different name, provide that name.

Yes No

(3) Do you sell products or provide services other than investment advice to your advisory clients?

☒ ☐

If "yes," describe this other business on Section 6.B.(3) of Schedule D, and if you engage in this business under a different name, provide that name.

SECTION 6.A. Names of Your Other Businesses

No Information Filed

SECTION 6.B.(2) Description of Primary Business

Describe your primary business (not your investment advisory business):

VGI PROVIDES ITS CLIENTS WITH CORPORATE, MANAGEMENT & ADMINISTRATIVE MUTUAL FUND SERVICES, INCLUDING LEGAL, ACCOUNTING, TRANSFER AGENCY & DISTRIBUTION SERVICES.

If you engage in that business under a different name, provide that name:

SECTION 6.B.(3) Description of Other Products and Services

Describe other products or services you sell to your *client*. You may omit products and services that you listed in Section 6.B.(2) above.

SAME AS 6 B.(2).

If you engage in that business under a different name, provide that name:

Item 7 Financial Industry Affiliations

In this Item, we request information about your financial industry affiliations and activities. This information identifies areas in which conflicts of interest may occur between you and your *clients*.

A This part of Item 7 requires you to provide information about you and your *related persons*, including foreign affiliates. Your *related persons* are all of your

advisory affiliates and any person that is under common control with you.

You have a *related person* that is a (check all that apply):

- ☒ (1) broker-dealer, municipal securities dealer, or government securities broker or dealer (registered or unregistered)
- ☒ (2) other investment adviser (including financial planners)
- ☒ (3) registered municipal advisor
- ☒ (4) registered security-based swap dealer
- ☒ (5) major security-based swap participant
- ☒ (6) commodity pool operator or commodity trading advisor (whether registered or exempt from registration)
- ☒ (7) futures commission merchant
- ☒ (8) banking or thrift institution
- ☒ (9) trust company
- ☒ (10) accountant or accounting firm
- ☒ (11) lawyer or law firm
- ☒ (12) insurance company or agency
- ☒ (13) pension consultant
- ☒ (14) real estate broker or dealer
- ☒ (15) sponsor or syndicator of limited partnerships (or equivalent), excluding pooled investment vehicles
- ☒ (16) sponsor, general partner, managing member (or equivalent) of pooled investment vehicles

Note that Item 7.A. should not be used to disclose that some of your employees perform investment advisory functions or are registered representatives of a broker-dealer. The number of your firm's employees who perform investment advisory functions should be disclosed under Item 5.B.(1). The number of your firm's employees who are registered representatives of a broker-dealer should be disclosed under Item 5.B.(2).

Note that if you are filing an umbrella registration, you should not check Item 7.A.(2) with respect to your relying advisers, and you do not have to complete Section 7.A. in Schedule D for your relying advisers. You should complete a Schedule R for each relying adviser.

For each related person, including foreign affiliates that may not be registered or required to be registered in the United States, complete Section 7.A. of Schedule D.

You do not need to complete Section 7.A. of Schedule D for any related person if: (1) you have no business dealings with the related person in connection with advisory services you provide to your clients; (2) you do not conduct shared operations with the related person; (3) you do not refer clients or business to the related person, and the related person does not refer prospective clients or business to you; (4) you do not share supervised persons or premises with the related person; and (5) you have no reason to believe that your relationship with the related person otherwise creates a conflict of interest with your clients.

You must complete Section 7.A. of Schedule D for each related person acting as qualified custodian in connection with advisory services you provide to your clients (other than any mutual fund transfer agent pursuant to rule 206(4)-2(b)(1)), regardless of whether you have determined the related person to be operationally independent under rule 206(4)-2 of the Advisers Act.

SECTION 7.A: Financial Industry Affiliations

Complete a separate Schedule D Section 7.A. for each *related person* listed in Item 7.A.

1. Legal Name of *Related Person*:

VANGUARD ASSET MANAGEMENT, LIMITED

2. Primary Business Name of *Related Person*:

VANGUARD ASSET MANAGEMENT, LIMITED

3. *Related Person's* SEC File Number (if any) (e.g., 801-, 8-, 866-, 802-)

or
Other

4. *Related Person's*

(a) CRD Number (if any):

(b) CIK Number(s) (if any):

No Information Filed

5. *Related Person* is: (check all that apply)

- (a) ☐ broker-dealer, municipal securities dealer, or government securities broker or dealer
- (b) ☒ other investment adviser (including financial planners)
- (c) ☐ registered municipal advisor
- (d) ☐ registered security-based swap dealer
- (e) ☐ major security-based swap participant
- (f) ☐ commodity pool operator or commodity trading advisor (whether registered or exempt from registration)
- (g) ☐ futures commission merchant
- (h) ☒ banking or thrift institution
- (i) ☐ trust company
- (j) ☐ accountant or accounting firm

- (k) ☐ lawyer or law firm
- (l) ☐ insurance company or agency
- (m) ☐ pension consultant
- (n) ☐ real estate broker or dealer
- (o) ☐ sponsor or syndicator of limited partnerships (or equivalent), excluding pooled investment vehicles
- (p) ☐ sponsor, general partner, managing member (or equivalent) of pooled investment vehicles

6. Do you *control* or are you *controlled* by the *related person*?

Yes No

☒ ☐

7. Are you and the *related person* under common *control*?

☐ ☒

8. (a) Does the *related person* act as a qualified custodian for your *clients* in connection with advisory services you provide to *clients*?

☐ ☒

(b) If you are registering or registered with the SEC and you have answered "yes," to question 8.(a) above, have you overcome the presumption that you are not operationally independent (pursuant to rule 206(4)-2(d)(5)) from the *related person* and thus are not required to obtain a surprise examination for your *clients'* funds or securities that are maintained at the *related person*?

☐ ☒

(c) If you have answered "yes" to question 8.(a) above, provide the location of the *related person's* office responsible for *custody* of your *clients'* assets:

Number and Street 1:

Number and Street 2:

City:

State:

Country:

ZIP+4/Postal Code:

If this address is a private residence, check this box: ☐

Yes No

9. (a) If the *related person* is an investment adviser, is it exempt from registration?

☐ ☒

(b) If the answer is yes, under what exemption?

FOREIGN PRIVATE ADVISER EXEMPTION

10. (a) Is the *related person* registered with a *foreign financial regulatory authority*?

☐ ☒

(b) If the answer is yes, list the name and country, in English of each *foreign financial regulatory authority* with which the *related person* is registered.

Name of Country/English Name of Foreign Financial Regulatory Authority

United Kingdom - Financial Conduct Authority

11. Do you and the *related person* share any *supervised persons*?

☐ ☒

12. Do you and the *related person* share the same physical location?

☐ ☒

1. Legal Name of *Related Person*:

VANGUARD INVESTMENTS CANADA INC.

2. Primary Business Name of *Related Person*:

VANGUARD INVESTMENTS CANADA INC.

3. *Related Person's* SEC File Number (if any) (e.g., 801-, 8-, 866-, 802-)

or

Other

4. *Related Person's*

(a) CRD Number (if any):

(b) CIK Number(s) (if any):

No Information Filed

5. *Related Person* is: (check all that apply)

- (a) ☐ broker-dealer, municipal securities dealer, or government securities broker or dealer
- (b) ☒ other investment adviser (including financial planners)
- (c) ☐ registered municipal advisor
- (d) ☐ registered security-based swap dealer
- (e) ☐ major security-based swap participant
- (f) ☐ commodity pool operator or commodity trading advisor (whether registered or exempt from registration)
- (g) ☐ futures commission merchant
- (h) ☐ banking or thrift institution
- (i) ☐ trust company
- (j) ☐ accountant or accounting firm
- (k) ☐ lawyer or law firm
- (l) ☐ insurance company or agency
- (m) ☐ pension consultant
- (n) ☐ real estate broker or dealer

- (a) ☐ sponsor or syndicator of limited partnerships (or equivalent), excluding pooled investment vehicles
(p) ☒ sponsor, general partner, managing member (or equivalent) of pooled investment vehicles

Yes No

6. Do you control or are you controlled by the related person?

☒ ☐

7. Are you and the related person under common control?

☐ ☒

8. (a) Does the related person act as a qualified custodian for your clients in connection with advisory services you provide to clients? ☐ ☒
(b) If you are registering or registered with the SEC and you have answered "yes," to question 8.(a) above, have you overcome the presumption that you are not operationally independent (pursuant to rule 206(4)-2(d)(5)) from the related person and thus are not required to obtain a surprise examination for your clients' funds or securities that are maintained at the related person? ☐ ☒
(c) If you have answered "yes" to question 8.(a) above, provide the location of the related person's office responsible for custody of your clients' assets:
Number and Street 1: _____ Number and Street 2: _____
City: _____ State: _____ Country: _____ ZIP+4/Postal Code: _____
If this address is a private residence, check this box: ☐

Yes No

9. (a) If the related person is an investment adviser, is it exempt from registration?

☐ ☒

(b) If the answer is yes, under what exemption?

PRIVATE FUND ADVISER

10. (a) Is the related person registered with a foreign financial regulatory authority?

☐ ☒

(b) If the answer is yes, list the name and country, in English of each foreign financial regulatory authority with which the related person is registered.

Name of Country/English Name of Foreign Financial Regulatory Authority

Canada - Ontario Securities Commission

11. Do you and the related person share any supervised persons?

☐ ☒

12. Do you and the related person share the same physical location?

☐ ☒

1. Legal Name of Related Person:

VANGUARD INVESTMENTS UK, LIMITED

2. Primary Business Name of Related Person:

VANGUARD INVESTMENTS UK, LIMITED

3. Related Person's SEC File Number (if any) (e.g., 801-, 8-, 866-, 802-)

or

Other

4. Related Person's

(a) CRD Number (if any):

(b) CIK Number(s) (if any):

No Information Filed

5. Related Person is: (check all that apply)

- (a) ☐ broker-dealer, municipal securities dealer, or government securities broker or dealer
(b) ☒ other investment adviser (including financial planners)
(c) ☐ registered municipal advisor
(d) ☐ registered security-based swap dealer
(e) ☐ major security-based swap participant
(f) ☐ commodity pool operator or commodity trading advisor (whether registered or exempt from registration)
(g) ☐ futures commission merchant
(h) ☐ banking or thrift institution
(i) ☐ trust company
(j) ☐ accountant or accounting firm
(k) ☐ lawyer or law firm
(l) ☐ insurance company or agency
(m) ☐ pension consultant
(n) ☐ real estate broker or dealer
(o) ☐ sponsor or syndicator of limited partnerships (or equivalent), excluding pooled investment vehicles
(p) ☒ sponsor, general partner, managing member (or equivalent) of pooled investment vehicles

Yes No

6. Do you control or are you controlled by the related person?

☐ ☒

7. Are you and the *related person* under common control? C C
8. (a) Does the *related person* act as a qualified custodian for your *clients* in connection with advisory services you provide to *clients*? C C
 (b) If you are registering or registered with the SEC and you have answered "yes," to question 8.(a) above, have you overcome the presumption that you are not operationally independent (pursuant to rule 206(4)-2(d)(5)) from the *related person* and thus are not required to obtain a surprise examination for your *clients'* funds or securities that are maintained at the *related person*? C C
 (c) If you have answered "yes" to question 8.(a) above, provide the location of the *related person's* office responsible for custody of your *clients'* assets:
 Number and Street 1: _____ Number and Street 2: _____
 City: _____ State: _____ Country: _____ ZIP+4/Postal Code: _____
 If this address is a private residence, check this box: ☐
9. (a) If the *related person* is an investment adviser, is it exempt from registration? Yes No
C C
 (b) If the answer is yes, under what exemption?
 PRIVATE FUND ADVISER
10. (a) Is the *related person* registered with a *foreign financial regulatory authority*? C C
 (b) If the answer is yes, list the name and country, in English of each *foreign financial regulatory authority* with which the *related person* is registered.

Name of Country/English Name of Foreign Financial Regulatory Authority
United Kingdom - Financial Conduct Authority
11. Do you and the *related person* share any *supervised persons*? C C
12. Do you and the *related person* share the same physical location? C C

1. Legal Name of *Related Person*:
VGI INSURANCE, INC.
2. Primary Business Name of *Related Person*:
VGI INSURANCE, INC.
3. *Related Person's* SEC File Number (if any) (e.g., 801-, 8-, 866-, 802-)
 -
 or
 Other
4. *Related Person's*
 (a) CRD Number (if any):
 (b) CIK Number(s) (if any):
 No Information Filed
5. *Related Person* is: (check all that apply)
 (a) ☐ broker-dealer, municipal securities dealer, or government securities broker or dealer
 (b) ☐ other investment adviser (including financial planners)
 (c) ☐ registered municipal advisor
 (d) ☐ registered security-based swap dealer
 (e) ☐ major security-based swap participant
 (f) ☐ commodity pool operator or commodity trading advisor (whether registered or exempt from registration)
 (g) ☐ futures commission merchant
 (h) ☐ banking or thrift institution
 (i) ☐ trust company
 (j) ☐ accountant or accounting firm
 (k) ☐ lawyer or law firm
 (l) ☒ insurance company or agency
 (m) ☐ pension consultant
 (n) ☐ real estate broker or dealer
 (o) ☐ sponsor or syndicator of limited partnerships (or equivalent), excluding pooled investment vehicles
 (p) ☐ sponsor, general partner, managing member (or equivalent) of pooled investment vehicles

6. Do you control or are you controlled by the *related person*? Yes No
C C
7. Are you and the *related person* under common control? C C

8. (a) Does the *related person* act as a qualified custodian for your *clients* in connection with advisory services you provide to *clients*? C C
 (b) If you are registering or registered with the SEC and you have answered "yes," to question 8.(a) above, have you overcome the presumption that you are not operationally independent (pursuant to rule 206(4)-2(d)(5)) from the *related person* and thus are not required to obtain a surprise examination for your *clients'* funds or securities that are maintained at the *related person*? C C
 (c) If you have answered "yes" to question 8.(a) above, provide the location of the *related person's* office responsible for *custody* of your *clients'* assets:
 Number and Street 1: _____ Number and Street 2: _____
 City: _____ State: _____ Country: _____ ZIP+4/Postal Code: _____
 If this address is a private residence, check this box: ☐
- Yes No
9. (a) If the *related person* is an investment adviser, is it exempt from registration? C C
 (b) If the answer is yes, under what exemption?
10. (a) Is the *related person* registered with a *foreign financial regulatory authority*? C C
 (b) If the answer is yes, list the name and country, in English of each *foreign financial regulatory authority* with which the *related person* is registered.
 No Information Filed
11. Do you and the *related person* share any *supervised persons*? C C
12. Do you and the *related person* share the same physical location? C C

1. Legal Name of *Related Person*:
 VANGUARD NATIONAL TRUST COMPANY, N.A.
2. Primary Business Name of *Related Person*:
 VANGUARD NATIONAL TRUST COMPANY
3. *Related Person's* SEC File Number (if any) (e.g., 801-, 8-, 866-, 802-)
 -
 or
 Other
4. *Related Person's*
 (a) CRD Number (if any):
 (b) CIK Number(s) (if any):
 No Information Filed
5. *Related Person* is: (check all that apply)
- (a) ☐ broker-dealer, municipal securities dealer, or government securities broker or dealer
 - (b) ☐ other investment adviser (including financial planners)
 - (c) ☐ registered municipal advisor
 - (d) ☐ registered security-based swap dealer
 - (e) ☐ major security-based swap participant
 - (f) ☐ commodity pool operator or commodity trading advisor (whether registered or exempt from registration)
 - (g) ☐ futures commission merchant
 - (h) ☒ banking or thrift institution
 - (i) ☒ trust company
 - (j) ☐ accountant or accounting firm
 - (k) ☐ lawyer or law firm
 - (l) ☐ insurance company or agency
 - (m) ☐ pension consultant
 - (n) ☐ real estate broker or dealer
 - (o) ☐ sponsor or syndicator of limited partnerships (or equivalent), excluding pooled investment vehicles
 - (p) ☐ sponsor, general partner, managing member (or equivalent) of pooled investment vehicles

- Yes No
6. Do you *control* or are you *controlled* by the *related person*? C C
7. Are you and the *related person* under common *control*? C C
8. (a) Does the *related person* act as a qualified custodian for your *clients* in connection with advisory services you provide to *clients*? C C
 (b) If you are registering or registered with the SEC and you have answered "yes," to question 8.(a) above, have you overcome the presumption that you are not operationally independent (pursuant to rule 206(4)-2(d)(5)) from the *related person* and thus are not required to obtain a surprise examination for your *clients'* funds or securities that are maintained at the *related person*? C C
 (c) If you have answered "yes" to question 8 (a) above, provide the location of the *related person's* office responsible for *custody* of your *clients'* assets.
 Number and Street 1 _____ Number and Street 2 _____

City: State: Country: ZIP+4/Postal Code:

If this address is a private residence, check this box: ☐

Yes No

9. (a) If the *related person* is an investment adviser, is it exempt from registration? ☐ ☐
- (b) If the answer is yes, under what exemption? ☐ ☐
10. (a) Is the *related person* registered with a *foreign financial regulatory authority*? ☐ ☐
- (b) If the answer is yes, list the name and country, in English of each *foreign financial regulatory authority* with which the *related person* is registered.
No Information Filed
11. Do you and the *related person* share any *supervised persons*? ☐ ☐
12. Do you and the *related person* share the same physical location? ☐ ☐

1. Legal Name of *Related Person*:
VANGUARD GLOBAL ADVISERS, LLC

2. Primary Business Name of *Related Person*:
VANGUARD GLOBAL ADVISERS, LLC

3. *Related Person's* SEC File Number (if any) (e.g., 801-, 8-, 866-, 802-)

or
Other

4. *Related Person's*
(a) CRD Number (if any):

No Information Filed

5. *Related Person* is: (check all that apply)

- (a) ☐ broker-dealer, municipal securities dealer, or government securities broker or dealer
- (b) ☒ other investment adviser (including financial planners)
- (c) ☐ registered municipal advisor
- (d) ☐ registered security-based swap dealer
- (e) ☐ major security-based swap participant
- (f) ☐ commodity pool operator or commodity trading advisor (whether registered or exempt from registration)
- (g) ☐ futures commission merchant
- (h) ☐ banking or thrift institution
- (i) ☐ trust company
- (j) ☐ accountant or accounting firm
- (k) ☐ lawyer or law firm
- (l) ☐ insurance company or agency
- (m) ☐ pension consultant
- (n) ☐ real estate broker or dealer
- (o) ☐ sponsor or syndicator of limited partnerships (or equivalent), excluding pooled investment vehicles
- (p) ☐ sponsor, general partner, managing member (or equivalent) of pooled investment vehicles

Yes No

6. Do you *control* or are you *controlled* by the *related person*? ☐ ☐
7. Are you and the *related person* under common *control*? ☐ ☐
8. (a) Does the *related person* act as a qualified custodian for your *clients* in connection with advisory services you provide to *clients*? ☐ ☐
- (b) If you are registering or registered with the SEC and you have answered "yes," to question 8.(a) above, have you overcome the presumption that you are not operationally independent (pursuant to rule 206(4)-2(d)(5)) from the *related person* and thus are not required to obtain a surprise examination for your *clients'* funds or securities that are maintained at the *related person*? ☐ ☐
- (c) If you have answered "yes" to question 8.(a) above, provide the location of the *related person's* office responsible for *custody* of your *clients'* assets:
Number and Street 1: Number and Street 2:
City: State: Country: ZIP+4/Postal Code:
If this address is a private residence, check this box: ☐

Yes No

9. (a) If the *related person* is an investment adviser, is it exempt from registration? ☐ ☐
- (b) If the answer is yes, under what exemption? ☐ ☐

10. (a) Is the *related person* registered with a *foreign financial regulatory authority* ? C C
(b) If the answer is yes, list the name and country, in English of each *foreign financial regulatory authority* with which the *related person* is registered.
No Information Filed
11. Do you and the *related person* share any *supervised persons*? C C
12. Do you and the *related person* share the same physical location? C C

1. Legal Name of *Related Person*:
VANGUARD INVESTMENTS HONG KONG LIMITED

2. Primary Business Name of *Related Person*:
VANGUARD INVESTMENTS HONG KONG LIMITED

3. *Related Person's* SEC File Number (if any) (e.g., 801-, 8-, 866-, 802-)
-
or
Other

4. *Related Person's*
(a) CRD Number (if any):

(b) CIK Number(s) (if any):

No Information Filed

5. *Related Person* is: (check all that apply)
- (a) ☐ broker-dealer, municipal securities dealer, or government securities broker or dealer
(b) ☐ other investment adviser (including financial planners)
(c) ☐ registered municipal advisor
(d) ☐ registered security-based swap dealer
(e) ☐ major security-based swap participant
(f) ☐ commodity pool operator or commodity trading advisor (whether registered or exempt from registration)
(g) ☐ futures commission merchant
(h) ☐ banking or thrift institution
(i) ☐ trust company
(j) ☐ accountant or accounting firm
(k) ☐ lawyer or law firm
(l) ☐ insurance company or agency
(m) ☐ pension consultant
(n) ☐ real estate broker or dealer
(o) ☐ sponsor or syndicator of limited partnerships (or equivalent), excluding pooled investment vehicles
(p) ☒ sponsor, general partner, managing member (or equivalent) of pooled investment vehicles

6. Do you *control* or are you *controlled* by the *related person*? Yes No
C C
7. Are you and the *related person* under common *control*? C C
8. (a) Does the *related person* act as a qualified custodian for your *clients* in connection with advisory services you provide to *clients*? C C
(b) If you are registering or registered with the SEC and you have answered "yes," to question 8.(a) above, have you overcome the presumption that you are not operationally independent (pursuant to rule 206(4)-2(d)(5)) from the *related person* and thus are not required to obtain a surprise examination for your *clients'* funds or securities that are maintained at the *related person*? C C
(c) If you have answered "yes" to question 8.(a) above, provide the location of the *related person's* office responsible for custody of your *clients'* assets:
Number and Street 1: Number and Street 2:
City: State: Country: ZIP+4/Postal Code:
If this address is a private residence, check this box: ☐

9. (a) If the *related person* is an investment adviser, is it exempt from registration? Yes No
C C
(b) If the answer is yes, under what exemption?
10. (a) Is the *related person* registered with a *foreign financial regulatory authority* ? C C
(b) If the answer is yes, list the name and country, in English of each *foreign financial regulatory authority* with which the *related person* is registered.

Name of Country/English Name of Foreign Financial Regulatory Authority

Hong Kong - Securities and Futures Commission

11. Do you and the *related person* share any *supervised persons*? C C

12. Do you and the *related person* share the same physical location?

1. Legal Name of *Related Person*:
VANGUARD INVESTMENTS AUSTRALIA LIMITED

2. Primary Business Name of *Related Person*:
VANGUARD INVESTMENTS AUSTRALIA LIMITED

3. *Related Person's* SEC File Number (if any) (e.g., 801-, 8-, 866-, 802-)

or
Other

4. *Related Person's*

(a) CRD Number (if any):

(b) CIK Number(s) (if any):

No Information Filed

5. *Related Person* is: (check all that apply)

- (a) ☐ broker-dealer, municipal securities dealer, or government securities broker or dealer
(b) ☒ other investment adviser (including financial planners)
(c) ☐ registered municipal advisor
(d) ☐ registered security-based swap dealer
(e) ☐ major security-based swap participant
(f) ☐ commodity pool operator or commodity trading advisor (whether registered or exempt from registration)
(g) ☐ futures commission merchant
(h) ☐ banking or thrift institution
(i) ☐ trust company
(j) ☐ accountant or accounting firm
(k) ☐ lawyer or law firm
(l) ☐ insurance company or agency
(m) ☐ pension consultant
(n) ☐ real estate broker or dealer
(o) ☐ sponsor or syndicator of limited partnerships (or equivalent), excluding pooled investment vehicles
(p) ☒ sponsor, general partner, managing member (or equivalent) of pooled investment vehicles

Yes No

6. Do you *control* or are you *controlled* by the *related person*?

☒ ☐

7. Are you and the *related person* under common *control*?

☐ ☒

8. (a) Does the *related person* act as a qualified custodian for your *clients* in connection with advisory services you provide to *clients*?

☐ ☒

(b) If you are registering or registered with the SEC and you have answered "yes," to question 8.(a) above, have you overcome the presumption that you are not operationally independent (pursuant to rule 206(4)-2(d)(5)) from the *related person* and thus are not required to obtain a surprise examination for your *clients'* funds or securities that are maintained at the *related person*?

☐ ☒

(c) If you have answered "yes" to question 8.(a) above, provide the location of the *related person's* office responsible for *custody* of your *clients'* assets:

Number and Street 1:

Number and Street 2:

City:

State:

Country:

ZIP+4/Postal Code:

If this address is a private residence, check this box: ☐

Yes No

9. (a) If the *related person* is an investment adviser, is it exempt from registration?

☐ ☒

(b) If the answer is yes, under what exemption?

FOREIGN PRIVATE ADVISER EXEMPTION

10. (a) Is the *related person* registered with a *foreign financial regulatory authority*?

☐ ☒

(b) If the answer is yes, list the name and country, in English of each *foreign financial regulatory authority* with which the *related person* is registered.

Name of Country/English Name of Foreign Financial Regulatory Authority

Australia - Australian Securities and Investments Commission

11. Do you and the *related person* share any *supervised persons*?

☐ ☒

12. Do you and the *related person* share the same physical location?

☐ ☒

1. Legal Name of *Related Person*:
VANGUARD GROUP (IRELAND) LIMITED

2. Primary Business Name of *Related Person*:
VANGUARD GROUP (IRELAND) LIMITED

3. *Related Person's* SEC File Number (if any) (e.g., 801-, 8-, 866-, 802-)

-

or

Other

4. *Related Person's*

(a) CRD Number (if any):

(b) CIK Number(s) (if any):

No Information Filed

5. *Related Person* is: (check all that apply)

- (a) ☐ broker-dealer, municipal securities dealer, or government securities broker or dealer
(b) ☐ other investment adviser (including financial planners)
(c) ☐ registered municipal advisor
(d) ☐ registered security-based swap dealer
(e) ☐ major security-based swap participant
(f) ☐ commodity pool operator or commodity trading advisor (whether registered or exempt from registration)
(g) ☐ futures commission merchant
(h) ☐ banking or thrift institution
(i) ☐ trust company
(j) ☐ accountant or accounting firm
(k) ☐ lawyer or law firm
(l) ☐ insurance company or agency
(m) ☐ pension consultant
(n) ☐ real estate broker or dealer
(o) ☐ sponsor or syndicator of limited partnerships (or equivalent), excluding pooled investment vehicles
(p) ☒ sponsor, general partner, managing member (or equivalent) of pooled investment vehicles

Yes No

6. Do you *control* or are you *controlled* by the *related person*?

☐ ☐

7. Are you and the *related person* under common *control*?

☐ ☐

8. (a) Does the *related person* act as a qualified custodian for your *clients* in connection with advisory services you provide to *clients*?

☐ ☐

(b) If you are registering or registered with the SEC and you have answered "yes," to question 8.(a) above, have you overcome the presumption that you are not operationally independent (pursuant to rule 206(4)-2(d)(5)) from the *related person* and thus are not required to obtain a surprise examination for your *clients'* funds or securities that are maintained at the *related person*?

☐ ☐

(c) If you have answered "yes" to question 8.(a) above, provide the location of the *related person's* office responsible for *custody* of your *clients'* assets:

Number and Street 1:

Number and Street 2:

City:

State:

Country:

ZIP+4/Postal Code:

If this address is a private residence, check this box: ☐

Yes No

9. (a) If the *related person* is an investment adviser, is it exempt from registration?

☐ ☐

(b) If the answer is yes, under what exemption?

10. (a) Is the *related person* registered with a *foreign financial regulatory authority*?

☐ ☐

(b) If the answer is yes, list the name and country, in English of each *foreign financial regulatory authority* with which the *related person* is registered.

Name of Country/English Name of Foreign Financial Regulatory Authority

Ireland - Central Bank of Ireland

11. Do you and the *related person* share any *supervised persons*?

☐ ☐

12. Do you and the *related person* share the same physical location?

☐ ☐

1. Legal Name of *Related Person*:
VANGUARD FIDUCIARY TRUST COMPANY

2. Primary Business Name of *Related Person*:

3. *Related Person's* SEC File Number (if any) (e.g., 801-, 8-, 866-, 802-)or
Other4. *Related Person's*

(a) CRD Number (if any):

(b) CIK Number(s) (if any):

No Information Filed

5. *Related Person is:* (check all that apply)

- (a) ☐ broker-dealer, municipal securities dealer, or government securities broker or dealer
 (b) ☐ other investment adviser (including financial planners)
 (c) ☐ registered municipal advisor
 (d) ☐ registered security-based swap dealer
 (e) ☐ major security-based swap participant
 (f) ☐ commodity pool operator or commodity trading advisor (whether registered or exempt from registration)
 (g) ☐ futures commission merchant
 (h) ☐ banking or thrift institution
 (i) ☒ trust company
 (j) ☐ accountant or accounting firm
 (k) ☐ lawyer or law firm
 (l) ☐ insurance company or agency
 (m) ☐ pension consultant
 (n) ☐ real estate broker or dealer
 (o) ☐ sponsor or syndicator of limited partnerships (or equivalent), excluding pooled investment vehicles
 (p) ☐ sponsor, general partner, managing member (or equivalent) of pooled investment vehicles

Yes No

6. Do you *control* or are you *controlled* by the *related person*?☒ ☐7. Are you and the *related person* under common *control*?☐ ☒8. (a) Does the *related person* act as a qualified custodian for your *clients* in connection with advisory services you provide to *clients*?☐ ☒

(b) If you are registering or registered with the SEC and you have answered "yes," to question 8.(a) above, have you overcome the presumption that you are not operationally independent (pursuant to rule 206(4)-2(d)(5)) from the *related person* and thus are not required to obtain a surprise examination for your *clients'* funds or securities that are maintained at the *related person*?

☐ ☒

(c) If you have answered "yes" to question 8.(a) above, provide the location of the *related person's* office responsible for *custody* of your *clients'* assets:

Number and Street 1:

Number and Street 2:

City:

State:

Country:

ZIP+4/Postal Code:

If this address is a private residence, check this box: ☐

Yes No

9. (a) If the *related person* is an investment adviser, is it exempt from registration?☐ ☒

(b) If the answer is yes, under what exemption?

10. (a) Is the *related person* registered with a *foreign financial regulatory authority*?☐ ☒

(b) If the answer is yes, list the name and country, in English of each *foreign financial regulatory authority* with which the *related person* is registered.

No Information Filed

11. Do you and the *related person* share any *supervised persons*?☒ ☐12. Do you and the *related person* share the same physical location?☒ ☐1. Legal Name of *Related Person*:

VANGUARD ADVISERS, INC

2. Primary Business Name of *Related Person*:

VANGUARD ADVISERS, INC.

3. *Related Person's* SEC File Number (if any) (e.g., 801-, 8-, 866-, 802-)

or

Other

4. *Related Person's*

(a) *CRD* Number (if any):

(b) *CIK* Number(s) (if any):

No Information Filed

5. *Related Person* is: (check all that apply)

- (a) ☐ broker-dealer, municipal securities dealer, or government securities broker or dealer
(b) ☒ other investment adviser (including financial planners)
(c) ☒ registered municipal advisor
(d) ☐ registered security-based swap dealer
(e) ☐ major security-based swap participant
(f) ☐ commodity pool operator or commodity trading advisor (whether registered or exempt from registration)
(g) ☐ futures commission merchant
(h) ☐ banking or thrift institution
(i) ☐ trust company
(j) ☐ accountant or accounting firm
(k) ☐ lawyer or law firm
(l) ☐ insurance company or agency
(m) ☐ pension consultant
(n) ☐ real estate broker or dealer
(o) ☐ sponsor or syndicator of limited partnerships (or equivalent), excluding pooled investment vehicles
(p) ☐ sponsor, general partner, managing member (or equivalent) of pooled investment vehicles

Yes No

6. Do you *control* or are you *controlled* by the *related person*?

☐ ☐

7. Are you and the *related person* under common *control*?

☐ ☐

8. (a) Does the *related person* act as a qualified custodian for your *clients* in connection with advisory services you provide to *clients*?

☐ ☐

(b) If you are registering or registered with the SEC and you have answered "yes," to question 8.(a) above, have you overcome the presumption that you are not operationally independent (pursuant to rule 206(4)-2(d)(5)) from the *related person* and thus are not required to obtain a surprise examination for your *clients'* funds or securities that are maintained at the *related person*?

☐ ☐

(c) If you have answered "yes" to question 8.(a) above, provide the location of the *related person's* office responsible for *custody* of your *clients'* assets:

Number and Street 1:

Number and Street 2:

City:

State:

Country:

ZIP+4/Postal Code:

If this address is a private residence, check this box: ☐

Yes No

9. (a) If the *related person* is an investment adviser, is it exempt from registration?

☐ ☐

(b) If the answer is yes, under what exemption?

10. (a) Is the *related person* registered with a *foreign financial regulatory authority*?

☐ ☐

(b) If the answer is yes, list the name and country, in English of each *foreign financial regulatory authority* with which the *related person* is registered.

No Information Filed

11. Do you and the *related person* share any *supervised persons*?

☐ ☐

12. Do you and the *related person* share the same physical location?

☐ ☐

1. Legal Name of *Related Person*:

VANGUARD MARKETING CORPORATION

2. Primary Business Name of *Related Person*:

VANGUARD MARKETING CORPORATION

3. *Related Person's* SEC File Number (if any) (e.g., 801-, 8-, 866-, 802-)

or

Other

4. *Related Person's*

(a) *CRD* Number (if any):

(b) *CIK* Number(s) (if any):

5. *Related Person* is: (check all that apply)

- (a) ☒ broker-dealer, municipal securities dealer, or government securities broker or dealer
 (b) ☐ other investment adviser (including financial planners)
 (c) ☐ registered municipal advisor
 (d) ☐ registered security-based swap dealer
 (e) ☐ major security-based swap participant
 (f) ☐ commodity pool operator or commodity trading advisor (whether registered or exempt from registration)
 (g) ☐ futures commission merchant
 (h) ☐ banking or thrift institution
 (i) ☐ trust company
 (j) ☐ accountant or accounting firm
 (k) ☐ lawyer or law firm
 (l) ☐ insurance company or agency
 (m) ☐ pension consultant
 (n) ☐ real estate broker or dealer
 (o) ☐ sponsor or syndicator of limited partnerships (or equivalent), excluding pooled investment vehicles
 (p) ☐ sponsor, general partner, managing member (or equivalent) of pooled investment vehicles

Yes No

6. Do you *control* or are you *controlled* by the *related person*?☒ ☐7. Are you and the *related person* under common *control*?☐ ☒8. (a) Does the *related person* act as a qualified custodian for your *clients* in connection with advisory services you provide to *clients*?☐ ☒

- (b) If you are registering or registered with the SEC and you have answered "yes," to question 8.(a) above, have you overcome the presumption that you are not operationally independent (pursuant to rule 206(4)-2(d)(5)) from the *related person* and thus are not required to obtain a surprise examination for your *clients'* funds or securities that are maintained at the *related person*?

☐ ☒

- (c) If you have answered "yes" to question 8.(a) above, provide the location of the *related person's* office responsible for *custody* of your *clients'* assets:

Number and Street 1:

Number and Street 2:

City:

State:

Country:

ZIP+4/Postal Code:

If this address is a private residence, check this box: ☐

Yes No

9. (a) If the *related person* is an investment adviser, is it exempt from registration?☐ ☒

- (b) If the answer is yes, under what exemption?

10. (a) Is the *related person* registered with a *foreign financial regulatory authority*?☐ ☒

- (b) If the answer is yes, list the name and country, in English of each *foreign financial regulatory authority* with which the *related person* is registered.

No Information Filed

11. Do you and the *related person* share any *supervised persons*?☒ ☐12. Do you and the *related person* share the same physical location?☒ ☐

Item 7 Private Fund Reporting

Yes No

B Are you an adviser to any *private fund*?☒ ☐

If "yes," then for each *private fund* that you advise, you must complete a Section 7.B.(1) of Schedule D, except in certain circumstances described in the next sentence and in Instruction 6 of the Instructions to Part 1A. If you are registered or applying for registration with the SEC or reporting as an SEC exempt reporting adviser, and another SEC-registered adviser or SEC exempt reporting adviser reports this information with respect to any such *private fund* in Section 7.B.(1) of Schedule D of its Form ADV (e.g., if you are a subadviser), do not complete Section 7.B.(1) of Schedule D with respect to that *private fund*. You must, instead, complete Section 7.B.(2) of Schedule D.

In either case, if you seek to preserve the anonymity of a *private fund* client by maintaining its identity in your books and records in numerical or alphabetical code, or similar designation, pursuant to rule 204-2(d), you may identify the *private fund* in Section 7.B.(1) or 7.B.(2) of Schedule D using the same code or designation in place of the fund's name.

SECTION 7.B.(1) Private Fund Reporting

Information About the Private Fund

1. (a) Name of the
- private fund*
- :

ASF PRIVATE FUND

- (b)
- Private fund*
- identification number:

(include the "805-" prefix also)

2. Under the laws of what state or country is the
- private fund*
- organized:

State:

Country:

Cayman Islands

3. (a) Name(s) of General Partner, Manager, Trustee, or Directors (or
- persons*
- serving in a similar capacity):

Name of General Partner, Manager, Trustee, or Director

VGMF I (CAYMAN) LIMITED

- (b) If filing an
- umbrella registration*
- , identify the
- filing adviser*
- and/or
- relying adviser(s)*
- that sponsor(s) or manage(s) this
- private fund*
- .

No Information Filed

4. The
- private fund*
- (check all that apply; you must check at least one):

☐ (1) qualifies for the exclusion from the definition of investment company under section 3(c)(1) of the Investment Company Act of 1940☒ (2) qualifies for the exclusion from the definition of investment company under section 3(c)(7) of the Investment Company Act of 1940

5. List the name and country, in English, of each
- foreign financial regulatory authority*
- with which the
- private fund*
- is registered.

Name of Country/English Name of Foreign Financial Regulatory Authority

Other - CAYMAN ISLANDS REGISTRAR OF TRUSTS

Yes No

6. (a) Is this a "master fund" in a master-feeder arrangement?

C C

- (b) If yes, what is the name and
- private fund*
- identification number (if any) of the feeder funds investing in this
- private fund*
- ?

No Information Filed

Yes No

- (c) Is this a "feeder fund" in a master-feeder arrangement?

C C

- (d) If yes, what is the name and
- private fund*
- identification number (if any) of the master fund in which this
- private fund*
- invests?

Name of *private fund*:*Private fund* identification number:

(include the "805-" prefix also)

NOTE: You must complete question 6 for each master-feeder arrangement regardless of whether you are filing a single Schedule D, Section 7.B.(1) for the master-feeder arrangement or reporting on the funds separately.

7. If you are filing a single Schedule D, Section 7.B.(1) for a master-feeder arrangement according to the instructions to this Section 7.B.(1), for each of the feeder funds answer the following questions:

No Information Filed

NOTE: For purposes of questions 6 and 7, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund

Yes No

8. (a) Is this
- private fund*
- a "fund of funds"?

C C

NOTE: For purposes of this question only, answer "yes" if the fund invests 10 percent or more of its total assets in other pooled investment vehicles, regardless of whether they are also *private funds* or registered investment companies.

- (b) If yes, does the
- private fund*
- invest in funds managed by you or by a
- related person*
- ?

C C

Yes No

9. During your last fiscal year, did the *private fund* invest in securities issued by investment companies registered under the Investment Company Act of 1940 (other than "money market funds," to the extent provided in Instruction 6.e.)? ☐ Yes ☒ No

10. What type of fund is the *private fund*?

☒ hedge fund ☐ liquidity fund ☐ private equity fund ☐ real estate fund ☐ securitized asset fund ☐ venture capital fund ☐ Other *private fund*:

NOTE: For definitions of these fund types, please see Instruction 6 of the Instructions to Part 1A.

11. Current gross asset value of the *private fund*:

\$ 20,235,794

Ownership

12. Minimum investment commitment required of an investor in the *private fund*:

\$ 1

NOTE: Report the amount routinely required of investors who are not your *related persons* (even if different from the amount set forth in the organizational documents of the fund).

13. Approximate number of the *private fund's* beneficial owners:

1

14. What is the approximate percentage of the *private fund* beneficially owned by you and your *related persons*:

100%

15. (a) What is the approximate percentage of the *private fund* beneficially owned (in the aggregate) by funds of funds:

0%

Yes No

(b) If the *private fund* qualifies for the exclusion from the definition of investment company under section 3(c)(1) of the Investment Company Act of 1940, are sales of the fund limited to *qualified clients*? ☐ Yes ☒ No

16. What is the approximate percentage of the *private fund* beneficially owned by non-United States persons:

0%

Your Advisory Services

Yes No

17. (a) Are you a subadviser to this *private fund*? ☐ Yes ☒ No

(b) If the answer to question 17.(a) is "yes," provide the name and SEC file number, if any, of the adviser of the *private fund*. If the answer to question 17.(a) is "no," leave this question blank.

No Information Filed

Yes No

18. (a) Do any investment advisers (other than the investment advisers listed in Section 7.B.(1).A.3.(b)) advise the *private fund*? ☐ Yes ☒ No

(b) If the answer to question 18.(a) is "yes," provide the name and SEC file number, if any, of the other advisers to the *private fund*. If the answer to question 18.(a) is "no," leave this question blank.

No Information Filed

Yes No

19. Are your *clients* solicited to invest in the *private fund*? ☐ Yes ☒ No

NOTE: For purposes of this question, do not consider feeder funds of the *private fund*.

20. Approximately what percentage of your *clients* has invested in the *private fund*?

1%

Private Offering

Yes No

21. Has the *private fund* ever relied on an exemption from registration of its securities under Regulation D of the Securities Act of 1933? ☐ Yes ☒ No

22. If yes, provide the *private fund's* Form D file number (if any):

No Information Filed

Auditors

23. (a) (1) Are the *private fund's* financial statements subject to an annual audit?

Yes No

☐ ☒

(2) If the answer to question 23.(a)(1) is "yes," are the financial statements prepared in accordance with U.S. GAAP?

☐ ☒

If the answer to question 23.(a)(1) is "yes," respond to questions (b) through (h) below. If the *private fund* uses more than one auditing firm, you must complete questions (b) through (f) separately for each auditing firm.

No Information Filed

Yes No

(g) Are the *private fund's* audited financial statements for the most recently completed fiscal year distributed to the *private fund's* investors?

☐ ☒

(h) Do all of the reports prepared by the auditing firm for the *private fund* since your last *annual updating amendment* contain unqualified opinions?

☒ Yes ☐ No ☐ Report Not Yet Received

If you check "Report Not Yet Received," you must promptly file an amendment to your Form ADV to update your response when the report is available.

Prime Broker

Yes No

24. (a) Does the *private fund* use one or more prime brokers?

☐ ☒

If the answer to question 24.(a) is "yes," respond to questions (b) through (e) below for each prime broker the *private fund* uses. If the *private fund* uses more than one prime broker, you must complete questions (b) through (e) separately for each prime broker.

No Information Filed

Custodian

Yes No

25. (a) Does the *private fund* use any custodians (including the prime brokers listed above) to hold some or all of its assets?

☒ ☐

If the answer to question 25.(a) is "yes," respond to questions (b) through (g) below for each custodian the *private fund* uses. If the *private fund* uses more than one custodian, you must complete questions (b) through (g) separately for each custodian.

Additional Custodian Information : 1 Record(s) Filed:

If the answer to question 25.(a) is "yes," respond to questions (b) through (g) below for each custodian the *private fund* uses. If the *private fund* uses more than one custodian, you must complete questions (b) through (g) separately for each custodian.

(b) Legal name of custodian:

BROWN BROTHERS HARRIMAN & CO

(c) Primary business name of custodian:

BROWN BROTHERS HARRIMAN & CO

(d) The location of the custodian's office responsible for custody of the *private fund's* assets (city, state and country):

City:

NEW YORK

State:

New York

Country:

United States

Yes No

(e) Is the custodian a *related person* of your firm?

☐ ☒

(f) If the custodian is a broker-dealer, provide its SEC registration number (if any):

CRD Number (if any):

(g) If the custodian is not a broker-dealer, or is a broker-dealer but does not have an SEC registration number, provide its *legal entity identifier* (if any)

Administrator

26. (a) Does the *private fund* use an administrator other than your firm?

Yes No

☐ ☒

If the answer to question 26.(a) is "yes," respond to questions (b) through (f) below. If the *private fund* uses more than one administrator, you must complete questions (b) through (f) separately for each administrator.

No Information Filed

27. During your last fiscal year, what percentage of the *private fund's* assets (by value) was valued by a *person*, such as an administrator, that is not your *related person*?

0%

Include only those assets where (i) such *person* carried out the valuation procedure established for that asset, if any, including obtaining any relevant quotes, and (ii) the valuation used for purposes of investor subscriptions, redemptions or distributions, and fee calculations (including allocations) was the valuation determined by such *person*.

Marketers

Yes No

☐ ☒

28. (a) Does the *private fund* use the services of someone other than you or your *employees* for marketing purposes?

You must answer "yes" whether the *person* acts as a placement agent, consultant, finder, introducer, municipal advisor or other solicitor, or similar *person*. If the answer to question 28.(a) is "yes," respond to questions (b) through (g) below for each such marketer the *private fund* uses. If the *private fund* uses more than one marketer you must complete questions (b) through (g) separately for each marketer.

No Information Filed

A. PRIVATE FUND

Information About the *Private Fund*

1. (a) Name of the *private fund*:

MPF PRIVATE FUND

(b) *Private fund* identification number:

(include the "805-" prefix also)

2. Under the laws of what state or country is the *private fund* organized:

State:

Country:

Cayman Islands

3. (a) Name(s) of General Partner, Manager, Trustee, or Directors (or *persons* serving in a similar capacity):

Name of General Partner, Manager, Trustee, or Director

VGMF I (CAYMAN) LIMITED

(b) If filing an *umbrella registration*, identify the *filing adviser* and/or *relying adviser(s)* that sponsor(s) or manage(s) this *private fund*.

No Information Filed

4. The *private fund* (check all that apply; you must check at least one):

☐ (1) qualifies for the exclusion from the definition of investment company under section 3(c)(1) of the Investment Company Act of 1940

☒ (2) qualifies for the exclusion from the definition of investment company under section 3(c)(7) of the Investment Company Act of 1940

5. List the name and country, in English, of each *foreign financial regulatory authority* with which the *private fund* is registered.

Name of Country/English Name of Foreign Financial Regulatory Authority

Other - CAYMAN ISLANDS REGISTRAR OF TRUSTS

Yes No

☐ ☒

6. (a) Is this a "master fund" in a master-feeder arrangement?

(b) If yes, what is the name and *private fund* identification number (if any) of the feeder funds investing in this *private fund*?

No Information Filed

(c) Is this a "feeder fund" in a master-feeder arrangement?

☐ ☒

(d) If yes, what is the name and *private fund* identification number (if any) of the master fund in which this *private fund* invests?

Name of *private fund*:

Private fund identification number:
(include the "805-" prefix also)

NOTE: You must complete question 6 for each master-feeder arrangement regardless of whether you are filing a single Schedule D, Section 7.B.(1) for the master-feeder arrangement or reporting on the funds separately.

7. If you are filing a single Schedule D, Section 7.B.(1) for a master-feeder arrangement according to the instructions to this Section 7.B.(1), for each of the feeder funds answer the following questions:

No Information Filed

NOTE: For purposes of questions 6 and 7, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

Yes No

8. (a) Is this *private fund* a "fund of funds"?

☐ ☒

NOTE: For purposes of this question only, answer "yes" if the fund invests 10 percent or more of its total assets in other pooled investment vehicles, regardless of whether they are also *private funds* or registered investment companies.

- (b) If yes, does the *private fund* invest in funds managed by you or by a *related person*?

☐ ☒

Yes No

9. During your last fiscal year, did the *private fund* invest in securities issued by investment companies registered under the Investment Company Act of 1940 (other than "money market funds," to the extent provided in Instruction 6.e.)?

☐ ☒

10. What type of fund is the *private fund*?

☒ hedge fund ☐ liquidity fund ☐ private equity fund ☐ real estate fund ☐ securitized asset fund ☐ venture capital fund ☐ Other *private fund*:

NOTE: For definitions of these fund types, please see Instruction 6 of the Instructions to Part 1A.

11. Current gross asset value of the *private fund*:

\$ 146,755,273

Ownership

12. Minimum investment commitment required of an investor in the *private fund*:

\$ 1

NOTE: Report the amount routinely required of investors who are not your *related persons* (even if different from the amount set forth in the organizational documents of the fund).

13. Approximate number of the *private fund's* beneficial owners:

1

14. What is the approximate percentage of the *private fund* beneficially owned by you and your *related persons*:

100%

15. (a) What is the approximate percentage of the *private fund* beneficially owned (in the aggregate) by funds of funds:

100%

Yes No

- (b) If the *private fund* qualifies for the exclusion from the definition of investment company under section 3(c)(1) of the Investment Company Act of 1940, are sales of the fund limited to *qualified clients*?

☐ ☒

16. What is the approximate percentage of the *private fund* beneficially owned by non-United States persons:

0%

Your Advisory Services17. (a) Are you a subadviser to this *private fund*?

Yes No

(b) If the answer to question 17.(a) is "yes," provide the name and SEC file number, if any, of the adviser of the *private fund*. If the answer to question 17.(a) is "no," leave this question blank.

No Information Filed

18. (a) Do any investment advisers (other than the investment advisers listed in Section 7.B.(1).A.3.(b)) advise the *private fund*?

Yes No

(b) If the answer to question 18.(a) is "yes," provide the name and SEC file number, if any, of the other advisers to the *private fund*. If the answer to question 18.(a) is "no," leave this question blank.

No Information Filed

19. Are your *clients* solicited to invest in the *private fund*?

Yes No

NOTE: For purposes of this question, do not consider feeder funds of the *private fund*.20. Approximately what percentage of your *clients* has invested in the *private fund*?

1%

Private Offering21. Has the *private fund* ever relied on an exemption from registration of its securities under Regulation D of the Securities Act of 1933?

Yes No

22. If yes, provide the *private fund's* Form D file number (if any):

No Information Filed

B. SERVICE PROVIDERS**Auditors**23. (a) (1) Are the *private fund's* financial statements subject to an annual audit?

Yes No

(2) If the answer to question 23.(a)(1) is "yes," are the financial statements prepared in accordance with U.S. GAAP?

If the answer to question 23.(a)(1) is "yes," respond to questions (b) through (h) below. If the *private fund* uses more than one auditing firm, you must complete questions (b) through (f) separately for each auditing firm.

No Information Filed

(g) Are the *private fund's* audited financial statements for the most recently completed fiscal year distributed to the *private fund's* investors?

Yes No

(h) Do all of the reports prepared by the auditing firm for the *private fund* since your last *annual updating amendment* contain unqualified opinions?☐ Yes ☐ No ☐ Report Not Yet Received

If you check "Report Not Yet Received," you must promptly file an amendment to your Form ADV to update your response when the report is available.

Prime Broker24. (a) Does the *private fund* use one or more prime brokers?

Yes No

If the answer to question 24.(a) is "yes," respond to questions (b) through (e) below for each prime broker the *private fund* uses. If the *private fund* uses more than one prime broker, you must complete questions (b) through (e) separately for each prime broker.

No Information Filed

Custodian25. (a) Does the *private fund* use any custodians (including the prime brokers listed above) to hold some or all of its assets?

Yes No

If the answer to question 25.(a) is "yes," respond to questions (b) through (g) below for each custodian the *private fund* uses. If the *private fund* uses more than one custodian, you must complete questions (b) through (g) separately for each custodian.

Additional Custodian Information : 1 Record(s) Filed.

If the answer to question 25.(a) is "yes," respond to questions (b) through (g) below for each custodian the *private fund* uses. If the *private fund* uses more than one custodian, you must complete questions (b) through (g) separately for each custodian.

(b) Legal name of custodian:
BROWN BROTHERS HARRIMAN & CO

(c) Primary business name of custodian:
BROWN BROTHERS HARRIMAN & CO

(d) The location of the custodian's office responsible for *custody* of the *private fund's* assets (city, state and country):

City:

NEW YORK

State:

New York

Country:

United States

Yes No

(e) Is the custodian a *related person* of your firm?

☐ Yes ☒ No

(f) If the custodian is a broker-dealer, provide its SEC registration number (if any):

-

CRD Number (if any):

(g) If the custodian is not a broker-dealer, or is a broker-dealer but does not have an SEC registration number, provide its *legal entity identifier* (if any)

Administrator

Yes No

26. (a) Does the *private fund* use an administrator other than your firm?

☐ Yes ☒ No

If the answer to question 26.(a) is "yes," respond to questions (b) through (f) below. If the *private fund* uses more than one administrator, you must complete questions (b) through (f) separately for each administrator.

No Information Filed

27. During your last fiscal year, what percentage of the *private fund's* assets (by value) was valued by a *person*, such as an administrator, that is not your *related person*?

0%

Include only those assets where (i) such *person* carried out the valuation procedure established for that asset, if any, including obtaining any relevant quotes, and (ii) the valuation used for purposes of investor subscriptions, redemptions or distributions, and fee calculations (including allocations) was the valuation determined by such *person*.

Marketers

Yes No

28. (a) Does the *private fund* use the services of someone other than you or your *employees* for marketing purposes?

☐ Yes ☒ No

You must answer "yes" whether the *person* acts as a placement agent, consultant, finder, introducer, municipal advisor or other solicitor, or similar *person*. If the answer to question 28.(a) is "yes," respond to questions (b) through (g) below for each such marketer the *private fund* uses. If the *private fund* uses more than one marketer you must complete questions (b) through (g) separately for each marketer.

No Information Filed

SECTION 7.B.(2) Private Fund Reporting

1. Name of the *private fund*:

VANGUARD DEVELOPED ALL-CAP EX NORTH AMERICA EQUITY INDEX POOLED FUND

2. *Private fund* identification number:

(include the "805-" prefix also)

805-9057962151

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing

Name:

VANGUARD INVESTMENTS CANADA INC.

SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*?

☐ ☐

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

VANGUARD GLOBAL ALL-CAP EX CANADA EQUITY INDEX POOLED FUND

2. *Private fund* identification number:

(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing

Name:

VANGUARD INVESTMENTS CANADA INC.

SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*?

☐ ☐

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

VANGUARD GLOBAL BALANCED FUND

2. *Private fund* identification number:

(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing

Name:

VANGUARD INVESTMENTS CANADA INC.

SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*?

☐ ☐

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

VANGUARD GLOBAL DIVIDEND FUND

2. *Private fund* identification number:

(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing

Name:

VANGUARD INVESTMENTS CANADA INC.

SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*?

☐ ☒

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

VANGUARD GLOBAL LIQUIDITY FACTOR ETF

2. *Private fund* identification number:

(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing

Name:

VANGUARD INVESTMENTS CANADA INC.

SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*?

☐ ☒

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

VANGUARD INTERNATIONAL GROWTH FUND

2. *Private fund* identification number:

(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing

Name:

VANGUARD INVESTMENTS CANADA INC

SEC File Number:

4. Are your *clients* solicited to invest in this *private fund*?

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

VANGUARD SHORT-TERM INVESTMENT POOLED FUND

2. *Private fund* identification number:
(include the "805-" prefix also)3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing
Name:

VANGUARD INVESTMENTS CANADA INC.

SEC File Number:

4. Are your *clients* solicited to invest in this *private fund*?

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

VANGUARD TARGET RETIREMENT 2015 POOLED FUND

2. *Private fund* identification number:
(include the "805-" prefix also)3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing
Name:

VANGUARD INVESTMENTS CANADA INC.

SEC File Number:

4. Are your *clients* solicited to invest in this *private fund*?

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

1. Name of the *private fund*:

VANGUARD WINDSOR U.S. VALUE FUND

2. *Private fund* identification number
(include the "805-" prefix also)

3. Name and SEC File number of adviser that provides information about this *private fund* in Section 7.B.(1) of Schedule D of its Form ADV filing

Name:

VANGUARD INVESTMENTS CANADA INC.

SEC File Number:

Yes No

4. Are your *clients* solicited to invest in this *private fund*?

☐ ☒

In answering this question, disregard feeder funds' investment in a master fund. For purposes of this question, in a master-feeder arrangement, one or more funds ("feeder funds") invest all or substantially all of their assets in a single fund ("master fund"). A fund would also be a "feeder fund" investing in a "master fund" for purposes of this question if it issued multiple classes (or series) of shares or interests, and each class (or series) invests substantially all of its assets in a single master fund.

Item 8 Participation or Interest in *Client* Transactions

In this Item, we request information about your participation and interest in your *clients*' transactions. This information identifies additional areas in which conflicts of interest may occur between you and your *clients*. Newly-formed advisers should base responses to these questions on the types of participation and interest that you expect to engage in during the next year.

Like Item 7, Item 8 requires you to provide information about you and your *related persons*, including foreign affiliates.

Proprietary Interest in *Client* Transactions

- A. Do you or any *related person*:

Yes No

- (1) buy securities for yourself from advisory *clients*, or sell securities you own to advisory *clients* (principal transactions)? ☐ ☒
- (2) buy or sell for yourself securities (other than shares of mutual funds) that you also recommend to advisory *clients*? ☐ ☒
- (3) recommend securities (or other investment products) to advisory *clients* in which you or any *related person* has some other proprietary (ownership) interest (other than those mentioned in Items 8.A.(1) or (2))? ☐ ☒

Sales Interest in *Client* Transactions

- B. Do you or any *related person*:

Yes No

- (1) as a broker-dealer or registered representative of a broker-dealer, execute securities trades for brokerage customers in which advisory *client* securities are sold to or bought from the brokerage customer (agency cross transactions)? ☐ ☒
- (2) recommend to advisory *clients*, or act as a purchaser representative for advisory *clients* with respect to, the purchase of securities for which you or any *related person* serves as underwriter or general or managing partner? ☒ ☐
- (3) recommend purchase or sale of securities to advisory *clients* for which you or any *related person* has any other sales interest (other than the receipt of sales commissions as a broker or registered representative of a broker-dealer)? ☒ ☐

Investment or Brokerage Discretion

- C. Do you or any *related person* have *discretionary authority* to determine the:

Yes No

- (1) securities to be bought or sold for a *client's* account? ☒ ☐
- (2) amount of securities to be bought or sold for a *client's* account? ☒ ☐
- (3) broker or dealer to be used for a purchase or sale of securities for a *client's* account? ☒ ☐
- (4) commission rates to be paid to a broker or dealer for a *client's* securities transactions? ☒ ☐

- D. If you answer "yes" to C.(3) above, are any of the brokers or dealers *related persons*? ☒ ☐

- E. Do you or any *related person* recommend brokers or dealers to *clients*? ☒ ☐

- F. If you answer "yes" to E. above, are any of the brokers or dealers *related persons*? ☒ ☐

- G. (1) Do you or any *related person* receive research or other products or services other than execution from a broker-dealer or a third party ("soft dollar benefits") in connection with *client* securities transactions? ☒ ☐
- (2) If "yes" to G.(1) above, are all the "soft dollar benefits" you or any *related persons* receive eligible "research or brokerage services" under section 28(e) of the Securities Exchange Act of 1934? ☒ ☐
- H. (1) Do you or any *related person*, directly or indirectly, compensate any *person* that is not an *employee* for *client* referrals? ☐ ☒
- (2) Do you or any *related person*, directly or indirectly, provide any *employee* compensation that is specifically related to obtaining *clients* for the firm (cash or non-cash compensation in addition to the *employee's* regular salary)? ☒ ☐

- I. Do you or any *related person*, including any *employee*, directly or indirectly, receive compensation from any *person* (other than you or any *related person*) for *client* referrals? ☐ ☒

In your response to Item 8.I., do not include the regular salary you pay to an *employee*.

In responding to Items 8.H. and 8.I., consider all cash and non-cash compensation that you or a *related person* gave to (in answering Item 8.H.) or received from (in answering Item 8.I.) any *person* in exchange for *client* referrals, including any bonus that is based, at least in part, on the number or amount of *client*

Item 9 Custody

In this Item, we ask you whether you or a *related person* has *custody of client* (other than *clients* that are investment companies registered under the Investment Company Act of 1940) assets and about your custodial practices.

- | | |
|---|--|
| A. (1) Do you have <i>custody of any advisory clients</i> : | Yes No |
| (a) cash or bank accounts? | <input type="radio"/> <input checked="" type="radio"/> |
| (b) securities? | <input type="radio"/> <input checked="" type="radio"/> |

If you are registering or registered with the SEC, answer "No" to Item 9.A.(1)(a) and (b) if you have custody solely because (i) you deduct your advisory fees directly from your clients' accounts, or (ii) a related person has custody of client assets in connection with advisory services you provide to clients, but you have overcome the presumption that you are not operationally independent (pursuant to Advisers Act rule 206(4)-2(d)(5)) from the related person.

- (2) If you checked "yes" to Item 9.A.(1)(a) or (b), what is the approximate amount of *client* funds and securities and total number of *clients* for which you have *custody*:

U.S. Dollar Amount	Total Number of <i>Clients</i>
(a) \$	(b)

If you are registering or registered with the SEC and you have custody solely because you deduct your advisory fees directly from your clients' accounts, do not include the amount of those assets and the number of those clients in your response to Item 9.A.(2). If your related person has custody of client assets in connection with advisory services you provide to clients, do not include the amount of those assets and number of those clients in your response to 9.A.(2). Instead, include that information in your response to Item 9.B.(2).

- | | |
|---|--|
| B. (1) In connection with advisory services you provide to <i>clients</i> , do any of your <i>related persons</i> have <i>custody of any of your advisory clients</i> : | Yes No |
| (a) cash or bank accounts? | <input type="radio"/> <input checked="" type="radio"/> |
| (b) securities? | <input type="radio"/> <input checked="" type="radio"/> |

You are required to answer this item regardless of how you answered Item 9.A.(1)(a) or (b).

- (2) If you checked "yes" to Item 9.B.(1)(a) or (b), what is the approximate amount of *client* funds and securities and total number of *clients* for which your *related persons* have *custody*:

U.S. Dollar Amount	Total Number of <i>Clients</i>
(a) \$	(b)

- C. If you or your *related persons* have *custody of client* funds or securities in connection with advisory services you provide to *clients*, check all the following that apply:

- | | |
|---|--------------------------|
| (1) A qualified custodian(s) sends account statements at least quarterly to the investors in the pooled investment vehicle(s) you manage. | <input type="checkbox"/> |
| (2) An <i>independent public accountant</i> audits annually the pooled investment vehicle(s) that you manage and the audited financial statements are distributed to the investors in the pools. | <input type="checkbox"/> |
| (3) An <i>independent public accountant</i> conducts an annual surprise examination of <i>client</i> funds and securities. | <input type="checkbox"/> |
| (4) An <i>independent public accountant</i> prepares an internal control report with respect to custodial services when you or your <i>related persons</i> are qualified custodians for <i>client</i> funds and securities. | <input type="checkbox"/> |

If you checked Item 9.C.(2), C.(3) or C.(4), list in Section 9.C. of Schedule D the accountants that are engaged to perform the audit or examination or prepare an internal control report. (If you checked Item 9.C.(2), you do not have to list auditor information in Section 9.C. of Schedule D if you already provided this information with respect to the private funds you advise in Section 7.B.(1) of Schedule D).

- | | |
|---|--|
| D. Do you or your <i>related person(s)</i> act as qualified custodians for your <i>clients</i> in connection with advisory services you provide to <i>clients</i> ? | Yes No |
| (1) you act as a qualified custodian | <input type="radio"/> <input checked="" type="radio"/> |
| (2) your <i>related person(s)</i> act as qualified custodian(s) | <input type="radio"/> <input checked="" type="radio"/> |

If you checked "yes" to Item 9.D.(2), all related persons that act as qualified custodians (other than any mutual fund transfer agent pursuant to rule 206(4)-2(b)(1)) must be identified in Section 7.A. of Schedule D, regardless of whether you have determined the related person to be operationally independent under rule 206(4)-2 of the Advisers Act.

- E. If you are filing your *annual updating amendment* and you were subject to a surprise examination by an *independent public accountant* during your last fiscal year, provide the date (MM/YYYY) the examination commenced:

- F. If you or your *related persons* have *custody of client* funds or securities, how many *persons*, including, but not limited to, you and your *related persons*, act as qualified custodians for your *clients* in connection with advisory services you provide to *clients*?

SECTION 9.C: Independent Public Accountant

No Information Filed

Item 10 Control Persons

In this Item, we ask you to identify every *person* that, directly or indirectly, *controls* you. If you are filing an *umbrella registration*, the information in Item 10 should be provided for the *filing adviser* only.

If you are submitting an initial application or report, you must complete Schedule A and Schedule B. Schedule A asks for information about your direct owners and executive officers. Schedule B asks for information about your indirect owners. If this is an amendment and you are updating information you reported on either Schedule A or Schedule B (or both) that you filed with your initial application or report, you must complete Schedule C.

Yes No

A. Does any *person* not named in Item 1.A. or Schedules A, B, or C, directly or indirectly, *control* your management or policies?

☐ ☐

If yes, complete Section 10.A. of Schedule D.

B. If any *person* named in Schedules A, B, or C or in Section 10.A. of Schedule D is a public reporting company under Sections 12 or 15(d) of the Securities Exchange Act of 1934, please complete Section 10.B. of Schedule D.

SECTION 10.A: Control Persons

No Information Filed

SECTION 10.B: Control Person Public Reporting Companies

No Information Filed

Item 11 Disclosure Information

In this Item, we ask for information about your disciplinary history and the disciplinary history of all your *advisory affiliates*. We use this information to determine whether to grant your application for registration, to decide whether to revoke your registration or to place limitations on your activities as an investment adviser, and to identify potential problem areas to focus on during our on-site examinations. One event may result in "yes" answers to more than one of the questions below. In accordance with General Instruction 5 to Form ADV, "you" and "your" include the *filing adviser* and all *relying advisers* under an *umbrella registration*.

Your *advisory affiliates* are: (1) all of your current *employees* (other than *employees* performing only clerical, administrative, support or similar functions); (2) all of your officers, partners, or directors (or any *person* performing similar functions); and (3) all *persons* directly or indirectly *controlling* you or *controlled* by you. If you are a "separately identifiable department or division" (SID) of a bank, see the Glossary of Terms to determine who your *advisory affiliates* are.

If you are registered or registering with the SEC or if you are an exempt reporting adviser, you may limit your disclosure of any event listed in Item 11 to ten years following the date of the event. If you are registered or registering with a state, you must respond to the questions as posed; you may, therefore, limit your disclosure to ten years following the date of an event only in responding to Items 11.A.(1), 11.A.(2), 11.B.(1), 11.B.(2), 11.D.(4), and 11.H.(1)(a). For purposes of calculating this ten-year period, the date of an event is the date the final order, judgment, or decree was entered, or the date any rights of appeal from preliminary orders, judgments, or decrees lapsed.

You must complete the appropriate Disclosure Reporting Page ("DRP") for "yes" answers to the questions in this Item 11.

Yes No

Do any of the events below involve you or any of your *supervised persons*?

☐ ☐

For "yes" answers to the following questions, complete a Criminal Action DRP:

A. In the past ten years, have you or any *advisory affiliate*:

Yes No

(1) been convicted of or pled guilty or nolo contendere ("no contest") in a domestic, foreign, or military court to any *felony*?

☐ ☐

(2) been *charged* with any *felony*?

☐ ☐

If you are registered or registering with the SEC, or if you are reporting as an exempt reporting adviser, you may limit your response to Item 11.A.(2) to charges that are currently pending.

B. In the past ten years, have you or any *advisory affiliate*:

(1) been convicted of or pled guilty or nolo contendere ("no contest") in a domestic, foreign, or military court to a *misdemeanor* involving:

☐ ☐

investments or an *investment-related* business, or any fraud, false statements, or omissions, wrongful taking of property, bribery, perjury, forgery, counterfeiting, extortion, or a conspiracy to commit any of these offenses?

(2) been *charged* with a *misdemeanor* listed in Item 11 B (1)?

☐ ☐

If you are registered or registering with the SEC, or if you are reporting as an exempt reporting adviser, you may limit your response to Item 11.B.(2) to charges that are currently pending.

For "yes" answers to the following questions, complete a Regulatory Action DRP:

- | | Yes | No |
|--|-----------------------|-----------------------|
| C. Has the SEC or the Commodity Futures Trading Commission (CFTC) ever: | | |
| (1) found you or any advisory affiliate to have made a false statement or omission? | <input type="radio"/> | <input type="radio"/> |
| (2) found you or any advisory affiliate to have been involved in a violation of SEC or CFTC regulations or statutes? | <input type="radio"/> | <input type="radio"/> |
| (3) found you or any advisory affiliate to have been a cause of an investment-related business having its authorization to do business denied, suspended, revoked, or restricted? | <input type="radio"/> | <input type="radio"/> |
| (4) entered an order against you or any advisory affiliate in connection with investment-related activity? | <input type="radio"/> | <input type="radio"/> |
| (5) imposed a civil money penalty on you or any advisory affiliate, or ordered you or any advisory affiliate to cease and desist from any activity? | <input type="radio"/> | <input type="radio"/> |
| D. Has any other federal regulatory agency, any state regulatory agency, or any foreign financial regulatory authority: | | |
| (1) ever found you or any advisory affiliate to have made a false statement or omission, or been dishonest, unfair, or unethical? | <input type="radio"/> | <input type="radio"/> |
| (2) ever found you or any advisory affiliate to have been involved in a violation of investment-related regulations or statutes? | <input type="radio"/> | <input type="radio"/> |
| (3) ever found you or any advisory affiliate to have been a cause of an investment-related business having its authorization to do business denied, suspended, revoked, or restricted? | <input type="radio"/> | <input type="radio"/> |
| (4) in the past ten years, entered an order against you or any advisory affiliate in connection with an investment-related activity? | <input type="radio"/> | <input type="radio"/> |
| (5) ever denied, suspended, or revoked your or any advisory affiliate's registration or license, or otherwise prevented you or any advisory affiliate, by order, from associating with an investment-related business or restricted your or any advisory affiliate's activity? | <input type="radio"/> | <input type="radio"/> |
| E. Has any self-regulatory organization or commodities exchange ever: | | |
| (1) found you or any advisory affiliate to have made a false statement or omission? | <input type="radio"/> | <input type="radio"/> |
| (2) found you or any advisory affiliate to have been involved in a violation of its rules (other than a violation designated as a "minor rule violation" under a plan approved by the SEC)? | <input type="radio"/> | <input type="radio"/> |
| (3) found you or any advisory affiliate to have been the cause of an investment-related business having its authorization to do business denied, suspended, revoked, or restricted? | <input type="radio"/> | <input type="radio"/> |
| (4) disciplined you or any advisory affiliate by expelling or suspending you or the advisory affiliate from membership, barring or suspending you or the advisory affiliate from association with other members, or otherwise restricting your or the advisory affiliate's activities? | <input type="radio"/> | <input type="radio"/> |
| F. Has an authorization to act as an attorney, accountant, or federal contractor granted to you or any advisory affiliate ever been revoked or suspended? | <input type="radio"/> | <input type="radio"/> |
| G. Are you or any advisory affiliate now the subject of any regulatory proceeding that could result in a "yes" answer to any part of Item 11.C., 11.D., or 11.E.? | <input type="radio"/> | <input type="radio"/> |

For "yes" answers to the following questions, complete a Civil Judicial Action DRP:

- | | Yes | No |
|--|-----------------------|-----------------------|
| H. (1) Has any domestic or foreign court: | | |
| (a) in the past ten years, enjoined you or any advisory affiliate in connection with any investment-related activity? | <input type="radio"/> | <input type="radio"/> |
| (b) ever found that you or any advisory affiliate were involved in a violation of investment-related statutes or regulations? | <input type="radio"/> | <input type="radio"/> |
| (c) ever dismissed, pursuant to a settlement agreement, an investment-related civil action brought against you or any advisory affiliate by a state or foreign financial regulatory authority? | <input type="radio"/> | <input type="radio"/> |
| (2) Are you or any advisory affiliate now the subject of any civil proceeding that could result in a "yes" answer to any part of Item 11.H.(1)? | <input type="radio"/> | <input type="radio"/> |

Item 12 Small Businesses

The SEC is required by the Regulatory Flexibility Act to consider the effect of its regulations on small entities. In order to do this, we need to determine whether you meet the definition of "small business" or "small organization" under rule 0-7.

Answer this Item 12 only if you are registered or registering with the SEC and you indicated in response to Item 5.F.(2)(c) that you have regulatory assets under management of less than \$25 million. You are not required to answer this Item 12 if you are filing for initial registration as a state adviser, amending a current state registration, or switching from SEC to state registration.

For purposes of this Item 12 only.

- Total Assets refers to the total assets of a firm, rather than the assets managed on behalf of clients. In determining your or another person's total assets, you may use the total assets shown on a current balance sheet (but use total assets reported on a consolidated balance sheet with subsidiaries included, if that amount is larger).
- Control means the power to direct or cause the direction of the management or policies of a person, whether through ownership of securities, by contract, or otherwise. Any person that directly or indirectly has the right to vote 25 percent or more of the voting securities, or is entitled to 25 percent or more of the profits, of another person is presumed to control the other person.

- | | Yes | No |
|--|-----------------------|-----------------------|
| A. Did you have total assets of \$5 million or more on the last day of your most recent fiscal year? | <input type="radio"/> | <input type="radio"/> |

If "yes," you do not need to answer Items 12.B. and 12.C.

B. Do you:

- (1) *control* another investment adviser that had regulatory assets under management (calculated in response to Item 5.F.(2)(c) of Form ADV) of \$25 million or more on the last day of its most recent fiscal year? ☐ ☐
- (2) *control* another *person* (other than a natural person) that had total assets of \$5 million or more on the last day of its most recent fiscal year? ☐ ☐

C. Are you:

- (1) *controlled by* or under common *control* with another investment adviser that had regulatory assets under management (calculated in response to Item 5.F.(2)(c) of Form ADV) of \$25 million or more on the last day of its most recent fiscal year? ☐ ☐
- (2) *controlled by* or under common *control* with another *person* (other than a natural person) that had total assets of \$5 million or more on the last day of its most recent fiscal year? ☐ ☐

Schedule A

Direct Owners and Executive Officers

- Complete Schedule A only if you are submitting an initial application or report. Schedule A asks for information about your direct owners and executive officers. Use Schedule C to amend this information.
- Direct Owners and Executive Officers. List below the names of:
 - each Chief Executive Officer, Chief Financial Officer, Chief Operations Officer, Chief Legal Officer, Chief Compliance Officer (Chief Compliance Officer is required if you are registered or applying for registration and cannot be more than one individual), director, and any other individuals with similar status or functions;
 - if you are organized as a corporation, each shareholder that is a direct owner of 5% or more of a class of your voting securities, unless you are a public reporting company (a company subject to Section 12 or 15(d) of the Exchange Act);
Direct owners include any *person* that owns, beneficially owns, has the right to vote, or has the power to sell or direct the sale of, 5% or more of a class of your voting securities. For purposes of this Schedule, a *person* beneficially owns any securities: (i) owned by his/her child, stepchild, grandchild, parent, stepparent, grandparent, spouse, sibling, mother-in-law, father-in-law, son-in-law, daughter-in-law, brother-in-law, or sister-in-law, sharing the same residence; or (ii) that he/she has the right to acquire, within 60 days, through the exercise of any option, warrant, or right to purchase the security.
 - if you are organized as a partnership, all general partners and those limited and special partners that have the right to receive upon dissolution, or have contributed, 5% or more of your capital;
 - in the case of a trust that directly owns 5% or more of a class of your voting securities, or that has the right to receive upon dissolution, or has contributed, 5% or more of your capital, the trust and each trustee; and
 - if you are organized as a limited liability company ("LLC"), (i) those members that have the right to receive upon dissolution, or have contributed, 5% or more of your capital, and (ii) if managed by elected managers, all elected managers.
- Do you have any indirect owners to be reported on Schedule B? ☐ Yes ☒ No
- In the DE/FE/I column below, enter "DE" if the owner is a domestic entity, "FE" if the owner is an entity incorporated or domiciled in a foreign country, or "I" if the owner or executive officer is an individual.
- Complete the Title or Status column by entering board/management titles; status as partner, trustee, sole proprietor, elected manager, shareholder, or member; and for shareholders or members, the class of securities owned (if more than one is issued).
- Ownership codes are: NA - less than 5% B - 10% but less than 25% D - 50% but less than 75%
A - 5% but less than 10% C - 25% but less than 50% E - 75% or more
- (a) In the *Control Person* column, enter "Yes" if the *person* has *control* as defined in the Glossary of Terms to Form ADV, and enter "No" if the *person* does not have *control*. Note that under this definition, most executive officers and all 25% owners, general partners, elected managers, and trustees are *control persons*.
(b) In the PR column, enter "PR" if the owner is a public reporting company under Sections 12 or 15(d) of the Exchange Act.
(c) Complete each column.

FULL LEGAL NAME (Individuals: Last Name, First Name, Middle Name)	DE/FE/I	Title or Status	Date Title or Status Acquired MM/YYYY	Ownership Code	Control Person	PR	CRD No. If None: S.S. No. and Date of Birth, IRS Tax No. or Employer ID No.
VANGUARD ADMIRAL FUNDS	DE	STOCKHOLDER	12/1992	NA	N	N	
VANGUARD OHIO TAX-FREE FUNDS	DE	STOCKHOLDER	06/1990	NA	N	N	
VANGUARD VALLEY FORGE FUNDS	DE	STOCKHOLDER	11/1992	NA	N	N	
VANGUARD TAX-MANAGED FUNDS	DE	STOCKHOLDER	09/1994	NA	N	N	
VANGUARD WHITEHALL FUNDS	DE	STOCKHOLDER	02/1996	NA	N	N	
VANGUARD HORIZON FUNDS	DE	STOCKHOLDER	06/1995	NA	N	N	
VANGUARD SCOTTSDALE FUNDS	DE	STOCKHOLDER	11/2009	NA	N	N	
VANGUARD NEW JERSEY TAX-FREE FUNDS	DE	STOCKHOLDER	09/1987	NA	N	N	
VANGUARD CALIFORNIA TAX-FREE FUNDS	DE	STOCKHOLDER	10/1985	NA	N	N	
VANGUARD NEW YORK TAX-FREE FUNDS	DE	STOCKHOLDER	01/1986	NA	N	N	
VANGUARD PENNSYLVANIA TAX-FREE FUNDS	DE	STOCKHOLDER	01/1986	NA	N	N	
VANGUARD CONVERTIBLE SECURITIES FUND	DE	STOCKHOLDER	04/1986	NA	N	N	
VANGUARD QUANTITATIVE FUNDS	DE	STOCKHOLDER	08/1986	NA	N	N	
VANGUARD VARIABLE INSURANCE	DE	STOCKHOLDER	04/1991	NA	N	N	

FUNDS						
VANGUARD MASSACHUSETTS TAX-EXEMPT FUNDS	DE	STOCKHOLDER	07/1992	NA	N	N
VANGUARD WELLINGTON FUND	DE	STOCKHOLDER	05/1975	NA	N	N
VANGUARD WINDSOR FUNDS	DE	STOCKHOLDER	05/1975	NA	N	N
VANGUARD WORLD FUND	DE	STOCKHOLDER	05/1975	NA	N	N
VANGUARD TRUSTEES' EQUITY FUND	DE	STOCKHOLDER	02/1980	NA	N	N
VANGUARD EXPLORER FUND	DE	STOCKHOLDER	12/1975	NA	N	N
VANGUARD MORGAN GROWTH FUND	DE	STOCKHOLDER	05/1975	NA	N	N
VANGUARD WELLESLEY INCOME FUND	DE	STOCKHOLDER	05/1975	NA	N	N
VANGUARD INDEX FUNDS	DE	STOCKHOLDER	08/1976	C	Y	N
VANGUARD BOND INDEX FUNDS	DE	STOCKHOLDER	12/1986	B	N	N
VANGUARD FENWAY FUNDS	DE	STOCKHOLDER	11/1987	NA	N	N
VANGUARD MALVERN FUNDS	DE	STOCKHOLDER	11/1988	NA	N	N
VANGUARD INTERNATIONAL EQUITY INDEX FUNDS	DE	STOCKHOLDER	04/1990	NA	N	N
VANGUARD FIXED INCOME SECURITIES FUNDS	DE	STOCKHOLDER	05/1975	NA	N	N
VANGUARD MONEY MARKET RESERVES	DE	STOCKHOLDER	05/1975	NA	N	N
VANGUARD MUNICIPAL BOND FUNDS	DE	STOCKHOLDER	09/1977	NA	N	N
VANGUARD SPECIALIZED FUNDS	DE	STOCKHOLDER	10/1983	NA	N	N
VANGUARD CHESTER FUNDS	DE	STOCKHOLDER	08/1984	NA	N	N
BUCKLEY, MORTIMER, JOSEPH	I	CHAIRMAN OF THE BOARD, CHIEF EXECUTIVE OFFICER, AND PRESIDENT	01/2019	NA	Y	N
PEROLD, ANDRE, FRANCOIS	I	DIRECTOR	12/2004	NA	Y	N
GUTMANN, AMY	I	DIRECTOR	06/2006	NA	Y	N
VANGUARD MONTGOMERY FUNDS	DE	STOCKHOLDER	11/2007	NA	N	N
FULLWOOD, EMERSON, U	I	DIRECTOR	01/2008	NA	Y	N
VOLANAKIS, PETER, FREDERICK	I	DIRECTOR	12/2008	NA	Y	N
NORRIS, JAMES, MAURICE	I	MANAGING DIRECTOR	03/2009	NA	Y	N
LOUGHREY, FRANCIS, JOSEPH	I	DIRECTOR	10/2009	NA	Y	N
VANGUARD STAR FUNDS	DE	STOCKHOLDER	03/2009	A	N	N
VANGUARD CHARLOTTE FUNDS	DE	STOCKHOLDER	10/2011	NA	N	N
KING, MARTHA, GEIGER	I	MANAGING DIRECTOR	03/2012	NA	Y	N
MCISAAC, CHRISTOPHER, DAVIS	I	MANAGING DIRECTOR	03/2012	NA	Y	N
MALPASS, SCOTT, CHARLES	I	DIRECTOR	03/2012	NA	Y	N
LOUGHRIDGE, MARK	I	DIRECTOR	03/2012	NA	Y	N
MARCANTE, JOHN, THOMAS	I	MANAGING DIRECTOR AND CHIEF INFORMATION OFFICER	03/2013	NA	Y	N
RAMPULLA, THOMAS, MARK	I	MANAGING DIRECTOR	07/2015	NA	Y	N
RISI, KARIN, ANN	I	MANAGING DIRECTOR	07/2015	NA	Y	N
HOUSTON, SARAH, LIANE	I	CHIEF AUDIT EXECUTIVE	07/2015	NA	Y	N
ROLLINGS, MICHAEL, THOMAS	I	MANAGING DIRECTOR AND CHIEF FINANCIAL OFFICER	06/2016	NA	Y	N
ROBINSON, ANNE, ELIZABETH	I	GENERAL COUNSEL, MANAGING DIRECTOR, AND SECRETARY	09/2016	NA	Y	N
JAMES, JOHN, MARK	I	MANAGING DIRECTOR	12/2016	NA	Y	N
MULLIGAN, DEANNA, MARIE	I	DIRECTOR	07/2017	NA	Y	N
RASKIN, SARAH, BLOOM	I	DIRECTOR	07/2017	NA	Y	N
DAVIS, GREGORY	I	MANAGING DIRECTOR AND CHIEF INVESTMENT OFFICER	07/2017	NA	Y	N
VANGUARD INSTITUTIONAL INDEX FUNDS	DE	STOCKHOLDER	02/2018	A	N	N
SCHADL, JOHN	I	CHIEF COMPLIANCE OFFICER	03/2019	NA	Y	N
BRENNAN, JOSEPH, PATRICK	I	MANAGING DIRECTOR AND CHIEF RISK OFFICER	09/2018	NA	Y	N

Schedule B

Indirect Owners

- Complete Schedule B only if you are submitting an initial application or report. Schedule B asks for information about your indirect owners; you must first complete Schedule A, which asks for information about your direct owners. Use Schedule C to amend this information.
- Indirect Owners With respect to each owner listed on Schedule A (except individual owners), list below.

(a) in the case of an owner that is a corporation, each of its shareholders that beneficially owns, has the right to vote, or has the power to sell or direct the sale of, 25% or more of a class of a voting security of that corporation;

For purposes of this Schedule, a *person* beneficially owns any securities: (i) owned by his/her child, stepchild, grandchild, parent, stepparent, grandparent, spouse, sibling, mother-in-law, father-in-law, son-in-law, daughter-in-law, brother-in-law, or sister-in-law, sharing the same residence; or (ii) that he/she has the right to acquire, within 60 days, through the exercise of any option, warrant, or right to purchase the security.

(b) in the case of an owner that is a partnership, all general partners and those limited and special partners that have the right to receive upon dissolution, or have contributed, 25% or more of the partnership's capital;

(c) in the case of an owner that is a trust, the trust and each trustee; and

(d) in the case of an owner that is a limited liability company ("LLC"), (i) those members that have the right to receive upon dissolution, or have contributed, 25% or more of the LLC's capital, and (ii) if managed by elected managers, all elected managers.

3. Continue up the chain of ownership listing all 25% owners at each level. Once a public reporting company (a company subject to Sections 12 or 15(d) of the Exchange Act) is reached, no further ownership information need be given.

4. In the DE/FE/I column below, enter "DE" if the owner is a domestic entity, "FE" if the owner is an entity incorporated or domiciled in a foreign country, or "I" if the owner is an individual.

5. Complete the Status column by entering the owner's status as partner, trustee, elected manager, shareholder, or member; and for shareholders or members, the class of securities owned (if more than one is issued).

6. Ownership codes are: C - 25% but less than 50% E - 75% or more

D - 50% but less than 75% F - Other (general partner, trustee, or elected manager)

7. (a) In the *Control Person* column, enter "Yes" if the *person* has *control* as defined in the Glossary of Terms to Form ADV, and enter "No" if the *person* does not have *control*. Note that under this definition, most executive officers and all 25% owners, general partners, elected managers, and trustees are *control persons*.

(b) In the PR column, enter "PR" if the owner is a public reporting company under Sections 12 or 15(d) of the Exchange Act.

(c) Complete each column.

No Information Filed

Schedule D - Miscellaneous

You may use the space below to explain a response to an Item or to provide any other information.

Please note that two individuals in Schedule A, Amy Gutmann and Mark Loughridge, do not have middle names.

Schedule R

No Information Filed

DRP Pages

CRIMINAL DISCLOSURE REPORTING PAGE (ADV)

No Information Filed

REGULATORY ACTION DISCLOSURE REPORTING PAGE (ADV)

GENERAL INSTRUCTIONS

This Disclosure Reporting Page (DRP ADV) is an ☒ INITIAL ☐ AMENDED response used to report details for affirmative responses to Items 11.C., 11.D., 11.E., 11.F. or 11.G. of Form ADV.

Regulatory Action

Check item(s) being responded to:

<input type="checkbox"/> 11.C(1)	<input type="checkbox"/> 11.C(2)	<input type="checkbox"/> 11.C(3)	<input type="checkbox"/> 11.C(4)	<input type="checkbox"/> 11.C(5)
<input type="checkbox"/> 11.D(1)	<input type="checkbox"/> 11.D(2)	<input type="checkbox"/> 11.D(3)	<input type="checkbox"/> 11.D(4)	<input type="checkbox"/> 11.D(5)
<input type="checkbox"/> 11.E(1)	<input checked="" type="checkbox"/> 11.E(2)	<input type="checkbox"/> 11.E(3)	<input type="checkbox"/> 11.E(4)	
<input type="checkbox"/> 11.F.	<input type="checkbox"/> 11.G.			

Use a separate DRP for each event or *proceeding*. The same event or *proceeding* may be reported for more than one *person* or entity using one DRP. File with a completed Execution Page.

One event may result in more than one affirmative answer to Items 11.C., 11.D., 11.E., 11.F. or 11.G. Use only one DRP to report details related to the same event. If an event gives rise to actions by more than one regulator, provide details for each action on a separate DRP.

PART I

A. The person(s) or entity(ies) for whom this DRP is being filed is (are):

- ☐ You (the advisory firm)
☐ You and one or more of your *advisory affiliates*
☒ One or more of your *advisory affiliates*

If this DRP is being filed for an *advisory affiliate*, give the full name of the *advisory affiliate* below (for individuals, Last name, First name, Middle name). If the *advisory affiliate* has a CRD number, provide that number. If not, indicate "non-registered" by checking the appropriate box.

ADV DRP - ADVISORY AFFILIATE

CRD

Number:

This *advisory affiliate* is ☒ a Firm ☐ an Individual

Registered: ☒ Yes ☐ No

Name: VANGUARD MARKETING
CORPORATION
(For individuals, Last, First,
Middle)

- ☐ This DRP should be removed from the ADV record because the *advisory affiliate(s)* is no longer associated with the adviser.
☐ This DRP should be removed from the ADV record because: (1) the event or *proceeding* occurred more than ten years ago or (2) the adviser is registered or applying for registration with the SEC or reporting as an *exempt reporting adviser* with the SEC and the event was resolved in the adviser's or *advisory affiliate's* favor.

If you are registered or registering with a *state securities authority*, you may remove a DRP for an event you reported only in response to Item 11.D(4), and only if that event occurred more than ten years ago. If you are registered or registering with the SEC, you may remove a DRP for any event listed in Item 11 that occurred more than ten years ago.

- ☐ This DRP should be removed from the ADV record because it was filed in error, such as due to a clerical or data-entry mistake. Explain the circumstances:

B. If the *advisory affiliate* is registered through the IARD system or CRD system, has the *advisory affiliate* submitted a DRP (with Form ADV, BD or U-4) to the IARD or CRD for the event? If the answer is "Yes," no other information on this DRP must be provided.

☒ Yes ☐ No

NOTE: The completion of this form does not relieve the *advisory affiliate* of its obligation to update its IARD or CRD records.

PART II

1. Regulatory Action initiated by:

☐ SEC ☐ Other Federal ☐ State ☒ SRO ☐ Foreign

(Full name of regulator, *foreign financial regulatory authority*, federal, state, or SRO)

2. Principal Sanction:

Other Sanctions:

3. Date Initiated (MM/DD/YYYY).

☐ Exact ☐ Explanation

If not exact, provide explanation:

4. Docket/Case Number:

5. *Advisory Affiliate* Employing Firm when activity occurred which led to the regulatory action (if applicable):

6. Principal Product Type:

Other Product Types:

7. Describe the allegations related to this regulatory action (your response must fit within the space provided):

8. Current Status? ☐ Pending ☐ On Appeal ☐ Final

9. If on appeal, regulatory action appealed to (SEC, SRO, Federal or State Court) and Date Appeal Filed.

If Final or On Appeal, complete all items below. For Pending Actions, complete Item 13 only.

10. How was matter resolved:

11. Resolution Date (MM/DD/YYYY):

☐ Exact ☐ Explanation

If not exact, provide explanation:

12. Resolution Detail:

A. Were any of the following Sanctions Ordered (check all appropriate items)?

☐ Monetary/Fine Amount: \$

☐ Revocation/Expulsion/Denial

☐ Censure

☐ Bar

☐ Disgorgement/Restitution

☐ Cease and Desist/Injunction

☐ Suspension

B. Other Sanctions Ordered:

Sanction detail: if suspended, *enjoined* or barred, provide duration including start date and capacities affected (General Securities Principal, Financial Operations Principal, etc.). If requalification by exam/retraining was a condition of the sanction, provide length of time given to requalify/retrain, type of exam required and whether condition has been satisfied. If disposition resulted in a fine, penalty, restitution, disgorgement or monetary compensation, provide total amount, portion levied against you or an *advisory affiliate*, date paid and if any portion of penalty was waived:

13. Provide a brief summary of details related to the action status and (or) disposition and include relevant terms, conditions and dates (your response must fit within the space provided).

GENERAL INSTRUCTIONS

This Disclosure Reporting Page (DRP ADV) is an ☐ INITIAL ☒ AMENDED response used to report details for affirmative responses to Items 11.C., 11.D., 11.E., 11.F. or 11.G. of Form ADV.

Regulatory Action

Check item(s) being responded to:

☐ 11.C(1)

☐ 11.C(2)

☐ 11.C(3)

☐ 11.C(4)

☐ 11.C(5)

☐ 11.D(1)

☒ 11.D(2)

☐ 11.D(3)

☒ 11.D(4)

☐ 11.D(5)

☐ 11.E(1)

☐ 11.E(2)

☐ 11.E(3)

☐ 11.E(4)

☐ 11.F.

☐ 11.G.

Use a separate DRP for each event or *proceeding*. The same event or *proceeding* may be reported for more than one *person* or entity using one DRP. File with a completed Execution Page.

One event may result in more than one affirmative answer to Items 11.C., 11.D., 11.E., 11.F. or 11.G. Use only one DRP to report details related to the same event. If an event gives rise to actions by more than one regulator, provide details for each action on a separate DRP.

PART I

A. The *person(s)* or entity(ies) for whom this DRP is being filed is (are):

☒ You (the advisory firm)

☐ You and one or more of your *advisory affiliates*

☐ One or more of your *advisory affiliates*

If this DRP is being filed for an *advisory affiliate*, give the full name of the *advisory affiliate* below (for individuals, Last name, First name, Middle name). If the *advisory affiliate* has a CRD number, provide that number. If not, indicate "non-registered" by checking the appropriate box.

ADV DRP - ADVISORY AFFILIATE

CRD

Number:

Registered: ☒ Yes ☐ No

Name: VANGUARD ADVISERS INC
(For individuals, Last, First, Middle)

This *advisory affiliate* is ☒ a Firm ☐ an Individual

- ☐ This DRP should be removed from the ADV record because the *advisory affiliate(s)* is no longer associated with the adviser.
- ☐ This DRP should be removed from the ADV record because: (1) the event or *proceeding* occurred more than ten years ago or (2) the adviser is registered or applying for registration with the SEC or reporting as an *exempt reporting adviser* with the SEC and the event was resolved in the adviser's or *advisory affiliate's* favor.

If you are registered or registering with a *state securities authority*, you may remove a DRP for an event you reported only in response to Item 11.D(4), and only if that event occurred more than ten years ago. If you are registered or registering with the SEC, you may remove a DRP for any event listed in Item 11 that occurred more than ten years ago.

- ☐ This DRP should be removed from the ADV record because it was filed in error, such as due to a clerical or data-entry mistake. Explain the circumstances:
- B. If the *advisory affiliate* is registered through the IARD system or CRD system, has the *advisory affiliate* submitted a DRP (with Form ADV, BD or U-4) to the IARD or CRD for the event? If the answer is "Yes," no other information on this DRP must be provided.
- ☒ Yes ☐ No

NOTE: The completion of this form does not relieve the *advisory affiliate* of its obligation to update its IARD or CRD records.

PART II

1. Regulatory Action initiated by:
☐ SEC ☐ Other Federal ☐ State ☐ SRO ☐ Foreign
(Full name of regulator, *foreign financial regulatory authority*, federal, state, or SRO)
2. Principal Sanction:

Other Sanctions:
3. Date Initiated (MM/DD/YYYY):
☐ Exact ☐ Explanation
If not exact, provide explanation:
4. Docket/Case Number:
5. *Advisory Affiliate* Employing Firm when activity occurred which led to the regulatory action (if applicable):
6. Principal Product Type:

Other Product Types:
7. Describe the allegations related to this regulatory action (your response must fit within the space provided):
8. Current Status? ☐ Pending ☐ On Appeal ☐ Final
9. If on appeal, regulatory action appealed to (SEC, SRO, Federal or State Court) and Date Appeal Filed:

If Final or On Appeal, complete all items below. For Pending Actions, complete Item 13 only.

10. How was matter resolved:
11. Resolution Date (MM/DD/YYYY):
☐ Exact ☐ Explanation
If not exact, provide explanation:
12. Resolution Detail:

A Were any of the following Sanctions *Ordered* (check all appropriate items)?

- | | |
|--|--|
| <input type="checkbox"/> Monetary/Fine Amount: \$ | <input type="checkbox"/> Disgorgement/Restitution |
| <input type="checkbox"/> Revocation/Expulsion/Denial | <input type="checkbox"/> Cease and Desist/Injunction |
| <input type="checkbox"/> Censure | <input type="checkbox"/> Suspension |
| <input type="checkbox"/> Bar | |

B Other Sanctions *Ordered*:

Sanction detail: if suspended, *enjoined* or barred, provide duration including start date and capacities affected (General Securities Principal,

Financial Operations Principal, etc.). If requalification by exam/retraining was a condition of the sanction, provide length of time given to requalify/retrain, type of exam required and whether condition has been satisfied. If disposition resulted in a fine, penalty, restitution, disgorgement or monetary compensation, provide total amount, portion levied against you or an *advisory affiliate*, date paid and if any portion of penalty was waived:

13. Provide a brief summary of details related to the action status and (or) disposition and include relevant terms, conditions and dates (your response must fit within the space provided).

CIVIL JUDICIAL ACTION DISCLOSURE REPORTING PAGE (ADV)

No Information Filed

Part 2

Exemption from brochure delivery requirements for SEC-registered advisers

SEC rules exempt SEC-registered advisers from delivering a firm brochure to some kinds of clients. If these exemptions excuse you from delivering a brochure to *all* of your advisory clients, you do not have to prepare a brochure.

Yes No

Are you exempt from delivering a brochure to all of your clients under these rules?

☐ ☒

If no, complete the ADV Part 2 filing below.

Amend, retire or file new brochures:

Execution Pages

DOMESTIC INVESTMENT ADVISER EXECUTION PAGE

You must complete the following Execution Page to Form ADV. This execution page must be signed and attached to your initial submission of Form ADV to the SEC and all amendments.

Appointment of Agent for Service of Process

By signing this Form ADV Execution Page, you, the undersigned adviser, irrevocably appoint the Secretary of State or other legally designated officer, of the state in which you maintain your *principal office and place of business* and any other state in which you are submitting a *notice filing*, as your agents to receive service, and agree that such *persons* may accept service on your behalf, of any notice, subpoena, summons, *order instituting proceedings*, demand for arbitration, or other process or papers, and you further agree that such service may be made by registered or certified mail, in any federal or state action, administrative *proceeding* or arbitration brought against you in any place subject to the jurisdiction of the United States, if the action, *proceeding*, or arbitration (a) arises out of any activity in connection with your investment advisory business that is subject to the jurisdiction of the United States, and (b) is *founded*, directly or indirectly, upon the provisions of: (i) the Securities Act of 1933, the Securities Exchange Act of 1934, the Trust Indenture Act of 1939, the Investment Company Act of 1940, or the Investment Advisers Act of 1940, or any rule or regulation under any of these acts, or (ii) the laws of the state in which you maintain your *principal office and place of business* or of any state in which you are submitting a *notice filing*.

Signature

I, the undersigned, sign this Form ADV on behalf of, and with the authority of, the investment adviser. The investment adviser and I both certify, under penalty of perjury under the laws of the United States of America, that the information and statements made in this ADV, including exhibits and any other information submitted, are true and correct, and that I am signing this Form ADV Execution Page as a free and voluntary act.

I certify that the adviser's books and records will be preserved and available for inspection as required by law. Finally, I authorize any *person* having *custody* or possession of these books and records to make them available to federal and state regulatory representatives.

Signature:

JOHN E. SCHADL

Printed Name:

JOHN E. SCHADL

Adviser CRD Number:

Date: MM/DD/YYYY

04/30/2019

Title:

CHIEF COMPLIANCE OFFICER

NON-RESIDENT INVESTMENT ADVISER EXECUTION PAGE

You must complete the following Execution Page to Form ADV. This execution page must be signed and attached to your initial submission of Form ADV to the SEC and all amendments.

1. Appointment of Agent for Service of Process

By signing this Form ADV Execution Page, you, the undersigned adviser, irrevocably appoint each of the Secretary of the SEC, and the Secretary of State or other legally designated officer, of any other state in which you are submitting a *notice filing*, as your agents to receive service, and agree that such persons may accept service on your behalf, of any notice, subpoena, summons, *order instituting proceedings*, demand for arbitration, or other process or papers, and you further agree that such service may be made by registered or certified mail, in any federal or state action, administrative *proceeding* or arbitration brought against you in any place subject to the jurisdiction of the United States, if the action, *proceeding* or arbitration (a) arises out of any activity in connection with your investment advisory business that is subject to the jurisdiction of the United States, and (b) is *founded*, directly or indirectly, upon the provisions of: (i) the Securities Act of 1933, the Securities Exchange Act of 1934, the Trust Indenture Act of 1939, the Investment Company Act of 1940, or the Investment Advisers Act of 1940, or any rule or regulation under any of these acts, or (ii) the laws of any state in which you are submitting a *notice filing*.

2. Appointment and Consent: Effect on Partnerships

If you are organized as a partnership, this irrevocable power of attorney and consent to service of process will continue in effect if any partner withdraws from or is admitted to the partnership, provided that the admission or withdrawal does not create a new partnership. If the partnership dissolves, this irrevocable power of attorney and consent shall be in effect for any action brought against you or any of your former partners.

3. *Non-Resident* Investment Adviser Undertaking Regarding Books and Records

By signing this Form ADV, you also agree to provide, at your own expense, to the U.S. Securities and Exchange Commission at its principal office in Washington D.C., at any Regional or District Office of the Commission, or at any one of its offices in the United States, as specified by the Commission, correct, current, and complete copies of any or all records that you are required to maintain under Rule 204-2 under the Investment Advisers Act of 1940. This undertaking shall be binding upon you, your heirs, successors and assigns, and any *person* subject to your written irrevocable consents or powers of attorney or any of your general partners and *managing agents*.

Signature

I, the undersigned, sign this Form ADV on behalf of, and with the authority of, the *non-resident* investment adviser. The investment adviser and I both certify, under penalty of perjury under the laws of the United States of America, that the information and statements made in this ADV, including exhibits and any other information submitted, are true and correct, and that I am signing this Form ADV Execution Page as a free and voluntary act.

I certify that the adviser's books and records will be preserved and available for inspection as required by law. Finally, I authorize any *person* having *custody* or possession of these books and records to make them available to federal and state regulatory representatives.

Signature:

Date: MM/DD/YYYY

Printed Name:

Title:

Adviser *CRD* Number:

Attachment 2

The following list identifies enslaved individuals owned by Citizens Bank of Louisiana and New Orleans Canal & Banking Company in Louisiana from 1831 to 1865.¹ The information is drawn from two sources. The first is a collection of Citizens Bank minute books and papers held at Tulane University. The second is a survey of conveyance and land records held either at the New Orleans Public Library or at local parishes throughout Louisiana.

The list includes every reference to ownership of enslaved individuals by the banks located in these records. The list is arranged by parish and thereafter by date. General references to ownership that did not indicate a specific parish are listed separately.

Each entry includes information on previous (P) and subsequent (S) owners where known. Any available information on the location of the plantation is also recorded and appears in brackets after the previous and subsequent owners. Each entry includes a reference identifying the historical sources used to compile the information.

The information on individuals includes all names identified in the records. In some cases, the same individuals appear to have been involved in several different transactions. However, the records are often not consistent in the spelling of names and are often only partially or poorly indexed. Accordingly, each transaction is listed separately. The names in italics are ones that were difficult to decipher because of handwriting or because the records have faded over time.

¹ This list was prepared by History Associates Incorporated at the direction of JPMorgan Chase & Co.

Citizens Bank of Louisiana

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Ascension Parish	page 3	Rapides Parish.....	page 8
Assumption Parish	page 3	St. Bernard Parish.....	page 8
Claiborne Parish.....	page 4	St. Charles Parish.....	page 8
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New Orleans Canal & Banking Company

Ascension Parish	page 12	Natchitoches Parish.....	page 13
Avoyelles Parish	page 12	Orleans Parish	page 13
East Feliciana Parish.....	page 12	West Feliciana Parish	page 14
Jefferson Parish	page 12		

Citizens Bank of Louisiana

General References

Date	Previous/Subsequent Owners [Plantation Location]	Information on Individuals	Source
Apr 1842	Mr. Pim (S)	Nelson, Philp, Sylvester, Sally and her two children	Tulane University, Citizens Bank Minute Book No. 5, 1842/04/04
Jan 1845 - Mar 1845	J. R. Thomas (P)	unnamed individuals	Tulane University, Citizens Bank Minute Book No. 5, 1845/01/18 and 1845/03/27
Jul 1845	Mary Hoey (P)	Lucretia and Joe	Tulane University, Citizens Bank Minute Book No. 5, 1845/07/31
Aug 1847	Unknown	unnamed individuals	Tulane University, Citizens Bank Minute Book No. 6, 1847/08/17
Feb 1847	J. Lawson (P)	Edward	Tulane University, Citizens Bank Minute Book No. 6, 1849/03/23
Jul 1850	G. Hiriard (P)	unnamed individuals	Tulane University, Citizens Bank Minute Book No. 6, 1850/07/02

Ascension Parish

Date	Previous/Subsequent Owners [Plantation Location]	Information on Individuals
c. 1839	Trasimon Landry (P)	unnamed individuals

Source
New Orleans Public Library (NOPL), Ascension Parish Vendee Index

Assumption Parish

Date	Previous/Subsequent Owners [Plantation Location]	Information on Individuals
Sep 1840	Francis Boutelou de St. Aubin (P) Adolphe Wenceslas Pichot (S)	Jean

Source
Assumption Parish, Sheriff's Sale Book A, p 232, 1840/09/023, Conveyance Record 6, p. 232, 1841/07/26

Aug 1844 - Marius Albagnac (P)
 Jan 1846 John Bilisen (S)
 [left bank of Bayou Lafourche]

Mar 1853- Alfred Teite (P)
 Apr 1853 Mrs. Clodis Gourdan (S)
 [Bayou Lafourche]

Peggy, Barnalby, Magdelaine

Assumption Parish, Conveyance Book 11, p 297, 1846/01/10; Sheriff's Sale Book B, p. 178, 1884/08/03; Tulane University, Citizens Bank Minute Book No 5, 1846/01/07
 Assumption Parish, Conveyance Book 19, p 190, 1853/04/26; Sheriff's Sale Book B, p. 426, 1853/03/06; Tulane University, Citizens Bank Minute Book No. 7, 1853/03/31

Claiborne Parish

Date
Previous/Subsequent Owners [Plantation Location]
 c. 1848 R. H. Basset (P)

Information on Individuals

4 unnamed individuals

Source

Tulane University, Citizens Bank Property Management Book

East Feliciana Parish

Date
Previous/Subsequent Owners [Plantation Location]
 Dec 1845 - John D McDonald (P)
 Feb 1846 Robert Perry (S)
 [Black Creek]

Information on Individuals

Hampton, Joe; Laura and her child Jane; Emily and her child John; Hester

Source

East Baton Rouge Parish, Sheriff's Book E, p. 137, 1845/12/13; East Feliciana Parish, Conveyance Book K, pp. 111-113, 1846/02/18; Tulane University, M-1847, Citizens Bank Mortgage Book; Citizens Bank Minute Book No. 5, 1846/02/12

Feb 1847 - Robert Pool (P)
 Dec 1848
 Jun 1848 Thornton Lawson (P)

c 1848 Carter Harvil (S)
 c. 1848 B Myers (P)

Jim and other unnamed individuals

Edmund

7 unnamed individuals
 5 unnamed individuals

Tulane University, Citizens Bank Minute Book No. 6, 1847/02/04, 1848/6/028, 1848/12/18
 East Feliciana Conveyance Book L, pp. 219-225, 1848/06/03, Tulane University, M-1847, Citizens Bank Mortgage Book Tulane University, M-1847, Citizens Bank Mortgage Book Tulane University, M-1847, Citizens Bank Mortgage Book

c. 1848	Unknown [Bayou Teche]	14 unnamed individuals	Tulane University, M-1847, Citizens Bank Mortgage Book
Jan 1853	Stephen Yarborough (P)	8 unnamed individuals	East Feliciana Parish, Mortgage Book E, p. 543, 1853/01/21
Feb 1854	John L. DeLee (S)	13 unnamed individuals	East Feliciana Parish, Mortgage Book E, p. 544, 1853/02/15

Iberville Parish

Date	Previous/Subsequent Owners [Plantation Location]	Information on Individuals	Source
Feb 1840	Botts and Abner Robinson (S)	Frank, Anthony, Jim, Dirk, Isaac, Joe Gray, Martin, Jacob McNayer, Lewis, Nat, Jacob, George McNayer, Ben, William, Joe, Plato, Washington, Big Davy, Davy, Moses, <i>Wapping</i> , Rachel and her child Daphny; Nelly; Lucy and her child Charlotte; Susan and her three children Jacob, Nelly and Lewis; Patsy and her daughter Caroline; <i>Chaney</i> , Elizabeth, Maria; Luckey and her children Harriet and Abraham; Spencer, Esau, Fanny; Sarah and her two children William and Martha; Daphny, Abby, Phillis, Mary, George, Anne, Big Maria; Fanny and her unnamed infant; Kitty, Charity; Susan and her unnamed son; George, Matilda, Edmund, Peter, Ben, <i>Bandals</i> , Sam, Archibald, York, John, Peter, Abraham, Fielding, Sam, David, Gras, Eliza, Lucy, Robert, Francis, Emily, Caroline, Henry, Patsy, William, Alexander, Wyatt, Anderson, Hannah, Ceyley, Milly, Letty, Tom, Maria, Mary, Harriet, Louisa, Tom, Ned, Juliet, Ned, Nancy unnamed individuals	Iberville Parish, Conveyance Book T, Entry 223, 1840/02/07; Lafourche Parish Conveyance Book P, p. 438, 1840/02/17
Feb 1843	Lewis LeSassin (P)		Tulane University, Citizens Minute Book No. 5, 1843/02/07

Lafourche Parish

Date	Previous/Subsequent Owners [Plantation Location]	Information on Individuals	Source
Dec 1842	G A Botts (P)	unnamed individuals	Tulane University, Citizens Bank Minute Book No. 5, 1842/12/30

Jul 1845 - J. Nicholas (P)
May 1849 R. P. Gailard (S)

Andre, Jean Baptiste, Clairville, Francis, Joseph, Sylvester, Benito, Bonaranture, Theophile, Marie, Cecile, William, Honore, Marianne, Orelie, Catherine, Celestin, Helene, Agathe, Domstele, Celestine, Mary, Solby, Anna, Suzette, Estele, Henriette, Odile, Lutelia, Baptiste, Diek, Randall, James, Sam, Melite, Madeleine

Latourche Parish, Conveyance Book AA, p 360, 1849/05/01

Natchitoches Parish

Date **Previous/Subsequent Owners [Plantation Location]**
Feb 1838 Michael Boyce (P)
Feb 1840 Adolphe Sampayrac (P)
Mar 1841 Joseph T. Robinson (S)

Information on Individuals

36 unnamed individuals
Alfred, Ovide, Honore, *Michot*, Frederic, Sam, William, *Flem*, Nelson, Ned, Mary, *Fanny*
Moses, *Asariah*, Lewis, Joe, Harrison, Henry West, *Elsy*, Green, Reid, York, Allen, Daniel, Harriet, Judy, Julia, Charlotte, *Sirah*, Nancy Elliot, *Chaney*, *Emi* and her child, Louisa and her unnamed child

Source
Natchitoches Parish, Book 23, p 2, 1838/02/07
Natchitoches Parish, Book 27, p. 18, 1840/02/29
Natchitoches Parish, Book 32, p. 50, 1841/03/27

Orleans Parish

Date **Previous/Subsequent Owners [Plantation Location]**
Jan 1842 Christopal de Armas (P)
Aug 1842 Leopold J Rocquet (S)
Aug 1842 Antione Bausset (S)
Aug 1842 Marais Gautier (S)
May 1843 Vallour Fortier (S)

Information on Individuals

Marie, Anne
Tom Mason and his wife Lucy
Peter
Archy, *Tabby* and her two children Joseph and an unnamed infant
Jacob

Source
Orleans Parish, Conveyance Record Book 29, p. 698, 1842/01/06
Orleans Parish, Conveyance Record Book 32, p. 421, 1842/08/03
Orleans Parish, Conveyance Record Book 32, p. 440, 1842/08/18
Orleans Parish, Conveyance Record Book 31, p. 447, 1842/08/21
Orleans Parish, Conveyance Record Book 33, p. 171, 1843/05/20

Sep 1845	Charles Nicaud (P) V. and B. Bouny (S)	John Richardson, Moses Lewis, Peter, Joe Phoebe, Jim Phoebe, Robert, Saul, Ben, Edmond, Jim Bouny, Narcisse, Thomas Side, Victor, Sheldrick, Moses Guerin, Tom Guerin, Jim O. Duhigg, Figaro, Ned Rackoon, Big Joe, Richard, Eugene, Jim Bullfrog, Bob, Henry Charleston, Belly Boy, William Chaigneau, Peter, Big Ned, Alfred, Mathilde, Nancy, Phoebe, Fanny, and Jack Richmond	Tulane University, Citizens Bank Papers, Loans, Box 1
c. 1846	Daniel Holliday (S)	James	Orleans Parish, Conveyance Record Book 38, p. 484
Mar 1849	Mrs. Lafayette Saunders (S)		Orleans Parish, Conveyance Record Book 46, p. 411, 1849/03/06
Sep 1852	Felix Garcia (P) Auguste Montegut (S)	Arthemise	Orleans Parish, Conveyance Record Book 60, p. 111, 1852/9/6, Tulane University, Citizens Bank Minute Book No. 7, 1852/08/26
Oct 1852	Felix Garcia (P) William and Heywood Stackhouse (S)	Basile, Llyod, Adam, Laurent, Pegui, Camille, Marguerite, Philomene, Charles, Ursine, Marianne, Pierre, Constance, Celestine, Saron, Dotreville, Dorothee, Melite, Rose, Sue, Fox, Therese, Edouard, Baptiste, Eulalie, Peter, Jean Bongo, Bill, Lucile Sue, Thebe, Mary, Olivia, Jean, Charles, Raymond, Rachel, Honore, Theodore, Petion, Raymond, Celeste, Joseph, Henriette, Heloise, Antoine, Celestine, Frosine, Casimir, Joseph, Francoise, Victor, Poline, Louise, Alexis, James, Mamette, Augustine, Francois, Birsson, Dick, Tom, Lucille, Anny, Rachel, Lidy, Charlotte, Valcour, Albert	Orleans Parish, Conveyance Book 59, p. 174, 1852/10/20; Tulane University, Citizens Bank Minute Book No. 5, 1852/09/09

Plaquemines Parish

<u>Date</u>	<u>Previous/Subsequent Owners [Plantation Location]</u>	<u>Information on Individuals</u>	<u>Source</u>
Oct 1852	Felix Garcia (P) W. and H Stackhouse (S)	Bazile, Raymond, Lloyde, Rachel, Adam, Honore, Laurent, Theodore, Regan, Petion, Camille, Raymonde, Marguerite, Eclante, Babet, Joseph, Philemon, Henrietta, Charles, Helios, Ursin, Antonio, Marianne, Celestin, Pierre, Frazine, Constance, Casimir, Celestine, Joseph, Janen, Francoise, Patreville, Carter, Porachi, Bob, Necille, Zanlin, Rose, Louise, Zoe, Hiers, Fox, James, Theresa, Henriette, Edward, Augustine, Baptiste, Francis, Evalie, Risson, Peter, Criske, Jean Congo, Tom, Bill, Lucille, Lucille Joe, Fanny, Phoebe, Rachel, Mary, Liddy, Olivia, Charlotte, Jean, Valcour, Charles, Alberte	Plaquemines Parish, Conveyance Book 6, p. 430, 1852/10/13, Tulane University, Citizens Bank Minute Book No 5, 1852/09/09

Pointe Coupee Parish

<u>Date</u>	<u>Previous/Subsequent Owners [Plantation Location]</u>	<u>Information on Individuals</u>	<u>Source</u>
Jul 1839 - Sep 1839	Montgomery Smith (P) A. Ledoux & Co., George O. Hall (S)	Gilbert, Randall, Lorenzo; Maria and her two unnamed children; Anne, Eliza, Ellen,	Pointe Coupee Parish, Mortgage Book C, No. 1177, 1839/07/22, no 1189, 1839/09/25

Rapides Parish

<u>Date</u>	<u>Previous/Subsequent Owners [Plantation Location]</u>	<u>Information on Individuals</u>	<u>Source</u>
Mar 1843 - c. 1848	A. B. Gill (P) J. Huie (S) [Bayou Marteau]	37 unnamed individuals	Tulane University, Citizens Bank Minute Book No. 5, 1843/03/23, 1843/03/25, 1843/4/18, M-1847, Citizens Bank Mortgage Book

St. Bernard Parish

<u>Date</u>	<u>Previous/Subsequent Owners [Plantation Location]</u>	<u>Information on Individuals</u>	<u>Source</u>
c. 1848	S. Peyroux (S)	11 unnamed individuals	Tulane University, M-1847, Citizens Bank Mortgage Book
Sep 1850	G. Peyroux (P) Albert Faber (S)	14 unnamed individuals	Tulane University, Citizens Bank Minute Book No. 6, 1850/09/10

St. Charles Parish

<u>Date</u>	<u>Previous/Subsequent Owners [Plantation Location]</u>	<u>Information on Individuals</u>	<u>Source</u>
c 1848	C. Roselle (S)	22 unnamed individuals	Tulane University, M-1847, Citizens Bank Mortgage Book
Jul 1852	Felix Garcia (P) [Loro Plantation on the right bank of the Mississippi River]	Abraham, Bill, Jacob, Peter, Jordan, Madison, Captain Fish, Baptiste, Sam, Philippe, Edmund, Marianne; Suzanne and her two children John and Nelly; Rachel and her two children Augile and Victor, Liza, Sally, Caroline	St Charles Parish, Conveyance Book A&B, 1852/07/07

Jan 1853	Felix Garcia (P) Charles Rousell, Theodell Rousell, and Julian Vienne (S) [Lorio Plantation]	Abraham, Bill, Jacob, Peter, Jordan, Madison, Captain Fish, Baptiste, Sam, Philippe, Edmund, Marianne; Suzanne and her two children John and Nelly; Rachel and her two children Angile and Victor; Liza, Sally, Caroline, Toby, Tallyrand, Nelly, Nathan, Arthur Field, Sam Caroli, Alexander Jackson, Archer Caroli, George McHenry, Moses Haris, Henry Hardith, Comptoes; Betsey Galinos and her two children Nathan and James; July Ann Johnson and her unnamed child; Eppo Johnson, Solomon Jones, William Lansing, Henry Waterson, Lan Thomas, Moses Nawell, Jody Flagg, Major Gillison, John Asby, Nancy Reses, Sam Red, Amy, Washington Spencer	Tulane University, Citizens Bank Minute Book 7, 1852/08/26; St Charles Parish, Conveyance Book A, p. 174, 1853/01/03
St. John the Baptist Parish			
Date	Previous/Subsequent Owners [Plantation Location]	Information on Individuals	Source
Apr 1846	Mrs. Jean Arnaud (P)	Thisa, James, Raymond, Alexis, Baker, Fox, Samsnow, Adam, Solomon, Honore, Celestin, Charley, Laurent, Pierre, Joe, Theodore, Raymond, Ursin, Camille, Antoinne, Bresson, Bebe, Peter, Dick, Basille, Francois, William, Jim Magnan, Casimer, Loyd, Daniel, Rose; Thereze and her child Manette; Celeste and her three children Louis, Joseph, and Philomele; Francoise and her children Detreville and an unnamed infant; <i>Phiosone</i> and her three children Celestine, Joseph, and <i>Joalsin</i> ; Louise, Adelaide; Marianne and her child Estelle; Nathan, John Magnan, Basile, Raymond, Loyd, Rachel, Adam, Laurent, Honore, Theodore, Pegui, Petion, Camille, Raymond, Artemise, Celeste, Marguerite, Babes, Louis, Joseph, Eloise, Ursin, Antoine, Adelaide, Coralie, Marianne, Celestin, Pierre, Casimir, Clara, Estelle, Constance, Frosine, Claire, Sansnow, Francoise, Detreville, Victor, Dorothee, Pauline, Ferdinand, Rose, Louise and her son Joseph Nathan exchanged for Francois, son of Marie Rosette	St. John the Baptist Parish, Conveyance Book X, pp 327-328, 1846/4/29, and Conveyance Book Y, pp. 145- 147, 1847/03/09, Tulane University, Citizens Bank Minute Book No. 6, 1847/01/27
Aug 1846	Jean Arnaud (P) Marie Rosette (S)		St. John the Baptist Parish, Conveyance Book Y, pp 72-74, 1846/08/19, Tulane University, Citizens Bank Minute Book No. 6, 1846/08/06

Sep 1846	Mrs. Jean Arnaud (P) Felix Garcia (S)	Louis (also known as Bebe), Alexis, Fox, Salomon, Daniel, James, William, Celestine, Joseph, Joalsin, Therese, Manette, Auguste, Marie, Augustine, Baptiste, Francois, Eulalie, Bulsin, <i>illegible</i> , Dick, Thisa, Baker, Charley, Ardina, Jean, <i>illegible</i> , Bill, Lucille, Rachel, Lucille Joe, <i>illegible</i> , Hanny, Phebe, Mary, Eugene, Mary, Charlotte, Jean, <i>illegible</i> , <i>illegible</i>	St. John the Baptist Parish, Conveyance Book Y, pp. 83-108, 1846/09/30, Tulane University, M-1847, Citizens Bank Mortgage Book
Jun 1852 - Mar 1853	Felix Garcia (P) Dominique Bouligny (S)	Nathan, Basille, Raymond, <i>illegible</i> , Rachel, Adam, Laurent, Honore, Theodore, Peggy, Petion, Camille, Raymond, Artemise, Celeste, Marguerite, Babette, Joseph, Philomene, Eloise, Ursin, Antoine, Marianne, Celestine, Pierre, Cismir, Constance, Frasine, Claire, <i>illegible</i> , Francois, Detreville, Victor, Dorothee, Rose, Louisa, Joseph, Pauline, Alexis, Fox, James, Celestine, Joseph, Jason, Thereza, Manette, Augustine, Auguste, Baptiste, Francois, Eulalie, Banson, Peter, Jack, Jean, Leon, Bill, Louisa, Rachel, Hanny, Phaila, Mary, Charlotte, Jean, Faloir, Allant, Theresa, Dorothee, Celeste, Mary and her children Laby and Mary Dick	St. John the Baptist Parish, Conveyance Book Z, pp. 183-185, 1852/07/06, and Conveyance Book Z, pp. 216-217, 1853/03/04; Tulane University, Citizens Bank Minute Book No. 5, 1852/09/09
May 1852	Felix Garcia (P)	Claire	Tulane University, Citizens Bank Minute Book No. 7, 1852/05/20
Sep 1852	Felix Garcia (P) Joseph <i>illegible</i> (S)		Tulane University, Citizens Bank Minute Book No. 7, 1852/09/09

St. Martin Parish

Date	Previous/Subsequent Owners [Plantation Location]	Information on Individuals	Source
Jul 1849	Charles Fagot (P) Charles Grevinberg (S) [Ilse L'abbel]	Nick, Laine, Bill, Etienne, <i>Donhous</i> ; Julie; Charlotte and her three children Frances, Sophie, and Marie; Peggy, Larina, Kitty and her child Pauline; Celeste, Honorine	St. Martin Parish, Sheriff Book 2, p. 163, 1849/07/10; Conveyance Record I-D, p. 260, 1849/10/02; Tulane University, Citizens Bank Minute Book No. 6, 1849/06/20, 1849/07/07; Tulane University, M-1847, Citizens Bank Mortgage Book
Jul 1849	Joseph Eysallenne (P) Victor Delahoussaye (S) [Bayou Ceche]	Ferranda, Alfred, Dick, Thomas, Jim, Grace, Julie, Edouarde, Juliet, Patsy, Ophelia, Lilla, Marie, Maria, Dickson, Patsy, Sophie, Fransisque	St. Martin Parish, Sheriff Book 2, p. 163, 1849/07/10, Conveyance Book ID, p. 261, 1849/10/02; Tulane University, Citizens Bank Minute Book No. 6, 1849/07/07

St. Mary Parish**Date****Previous/Subsequent****Owners [Plantation****Location]**May 1845 - Robert Nicholas (P)
Apr 1846 Samuel Ogden and John
Huger (S)
[Cote Blanche]**Information on Individuals****Source**

Jacob, Little Mayor, Stephen, Little Jacob, Nelson, Edmond, Armisted, Monday, Big Harry, Washington, Peyton, John, Young Jon, Big Mayor, Bill, Peter, Fersh, Richmond, Eliza, Tammy, Charly, Caroline, Nelly, Violet, Diana, Tubby, Nancy, Harriett, Nicv, Milly, Lacy, Little Mary, Rhony, Sally, Minty, Saunders, Jefferson, Minerva, Dickson, Harry, Davy, Tom, Naney, Courtney, Eddy, Pauly, Susanna, Jacob, Barley, Patrick, Coleman, Frederick, Minerva, Cintly, Molly, Penina, Abraham, Buster, Leah, Vina, Solomon, Joe, Calvin, Martha, Amy, Jane, Edmond, Modilla, Alexander, Handy, Little Tim, Charles, Sorberton, Sophia, Lindy, Elizabeth, Albert, Minerva, Jack, Cerias, Betsy, Thomas, Casey, Tommy, Lewis, Marthon, Rindey, Emily, Artemis, Patrick, Becky, Louisa, Margaret, Sam, George, Peggy, Harold, Willy, Marnah, Jackson, Spencer, Charlotte, Lorean, unnamed individual, Harnby, Robinson, Hisam, Virginia Richmond

Tulane University, Citizens Bank Minute Book No. 5, 1845/05/05 and 1846/04/16; St. Mary Parish Records, Conveyance Book F, p. 401, 1845/08/03, Mortgage Book 12, p 89, 1845/07/24, NCPL, New Orleans Deed Book, 1845/08/08

Jul 1845

R. C Nicholas (P)

Tulane University, Citizens Bank Minute Book No. 5, 1845/07/31

St. Tammany Parish**Date****Previous/Subsequent****Owners [Plantation****Location]**Apr 1849 M. G. Penn (P)
[Palestine Plantation]**Information on Individuals****Source**

9 unnamed individuals

Tulane University, M-1847, Citizens Bank Mortgage Book and Citizens Bank Minute Book No 6, 1849/04/19

Washington Parish**Date****Previous/Subsequent****Owners [Plantation****Location]**

Jun 1847

G. Penn (P)

Information on Individuals**Source**

unnamed individuals

Tulane University, Citizens Bank Minute Book No 6, 1847/06/15

New Orleans Canal & Banking Company

Ascension Parish

Date	Previous/Subsequent Owners [Plantation Location]	Information on Individuals	Source
1845	William C. Randall (S)	Reuben	Ascension Parish, Book 19, p. 401, c. 1845
Oct 1845 - Nov 1845	David Randall (P) Christopher Ford (S) [left bank of Bayou Lafourche]	Jack, Matthew, Henry, Randall, Gus, Jack, Richard, Brown, Squire, Elijah, Caesar, Charles, MaryAnn, Virginia, Hannah, Julie, Aime; Martha and her two children Letitia and Ralf; Sarah and her three children Reubin, Louisa, and Henry; Mary, Suzane, Aglace, Carol, and William	Ascension Parish, Conveyance Book 19, p. 379, 1845/10/28, p. 387, 1845/11/13, and p. 401, 1845/11/024

Avoyelles Parish

Date	Previous/Subsequent Owners [Plantation Location]	Information on Individuals	Source
Dec 1846	Edmond Briggs (P) James Satterfield (S)	Hanah and her child Hester; Susan, Henrietta	Avoyelles Parish, Conveyance Book T, p. 32, 1846/12/23

East Feliciana Parish

Date	Previous/Subsequent Owners [Plantation Location]	Information on Individuals	Source
Jan 1849	Mary Bostwick (P)	Cattie	NOPL, East Feliciana Conveyance Book L, p. 366, 1849/01/06

Jefferson Parish

Date	Previous/Subsequent Owners [Plantation Location]	Information on Individuals	Source
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Dec 1831	Eleonore M. MacCarty (P) [left bank of Mississippi River]	<i>Narcisse, Adonis, Alexander, Creole, Amedee, Ase nor, Alexander, Aisseu, Anthony, Bernard, Bison, Biard, Brutus, Bonjeau, Battist, Big Billy, Little Billy, Billy, Cesar, Charles, Charles, Daniel, Erasit, Etienne, Evariste, Edmund, Francois, George, Hector, Honore, Honore, Henry, Jacinthe, Jacques Jardinier, Jean Baptiste, Jeffrey, Joseph, John, John, Jean, Jerry, Joshua, Jeffrey, Leon, Ludo n, Louis Ficher, Louis Ketto, Marcellus, Michel, Michael, Oresti, Orsher, Pair, Pierre, Pierre Congo, Pacide, Pompey, Puyo, Philimon, Paul, Solimon, Sanbo, Stephen, Stepney, Tisi, Mulatto Tom, Turner, Tine Tanba, Little Tom, Victor, Little Victor, Washington, Rosimond, Garlin Blacksmith, Bensieur, Jim, Simon, Felix, Anlaid, Athimide, Arseisne, Charlotte, Christian, Constance, Poumonne, Rose, Sarah, Sophie, Venus Congo, Venus Banbarra, Virginia, Victoire, Clarissa, Labelle, Sarah, Eliza, Marie Brine, Nelly, Edward, Vincent, Alexis, Figaro, La, Jerry, Antoinette, Helen, Arsuli, Celestina, Desiree, Dylarouie, Dalmyre, Marie Noel, Arsine, Virginia, Marie Daluph, Jacques Cap, Little Jacques, Cleopatra, Charlotte, Charily, Dalphine, Flora, Big Maria, Maria Trusy, Little Maria, Maria Congo, Marie Francoise, Marianne, Mina; Pouponne and her child Celest; Pelagis</i>	NOPL, East Feliciana Conveyance Book L, p. 366, 1831/12/19, Louisiana State Archives, Jefferson Parish Mortgage Book 2, p. 387, 1832/1/10	
<u>Natchitoches Parish</u>				
Date	Previous/Subsequent Owners [Plantation Location]	Information on Individuals	Source	
May 1834	Michael Boyce (P)	Reuben, Hamish, Peter, Lewis, Jesse, Archy, Anthony, Patrick, Prince, Larisa and her son Martin, unnamed boy, Mary	Natchitoches Parish, Book 18, p. 296, 1834/05/05	
<u>Orleans Parish</u>				
Date	Previous/Subsequent Owners [Plantation Location]	Information on Individuals	Source	
Nov 1838	Martial Dupieris (P)	Billy Christian	Orleans Parish, Conveyance Book 23, p. 692, 1838/11/12	
Jun 1839	J L Bogert (P)	Bill	Orleans Parish, Conveyance Book 26, p. 410, 1839/06/25	
Feb 1844	Benjamin Davis (P)	Zachariah, illegible, Frank, John	Orleans Parish, Conveyance Book 35, p. 93, 1844/02/24	

Feb 1844	Mark Davis (P)	John, Albert, Issac, Peter, Aaron, Nelson	Orleans Parish, Conveyance Book 36, p. 97, 1844/02/24
Dec 1847	John Currin (P)	Andrew, Quinn	Orleans Parish, Conveyance Book 43, p. 275, 1847/12/28
Apr 1850	James Gilmer (S)	Terry, James	Orleans Parish, Conveyance Book 49, p. 442, 1850/04/09
Apr 1850	<i>John Hoey</i> (S)	Hubbard	Orleans Parish, Conveyance Book 50, p. 437, 1850/04/09
Sep 1850	Mrs. Laure Wilkinson (S)	Susan	Orleans Parish, Conveyance Book 53, p. 127, 1850/09/20
May 1851	Manuel Blasco (S)	Priscilla and her daughter Mary Rose	Orleans Parish, Conveyance Book 29, p. 342, 1841/05/29

West Feliciana Parish

Date	Previous/Subsequent Owners [Plantation Location]	Information on Individuals	Source
Sep 1843	John Holmes (P and S) [Bayou Sarah]	Albert, Edmond, Wilson, Robin, Harriet	NOPL, West Feliciana Conveyance Book H, p. 452, 1843/09/02, and p. 461, 1843/09/02
Sep 1843	A. Dunbar (P)	Harry, Baptiste, Albert, Harry, Lowry, Randall, John, Jane, Mariah and her three children Baptiste, Albert, and Edward	NOPL, West Feliciana conveyance Book H, p. 455, 1843/09/02
Apr 1845 - Dec 1845	Guillaume Ramon (P) W. H. Barrow (S) [Rio River]	Hampton Stokes, Carter Hampton, Bill O'Conner, Ned Carter, Sam O'Conner, Giles, Joshua, Aaron, Roden, Eddward Long, Peter, Overton, Ben, Walter, Bill, Nat, Solomon, Booker, Adeline and her child Dan; Lot, Joe, Joshua, Island Ben, Harry, Sophia, Kathy, Biddy; Stella and her child Rumsey; Nancy, Annette and her child Eveline; Rachael, Ellen, Lettie, Dorcas and her child Rachael, Jane, Sally, Carey, Patty, Becky; Harriett and her child Elizabeth; Lucy, Susan Catherine	NOPL, West Feliciana Conveyance Book I, p. 168, 1845/12/20; West Feliciana Parish, Mortgage Book N, p. 225, 1845/04/09
Mar 1849	Uriah B. and Edward Phillips (S)	Lucinda, Harriet, Ann Marie, Isobel, and unnamed infant	West Feliciana, Conveyance Book I, p. 559, 1849/03/21
Nov 1849	S. H. Lurty (S)	John	NOPL, West Feliciana Conveyance Book I, p. 620, 1849/1/15
Nov 1849	P. Lebret (S)		NOPL, West Feliciana Conveyance Book I, p. 622, 1849/1/15

**ATTACHMENT 3
TO
ATTACHMENT C
TO
CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
FILED BY
JPMORGAN CHASE BANK, NATIONAL ASSOCIATION
(as a Disclosing Party holding an interest in the Applicant)**

ENSLAVED INDIVIDUALS MORTGAGED TO
CITIZENS BANK OF LOUISIANA,
NEW ORLEANS CANAL & BANKING COMPANY AND
LEXINGTON BRANCH OF THE SECOND BANK OF KENTUCKY

Attachment 3

The following list identifies cases where enslaved individuals were pledged to Citizens Bank of Louisiana, the New Orleans Canal Bank, or the Bank of Kentucky (Lexington Branch) as collateral for mortgages or loans from 1831 to 1865.¹ The information is drawn from three sources. The first is a collection of Citizens Bank minute books and papers held at Tulane University. The second consists of conveyance and mortgage records held at local parishes throughout Louisiana. The final source consists of conveyance records held at the Fayette County Courthouse in Lexington, Kentucky.

The list includes every reference to Citizens Bank, Canal Bank, or Bank of Kentucky (Lexington Branch) customers who secured loans or mortgages with enslaved individuals. The list is arranged alphabetically by parish or county and thereafter by owner. Each entry also includes information on the property and individual names included in the records. Names in italics reflect places where the documents were difficult to decipher because of the handwriting or because the documents have faded over time. The final column identifies the source for the information.

Many loans or mortgages were recorded more than once, including when borrowers died and plantations were sold or passed to others by will or other conveyance, or when loans were changed and had to be re-recorded. The existing records do not always provide enough information to identify when this occurred. Thus, related transactions may appear in separate entries listed under separate individuals. Complicating matters, there was no standardized spelling for many names in the source materials, and no standardized descriptions for many of the properties involved. Duplicate entries were avoided wherever possible, but where there was doubt, multiple entries were provided. Accordingly, some enslaved individuals listed may appear in several different entries.

¹ This list was prepared by History Associates Incorporated at the direction of JPMorgan Chase & Co.

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New Orleans Canal & Banking Company

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Citizens Bank of Louisiana

General References

Owner	Mortgaged Collateral	Dates	Source
Allard, R.	unnamed individuals	1834	Tulane University, Citizens Bank Minute Book No. 1: 1834/10/07
Allard, S.	the following individuals: Judy; Emmanuel; Peter	1838-1845	Tulane University, Citizens Bank Minute Book No. 2: 1838/06/21; Minute Book No. 5: 1845/08/30
Andry, H.	unnamed individuals	1843	Tulane University, Citizens Bank Minute Book No. 5: 1843/02/08
Andry, Mrs. Joe	land, brickyard; and 47 unnamed individuals	1845	Tulane University, Citizens Bank Minute Book No. 5: 1845/11/20
Andry, M. and H.	unnamed individuals	1834	Tulane University, Citizens Bank Minute Book No. 1: 1834/10/07
Avant, F. R.	unnamed individuals	1841	Tulane University, Citizens Bank Minute Book No. 4: 1841/12/22
Bailey, Littleton	plantation and unnamed individuals	1839	Tulane University, Citizens Bank Minute Book No. 2: 1839/05/02
Bergron, W	property and unnamed individuals	1838	Tulane University, Citizens Bank Minute Book No. 2: 1838/06/11
<i>Bienvenu, Neuville</i>	Hanisthe; Eliza; Eloise; Sophie; Ansin; Hugner; Robert; Alfred; William; Pleasance	1847	Tulane University, Citizens Bank Minute Book No. 6: 1847/03/25
Bouny, Widow	bakery and unnamed individuals	1845	Tulane University, Citizens Bank Minute Book No. 5: 1845/06/05
Bouny, William	Minerva and Mathilda	1851	Tulane University, Citizens Bank Minute Book No. 6: 1851/06/17
<i>Briny, Mrs. W.</i>	Phebe and Milie	1846	Tulane University, Citizens Bank Minute Book No. 6: 1846/12/30
<i>Buisseau, M. Auville</i>	21 unnamed individuals	1839	Tulane University, Citizens Bank Minute Book No. 3: 1839/10/03
Bujai, J	land and 22 unnamed individuals.	1850	Tulane University, Citizens Bank Minute Book No. 6: 1850/10/22

Owner	Mortgaged Collateral	Dates	Source
<i>Calfion, P. H</i>	unnamed individuals	1838	Tulane University, Citizens Bank Minute Book No. 2. 1838/11/12
<i>Caulfield, William & William Noble</i>	5 unnamed individuals	1852	Tulane University, Citizens Bank Minute Book No. 7. 1852/01/13
<i>Chambord & Salarin</i>	land and unnamed individuals.	1841	Tulane University, Citizens Bank Minute Book No. 4: 1841/06/03
<i>Charbonnet, Jacques</i>	plantation and 20 unnamed individuals	1838 - 1847	Tulane University, Citizens Bank Minute Book No. 2. 1838/08/06, Citizens Bank Minute Book No. 6. 1847/10/19, 1847/10/12
<i>Churbanit</i>	6 unnamed individuals	1838	Tulane University, Citizens Bank Minute Book No. 2: 1838/02/12
<i>Cole, Mrs. Ann C.</i>	plantation and 11 unnamed individuals	1856	Tulane University, Citizens Bank Minute Book No. 7: 1856/02/19
<i>Curely, Mrs Sarah</i>	unnamed individuals	1840	Tulane University, Citizens Bank Minute Book No. 3: 1840/04/09
<i>Darby, L Mars and LeMar Durlly</i>	2 unnamed individuals	1842	Tulane University, Citizens Bank Minute Book No. 4: 1842/05/05
<i>Daupan, J. P.</i>	plantation and unnamed individuals.	1838	Tulane University, Citizens Bank Minute Book No. 2 1838/05/24
<i>Davenport, B. G</i>	plantation and 23 individuals; including the following: Ryley; Willis; Hannah; Big Henry; Lewis; Ann	1844-1845	Tulane University, Citizens Bank Minute Book No. 5: 1844/07/08, 1845/01/30
<i>de Armas, C. G.</i>	2 unnamed individuals	1844	Tulane University, Citizens Bank Minute Book No. 5: 1844/05/22
<i>Deslondy, J</i>	unnamed individuals	1834	Tulane University, Citizens Bank Minute Book No. 1: 1834/09/22
<i>DeHabicourt, Mrs.</i>	<i>Jonus</i>	1838	Tulane University, Citizens Bank Minute Book No. 2: 1838/09/03
<i>Doyal, Henry</i>	Champion, Bathilde; Squire	1851	Tulane University, Citizens Bank Minute Book No. 6: 1851/06/24
<i>Dit'orpun G.; William Arnough Arnossly</i>	plantation and unnamed individuals	1841	Tulane University, Citizens Bank Minute Book No. 4: 1841/12/11
<i>DuBuchtis, W. & A. Burwin Browning</i>	unnamed individuals	1842	Tulane University, Citizens Bank Minute Book No. 4: 1842/02/19

Owner	Mortgaged Collateral	Dates	Source
<i>Dufollut, J. S.</i>	property and the following individual: <i>Guitilly Road</i>	1839	Tulane University, Citizens Bank Minute Book No. 2 1839/05/09
Dugue, F.	land and six unnamed individuals	1846	Tulane University, Citizens Bank Minute Book No. 5: 846/02/13, 1846/03/06
<i>Dulafat, Joseph</i>	Baptiste; Dudley Washington	1847	Tulane University, Citizens Bank Minute Book No. 6: 1847/04/08
Durand, John	land and the following individuals: Tempe; William and Mil and 6 other unnamed individuals	1850	Tulane University, Citizens Bank Minute Book No. 6: 1850/07/08
Durond, E. D	plantation and 6 unnamed individuals	1839	Tulane University, Citizens Bank Minute Book No. 2: 1839/04/11
Faber, Albert	Kidose; Jacques; Theodore; Cecilia; Milby; Augustine	1850	Tulane University, Citizens Bank Minute Book No. 6: 1850/10/15
Farrar, C. C.	12 unnamed individuals	1845	Tulane University, Citizens Bank Minute Book No. 5: 1845/08/30
Forbes, Joseph	2 unnamed individuals	1841	Tulane University, Citizens Bank Minute Book No. 4: 1841/12/22
Forstall, Edward J. and Placide	Grande Terre plantation and 53 unnamed individuals	1843	Tulane University, Citizens Bank Minute Book No. 5: 1843/08/03
Fortier, Edward	plantation and 100 unnamed individuals	1839	Tulane University, Citizens Bank Minute Book No. 2 1839/04/04
Fortin, Charles	land and unnamed individuals	1837	Tulane University, Citizens Bank Minute Book No. 2: 1837/05/13
Fortin, O.	unnamed individuals	1843	Tulane University, Citizens Bank Minute Book No. 5: 1843/02/07
<i>Frexet brothers</i>	land and unnamed individuals	1847	Tulane University, Citizens Bank Minute Book No. 6: 1847/12/28
<i>Gabaruche, John</i>	plantation and unnamed individuals	1838	Tulane University, Citizens Bank Minute Book No. 2: 1838/10/22
<i>Garniers, F</i>	land and 15 unnamed individuals	1841	Tulane University, Citizens Bank Minute Book No. 3: 1841/04/22
Goza & Griffin	Henry, Anderson, Thomas Henry; Charles; James; Lewis Smith; Joe; Henry Richmond; Charles Smith; Phil; Eliza; Madison; Mary; Isaac; Hager; and Sandy	n.d.	Citizens Bank of Louisiana Papers, 1834-1914, Folder 5, n.d

Owner	Mortgaged Collateral	Dates	Source
Harper, John F and Elliott, C W	Adam, Ben, Buck; Cleggett; George; Guss; Henry; Isaiah; July; Jacob; John; Joshua; Jim; Randolph; Peter; Theodore; West; Joe Smith; Bill Brown; Sam; Isaac; Jeffrey; Ellis; Calvin; Lewis; Sam; Edmond; Speede; Lewis; Bob; Andrew; Nathan, Dave; Sandy; Airey; Adline; Bell; Betsy; Charity; Cynthia; Charlotte; Cilia; Eliza Green; Ellen, Frances; Frances; Henney; Josephine; Mary; Mary Brown; Malinda; Margaret; Martha, illegible; Louisa; Liz; Nancy; Sopha; Silla; Susan; Sally; Milly, Sarah; Wrina; Patsy; Nancy; Toby; Levenia; Rebecca; Jinny; Anna; Diana; Rosette; Tempe; Edward; Low; Joe; Jane; Wash; Davis; Moses; Charles; Letty; Ike Edmond; Taylor; William; Lucy; Celia 10 unnamed individuals	1842	Tulane University, Citizens Bank of Louisiana Papers, 1834-1914, Folder 5
Heriandy, Jacques		1842-1850	Tulane University, Citizens Bank Minute Book No. 4: 1842/12/16
Hilles, J. H.	Orangeland plantation; New Hisia plantation at Bayou Luke; and 52 unnamed individuals	1859	Tulane University, Citizens Bank Minute Book No. 8: 1859/12/05
Hughes, D.	plantation and unnamed individuals	1849	Tulane University, Citizens Bank Minute Book No. 6 1849/11/07
Hule, Joshua	16 unnamed individuals	1837	Tulane University, Citizens Bank Minute Book No. 2 1837/05/24
Johnson, Sty	plantation and unnamed individuals	1838	Tulane University, Citizens Bank Minute Book No. 2 1838/02/12
Jordan, B.	unnamed individual and Marguerite	1840	Tulane University, Citizens Bank Minute Book No. 3. 1840/07/02
Keyes & Roberts	plantation and unnamed individuals	1844	Tulane University, Citizens Bank Minute Book No. 5. 1844/07/08
Kittridge & Knox	19 unnamed individuals	1847	Tulane University, Citizens Bank Minute Book No. 6: 1847/02/18
Landreaux, Honoré	Dorcas and her four children Celia, Moses, Martha and Judah; Ned; George; Terry; Little Archy; Sidney; Davy and his wife Lucinda; Henry; Epps; Joe; Harry; Nathan; Daniel; Ben; Jacob; Dolly; Johanna	1856	Tulane University, Citizens Bank Minute Book No. 7: 1856/02/15
Lapin, P.M.B.	plantation and 35 unnamed individuals	1845	Tulane University, Citizens Bank Minute Book No. 5: 1845/11/13
Le Breton, B. S. M. and Louis	land and 9 unnamed individuals.	1838	Tulane University, Citizens Bank Minute Book No. 2 1838/02/12
Marim	6 unnamed individuals		

Owner	Mortgaged Collateral	Dates	Source
Martin, K. C.	Rhodu and unnamed individuals	1841	Tulane University, Citizens Bank Minute Book No. 3: 1841/03/29
Nicaud, Michel	Stephen; Henry Guerin; Robert; Samite, Becky; Maria; Suzanne; Eliza; Hanna; Julia; Isabelle; Mary; Congo; Moses; Ganl; Ganett; John Minor; Ferdinand; Sam; Daniel, Denis; Manuel; David; Roli; Jerry Ridan	1845	Tulane University, Citizens Bank Minute Book No. 2 1838/09/06, 1838/11/08, Citizens Bank Minute Book No. 5: 1845/10/24
O'Deshigy, Mr	property and 60 unnamed individuals	1841	Tulane University, Citizens Bank Minute Book No. 4: 1841/06/29
Parker, A.	property and 2 unnamed individuals	1841	Tulane University, Citizens Bank Minute Book No. 4 1841/12/24
Paruit, Charles	plantation and unnamed individuals	1838	Tulane University, Citizens Bank Minute Book No. 2: 1838/03/14
Peyroux, Aime	Jaik and Marguerite	1845	Tulane University, Citizens Bank Minute Book No. 5: 1845/07/31
Pim, W. M	the following individuals: Nelson; Philip; Sylvester; Sally and her two unnamed children	1841	Tulane University, Citizens Bank Minute Book No. 4 1841/11/29, 1842/04/04
Poincy, D.	Petre, Caroline	1844	Tulane University, Citizens Bank Minute Book No. 1844/07/30
Pontchartrain Rail Road Company	land and 28 unnamed individuals	1843 -1846	Tulane University, Citizens Bank Minute Book No. 5: 1843/02/01, 1843/02/04, 1846/03/26
Poupono, Fifi	land and individual named Marianne	1838	Tulane University, Citizens Bank Minute Book No. 2: 1838/03/27
Reggio, Mrs. Augustin	Arthemise, Marie; Clarisse; Martha Hampton; Mary Dorsey; Rosalie	1849	Tulane University, Citizens Bank Minute Book No. 6: 1849/02/13
Riggio, Adolphi, Charles and Eusebe	plantation and unnamed individuals	1845	Tulane University, Citizens Bank Minute Book No. 5: 1845/05/01
Ring, N. D.	plantation and 150 unnamed individuals	1841	Tulane University, Citizens Bank Minute Book No. 3 1841/05/27
Robert and Allard	3 unnamed individuals	1835	Tulane University, Citizens Bank Minute Book No. 1: 1835/06/09
Sandos, L. P	Costalina.	1845	Tulane University, Citizens Bank Minute Book No. 5: 1845/01/02
Sandrian, P	plantation and unnamed individuals	1838	Tulane University, Citizens Bank Minute Book No. 2 1838/10/22

Owner	Mortgaged Collateral	Dates	Source
Smith, Rev Ian	two plantations and unnamed individuals	1842	Tulane University, Citizens Bank Minute Book No. 4: 1842/05/19, 1842/08/11
Soniat, E	two plantations at Little Bayou Sara and 117 unnamed individuals	1852	Tulane University, Citizens Bank Minute Book No. 7: 1852/01/27
Soniat, Joseph	unnamed individuals	1843	Tulane University, Citizens Bank Minute Book No. 5: 1843/05/17
Story, C H G	20 unnamed individuals	1852	Tulane University, Citizens Bank Minute Book No. 7: 1852/03/23
Sumir, V.	plantation and unnamed individuals	1838	Tulane University, Citizens Bank Minute Book No. 2: 1838/07/19
Sundurnn, Arvlin	plantation and unnamed individuals	1837	Tulane University, Citizens Bank Minute Book No. 2: 1837/05/27
Sundurnn, J. W.	plantation and unnamed individuals	1837	Tulane University, Citizens Bank Minute Book No. 2: 1837/05/27
Sundurnn, P	plantation and unnamed individuals	1837	Tulane University, Citizens Bank Minute Book No. 2: 1837/05/27
Supin, P. M.	plantation and unnamed individuals	1838	Tulane University, Citizens Bank Minute Book No. 2: 1838/02/12
Supris, Mr.	two plantations and 121 unnamed individuals	1841	Tulane University, Citizens Bank Minute Book No. 3: 1841/04/26
Suttel, Henry	plantation and unnamed individuals	1859	Tulane University, Citizens Bank Minute Book No. 8: 1859/06/27
Suvilan, G. S	plantation and 16 unnamed individuals at Sicily Island on Bayou Fluron	1837	Tulane University, Citizens Bank Minute Book No. 2: 1837/07/15
Thomas, J R	plantation and unnamed individuals	1845	Tulane University, Citizens Bank Minute Book No. 5: 1845/01/18, 1845/03/27
Todd, John	plantation and unnamed individuals	1859	Tulane University, Citizens Bank Minute Book No. 8: 1859/05/16
Trémé, Benoit	land and 7 unnamed individuals	1849	Tulane University, Citizens Bank Minute Book No. 6: 1849/06/20
Turng, William and Charles Strong	plantation and unnamed individuals	1841	Tulane University, Citizens Bank Minute Book No. 4: 1841/11/29

Owner	Mortgaged Collateral	Dates	Source
<i>Vaigar, Honore</i>	9 unnamed individuals	1842	Tulane University, Citizens Bank Minute Book No. 5; 1842/12/16
Villard, D.	6 unnamed individuals	1846	Tulane University, Citizens Bank Minute Book No. 5; 1846/03/06
Virret, C.	Charles and David	1838	Tulane University, Citizens Bank Minute Book No. 2; 1838/08/10
White & Hughes; L. Barly	plantation and unnamed individuals	1841	Tulane University, Citizens Bank Minute Book No. 4; 1841/12/11
Whitney, B.	3 unnamed individuals	1847	Tulane University, Citizens Bank Minute Book No. 6; 1847/05/13
Unknown	the following individuals: Leven; Lydia; John; Bob; Bili; Henry; Stephen; Tabby; Fanny; Perry; Clarissa; Isaac; Tom; Philes; Tener; Betsy; Alek; Eddy; Isaac; Moses; Susan; Lavinia; May; Artemis; Rose; April; Martha; Nancy; Adam; Jack; John; Melinda; Henry; Andrew; Letty	1835	
Unknown	William; Azor; Ben; Jim; Cuffy; Isaac; Mary and child; Emily; Fanny; White Allen; Rachel; Abraham; Xavier; Bax; Black Allen; Cornelius; Henry; Maria and her child; Black Fanny; Sally; Matilda; Lymer; Louise; Victor	nd.	Tulane University, Citizens Bank of Louisiana Papers, 1834-1914, Folder 5
<u>Ascension Parish</u>			
<i>Blanchard, Joseph</i>	land and the following individuals: Jaquez; Adam; Julien; Jacobe; Stepehn; Marc; Ned, James; Blaise; George; Charles; David; John; Brown; Benjamin; Nicotess; <i>Henrietta</i> ; Bitsy; Lea; Jane; Sally; <i>Domitille</i> ; Alexandre; <i>Odille</i>	1838	Ascension Parish, Conveyance Book 14, p. 298, 1838/03/08

Owner	Mortgaged Collateral	Dates	Source
De Lizardi, Manuel Julien	Orange Grove sugar plantation and the following individuals: Isaac; Anthony; Cahah, John Sildard; Louis; John Hayes; Sam; Archy; William; George Lee; Nelson; William Bonaparte; Charles Bath; Henry Johnson; Frank; Bolla; Henry Page; Stephen; Pidmalea Denis; Pierre Louis Morris; Wilson; James; Jack; Dublin; Charles Martin; David; George Benton; Ned; Alfred; David; Peggs; Rod; Tammy; Sally; Nelly; Hilty; Elisa; Letty; Violette; Mary; Rolina; Marguerite; Finny; Elada; Marguerite; Sophie; Sophia Mary; Esther; Edouard; Colla; Caroline; Flora; Mathilda; Aaron; Pauline; Robert; Lucinda; Sally; Nancy; Henry; Isaac; David; Noel; Jolyaie; Isaac; John; Horace; Lindon; Henry; Boyer; Bruce; Sam; John; Henry; Kitty; Isabelle; Henriette; Charlotte; Nat; Louisa; Suzanne; Rachel; Moses; Sally, Charlotte	1844	Tulane University, Citizens Bank Minute Book No. 5: 1844/04/17, Ascension Parish, Mortgage Book 8, p. 115, 1844/04/18
Duffel, Edward	plantation and the following individuals: Casimir; Charles; Elizabeth; Peter; Caleb; Baptiste; Petit Joe, Matt; Elsie; Henry; William; Joe; John; Sam; Nace; Ben; Frank; Tim, Auguste; Jean Louis, Jose; Andre; Evarist; Stephen; Colin; Terrence; Bond; Desieser; Lewis; Jack, Constance; Grand Leonard; Melanie; Sellah, her daughter Sylvie, and Sylvie's daughter Marie; Maria; Jenny; Fanchonnette; Amie; Sally and her son Baptiste; Suzette; Petit Leonaide and her five children Rose, Laurant, Tom, Lucia, and Elsie; Augustine; Louise and her son Edward; Marianne and her five children Elphonse, Augustine, Francis, Lucy, and Fortuna; Marguerite and her child Joe, Sarah; Genevieve; Mary	1834-1869	Tulane University, Citizens Bank Minute Book No. 1 1834/10/13; Citizens Bank Minute Book No. 2: 1837/05/27, Ascension Parish, Mortgage Book 11, p. 329, 1859/06/22; Ascension Parish, Mortgage Book 12, p. 6, p. 582
Kenner, Duncan F. and George B.	Sinwood Plantation and the following individuals: Daniel; Phill; Jove; Shannon; Jim; Billy; Stephen, Tom; Branch; Jacob; Lidge; Jake; Bolla; Alice; Harry; Clark; Davy, Big Davy, John; Dick; Nick; Billy; Sampson; Coffee; Ned; Sandy; Jaques, Nut; Johnson Dan; Jerry; Narapie; Cigar; Jarrad; George; Clinton; Levi; Johnny; Bud; Robin; Sam, Tom Dugan; Joisey; Nancy; Clara; Violet; Nancy; Milly; Viniz; Patty; Lara, Rose; Kitty; Molly; Reb; Eliza; Fanny; Judy; Fanny; Betty; B. Bias; Peggy, Judey; Mary; Marie; Margaret; Lucy; Ethen; Julian; Bob; Dinah; Clarissa; Branch, Celeste; Cigy; Nick; Ned; Ben; Pilagee; Sancho; Milly; Laly; Bishop; Pigy; Major; Lewis; Zachach; Lovauth; Sam; Sally; Tom; Casucire; Ben; Phil; Sailor; William; Aby	1838-1845	Tulane University, Citizens Bank Minute Book No. 2: 1838/02/24, Ascension Parish, Mortgage Book 6, p. 452, 1838/03/29, Ascension Parish, Mortgage Book 9, p. 141, c. 1845
Keyes, Elizabeth R.	land and the following individuals: Godfrey; Charles; Henry; William; Ben; Phenix; Washington; Henry Jones; Peter; Ambroise; Ben Thompson; Marion; Lizzy; Anna; Blaire, Williams; Len; Bazile; Henry Ling; Rachel; Cloe; Eliza; Maria	1839	Ascension Parish, Mortgage Book 7, p. 111, 1839/05/24

Owner	Mortgaged Collateral	Dates	Source
Landry, Amadeo	land and the following individuals: Pompe; Pierre; Sambo; Jo; Mathilda Mercedi; Constance and her children Hortense and Eugenie		Tulane University, Citizens Bank Minute Book No. 1: 1834/10/14, Ascension Parish, Mortgage Book 6, p. 214, 1835/12/26
Landry, Celeste	plantation on right bank of the Mississippi and the following individuals: Baptiste; Joe; Nat; Elsi; Henry; Raphael; Francis; William; Joe; Michael; Billy; Old Sam; Brother; John; Andrew; Bill; Frank; Nace; Young Sam; Ben; Frank; Jean; Auguste; <i>illegible</i> ; Baralie; Constance; Melagie; <i>illegible</i> ; Celler; Maria; Malina; Jenny; <i>illegible</i> ; Can; Julie; Leonande; Aimee; Sally; Suzette; Laura; Augustine; Louise; Joan Louise; Susan; Jean Baptiste; Andre; Edward; Flora; Colin; Marianne; Julie; Mark; Helene; Johnson; Liza; Rose; Marguerite	1844	Ascension Parish, Mortgage Book 8, p. 138, 1844/04
Landry, Trasimon and Modeste Brand	land and the following individuals: Pompey; Lubin; Sambo; Pierre; Constance; Hortense; Eugene; Betsey Mercredi; Bouchas; Solomon; George; Ben alias Benjamin; Glacede; Squire; Jean Pierre; Suzanne; David; Tom; Sam; Barnett; Henry; Betta; Paul; Celeste; Jacob Augustine; William alias Funis; Isaac; William (alias Samdi); Milliy, James; John alias PostNote; Dick ou Juin; Elvira; William; Isaac; Charles; Celestine; Fanny; Benjamin; Caroline alias Mai; Milly; John; Sally and her child George; Fanny and her child Rachel; Sandy; John; Matt; Philippe; William; Dick; Lucinda; Black Maria; Criole Maria; Charlotte; Jenny; Allen; James; John; Benjamin Bin; Milley; Benjamin; William; Stephen; Ben; George; Honore; Gabriel; Dumas; Philippe; Jim; Julien; Harry; Harry; Abraham; Jaques; Hector; Cofas; Magloire; Louis Christophe; Pierre; Ned; Louis; Trasimon Mardi; Dick; Charles; George Jour; Simon Lundi, Basil; Darby; Raquis; Henry Vendredi; John; Nat; Thaddeus; Peter Dimanche; Cambredge; Lank; John Javier; George Semaine; Auguste; Willus; Caulin; Alexis; Silvere; Valentin; Zenon; Cesar; Jacques Night, Sophie; Lucy; Rosalie; Estella; Manon; Fanny; Clemence; Marie; July; Agar; Cynthia; Sally; Elizabeth Betsy; Mathilda; Liah; Rosalie Novembre; Mary Ann; Marie; Jean Baptiste; Lindon; Louise; Celestin; Moguie; Séance, Juillet; Nancy; Alfred; Caroline; Audile; Aurore; Bill; Mars; Jane; Susanne; Charity; Jefferson Hope; Cueline	1838-1855	Tulane University, Citizens Bank Minute Book No. 1: 1835/04/20, 1836/05/30; Citizens Bank Minute Book No 2: 1838/03/14, 1838/03/26, 1838/11/08, 1838/11/19; Citizens Bank Minute Book No. 5: 1843/01/28, Citizens Bank Minute Book No. 7: 1853/11/22, 1853/12/16, 1855/05/15; Ascension Parish, Mortgage Book 6, p. 211, 1835/12/24; Mortgage Book 7, p. 18, 1838/11/23

Owner	Mortgaged Collateral	Dates	Source
Landry, Trasimon and Modeste Brand	Wyatt plantation and the following individuals: Seville; Phil; Daniel; Ben; Peter; Richard; Abe; Aaron; Isaac; Christoph; Jenny; Fred; Martin; Mark; Moses; Campbell; Peter; Jack; Francois; Dick; Jacob; Mary; Caroline and her child Henry; Ginsey and her child Ore ; Chloe; Nina; Nancy; Lucy; Sally and her child Frisly; Amanda; Ellen and her child Bob; Minerva; Henrietta; Sarah; Lucky; Leida; Jane; Mary Luke and her child Orange; Mariah; Sarah; Minerva; Peggy; Pallas; Ann; Winney; Sally; Martha and her children Mary and Jack; William; Sam; Fanny; Julien; Martin; Nelson; Pelagie; Marguerite; Draureir; Rosalie; Adile; Raphael; Elizabeth; Danielle; Charles; Tobias	1855	Tulane University, Citizens Bank Minute Book No. 7: 1855/05/15; Ascension Parish, Mortgage Book 10, p 313, 1855/05/03
Landry, Trasimon Modeste Brand	Sugar plantation on left bank of the Mississippi and the following individuals: Nelson; Ezekial, Melville; Taylor and children Bob, Landon, and James; Nelson; Preston Stephenson; Pompey; Potters; Eliza; Loius, Blaize, <i>Macaire</i> ; Joseph; Dick Bently, Harry Hill; Tom Logan; Nathan Bowman; John Biveans; Cyrus; Elick; Gabriel; St. Claire; Alcide; Balin, Joe Baton Rouge, Nancy; Suzanne; Lucy; Peggy; Josephine, Mary; Louis	1850	Ascension Parish, Mortgage Book 9, p. 332, 1850/04/26
LeBlanc, Pharion	land and the following individuals: Celestin; Benjamin; Guillamme; Rosamond; Edward; Antoine, Suzanne; Sophia; Elinor; Carmelita; <i>Emma</i> ; <i>Nicocerine</i>	1838	Ascension Parish, Mortgage Book 6, p. 459, 1838/04/13
Philippon, Henry	Orange Grove plantation and unnamed individuals	1843	Tulane University, Citizens Bank Minute Book No. 5: 1843/02/05
St. Martin, Joseph	Land and the following individuals: Joseph; Bob; Isaac; Levy; Peter; Ackin; Sam; Colas; Augustin; Betsey Dumond; Charlotte; <i>Priscey</i> ; Sally; Petite Sally; Betsy; <i>Lovicsy</i> , Eliza; George; Jean; Hattieu; Aguste; Lysette; Antoine; Laure; Betsey; Betsey Smith; Charlotte; William; Philippe; Mathilda	1833-1838	Ascension Parish, Mortgage Book 7, p. 512, 1833/06/08; Mortgage Book 6, p. 433, 1838/03
<u>Assumption Parish</u>			
Albagnac, Marius; John Billsen and S. G. Philips	land and the following individuals: Bill; Peggy; <i>Barnalby</i> ; <i>Madelaine</i> ; Charity	1838-1852	Assumption Parish, Mortgage Book 1834-41, p. 134, 1838/01/18; Sheriff's Sale Book B, 1841-55, p. 178, 1844/08/03; Conveyance Record 17, p 448, 1853/02/02; Tulane University, Citizens Bank Minute Book No. 7: 1852/01/06
Barrilleaux, Francois	land and the following individuals: Henry; Jacques; Jean; <i>Michael</i> ; James <i>Argitte</i> ; Jim; <i>Dinah</i> ; Jared; <i>Apoline</i>	1838	Assumption Parish, Mortgage Book 1834-1841, p 147, 1838/02/05; Tulane University, Citizens Bank Minute Book No. 2. 1839/03/13

Owner	Mortgaged Collateral	Dates	Source
Barrow, Ruffin Robert	the following individuals: Thomas Spencer; Jack Kerry; Robert Will; Aaron; Pauline, Felix; Davis; Honorine; Paul	1846	Assumption Parish, Conveyance Book 11, p. 371, 1846/02/12
Belliam, John	plantation and 4 unnamed individuals	c. 1848	Tulane University, M-1847, Citizens Bank Mortgage Book
Bertaud Brothers	plantation and unnamed individuals	1854	Tulane University, Citizens Bank Minute Book No. 7: 1854/05/09
Bourgeois, Josephine	land and the following individuals: Fortin; Jim; Hortence; Lucien; Guey	1841	Assumption Parish, Conveyance Book 6, p. 173, 1841/03/17
Boyd, Julien and Robert Martin	land and the following individuals: Thomas; Abraham; Lydia; Pheebe; Big Pheebe; Julie; George; Andre; Tom; Jacques	1838-1842	Assumption Parish, Mortgage Book 1834-41, p. 145, 1838/02/05; Mortgages vol. 10, p. 239, 1842/03/26
Bradford, D.	plantation and 7 unnamed individuals	c. 1848	Tulane University, M-1847, Citizens Bank Mortgage Book
Charlet, Pierre and Estelle Landry	land and the following individuals: Daniel; Tom; Squire; Jean Baptiste; Rose; Celina; Eliza; Sophie; Marie; Pauline	1834	Assumption Parish, Mortgage Book 1831-1935, p. 217, 1834/09/08
Delano, Jean Baptiste	land and the following individuals: Edmond; Henry; Rose	1839	Assumption Parish, Mortgage Book 1834-1841, p. 229, 1839/01/22
Delavign, John; Harvey North and Clerville Himel	plantation on Bayou Laforuche and the following individuals: William; Jacob; Harrison; Betsy; Mai; Jacob; Arinda Clay and her unnamed child; Harry; Maria Jane; Auguste John; Wilson; Henry; Daniel; Anderson; Terence; Pitman; Charles; Tony; Robert; Reuben; Patsy; Aime; Louisa, Frank; Milton; Jerry; Jessie; Patsy; Jose; Fanny; Henry Smith; Joe Wolsy; Harris; Nelson Beasey; William Anderson; Drury Gordon; Eliza; Basil Pains	1848-1854	Tulane University, Citizens Bank Minute Book No. 6: 1848/05/23, 1848/12/27, 1851/05/20; Citizens Bank Minute Book No. 7: 1853/04/28, 1853/03/21, 1853/03/17, 1854/05/02; Assumption Parish, Mortgage Book 11B, p. 150, 1848/06/13, Mortgage Book 12A, p. 649, 1854/11/06
Feto, Amedee	land and 25 unnamed individuals	1856	Tulane University, Citizens Bank Minute Book No. 8: 1856/06/06
Foley, Arthur M	land and the following individuals: William; Jerry; Henry; Henry; <i>illegible</i> ; Polly; Amelie; <i>illegible</i> ; Rachel; Oscar; Clay, Leonre, Lindor	1838	Assumption Parish, Mortgages 1834-1841, p. 138, 1838/08/10
Gauthereaux, Richard	plantation and the following individuals: Dick; Joe Pomps; Ben Davis; Jordan Bassett; Preston Turner; Harriet Turner; William; Wyatt Hason; Starling; Alick Dickinson; Silva	1847-1848	Tulane University, Citizens Bank Minute Book No. 6: 1847/01/07; Assumption Parish, Mortgage Book 11B, p. 119, 1848/04/01; p. 122, 1848/04/08
Guillot, Jean Baptiste	land and the following individuals: Jean Louis; Jim; Peter; John; Helouise; Clementine; Gedeon	1838	Assumption Parish, Mortgage Book 1834-41, p. 157, 1838/02/09

Owner	Mortgaged Collateral	Dates	Source
Isourd, Antoine	land and the following individuals: Dick; Bob; Catherine; Marie; Lucie	1838	Assumption Parish, Mortgage Book 1834-41, p. 162, 1838/02/20
Jordan, Francois and Elodie Tete	plantation and the following individuals: Henry; Jacob; Abraham; George; Moses	1853	Assumption Parish, Mortgage Book 12, p. 413, 1853/04/26
Kittredge, Ebenezer E. and Martha	plantation and the following individuals: Jesse Harris; Aaron; Anthony; Frederick; Ned; Joe; Tom; Ben; John; Adam; Aleck; Charles; Charley; <i>Meit</i> ; Elisha; Julianne; Julie; Lyn, Peggy; Patty; Betty; Flora; Laurette; Linney; Marcelite; Harriet; Fanny; Alva; Jenny; Ninny; Silva; Leanna; Daniel	1834	Tulane University, Citizens Bank Minute Book No. 1: 1834/07/22; Assumption Parish, Mortgages 1831-1835, p. 238, 1834/10/10
Knox, Charles	land and the following individuals: Harry; Hanna; Oscar; Abby; Eliza; <i>Guay</i> ; Hanna; Julia Ann; Sophia; King; William; Charles; Jeremiah; James; Joseph	1835	Assumption Parish, Mortgage Book 1834-41, p. 140, 1835/02/05
Lalande, Joseph and Augustine	plantation and the following individuals: Thomas; Mingo; Peter; Anthony; George; Ursule; Josephine; Betsy	1834	Assumption Parish, Mortgages 1831-1835, p. 227, 1834/09/24
Landreaux, Pierre and Ursin	land and the following individuals: Brister; Lamon; Lucien; Ned; Ben; July; Alexandre; Pompe; Charles; Yorick; Janvier; Joe; B. James; Celestine; Henry; Avril; B. Simon; Mingo; Andre; Toussaint; Lewis; B. Simon; Dick; Peter; John, Ralph; Gilbert; B. James; Davy; Rhody; Diana; Marguerite; B. Suzanna; Lydia; Mary Ann; Patsy; Euphrosine; Agga; Polly; Adelaide; Eliza; Celeste; Becky; L. Swan; B. Letty; Jenny; Lellany; Bellary; Sylvia; Catherine; L. Letty; William; Leandre; Tom; Cyrille; Jacob; Winny; Magdeleine; Jesse; Handfield; Carimir; Emile; Arthemise; Thomas; Pascal; Clemence; Kitty; Mars; Barile; Justine; Aime; Vanny; Susanne; Simon; Rosalie; William; Henriette; Auguste; Rody; Louis; Davis; Martiner; Celertin; Samon; Little Jim; Millien; Munck; Celeste; Polly; Maria; Dina; Big Mary; Little Mary; Big Suzanne; Lacy; James; Cebon; Nancy; Tepy; Body Little Amelle; Maxemillian; Josephine; Bazile; Handsel; Geno; Casener; Emilee; Auguste; Charlie; Bavin; Archie; Gibon; Taron	1834-1844	Tulane University, Citizens Bank Minute Book No. 1 1834/07/22, Minute Book No. 2: 1838/12/06; Assumption Parish, Mortgage Book 1834-41, p. 28, 1835/11/24; p. 77, 1837/01/03, p. 106, 1837/06/01; Conveyance Book 22, p. 727, 1844/03/01
Landry, Joseph	the following individuals: Seveille; Clarisse	1837-1839	Assumption Parish, Mortgages 1835-1841, p. 177, 1837/05/10, p. 277, 1839/12/02
Landry, Mrs. Marguerite	land and the following individuals: Auguste; <i>Louis</i> ; Lewis; Francois; Philippe; Leon, Etienne, <i>Tato</i> ; Jacques; Antoine; Theodore; Celeste; <i>Phany</i> ; <i>Pit</i> ; Clarisse; Delphine	1835-1838	Tulane University, Citizens Bank Minute Book No. 1 1835/05/11; Citizens Bank Minute Book No. 2: 1838/01/1; Assumption Parish, Mortgage Book 10, p. 239, 1837/08/10
Lesage, Pierre Martin and Robert Campbell	plantation and the following individuals: Thomas; Andre; Tom; Gacques; Abraham; Julia; Phebe; Georges; and unnamed individuals	1837-1842	Assumption Parish, Mortgage Book 10, p. 239, 1837/08/10, Mortgage Book 10, p. 69, 1842/03/26

Owner	Mortgaged Collateral	Dates	Source
Marquette, Montequie	the following individual: Samuel	1836	Assumption Parish, Mortgage Book 1834-41, p. 68, 1836/12/09
Martin, Joseph	land and the following individuals: Georges Lot; Joseph Monnot; William; Washington; Moses; Petit James; Newton; Sandy; Clementine; Rachel; Louise; Estelle; Joseph; Ben; Washely; Adam; John Cadieu; Tom White; Philip; Grand Tom; Augustine; James; Tucker; Salatin; Cain; Bellow; Lindor; Cajinir; Cesar; Emanuel; Meuttie; Jaiques; Prosper; Jean Lou; John Ameire; Sephuer; Sylvain; Celestin; Grosse Sulley; Petite Sulley; V. Betsy; S. Betsy; Melinda; Henriette; Grosse Rosette; Rosette; Betty; Charlotte; Lucy; Eliza; Susanne; Chetin; Celina; Nancy; Sarah; Petite Sarah; Elvira; Azelie; Sylvestre; Tom; Charlotte Poucette; Leon; Charles; Sophie; Marianne; Eugenie	1834-1844	Tulane University, Citizens Bank Minute Book No. 1: 1834/08/29; Assumption Parish, Mortgage Book 1831-1835, p. 228, 1834/11/16; p. 230, 1834/11/17; p. 236, 1834/10/04; p. 237, 1834/10/04; Mortgage Book 10A, p. 320, 1844/06/22
Mollere, Raphael and Clarisse	land and the following individuals: Coco; Parisien; Caroline; <i>Euphrosine</i>	1838	Assumption Parish, Mortgage Book 1834-1841, p. 169, 1838/05/22
Monginot, Louis	land and the following individuals: Ned; Ben; Cadio; Louis; Adam; Abraham; Henriette, unnamed individual	1838	Assumption Parish, Mortgage Book 1834-41, p. 178, 1838/04/30
Monnet, Charles	land and the following individuals: <i>Pithion</i> ; Pierrot; Ursue; Nancy; <i>Aphroisine</i> ; Victoire, Adeline; Justine; Thomas, <i>Leonide</i> ; <i>Ursin</i> ; Lucy	1838-1841	Tulane University, Citizens Bank Minute Book No. 3: 1841/03/11, 1841/04/22; Assumption Parish, Mortgage Book 1834-41, p. 150, 1838/02/05
Phillips, George W. and Sarah Rhea	plantation and 15 unnamed individuals	1837	Assumption Parish, Mortgage 11B, p. 119, 1848/04/01
Phillips, W. P	land and the following individuals: Bill Owen; Isaac; Gaston; Solomon; Dick; Joseph; Smith; Helina; Polly; Marie; unnamed individuals; Bud; Kevin; Milley; Mary; Tiny; Tom; <i>Eduard</i> ; <i>Adelina</i> ; Liz	1836-1837	Assumption Parish, Mortgage Book 1834-41, p. 117, 1837/08 ca.
Pichot, A. W.	land and unnamed individuals	1846	Tulane University, Citizens Bank Minute Book No. 5: 1846/01/29
Pugh, Thomas	land and the following individuals: Charles; Jacob; Bob; Lewis; Isaac; Ned; Willis, Louis Brag, Dick; Rachel; Daphne; Peggy; Julia; Martha; Prudence; Violet; Maria; Mina, Sally; Patsy; Polly; Sampson; Neptune Reuben; Betsy	1838	Assumption Parish, Mortgage Book 1834-1841, p. 201, 1838/10/26
Pugh, William W.	the following individuals: Ben, Britler, Laray; Pompey; Randal; Salera; Penny; <i>Lesina</i> ; Esther; Caroline; Martha; Antoinette	1836	Assumption Parish, Mortgage Book 1834-1841, p. 70, 1836/12/12; Tulane University, Citizens Bank Minute Book No. 1: 1836/06/15
Sewall, Mrs. Maria Laura	Appy; Eliza; Marguerite	1842	Assumption Parish, Conveyance Record 6, p. 307, 1842/03/04

Owner	Mortgaged Collateral	Dates	Source
<i>Sparks, N.</i>	unnamed individuals	1835	Tulane University, Citizens Bank Minute Book No. 1: 1835/04/20
Templet, Florentin	land and the following individuals: Jacob; Ned; Arthemise; Louise; <i>Silvany</i> ; Constance; Ursule; <i>Azema</i>		Assumption Parish, Mortgage Book 1834-1841, p. 138, 1838/01/30
Tete, Auguste	plantation and the following individuals: James; Fulton; Phillip; Priddy; Francois; Robert; Baptiste; Marciene; Anna ; Genevieve; Marie; Betsey; Jane; Milly; Sam; Jack; James; Solomon; Phillip; Polly; Jim Hazard; Julian; Jenny; Winsor Williams; Mary Ann Greeves ; Maria; Babes; Sarah; Diana ; Ephraim; Edmond; Patrick; Henry; Moses; Carson; Jacob; Abraham; George; Honorine; Suzette; Affi; Moses; Anais; Henry Bett; Jim Newson; Elizabeth; Eveline; Alfred Myer; <i>Omson</i>	1843 - 1853	Tulane University, M-1847, Citizens Bank Mortgage Book, Citizens Bank Minute Book No. 7: 1853/03/31; Assumption Parish; Sheriff's Sale Book B, p. 428, 1835/04/08; p. 432, 1841/07/28; p. 435, 1843/09/18; Mortgage Book 10, p. 239, 1843/09/18; Mortgage Book 12, p. 414, 1853/04/26
Tete, Francois and Anne	plantation and the following indiv individuals: William Carpenter; Henry; Jerry; Justin; Raphael; John; Jack; Lewis; Charles; Henry; Barber; Alfred; Agnes; Maria; Louisa; Adele; Henriette; Emiline; Mary, Ann; Elizabeth; Samantha; Melite; Octave; Eugene; Camilia	1856	Assumption Parish, Mortgages vol 13, p. 224, 1856/06/12
<i>Timmerville, C. T.</i>	plantation and unnamed individuals	1842	Tulane University, Citizens Bank Minute Book No 4 1842/03/23
Tournillon, Julien	land and the following individuals: Francois; George; Henry; Moulard; Hypolite; Thom; Boatswain; Joseph; John Brown; Cyrus; Ellick; Kitt; Hector; Little Cyrus; Alphonse, Will; Ned Blacksmith; Ebby Cooper; Altimore; Moise; Big Joe; Leonard; Maria; <i>Poza</i> ; Aimmee; Phillis; Jenny; Delphine; Celestine; Celle; Priscilla; Charlotte; Madelaine, Nancy; Marie; Elsy; Betsy; Little Celle; Helene; Carmelite; Jean Baptiste; Adam; Henriette; Marie Jeane; William; Jean Pierre; Louis; Marinette; Caterine; Paul; Clarisse	1835	Tulane University, ., Citizens Bank of Louisiana Papers, 1834-1914 Folder 1: 1835/02/01; Assumption Parish, Mortgage Book 10A, p. 355, 1835/01/08, Tulane University, Citizens Bank Minute Book No. 1: 1835/04/03
Tournillon, S F	unnamed individuals	1834	Tulane University, Citizens Bank Minute Book No 1. 1834/07/22
Trowbridge, William, Pierre Bourg	land and the following individuals: Lucie; Rosalie and her two children Adam and Eve	1838-1853	Assumption Parish, Mortgage Book 1834-1841, p. 170, 1838/03/09, Tulane University, Citizens Banl Minute Book No. 7 1853/05/26
Verret, Carville	the following individuals: Collin; Sam; Davis; Melinda; Caroline	1834-1836	Tulane University, Citizens Bank Minute Book No. 1 1834/10/20, 1836/03/17, Assumption Parish, Mortgage Book 1831-1835, p. 256, 1835/03/20

Owner	Mortgaged Collateral	Dates	Source
Wilson, James	plantation on Bayou Laforche and the following individuals: Joe; Mary; Elias; Rosanna; Huston; Henriet Johnson; William Byerstes; Alfred Vass; Nat	1851	Tulane University, Citizens Bank Minute Book No. 6: 1851/01/07, 1851/03/26; Assumption Parish, Mortgage Book 12, p. 69, 1851/04/28, 1851/03/28
<u>Avoyelles Parish</u>			
Griffin, William	plantation and unnamed individuals	1858	Tulane University, Citizens Bank Minute Book No. 8: 1858/05/24
Grimball, Robert A.	land and the following individuals: John; Jack; Charles; Daniel; Kelly; Lewis; Writ; David; Alfred; Franke; Peggy; Judy; Maria; Sarah; Jinny; Caroline; Amanda; Mary; Lena; Randon; Bill; Hannah; Julia; Betsy	1849	Avoyelles Parish, Conveyance Book U, p. 428, 1849/08/02
Keary, A. M.	the following individuals: Henry; Patrick; HH; Mary and her child Lorenzo; Tommy; Isaac; Allen; Solomon; Joe; Al; William; Andrew; Tom Carpenter; Sam; Frank; Jim; Palmer; Frank; Tom; Joe; Joe Bradford; Dan Masslink; Jason; Sam Eug.; Amanda; Ephram; Lucy; Nelly; Addy; Mintz; Francis; Betsy; Sarah; Magret; Catherine; Nancy; Ellen; Louisa; Nancy; Julia; Georgia; Peter; Judy; Lucy Garrett; Mathilda; Charlotte; Sarah Jane; Lea; Martha; Celeste Bradford; Eliza; Mahala; Mary Ann Bradford; Nancy; Jack; Dennis; Charlotte; Harriet; Margeret; Jenny; Katy, <i>illegible</i> ; Noah; Betsy King; Sarah; <i>illegible</i> ; Lolo Cooper; Lucy Bradford; Lucy Ned, Caroline; Martha; George Wallis; Fort; Hugh; Dick; Jack; Frisby; Ju; Lye; Jessy; Bryant; Stephen; Paul; Henry; George; Martin; Calvia; Robert; Maddison; Richmond; Jim Bradford; Charles; Jim W; Martha; Letty; Malinda; Eric; Celeste; Patsy; Matilda; Mary Spoff; Fanny; Amelia; Susan; Augusta; Louisa; Brady; Mary Willis; Aggy; Peggy; Betsy Marshall and her child; Milly; Easter; Rody; Isaac; Mary Davinport; Anna; Cindy; Amy; Bella; Amy Little; Ben; Toby; Lucinda	1850	Tulane University, Citizens Bank of Louisiana Papers, 1834-1914, Folder 3, 1850/04/15
Moore, John	land and the following individuals. George; George; Sam; Nancy; Rose and her three children Bob, Caroline, and Mary Ann; Therisa	1838	Avoyelles Parish, Conveyance Book N, p. 175, 1838/03/20, St. Landry Parish, Conveyance Book J-1, p. 207, 1838/04/09
<u>Bienville Parish</u>			
Ambrose, James	the following individuals: Rina and her son Jefferson	1849	Bienville Parish, Mortgage Book 1849-1855, p. 3, 1849/08/08

Owner	Mortgaged Collateral	Dates	Source
Bissell and Schlater	plantation and 56 unnamed individuals	1853	Tulane University, Citizens Bank Minute Book No. 7 1853/02/24
<u>Caldwell Parish</u>			
Hyams, Henry M	<i>Esserance</i> Plantation and the following individuals: Charles; Sarah; Catherine; Mary Ann; Little Charles; Sancho; Lucy; Moses; Marion; Toby; Bitsy; Clarissa; Phillis; Little Sancho; Richard ; Gabriel; Nab ; Anne; Isaac; <i>Lorenzo</i> ; Abram; Amanda; Llyod; Eliza.; Elsey; Old Grace; <i>D Williams</i> ; Jefferson; Elizabeth; unnamed infant; Fanny; Minerva; Jessie; Suckey; Edward; Jacob; <i>Harry</i> ; unnamed infant; Alfred; Jenny; Little Jesse; Nelly; <i>Dovoght</i> ; Clarisa; Cynthia; <i>Golden</i> ; Louisa; Franklin; Magaret; Celia; <i>Mahala</i> ; Maria; Rivers; Randall; <i>Trissy</i> ; Manuel, Maria; Betty; Thomas, Harriet; Essex; Elvira; Martin; Little Bill; Edwin; Sam Wallace	1858	Caldwell Parish, Mortgage Book C, 1858/04/26; Tulane University, Citizens Bank Minute Book No. 8; 1857/10/05
<u>Claiborne Parish</u>			
Ambrose, James	farm and 2 unnamed individuals	c. 1848	Tulane University, M-1847, Citizens Bank Mortgage Book
Bassett, R	land and 4 unnamed individuals	c. 1848	Tulane University, M-1847, Citizens Bank Mortgage Book
<u>Concordia Parish</u>			
<i>James, illegible</i> and John Norment	plantation and 12 unnamed individuals	1859	Tulane University, Citizens Bank Minute Book No. 8 1859/03/10

Owner	Mortgaged Collateral	Dates	Source
Lapice, Peter M. and Joseph	plantation and the following individuals: Allain; <i>Cumbacy</i> ; Sophy; Anderson; John; Soloman; Charlotte; Robert; Kitty; <i>Pin Barkell</i> ; Jenia; Maria; Carlotta; Arthur; Marie; <i>Daniel</i> ; Jim; Malvina; Wyatt; Betsy Thompson; Ellen; George; <i>Dania</i> ; Zelia; Zick; Big Zack; Dianah; Big Leny; Marie Keating; Keating; George; <i>Kentucky Burn</i> ; Leticia; Billy Barrett; Rachel; Reuben; Elick; Mathilda; Henderson; Jim Darcus; Judy; William; Phobe; William; Milly; Walter; Leny; Eliza Scott; Nancy; Sarah; Henry; Mathilda; Juiz; Louisa Harding; Othello; Old Sandy; Harriett; Big Sandy; Peter; Dick; Patrick; Caroline; Richardson; Willia; Isaac; Robin; Dally; Hannah; Onia; Aaron; Old London; Anna; Jim Rivers; Cesar Bosman	1839	Concordia Parish, Mortagage Book J-K, p. 222, 1839/03/25
Lapice, Peter M.	plantation and the following individuals: David; Big Tom; Big Peter; Lewis; Bob; Black Tom; Richmond; William; John Boots; Morgan; Roberts; York; Black Gin; Jordan; Big Joe; Little Joe; Long Joe; Jack Nelson; Anthony; Homochito; Dick; Joe; Little Tom, Levy; Gin Patt; Old George; Henry Chapman; John Page; Little Peter; Leonard, Leonard; Phil; Horace; Big Ned; Linian; Willis; Big Gen; Moses; Nathan; Little George; Big Peter; Old Ben; Washington; Henry; Anthony; William; Sophia; Little Eliza; Little Betsy; Dorcas; Minerva; Lucy; Little Cornelia; Yellow Betsy; Bathsheba; Long Dorcas; Big Peggy; Little Peggy; Betsy; Mary; Nelly; Little Else; Luckey; Kitty; Harriett; Old Else, Diana; Suzan; Nina; Kitty; Ann Beckey; Beckey; Melly; Ann; Henry; Little Anna; Old Lisha; Melly; Pegay; Hannah; Ann; Caroline; Maria; Maria Betsey; Paga, Sarah; Vina; Stephen; Gim; Jackson; George; Nathan; Henry; Little Stephen; Ned; Tom; Yellow Dick; Pleasant; Aaron; Moses; Lewis; Little Isaac; Moses; Andrew; Bill; Randall; Edmond; Bob; Violette; Hetty; Henny; Venus; Liza; Liza Morris; Linia; Pegay; Juliana; Delila; Polly; Cynther Cinthy; Sophy; <i>Vina</i> ; Isabelle; Francis; Mary; Maria; Emeline; Emily; Rosana; Mary Jane; Little Amy;	1841	Concordia Parish, Mortgage Book L, p. 207, 1841/05/14

Owner	Mortgaged Collateral	Dates	Source
Little, Peter	plantation and the following individuals: Ambrose; Dabney; Tobe; John Winston; Lewis; Frank; Eliza; Lucy; Ailsey; Maria; Cloe; Ann; Gabe; Richard and his wife Harriet; Albert; Thomas; Cynthia; Charlez. Abraham, his wife Eliza, and her children Denis and Fortrim; Thomas and his wife Cynthia; John Vincent and his wife Ginnia; William and his wife Charlotte; her child William; Frank; his wife Cloe; and their five children Celiste; Elizabeth; Esther; Richard; Alexander; John Davis; Nelly and her three children Eliza, Daina, and Sophia; Ben; Laura; Bob; Ese; Peter; Abby; Canda; Dabney, his wife Ann, and her unnamed infant; Burrill, his wife Harriet, and her four children William, <i>Harrena</i> , Randall, Emeline, and Alfred; Emanuel; George Miley; Wiley; John; Hanson; Henry; Milton; Rose; Hetta; Louisa; May	1838-1859	Tulane University, Citizens Bank Minute Book No. 6: 1847/01/11; Concordia Parish, Mortgage Book J-K, p. 39, 1838/02/05; Mortgage Book J-K, p. 118, 1838/07/13; Mortgage Book M, p. 282, 1848/06/19; Mortgage Book N, 1859/03/18
Miller, David P.	plantation and the following individuals: Sem; Phil; George; Nick; Hyatt; Gui; Henry, Lewis; Moses; Edmund; Jane; Sarah; America; Angeline; Mary; Ellen; Polly, Adeline; Julia; Henry	1838	Concordia Parish, Mortgage Book J-K, p. 37, 1838/02/05; Mortgage Book J-K, p. 53, 1838/02/22
Routh, Stephen M.	plantation and the following individuals: Amos; Sam; Jim; John N.; Mosez Mazea; Wesley; George S.; George Bazea; Harry B.; Sam B.; Nick; Hezekiah; Moses B.; Isaac; York, Bill Brown; John S., Harry; Wilson; David; Henry C.; Perry; Oarrett; Peter; Henry S.; Richard; Stephen Boots; Julius; Ralph Bird; Ralph; Gilbert; Robert; Jim Taylor; Stephen Taylor; Catherine; Agniz; Violet; Elizabeth; Betty; Betsy; Betsey McKil; Mary Scott; Airy; Charlotte; <i>Feriby</i> ; Ann; Lear; <i>Alviyra</i> ; Fanny; Fanny B.; Lucy, Lilly; Rachel; Agnis; Eliza; Susan; Matilda; Mary; Lucy; Elvira; Mary; Henry; Canadis; Hannah; Maria; Harriet; Cynthia Ann	1838	Concordia Parish, Mortgage Book J-K, p. 463, 1838/05/06
Williams, Austin	plantation and the following individuals: Phil; Peggy; John; Fanny; Hannah; Sarah; Henry; Lavnia; Nelly; Lane; Manuel; William; May Johnson; Daniel; Dick; Cynthia; Virginia; Stephen, Julia; Ned; Julian, Caleb; Harriet; Letty; Nathan; Leah; Amanda; Hannah Jane, Martin; Big Maria; Susan; Mason; Maria Feany; Divee; Emmeline; Pleasant; Mary, Isaac; Frank; Frank; Emily; Marey Jones; Nancy; Tipporah; George; Catherine; George; Eliza; Fanny; Yellow Caroline; Grace; Joshua; Lee; Polly; Bill; Little Maria; Levi; Yellow Leah; Harry; Louisa; Rebb; Polivia; Samson; Jim, Hannah; Jourdan; Simon; Jena; Sim; Moses; Coffey; Oream; Rachael; Lucinda, Kitty; Harry; Leah; Peggy; Ellick; Nelly Knox; Big Caroline; Mary Tucker; Mary Prince; Washington; Upsher; Martha; Robert; Margaret; Levi; Richard; Henry; Orange; Milly; Lewis; Jim Mitchell; William	1838	Concordia Parish, Mortgage Book J-K, p. 50, 1838/02/20, Tulane University, Citizens Bank Minute Book No. 2: 1838/12/13

Owner	Mortgaged Collateral	Dates	Source
<u>East Baton Rouge Parish</u>			
Alexander, Joshua	land and the following individuals: Jack; Stephen; Dick; Chester; Jupiter; Charles; Maria; Rachel; Sophia; Lucy	1837-1848	Tulane University, M-1847, Citizens Bank Mortgage Book; Citizens Bank Minute Book No. 6: 1848/09/26 East Baton Rouge Parish, Mortgage Book J, p. 433, 1837/12/26, Mortgage Book K, p. 49, 1838/12/26
Allain, Sosthene	cotton plantation and the following individuals: Alfred; Andre Big; Laquer; John; Peter Bayon; Tony; <i>Cathaniel</i> ; Narcesse; Small Pelia; Louis; Paul; Joseph; Martin; John; Long Davey; Tony; Lucy; Big Lenon; Small Tony; Julie; Melende; Poley; <i>Indich</i> ; Cocola; Maynette; Jenny and her two unnamed children; <i>Polleape</i> ; Celestin; Pierre, Jean; Carmel; Moses; Louise; Celestine; Melite; Celame	1838	Tulane University, Citizens Bank Minute Book No. 1: 1838/05/21; East Baton Rouge Parish, Mortgage Book J, p. 502, 1838/06/06
Beat, Robert	the following individuals. Hurvy; Bradford	1855	East Baton Rouge Parish, Mortgage Book E, p. 278, 1855/07/14
Davis, <i>Illegible</i> ; Sharp Mathews	the following individuals: Baptiste and his wife Eliza; Nathan; Julia; Rosalie; Chisey; Beu and his wife Rachel; Winy; Silvey; Horace and his wife Maria; Ellen; Nanny, Arrange; Giur	c. 1850-1860	East Baton Rouge Parish, Mortgage Book F, p. 145; Tulane University, Citizens Bank Minute Book No. 8: 1860/05/10
Duer, Robert	plantation and the following individuals: Wyatt; John; Olive and her unnamed child	1838	East Baton Rouge Parish, Mortgage Book J, p. 450, 1838/01/22
Dunbar, John and Kendall	plantation and the following individuals: John; Phil; Thomas; Truman; Sam; Celia; Nancy; Dailey; Dulley; Warren; Jimmy; Louisa; Moses; David; William; Emily; Miles; Dalia	1838-1845	East Baton Rouge Parish, Mortgage Book J, p. 381, 1838/08/01, Mortgage Book K, p. 11, 1845/05/31
Duplatier, Alberic	land and the following individuals: Louis; Bob; Jack	1837	East Baton Rouge Parish, Mortgage Book J, p. 407, 1837/10/09; Tulane University, Citizens Bank Minute Book No. 2 1837/05/10
Elder, C.	plantation and 14 unnamed individuals	1860	Tulane University, Citizens Bank Minute Book No. 8: 1860/05/28, 1860/11/19
Lilley, Thomas	land and the following individuals: John; Thomas	1845	East Baton Rouge Parish, Mortgage Book K, p. 30, 1845
McCalah, James	planation and the following individuals: John; Thomas; Sam; Celia; Nancy; David; Warren; Jenny; Emma; Moses; David; William; Emily; Miles; Dalia	1845	East Baton Rouge Parish, Mortgage Book K, p. 453, 1845/05/01

Owner	Mortgaged Collateral	Dates	Source
McCauley, L. P.	plantation and the following individuals: Ruben; London; Ben; Peter; Sam; Toby; Joe; Anderson; Henry; Alfred; Isaac; John; William; Ruffin; James; Lewis; Oscar; Hannah; Lucy; Patsy; Sarah; Ann; Adaline; Pauline and her child Eliza; Pelly; Peggy; Delia; Ann; Esther	1858-1859	East Baton Rouge Parish, Mortgage Book R, p. 55, 1858/12/14, p. 156, 1859/03/04
Posey, Carnot	plantation and the following individuals: William; Carter; Martha; Bill; <i>illegible</i> ; Rose, Susan	1851	East Baton Rouge Parish, Mortgage Book C, p. 87, 1851/02/17; Tulane University, Citizens Bank Minute Book No. 6, 1851/02/11
Scudder, J. B.	plantation and 14 unnamed individuals	1850	Tulane University, Citizens Bank Minute Book No. 6: 1850/04/24
Vail, Samuel	plantation and 28 unnamed individuals	1837	East Baton Rouge Parish, Mortgage Book F, p. 145, 1837/07/26
<u>East Carroll Parish</u>			
Dogherty, George	plantation and unnamed individuals	1838	Tulane University, Citizens Bank Minute Book No. 2: 1838/06/21
Flynn, H. S.	plantation and 9 unnamed individuals	1841	Tulane University, Citizens Bank Minute Book No. 3 1841/05/27, Citizens Bank of Louisiana Papers, 1834-1914, Folder 4
Goza, Aaron and Joseph H. Moore	the following individuals: Emanuel, Jackson; Bill; Plummer; Brid; Pompey; Harry; Rebecca, Andrew; Amy; Charlotte; Johnson; Wiley; Charles; Matilda; Delia; Mary; Leah, an unnamed child; Fanny; Mina; Mahala; Jane; Nelly; Lenah; Mary and her unnamed child; Betsy; Alcinda; Lotty; Ann; Margaret	1840-1859	East Carroll Parish, Mortgage Book B, p. 95, 1840/05/08, Mortgage Book B, p. 330, 1842/04/18; Mortgage Book C, p. 228, 1859/03/07; Tulane University, Citizens Bank Minute Book No. 3: 1841/05/27; Minute Book No. 6 1850/01/07
Kerr, James D	11 unnamed individuals	1843	East Carroll Parish, Mortgage Book C, p. 53, 1843/11/09
Lawson, Thomas	land and the following individuals: John; Warick; Isaac; Edmond	1838	East Baton Rouge Parish, Mortgage Book K, p. 5, 1838/07/11
Maher, Philip; William S Parham, Thomas FitzWilliams	the following individuals: Abraham; Ned; Simon; Henry; Charles; Ben; Claiborne; Eaton; Ben; David; Hannah and her 3 unnamed children; Cecile; Eliza; Nina; Charlotte; Nancy; Little Ned; George; Jack; Frederick; William; Celia; Harriet; and Sevilla	1838-1856	East Carroll Parish, Mortgage Book A, p. 507, 1838/04/25; Mortgage Book B, p. 1, 1838/10/20; Tulane University, Citizens Bank Minute Book No. 7 1856/02/08

Owner	Mortgaged Collateral	Dates	Source
Morancy, Honore Perigny	the following individuals: Sam; Ben; Bill Johnson; Washington (alias Lloyd); Wesley; David; John; John Benson; John; Perry; Will; Dick; George Middleton; George; Peter; Chatham; Adam; Mark; Kell; Ambrose; Warren; Henry; Stephen; Prince; Stephen; Gilbert; Henry; Maria; Maria and her child Delphine; Jane and her child Thornton; Hannah; Betsey; Irene; Mary; Lucy; Nancy and her child Nancy; Matilda; Charlotte; Maria; Jane; Milly; Mina; Letty; Evelina and her child Henry; Nancy; Temperance and her child Maryanne; Jim; Lizy; Caroline; Julyann; Washington; Sam; and Phoebe	1837-1838	East Carroll Parish, Mortgage Book A, p. 529, 1838/08/06, Tulane University, Citizens Bank Minute Book No. 2: 1837/05/20
Pool, Robert	unnamed individuals	1847	Tulane University, Citizens Bank Minute Book No. 6: 1847/02/04
Prescott, James B.	the following individuals: Nace; Ben; Willis; James Munroe; Mary; Esther; Nelson; Aley; Harriet; Peter; and Allen	1838	East Carroll Parish, Mortgage Book A, p. 490, 1838/03/31
Sellers, Mathew Bacon	the following individuals: Solomon; William; Andrew; Ned; Ben; Peter; Elijah; John; Mat; Brister; Jack; Priscilla; Crawford; Kizy; Maria; Mary; Dorinda; Sarah; Elijah, Milly, Elise; Alice; Ann; Sophia; Matilda; Ellen; Maria; Obi; Floyd; Nancy; Lucretia, Henry; Caroline; George; Martha; Matilda Jane; Lucille; Minerva	1837	East Carroll Parish, Mortgage Book A, p. 414, 1837/07/15
Yarborough, Stephen	39 unnamed individuals	1838-1839	Tulane University, Kuntz Collection, No. 600, 1838/02/12; Citizens Bank Minute Book No. 2: 1839/03/25
<u>East Feliciana Parish</u>			
Booker, James	land and the following individuals: Willis; Anne; Phebe; Emeline; Ellen; Wesley; Will; Joe; Mark	1837	East Feliciana Parish, Mortgage Book E, p. 198, 1837/11/02
Bowman, Matthew	land and the following individuals. Philip; Willis; Milo; Thomas; John	1837-1858	East Feliciana Parish, Mortgage Book E, p. 223, 1837/10/12; Tulane University, Minute Book No. 8: 1858/04/15
Bradford, Harrison	land and the following individuals: Simon; Sady	1837	East Feliciana Parish, Mortgage Book E, p. 211, 1837/09/29
Bradford, Leonard	land and the following individuals: Peter; Archy; Joe; Isaac; Simon	1838	East Feliciana Parish, Mortgage Book E, p. 187, 1838/01/15

Owner	Mortgaged Collateral	Dates	Source
Carter, Albert G.	land and the following individuals: Harry; Tom ; Abraham; Mariah; Flora; Catii; Joe	1838	East Feliciana Parish, Mortgage Book E, p. 183, 1838/01/15
Carter, Howard	land and the following individuals: Cesar and his wife Jane; Henry; Starks; Cesar; Franklin; Polly Ann; Mary Ann; Abram	no date	East Feliciana Parish, Mortgage Book E, p. 554
Cocks, John J.	land and the following individuals: Susan and her child William; Celia	1838	East Feliciana Parish, Mortgage Book E, p. 310, 1838/05/05
Conner, James R	land and the following individuals: John; Harriet; Isaac; Edmund	1838	East Feliciana Parish, Mortgage Book E, p. 374, 1838/06/11
DeLee, John L	13 unnamed individuals	1853	East Feliciana Parish, Mortgage Book E, p. 544, 1853/01/13
Delie, John L	land and the following individuals: Nat; Dick; Minda ; Mary; Eliza; Moses; Peter	1838	East Feliciana Parish, Mortgage Book E, p. 243, 1838/01/22
Dougherty, George	land and the following individuals: Henry; Maria and her son Gibson; Cady	1838	East Feliciana Parish, Mortgage Book G, p. 194, 1838/10/02
Flynn, John C.	land and the following individuals: Joe; Ben; Isaac; Dick; Jack; Vinny; Mary	1837	East Feliciana Parish, Mortgage Book E, p. 168, 1837/10/14
Gou, Ellis	land and the following individuals: Louis; Milly; River; Mahala; Robert; Anny; Nathan	1837	East Feliciana Parish, Mortgage Book E, p. 250, 1837/12/14
Holmez, James	land and the following individuals: Limaz; Goin; Winny.	1838	East Feliciana Parish, Mortgage Book E, p. 353, 1838/05/17
Lee, Samuel	land and the following individuals: George; Charles; Joe; May; John; Ralph; James; Malinora ; Violet; Milly; Viney	1837	East Feliciana Parish, Mortgage Book E, p. 173, 1837/12/28
Linnel, William	land and the following individuals: Lewis; Will; Jim; Milly; Martha; Mary; Peggy	1838	East Feliciana Parish, Mortgage Book E, p. 176, 1838/01/12
McDonald, John D.	land and the following individuals: Foust; Hampton; Louise; Emily; Hester; Joe	1837	East Feliciana Parish, Mortgage Book E, p. 163, 1837/09/05
Myers, Burrel	land and the following individuals: Mike; Sue; Hannah; Malissa; Moriah	1837	East Feliciana Parish, Mortgage Book E, p. 194, 1837/11/04
Newport, Robert W.	land and the following individuals: Stephen; Ben; Jim; Second Jim; Charles; Lot; Breidget; Caroline; Malinda; Charles; Sylvia.	1837	East Feliciana Parish, Mortgage Book E, p. 217, 1837/12/20
Perry, Robert and Hilary Bretin Cenus	The following individuals: Hampton; Joe; Laura; Emily; Ester; Jane child of Laura; John child of Emily	1846	East Feliciana Parish, Mortgage Book G, p. 569, 1846/02/18

Owner	Mortgaged Collateral	Dates	Source
Piper, David	land and the following individuals: Bob; Willy; Joe; Fanny; Harriet; Andrew	1837	East Feliciana Parish, Mortgage Book E, p. 220, 1837/10/10
Reddin, George	land and the following individuals: Jane; Hannah; Ann; Luke	1838	East Feliciana Parish, Mortgage Book E, p. 301, 1838/03/07
Rirt, John	land and the following individuals: Jury; Henry; Bill; John; Charles; Rachel; Lizza; Jury; Sarah; Buda; and her child Sally; Viny	1837	East Feliciana Parish, Mortgage Book E, p. 122, 1837/07/28
Rook, Robert	land and the following individuals: James; Sam; William; Ciss; Easter; Lawson; Milly; Jocey; Abram; Minerva; Willis; Laudy; Livinia	1837	East Feliciana Parish, Mortgage Book E, p. 191, 1837/09/07
Saunders, Lafayette	land and following individuals: West; Frederick; Hannah and her two children, John, and Catharine; Clara and her children, Anthony, Malinda, John Brown	1838	East Feliciana Parish, Mortgage Book E, p. 296, 1838/03/10
Tilden, Stephen	land and the following individuals: Charles; Joe; Milo; Dave; Browdie; Sophia; Fanny; Susan; Lucinda; Sophia; Nathan; Sylvia	1838-1843	East Feliciana Parish, Mortgage Book E, p. 304, 1838/04/12; East Feliciana Parish, Mortgage Book G, p. 337, 1843/08/29
Yarborough, Steven	land and the following individuals: Jack; Romeo; Oliver; Barber; Linda; Matilda; William; Francis; Rose; Edmund; Dick; Henry; Oliver; Barber; Charles; Jim, his wife Nicey and their daughter Ann; Winney Ann	1838-1840	East Feliciana Parish, Mortgage Book E, p. 281, 1838/03/06; East Feliciana Parish, Mortgage Book G, p. 168, 1840/12/11

Iberville Parish

Owner	Mortgaged Collateral	Dates	Source
Armandez, Jean Baptiste	plantation and the following individuals: Baptiste; Francis; Louis; Bernard; Valentin; Antoine; Jenny and her four children Celeste, Manuel, Polite, and Clarisse; Victoire; Marie	1835-1836	Iberville Parish, Conveyance Book O, no. 474, 1835/04/03, Conveyance Book P, no. 262, 1836/03/03
Arnandez, Gilbert and Rosemond Berrett	plantation and the following individuals: Jean; Marie and her children Adolphe and Fanny	1836-1843	Iberville Parish, Conveyance Book R, p. 144, 1836/11/08, p. 286, 1837/01/27; Conveyance Book U, p. 301, 1841/06/22; Conveyance Book V, No. 383, 1843/11/15
Arnandez, Jacques, Daigre, Honore	plantation and the following individuals: Daniel; Charlotte; Sylvia and her unnamed child, Felicite; Caroline; Artanire; Josephine; Milly; Eugene	1837-1845	Iberville Parish, Conveyance Book R, p. 590, 1837/08/05; Conveyance Book S, p. 131, 1838/04/11; Conveyance Book W, No. 264, 1845/03/27; Tulane University, Citizens Bank Minute Book No. 5: 1845/01/16

Owner	Mortgaged Collateral	Dates	Source
Bell, Robert and Caroline B.	several lots of land and the following individuals: Frank; Anthony; Jim; Dick; Isaac; Joe Gray; Martin; Jacob McNairy; Louis Sawyer; Nat; Jacob; George McNairy; Ben; Charley; William; Joe; Plato Sawyer; Washington; Big Davey; Davey; Moses; Wapin; Rachel and her child Daphnie; Nelly; Lucy and her child Charlotte; Suzan and her children Jack, Nelly, and Louis; Patsy and her daughter Caroline; Chansey; Eliza; Maria; Luckey and her children Harriet, Abraham, Spencer, Esace, and Jenny; Sarah and her children William and Martha; Daphne; Abby; Phyllis; Mary; George; Ann; Big Maria; Haucey and her unnamed child; Katy; Charity and her son Lincon; George; Mathilda; Edmond; Peter; Ben; Randal; Saul; Archibald; York; John; Peter; Abraham; Fielding; Sam; David; Cyrus; Eliza; Lucy; Robert; Francis; Emily; Caroline; Cezar; Winny; Patsy; William; Alex; Wyatt; Anderson; Hannah; Cely; Miles; Letty; Jones; Maria; Mary; Harriet; Louisa; Tom; Ned; Juliet; Ned; Nancy	1837-1839	Iberville Parish, Conveyance Book R, p. 603 1837/08/21, p. 636 1837/10/02; Conveyance Book S, p. 334, 1838/08/08; Conveyance Book T, p. 177, 1839/09/20; Tulane University, Citizens Bank Minute Book No. 2; 1837/06/22, 1837/08/03; St. James Parish, Book 16, p. 395, 1837/08/31
Bettison, Joseph and Ann E.	plantation and the following individuals: Spencer; Horace; Jerry; Hortense and her unnamed child; Bella; Will; Peter; Rachel	1837	Iberville Parish, Conveyance Book R, p. 645, 1837/10/13, p. 677, 1837/11/07
Blanchard, Joseph; Achille Delphine and Marie Savory	plantation with the following individuals: Francois; Sam; <i>illegible</i> ; Tom; William; Guillaume, <i>Sanieda</i> ; Mary; Mickey; Sulalie; Poupone; Elizabeth; Henny; Joe; Edmond; Augustine; Tom; Amelia; Ellick; Priscilla	1837-1857	Tulane University, M-1847, Citizens Bank Mortgage Book; Iberville Parish, Conveyance Book R, p. 504, 1837/06/05; p. 537, 1837/06/13; Conveyance Book 5, No. 115, 1857/08/15
Breaux, J. B.	sugar plantation in right bank of the Mississippi River and the following individuals: Phill Root; Andrew Jackson; Jackson Finey; Elizabeth Powers and her three children John, William, and Jersey; Philip; Jack; Peter; Amy; Venus and her child George	1848	Tulane University, Citizens Bank Minute Book No. 6 1848/06/06; Iberville Parish, Mortgage Book 2, p. 147, 1848/08/22
Brent, Robert; Labauve Hobard, C. W. Keep, and Joseph Schlater	plantation with the following individuals: Ben; Dick; Patience and her unnamed child; Mary; Louisa; Pug	1837-1853	Tulane University, M-1847, Citizens Bank Mortgage Book, Tulane University, Citizens Bank Minute Book No. 7; 1853/02/17; Iberville Parish, Conveyance Book R, p. 633, 1837/09/28; Conveyance Book S, p. 32, 1838/02/10
Bush, Philip and Josephine Bush	land on Bayou Goula and the following individuals: Philip; Wilson; Celestine	1836	Iberville Parish, Conveyance Book R, p. 74, 1836/11/21, p. 240, 1836/12/27, p. 170, 1836/12/28,
Camp, Robert, W. W. Pugh	plantation and unnamed individuals	1857	Tulane University, Citizens Bank Minute Book No. 8: 1857/06/20
Clement, Henrietta; Louis Desobry	the following individuals: Big Bob; Daniel; Sophia; Tepey	1839	Iberville Parish, Conveyance Book S, p. 700, 1839/05/08

Owner	Mortgaged Collateral	Dates	Source
Daigre, Honore	the following individuals: John; Richard; Joe; Frederick; Rose and her child Andre; Pauline and her children Julienne, Antoine, and Mary; Agathe	1844-1845	Iberville Parish, Conveyance Book W, No. 97, 1844/08/22, No. 207, 1845/01/27; Tulane University, Citizens Bank Minute Book No. 4, 1842/06/07; Citizens Bank Minute Book No. 5, 1845/01/16
Dardenne, J.	plantation and unnamed individuals	1861	Tulane University, Citizens Bank Minute Book No. 8, 1861/01/28
Deblacun, Mrs. Benjamin, D. L. Orillion and Paul Deblacun	plantation on Bayou Jacob and 33 unnamed individuals; and another tract of land and 61 unnamed individuals	1853	Tulane University, Citizens Bank Minute Book No. 7, 1853/05/19
Dickinson, Charles H.	several tracts of land and the following individuals: Lewis; Will; Jim; Milly; Martha; Mary; Peggy	1838-1842	Iberville Parish, Conveyance Book S, p. 208, 1838/05/08; Conveyance Book U, No. 470, 1842/04/22
Dodd, William	plantation on Payou Plaquemines and 33 unnamed individuals	1835-1836	Tulane University, Citizens Bank Minute Book No. 1, 1835/04/20; Iberville Parish, Conveyance Book P, no. 240, 1836/02/20; p. 363, 1836/03/14
Doyle, George and Ann M.	plantation and the following individuals: Bill; Abe; Mitchel; Syphax; Cyrus; Minor; Siye; Harry, James Mickey, Sarah and her child Robert; Vacey and her child Jane; Tobey; Rose; Scillia; Maria; Sophy and her children Louis and Ann; Sydney; Suzan; Mary, Sally	1836	Iberville Parish, Conveyance Book R, p. 87, 1836/11/21, p. 447
Druilhet, Jules	plantation on the left bank of the Mississippi River with the following individuals: William Brook; Absolon; Pleasant; Mary and her children Josephine and Martha; Marianne	1837-1840	Iberville Parish, Conveyance Book R, p. 372, 1837/03/08; Conveyance Book T, p. 627, 1840/09/29; St. James Parish, Book 18, p. 684, 1840/08/28
Duplessis, Francis	plantation and the following individuals: Pierre; Violette; Washington; Magdelaine; Dalby; John Hill; Betsy; John; Anderson; Fanny; Eliza; Greyc; Charles; Ned Ward; Phoebe; Mary Ann; Suzette; George; Ned; Harriett; Lewis; Jesse; Anna; Della; Spencer; Sally; unnamed individual; Mat; Jerry; Harlette; Dan; Philip; Lewis; Henry Sprigg; Peggy and her unnamed child; Fanny; Rose and her unnamed child; Caroline and her unnamed child; Solomon; Betty; Sally and three unnamed children; Henry Chambers; Rachel; Adam; Billy; Fanny Chambers; Hunter; Dally; Samson, Gabriel; Daniel; Robert; Peggy and her 4 children, unnamed, unnamed, Anderson, Martha; Lucy and her 2 children, James and unnamed	1838-1851	Tulane University, Citizens Bank Minute Book No. 2, 1838/05/21; Iberville Parish, Conveyance Book S, p. 362, 1838/08/24, p. 603, 1848/06/13; St. Martin Parish, Conveyance Records Book 11, p. 28, 1838/08/15; Record 20, p. 373, 1851/12/03

Owner	Mortgaged Collateral	Dates	Source
Dupuy, Adolphe and Uranie D. Dupuy	plantation on the right bank of Mississippi River and the following individuals: Jacob; Jefferson; Henry; William; Denis; Sam; Nancy and her child Rosette; Gudy; Ellen; Angele	1837-1838	Iberville Parish, Conveyance Book R, p. 564, 1837/07/15; Conveyance Book S, p. 31, 1838/02/07
Dupuy, Adolphe	plantation on Bayou Plaquimine and the following individuals: William; George; Alfred; Alexander; Edmond; Polly; Elisa; Sally and her children Guillaume and William; Tom; John; Polite; Frank; Reuben; Charlotte; Rachel and her child Lewis; Milly and her child Ann	1845-1846	Iberville Parish, Conveyance Book W, No. 488, 1845/11/07; Conveyance Book X, p. 70, 1846/02/24; Tulane University, Citizens Bank Minute Book No. 5: 1846/02/13
Edwards, W. E.	plantation and unnamed individuals	1852	Tulane University, Citizens Bank Minute Book No. 7 1852/03/30
Erwin, Lavinia and William Robertson	plantation and the following individuals: Big Charles; Isaac; John; Hector; Lye; William; Moses Gray; Anthony; William Brinly; David Young; Summerset; American William; Big Anthony; Mac; Tom; Harry; Sam; Little Ned; Ann Stewart; Betsy; Big Ned; Yellow Willy; Horace; Kitty; Henry; Eliza; Kitty; Big Margaret; Caroline; Jim; Hannah; Prissy; William; Little Lydia; Francis; Bob; Big Hanna; Anna Brinly; Mary Dodd; Louisa; Lucinda; Little Helen; Charity; John Sommerset; Celestine; Big Nancy; Emily; Mary Emily; Little Minty; Charlotte; Pamela; Gracy; Lydia; Kitty; Betsy; Yellow Hannah; Little Syc; Liza; Little Harriet; <i>Dittley Lyde</i> ; Julienne; Nancy; Washington; Miama; Celine; Abraham; Big Minto; Suzanne; Mary Magdelen; Black Mity; Little Betsy; Rose; Little Charles	1835-1847	Iberville Parish, Mortgage Book 1, p. 249, 1847/07/27, p. 249, 1847/06/05, Conveyance Book P, No. 274, 1836/03/10; Tulane University, Citizens Bank Minute Book No. 1 1835/02/20
Erwin, Thomas R. and Lavinia; Andrew Hynes, Mrs. Nancy Erwin, and Joseph Craighead	sugar and cotton plantation and 216 unnamed individuals	1836	Iberville Parish, Conveyance Book P, p. 497, 1836/06/01
Erwin, Isaac and Carmalite	plantation on Bayou Grosse Tete and the following individuals: Peter; Edmond; Bob; Vicy; Rachael; Ritter; Catherine; Ann; Nancy; Milly	1841	Iberville Parish, Conveyance Book U, p. 186, 1841/04/30
Estevan John and Marie E.	plantation on the left bank of the Mississippi River with the following individuals: Honore; Michel, Etienne; Clement, Cyprieu; Klein; Celestin; Maurice; Catharine; Harriette; Josephine; Eugice, Cecile; Darius; Kitty; Marie Joseph; Melitte and her two children Abraham and Azelie; Rosa; Philis and her child Clemetine; Charlotte and her children Jean Louis, Celeste, Alfred, Manor, and Philomene	1837-1839	Iberville Parish, Conveyance Book R, p. 580, 1837/07/25; Conveyance Book S, p. 153, 1838/04/25, p. 313, 1838/07/18, p. 674, 1839/04/27

Owner	Mortgaged Collateral	Dates	Source
Estevan, Marie R and Jean	plantation on the right bank of the Mississippi and the following individuals: Dominique; Andre; Jean Baptiste; Clarielle; Cecile and her children Francis, Joseph, and Sylvestre; Benoit; <i>illegible</i> ; Bonaventure; Caspare; and Theophile; Eggare; Marianne; Ellene; Agathe	1838	Iberville Parish, Conveyance Book S, p. 106, 1838/03/23
Flack, E	unnamed individuals	1835	Tulane University, Citizens Bank Minute Book No. 1: 1835/02/20
Gaillard, Raymon P.	plantation on the left bank of the Mississippi with the following individuals: Andre; Dominique; Cecile; Jean Baptiste; Clarville; Francis; Joseph; Sylvester; Benoit; Dominique; Bonaventure; Theophile; Agatha; Marianne; Agar; Helene; Gaspard	1841	Iberville Parish, Conveyance Book U, p. 337, 1841/07/29
Garlick, John	plantation on the north bank of Bayou Goula and 19 unnamed individuals	1835-1842	Tulane University, Citizens Bank Minute Book No. 1, 1835/02/06; Iberville Parish, Conveyance Book P, no. 254, 1836/02/29, p. 362, 1836/02/12; Conveyance Book V, p. 171, 1842/12/12
Greaud, Alfred	plantation and unnamed individuals	1859	Tulane University, Citizens Bank Minute Book No. 8: 1859/03/07
Hamilton, J. D.	land and the following individuals: Basket; James; Charles; Edward; Tom; Abraham; Rose, Felicite; Amy; Marie; Esther; Louis; Barney; Martin; Harriette; Silsy; Britannia; Martin; Madison; Solomon; Malissa	1835-1848	Tulane University, Citizens Bank Minute Book No. 2: 1835/02/06, Minute Book No. 5: 1844/06/07; Minute Book No. 6: 1847/03/07; Iberville Parish, Conveyance Book P, no. 250, 1836/02/29, Conveyance Book W, no. 65, 1844/06/27; Mortgage Book 1, p. 465, 1848/03/28
Harding, John, Louis Desobry and Charles Clements	the following individuals: Patrick; David; Desir; Jackson; Hardy; Cyrus; Jesse; Talbert; Mabeley; Sally; Mary; Mathilda; Martha; Caroline; Nancy; Bob; Elsy	1838-1839	Iberville Parish, Conveyance Book S, p. 233, 1838/05/21, p. 448, 1838/11/17, S. p. 523, 1839/02/07, Tulane University, Citizens Bank Minute Book No. 2: 1838/05/17, 1839/01/21
Harrison, Samuel	Gerville plantation and 80 unnamed individuals	1849-1851	Tulane University, Citizens Bank Minute Book No 6: 1849/07/11, 1851/06/17
Herbert, Achille and Marcelite	land and the following individuals: Abraham; Francois; Henry; John; Louise; Jenny; Laura; Norbert; Jean Louis; Paul, <i>Telesphone</i>	1836-1839	Iberville Parish, Conveyance Book R, p. 67, 1836/11/18, p. 261, 1837/01/16; Conveyance Book T, p. 44, 1839/06/12
Hebert, Treville	18 unnamed individuals	1835-1836	Tulane University, Citizens Bank Minute Book No 1: 1835/03/23, Iberville Parish, Conveyance Book P, no. 247, 1836/02/27, p. 366, 1836/03/14
Hebert, Valery and Clarisse B.	unnamed individuals	1835	Tulane University, Citizens Bank Minute Book No. 1 1835/02/06; Iberville Parish, Conveyance Book no. 242, 1836/02/23, no. 265, 1836/03/03

Owner	Mortgaged Collateral	Dates	Source
Herbert, Paul	plantation on the right bank of the Mississippi and the following individuals: Abraham; Jim; Charlotte; Stephen; Edmond; Ben; Colas; Jenny and her children Jim and Eliza; Jeanette; Sarah; Polly; Ann; Julienne and her children Sally, Honorine, and Manette	1835-1842	Tulane University, Citizens Bank Minute Book No 1. 1835/02/06; Iberville Parish, Conveyance Book P, no. 248, 1836/02/27, no 270, 1836/03/08; Conveyance Book U, no 307, 1841/10/18, no. 355, 1842/01/03,
Henry, Joseph and Marie B.	unnamed individuals	1836	Iberville Parish, Conveyance Book P, no 241, 1836/02/23, no. 263, 1836/03/03
Ivy, Isaac; Lucinda and William Terrel	land and the following individuals: Lewis; Will; Jim; Milly; Martha ; Mary; Peggy	1838	Iberville Parish, Conveyance Book S, p. 3, 1838/01/12, p. 54, 1838/02/21
Johnson, Henry	two plantations with 17 unnamed individuals; and Marigny plantation with 32 unnamed individuals	1851	Tulane University, Citizens Bank Minute Book No 6: 1851/02/25
Kleinpeter, George	plantation and 4 unnamed individuals	1851	Tulane University, Citizens Bank Minute Book No. 6: 1851/06/24
Landry, Camille	plantation on the Mississippi River with the following individuals: Manuel; Charles; Aaron; Peter; Lewis; Henry; Auguste; Eliza; Maria; Francoise; Betsy; Mary; Julie; Nelson; Louisa, Evelina; Rosalie	1850	Iberville Parish, Mortgage Book 2, p. 490, 1850/03/07
Lauve, Evariste and Celeste	land and the following individuals: Henriette; James; Catherine; Rosette; Manor and her children Frederie and Esther; Melite; Charles; Harry; Josephine	1838-1839	Iberville Parish, Conveyance Book S, p. 23 1838/01/31, p. 66, 1838/03/03, p. 585, 1839/03/19
Lauve, Evariste and Celeste; H Moses Shiff	sugar plantation on the right bank of the Mississippi River and the following individuals: Griffin; Richard; <i>illegible</i> ; Joe; Simon; Big David; Big Willis; Ben; Harry Brown, David; Jacques Richard; Adam; Sam; Big Ben; Young; Little Jack; Plato; John; Big Ian; Yellow Anthony; Anthony Wood; Cesar <i>Suile</i> ; Little Willis; Moses Lamb, Peter Whiles; Moses Matter; John White; Joe; Jesse; Cesar Scott; Daniel; Tom Singleton; Matthew; Manuel; Little Faucy; Flora; Billy; Bachus; Little Suzan; Peggy, Mathilda; Little Maria; Little Jenny; Agnis; Big Lucinda; Eady; Louisa; Biddy; Kitty; Kitty; Big Jenny; Molly; Rosetta; Lucinda Jackson	1838-1839	Iberville Parish, Conveyance Book S, p 138, 1838/04/13, p 181, 1838/04/28, p. 414, 1838/10/06, p. 632, 1839/04/11
Marigny, Bernard Moore, Edward	plantation on Bayou Goula and 24 unnamed individuals Estevan plantation and the following individuals: Jerry; Jack; John; Jacob; Jim; Sam; Bob; Beale; Henry, Burrel; Aggy and her seven children Jake, William, Melinda, Henry, Sarah, Rufus, and Joe; Mary and her six children Bill, Becky, Ann, Eveline, Maria, and Andrew; Martha and her two children Catherine and Alfred; Rose and her two children Caroline and Elizabeth; Martha Harris; Charlotte	1837 1840	Iberville Parish, Conveyance Book R, 1837/12/02 Iberville Parish, Conveyance Book T, p 590, 1840/07/17

Owner	Mortgaged Collateral	Dates	Source
Neraut, Bernard and Mathilde; Gustave and Emilie L. Rousseaux	plantation on the left bank of the Bayou Plaquimine with the following individuals: Ruben; Morris, William; Harry; Sam; John; Sam; Jacob; Edmond; Frank; Poulite; Kitty; Rachel and her child Lewis; Milly and her unnamed child; Mathilda; Dolly; Charlotte; Ira; Charles; Henon; Louis	1841-1846	Iberville Parish, Conveyance Book U, p. 79, 1841/03/22, p. 340, 1841/07/30, Tulane University, Citizens Bank Minute Book No. 5: 1846/02/13
Orillion, Louis	plantation and the following individuals: Abraham Hill; George; Frank	1838-1846	Iberville Parish, Conveyance Book S, p. 205, 1838/05/07, Mortgage Book 1, p. 13, 1846/09/17
Pritchard, Jeramiah; Mrs. George Mather	plantation and 23 unnamed individuals	1835-1859	Tulane University, Citizens Bank Minute Book No. 1: 1835/05/11; Citizens Bank Minute Book No. 8: 1859/04/11; Iberville Parish, Conveyance Book P, no. 260, 1836/03/02, p. 367, 1836/03/14
Pugh, Mary Ann	land and 21 unnamed individuals.	1848	Tulane University, Citizens Bank Minute Book No. 6 1848/05/30
Reams, Richard and Eliza J.	plantation on the right bank of the Mississippi River and the following individuals: John, Harry; Jack; Charity; Mary and her child Wallace; Louisa; Lucy; Josephine	1838	Iberville Parish, Conveyance Book S, p. 235, 1838/05/23, p. 281, 1838/05/15,
Rils, J and C. Brusle	unnamed individuals	1835-1836	Tulane University, Citizens Bank Minute Book No. 1: 1835/02/06, Iberville Parish, Conveyance Book P, no. 230, 1836/01/15, no. 264, 1836/03/03
Rivet, Lewis and Henrietta	plantation and the following individuals: Lindor; Francois; Celeste; John; Thom	1836-1837	Iberville Parish, Conveyance Book R, p. 142, 1836/12/08, p. 288, 1837/01/27
Robinson, Abner et al, and George A. Botts	plantation and the following individuals: Frank; Anthony; Jim; Dirk; Isaac; Joe Gray, Martin; Jacob McNayer; Lewis; Nat; Jacob; George McNayer; Ben; William, Joe; Plato; Washington; Big Davy; Davy; Moses; Wapping; Rachel and her child Daphny; Nelly; Lucy and her child Charlotte; Susan and her children Jacob, Nelly, and Lewis, Patsy and her child Caroline; Chany; Elizabeth; Maria; Luckey and her children Harriet and Abraham; Spencer; Esau; Fanny; Sarah and her children William and Martha; Daphny; Abby; Phillis; Mary; George; Anne; Big Maria; Fanny and her unnamed child; Kitty; Charity; Susan and her unnamed son; George; Matilda; Edmund; Peter; Ben; Bandals, Sam; Archibald; York; John; Peter; Abraham; Fielding; Sam; David; Gras; Eliza; Lucy; Robert; Francis; Emily; Caroline; Henry; Patsy; William; Alexander; Wyatt; Anderson; Hannah; Ceyley; Milly; Letty, Tom; Maria; Mary; Harriet; Louisa; Tom; Ned; Juliet; Ned; Nancy	1840	Lafourche Parish, Mortgage Book P, p. 438, 1840/02/21

Owner	Mortgaged Collateral	Dates	Source
Slack, Eliphalet and Abigail	plantation on Bayou GrosseTete with 49 unnamed individuals	1836	Iberville Parish, Conveyance Book P, no 259, 1836/03/02, p. 364, 1836/03/14
Surry	plantation and unnamed individuals	1841	Tulane University, Citizens Bank Minute Book No. 4: 1841/09/30
Trier, A. and Dominique Bouligny	plantation and 34 unnamed individuals	1852	Tulane University, Citizens Bank Minute Book No. 7: 1852/09/09; Iberville Parish, Conveyance Book 3, p. 3, 1852/09/24
Wilson, Elisa	plantation and 60 unnamed individuals	1839	Tulane University, Citizens Bank Minute Book No. 2: 1839/02/26
<u>Jefferson Parish</u>			
Coumagere	unnamed individuals	1835	Tulane University, Citizens Bank Minute Book No. 1: 1835/02/20
Courbin & Roule	unnamed individuals	1835	Tulane University, Citizens Bank Minute Book No. 1: 1835/04/10
Delassize, Jean	unnamed individuals	1834	Tulane University, Citizens Bank Minute Book No. 1: 1834/12/19
Deschappelle, Gabriel Lebreton	the following individuals: James; Edward; Louis; Sam; Mary; Lucy; Mary; Charlotte	1836	Tulane University, Citizens Bank of LA Papers, 1834-1914, Folder 1: 1836/07/25
Du Sassau, G.	unnamed individuals	1834	Tulane University, Citizens Bank Minute Book No. 1: 1834/07/22
Fortier, Berthies	Tom, Nelson; Louise	1834-1851	Tulane University, Citizens Bank Minute Book No. 1: 1834/07/22; Citizens Bank Minute Book No. 6: 1851/01/07
Fortis, Edmund	plantation and unnamed individuals	1842	Tulane University, Citizens Bank Minute Book No. 4: 1842/04/28
Fortis, Eugin and Faustus	plantation and unnamed individuals	1842	Tulane University, Citizens Bank Minute Book No. 4: 1842/04/21, 1842/04/28
Gesseau, Eugene	unnamed individuals	1834	Tulane University, Citizens Bank Minute Book No. 1: 1834/10/14
LeBuhn, F. J.	two tracts of land and unnamed individuals.	1839	Tulane University, Citizens Bank Minute Book No. 2: 1839/02/21

Owner	Mortgaged Collateral	Dates	Source
Marshall, L. R. and Charles Fortis	plantation and unnamed individuals	1854	Tulane University, Citizens Bank Minute Book No. 7 1854/05/30
Mason, W.	Milly Bishop; Catherine; and Jane	1851	Tulane University, Citizens Bank Minute Book No. 6: 1851/01/07
Ribas & Colminaro; J. M De Gama	plantation and 31 unnamed individuals	1834-1847	Tulane University, Citizens Bank Minute Book No. 1: 1834/08/29, Citizens Bank Minute Book No. 3: 1841/05/06; Citizens Bank Minute Book No. 6: 1847/12/17
Saules Balthazar	the following individuals: Vincent; Jacques; Edward; Baptiste; Azor; Jerry; Clarissa; Charlotte; Rodie; Henrietta; Francis; Charles; Perry; Ben; Auguste; Stephen; Fine; Silie; Maria; Sara	1834-1835	Tulane University, Citizens Bank Minute Book No. 1. 1834/12/19, 1835/02/05
Sault, Mrs.	20 unnamed individuals	1850	Tulane University, Citizens Bank Minute Book No. 6: 1850/01/15
Trudeau, Mrs. A.	plantation and 31 unnamed individuals	1853	Tulane University, Citizens Bank Minute Book No. 7 1853/05/05

Lafayette Parish

McCaskill, Daniel and Chevis, J. W.	land and 24 unnamed individuals on Bayou Vermillion.	1850-1851	Tulane University, Citizens Bank Minute Book No. 6: 1850/11/05; Tulane University, Citizens Bank Minute Book No. 7: 1851/12/23
McCaskill, Samuel	land and the following individuals: Lewis; Gabreil; Cyrus; Caleb; Geuin; Wilson; Moses; Collins; Willough; Henry; Jep; Charlotte; Charity; Kazzy; Sally; Rose; Ellick; Tim; Sophia; Louisa; Gabe; Marissa; Saul; Thases	1838	Lafayette Parish, Copies of Notarial Acts, no. 2816, 1838/04/30
Thrall, John B.	plantation and the following individuals: Dick; Sally; Catherine; unnamed individual, Jane; Mary; Seysus	1837-1838	Tulane University, Citizens Bank of Louisiana Papers, 1834-1914 Folder 2 1837/09/28; Lafayette Parish, Copies of Notarial Acts, entry 2770. 1838/01/04

Lafourche Parish

Baudoin, S	plantation and 12 unnamed individuals	c. 1848	Tulane University, M-1847, Citizens Bank Mortgage Book
Bernard, Jean Baptiste and Marie Esther	land and the following individuals: Etienne; Paul; Honore; Ursin; Moses; Dick; Joe; Alexandre; Marie; Lucinda; Joseph; Dransin; Victoire; Juilliens	1838-1845	Lafourche Parish, Conveyance Book N, p. 224, 1839/03/06; Book U, p. 436, 1845/05/12

Owner	Mortgaged Collateral	Dates	Source
Biagg, Barton	plantation and 105 unnamed individuals	c. 1848	Tulane University, M-1847, Citizens Bank Mortgage Book
Bourgeois, J. and H. Champagne	unnamed individuals	1834	Tulane University, Citizens Bank Minute Book No. 1: 1834/10/20
Brown, John Conway	land and the following individuals: Thomas; Daniel; Eliza; Jacques	1838	Lafourche Parish, Conveyance Book N. p. 278, 1838/05/24
Charles, Mme.	unnamed individuals	1834	Tulane University, Citizens Bank Minute Book No. 1: 1834/06/26
Ellis, Richard G. and Mary Jane Towson; Thomas Butler; J B Moreaux	plantation and the following individuals: Nace; Stephen; Stanner; Philip; Isaac; Jack; Hanson; Henry; Thomas; Saulbring; Armstrong; Charles; Basil; Stanner Jr.; Leonora; Frank; Hanson Jr.; Lewis; Alfred; Reason; Henry; Sai; Rachel; Polley; Theresa; Juno; Emily; Juliana; Sarah; Nancy Jr.; Nancy; Hager; Elvia; Sarah Ann; Tempe; Jane; Hannah; Hannah Jr.; Julia; James; Henry; Bernard; John; Joseph; Sally Camilla; Cassandra; Nancy; Mary Ann; Margaret	1837-1858	Lafourche Parish, Conveyance Book N, p. 185, 1837/12/11; West Feliciana Parish, Mortgage Book K, p. 129, 1838/01/25; Terrebonne Parish, Conveyance Record Aug 29, 1832 - Jan. 5, 1841, Entry 2271, 1858/01/01; Tulane University, Citizens Bank Minute Book No 5: 1844/10/04
Frederic, Marie Madelain and Jean Omar Nicolas	land and the following individuals: Michel; Jim; Joe; Valette; Bob; Hanny; Dobby; Rosa; Mary; Bob; Randall; Nancy; Maria; James; Nancy; George; Esther; William; Nancy; Edmond; Poupanne; Marguerite; Clarisse; <i>Amvrica</i>	1834	Lafourche Parish, Conveyance Book T, p. 474, 1834/12/30
Gaillard, Raymond P.	land and the following individuals: Andre; Jean Baptiste; Clairville; Francis; Joseph; Sylvester; Benito; Bonaranture; Theophile; Marie; Cecile; William; Honore; Marianne; Orelene; Catherine; Celestin; Helene; Agathe; Domstele; Celestine; Mary; Solby; Anna; Suzette; Estele; Henriette; Odile; Lutelia; Baptiste; Dick; Randall; James; Sam; Melite; Madeleine	1845	Lafourche Parish, Mortgage Book AA, p. 380, 1845/07/21; Tulane University, Citizens Bank Minute Book No. 6: 1849/02/06, 1849/03/16, 1851/02/11
Gordon, Alexandre and Jean Baptiste Maureau	the following individuals: Lewis; Spencer; Lymus; Betty; March; John; Martha; Charles; Will; Melinda; Edmund; Mary Jane; Frances; Fanny; Octavee; Barbary Margaret; Louise; Julien; Alexandre; <i>Victoriae</i> ; Sophie; Agnes; Betsy; Nathan; Henry Smith; Jack; Henry; Alfred; Tommy; Glaster; ittle Sam; Jack; George; Bazile, Frank; Mina; Saul; Yellow Willam; Philip; Stephen; Stanney; Little Stanney; Leonard; Big James; Cisar; Little William; Davy; Henson; Barnett; John; Joe; Thomas; William; John; Adam; Juillick; Emily; Nancy; Julian; Old Jenny; Mary; Winney; unnamed individual; Pervey; Miley; Hagar; Sarah; Sally; Eliza; Hannah; Milah; Mary; Rachel; Penny; Nancy; Cashlien; Jesse; Holly; Joe; Rose; Frank; Helene; Kitty; Rachel; Mary; Abraham; Patty; five unnamed children	1845	Lafourche Parish, Conveyance Book W, p. 115, 1845/08/09; Tulane University, Citizens Bank of Louisiana Papers, 1834-1914, Folder 5: Citizens Bank Minute Book No. 5 1844/10/04, Citizens Bank Minute BookNo 5: 1845/07/31

Owner	Mortgaged Collateral	Dates	Source
Guion, George L.	plantation and the following individuals: Arthur; Littleton; Jesse; George; Henry; Scarlett; Big Peter; Wallace; Jake; Dick; Joshua; Anderson; Harding; Westley; Little Peter; Dave; Spencer; Melvin; Monroe; Moses; Thorton; Millie; Lany; Eliza; Little Anny; Sydney; Betsy; Big Amy; Mary; Louisa; Violet; Basheba; Minerva; Matilda; Prissy; Rachel; Cynty	1840-1845	Tulane University, Citizens Bank Minute Book No. 3: 1840/12/17; Lafourche Parish, Mortgage Book R, p. 164, 1840/12/31, p. 509, 1842/08/12; Conveyance Book R, p. 510, 1842/08/12; Conveyance Book, p. 115, 1845/08/09
Haydel, Nel and Carmelite	land and the following individuals: Casimine; Antoine; Esprit; Alexis; Basile; Sannon; Jean Baptiste; Jeannette; Catherine; Marie Joseph; Daphne; Pauline; Susanne; Martine; Feliciane; Isabelle; Eveline; Rosette; Felicite; Manette; Marie; Eve; Marie; Jules; Joachim; Edouard; Jean; and three unnamed children	1837	Lafourche Parish, Conveyance Book N, p. 199, 1837/07/26
<i>Heriot, Justinian and Suzanne Lépine</i> , Mrs. Charles Degauche	plantation and 6 unnamed individuals	1858-1860	Tulane University, Citizens Bank Minute Book No. 8: 1858/03/22, 1860/05/03
Ledet, Henry and Anne Dauphine Levron	land and the following individuals: Westley; Enree; Lalie; John; Euphrosine; Philippe; Drausin; Charlotte	1838	Lafourche Parish, Conveyance Book N, p. 220, 1838/03/06
Lepine, Evariste and Marie Nathalie Martin	land and the following individuals: Lubin; Louis; Sam; Baptiste; Noel; Augustin; Joseph; Madeleine; Francoise; Helene; Emilite; Amelia; Celeste; Aimee; Marie; Cecile; Justine; Paul; Laurent; Lazare; Eugene; Valentin; Louise	1837	Lafourche Parish, Conveyance Book N, p. 167, 1837/08/04
Nicholas, W. and J	Plantation and the following individuals: Michele; Jim; Joe; Valette; Bob; Hanney; Debby; Rosa, Mary; Bob; Randall; Nancy; Mariah; James; Nancy; George; Esther; William; Nancy; Edmund; Puoponne; Marguerite; Clarisse; America	1834-1843	Tulane University, Citizens Bank Minute Book No. 1. 1834/10/20; Lafourche Parish, Mortgage Book L, p. 105, 1834/12/30, Conveyance Book S, p. 360, 1843/10/02
Pitre, Mathurin	plantation and the following individual: Godfrey	1837	Lafourche Parish, Mortgage Book N, p. 128, 1837/08/01
Seely, John L.	plantation and the following individuals: Lewis; Louis; Allick; Melinda; Betsey; Winson; Coco	1837	Lafourche Parish, Mortgage Book N, p. 151, 1837/08/17
Tucker, Joseph W	plantation and the following individuals: Edmond; William; Simon; Manuel; Gilbert, Dick Peyton; Allick; John Baily; Bob; Peter; George William; Robin; Henry; Sam; Toussaint; George; Grandisan; Little George; Dick; John Ben; George Gaudet; Polly; Jacob; Rebecca; Little Mary; Big Rachel; Harriet; Big Mary; William; Toussaint; unnamed individual; Phoebe; Nathan; Patty; Belinda; Sarah; Thilda; Letty; Rachel; Maria; Davy; Sophie; Sylvia; French Sylvia; Rose; Frances; Eliza; unnamed individual; Andy; Dynah; Elizabeth	1849	Lafourche Parish, Conveyance Book AA, p. 424, 1849/04/07; Conveyance Book BB, p. 225, 1849/05/18

Owner	Mortgaged Collateral	Dates	Source
<u>Madison Parish</u>			
Butler, Ira	Charles; Henry, John; Hynson; Peter; Michel; Bennet; Lannon; Moriah; Sam	1838	Madison Parish, Mortgage Book A 1838-1861, p. 7, 1838/04/24; Mortgage Book A 1838-1861, p. 130, 12/13/1842; Concordia Parish, Conveyance Book H, p. 346, 1838/04/24
James, Joshua	plantation and 147 unnamed individuals	1859	Tulane University, Citizens Bank Minute Book No 8 1859/06/02
Shadburne, George D.	the following individuals: Hatch; Bob; Bill; Mitch; Marshall; Logan; Susan; Rose; Nance; William; Red; James; Ambrose; Fayette; Betsey; Mahalu; Josephine; Mary; Ella; Ike	1858	Madison Parish, Mortgage Book A 1855-1859, p. 463, 1858/09/06

<u>Morehouse Parish</u>			
Brigham, Sarah Davidson	the following individuals: Harriett; Pleasant; Armstead; Aleck; Davy; Kit; Charles; Abraham; Joe Simmons; Tom; Mason; Cheney; Peter; Dick; Judy; Nancy; John; Sally; Sam; Lucinda; Harvey; Stephen; David; Fanny; Little Harriet; Mary; Zeke; Nelly; Jack; Lewis; Harvey; Glasco; George; Patience; Mira; Old Peter; Masin; Madison; Adam; Manuel; Hassell	1841-1844	Morehouse Parish, Notarial Record Book A, p. 38, 41, 1844/10/29; Mortgage Book B, p. 396, 1844/09/19; Tulane University, Citizens Bank Minute Book No. 3: 1841/02/17
Jordan, H., W Jodan, and W. Gillespie	plantation and 71 individuals; including: Mather Washington; Solomon; and Walsh	1859-1861	Tulane University, Citizens Bank Minute Book No. 8: 1859/06/23, 1861/06/03, 1861/08/19

<u>Natchitoches Parish</u>			
Boyce, Michael	land and the following individuals: Johnson; Calife; Jean Baptiste; Robert; Frank; Charles, Emery; Leman; David; Sam, Bob; <i>Huittem</i> ; Patrick; Prince; Jess; Lewis; Reuben; Harriette and her children <i>Zenan</i> and Helene; Debby and her child George; Mary and her child Henry; Larrisa and her child Thomas; Dicy and her child Eliza; Caroline and her child William; Harriette; Rachel; Lucy; Hannah and her child Albert; Marie	1837-1839	Natchitoches Parish, Book 23, p. 2, 1837/12/05, Book 10, p. 340, 1838/02/07, Book 23, p. 239, 1839/03/04

Owner	Mortgaged Collateral	Dates	Source
Robinson, J.	plantation and the following individuals: Andre, Jean Baptiste, Clairville, Francis, Joseph, Sylvester, Benito, Bonaranture, Theophile, Marie, Cecile, William, Honore, Marianne, Orelene, Catherine, Celestin, Helene, Agathe, Domstele, Celestine, Mary, Solby, Anna, Suzette, Estele, Henriette, Odile, Lutelia, Baptiste, Diek, Randall, James, Sam, Melite, Madeleine	1841	Tulane University, Citizens Bank Minute Book No. 3: 1841/02/10; Nachitoches Parish, Book 32, p. 50, 1841/03/27
St. Amans, Bernard	land and the following individuals: Hector; <i>Cesaire</i> ; <i>Gustu</i> ; Sara; Frank; Robert; Robert; Dick; Richard; Pita; Cyprian; Simpson; George; Old Sam; Sam; Bandan; <i>Oculi</i> ; Frank; Bob; George; Patrick; Henry Lewis; Felix; John; Betsy; Molly and her child Maria; Jean Baptiste; Lucy; Laiza; <i>Vallette</i> and her child Alexandre; Mary and her unnamed daughter; Angel; Henrietta; Zaire and her child <i>Valsin</i> ; Hannah; Big Ann; Priscilla; Diana; Little Ann; Nancy and and her child John; Suzette; Suzette and her child Felicite; Hane and her child Martha Ann; Dackey; Charity and her child Livan; <i>Clemmice</i> ; <i>Minty</i> ; Eugene; Henry	1838	Nachitoches Parish, Book 23, p. 60, 1838/03/18, Book 10, p. 360, 1838/05/18
Sampayrac, A.	land and the following individuals: Sam; Jose; Bob; Carret; Bill; Jesse; Abraham; Petit Sam; Barrel; Arci; John Green; Petit John; Levy; Grand Abraham; <i>Isaac</i> ; Alfred; Noe; George; Devis Charpantuir; Wilson; Thomas; Henry; Archer; <i>Isaac</i> ; Albert; Betty; <i>Derasin</i> ; Adams; Williams; Julien; <i>Belf</i> ; Cesar; Rachel; Jenny; Helene; Sally; Silvy; Nancy; Josephine; Mariah; Betsy; Caroline; Mary; Henriette; Petite Betsy; Anne; Cealy; Peggy; Aimu; Malvany; Julie; Rose; and 12 unnamed children	1834-1840	Nachitoches Parish, Book 26, p. 150, 1840/06/20, Book 31, p. 338, 1834/06/10, Book 10, p.389, 1838/08/17, Book 26 p. 149 no 1443, 1840/06/20,
Unknown	land and the following individuals: Phil; Isaac (alias Dory); Jacob (alias Martin); Dave; Mary (alias Charity); Elcy; Betsy	1834	Nachitoches Parish, Book 22, p.1, 1834/11/19

Orleans Parish

Bernard, B.	plantation, brickyard, and 38 unnamed individuals	c. 1848	Tulane University, M-1847, Citizens Bank Mortgage Book
Bouigny, Alfred and Dominique	plantation and 9 unnamed individuals	1849-1853	Tulane University, Citizens Bank Minute Book No. 6 1849/09/18; Book No. 7 1853/02/24
Bradford, H.	farm and 2 unnamed individuals	c. 1848	Tulane University, M-1847, Citizens Bank Mortgage Book
Caffin, Charles	unnamed individuals	1835	Tulane University, Citizens Bank Minute Book No 1 1835/02/20

Owner	Mortgaged Collateral	Dates	Source
Cocke, P B	unnamed individuals	1835	Tulane University, Citizens Bank Minute Book No. 1: 1835/01/05
Ducros, Antonio and Casimir Lacoste	the following individuals: Remond; Louis; Mary	1834	Tulane University, Kuntz Collection, No. 600, 1834/6/21
Forestall Brothers; Poiney	several plantations and 68 individuals, including: James; William; Bill; Aaron Cusinaru; Jaques; James Bourguet; Adams Boiny; Celir; Jams; Saior; Charisse; Betsy, Ann; David Copeland	1834	Tulane University, Citizens Bank Minute Book No. 1: 1834/04/20; Citizens Bank Minute Book No. 2: 1838/03/03, 1838/10/11, Citizens Bank Minute Book No. 5. 1846/02/05
<i>Gardel, Louis Armand</i>	bakery with Charlotte and other unnamed individuals	1857	Tulane University, Citizens Bank Minute Book No. 8: 1857/03/23
Hoa, Albert and Pierre	plantation and the following individuals: Baptiste; Big George; John Rousseau; Jerry; Bernard; Gabriel; <i>John Ameneaux</i> ; Reuben; Tom; Grand William; Gros Joseph; Jerry; Squire; Abraham; Petit William; Mitchel; Richmond; Bob; Charles Fegg; Dembo; Petit John; Francisque; Penon; Coco; Jean Louis; Joseph; Doyle; Hosborn; Philippe; Tom Hibon; Daniel; Charles; Joseph; John Challenger; Azor; Isaac; Felicite and her child Jim; Charlotte; Jessette; Sophie and her unnamed child; Augustine; Marie Chamber; Marie Jeanne and her son Theogere; Angelle; Henry; Louisa; Pyrrhus; Abraham Cagelar; David	1838	St. James Parish, Book 17, p. 384, 1838/08/14
Lacoste, Pierre and Antoine	plantation and the following individuals: Basile; Tom; Jean Louis; Antonio; Voltaire; Sam; Hyacynthe; John; Louis Labrique; Leon; Lindor; Antoine; George; Jupiter; Hippolyte; Reuben; Lewis; Dick; Jean Louis; Joseph; Francois; Charlot; Phillis; Fanny; Melite; Sophie; Edmond; Jerry; Noel; Robert; Toby; Henry; Auguste; Marie; Phrosine; Louise; Leocadie; Maria; Pierre; Marie; Joshua; Frank; Bob	1834-1846	Tulane University, Kuntz Collection, No. 600, 1834/1835 and 1836/04/19
Lacoste, Pierre and Antoine	plantation and 60 individuals, including: Bazile; Ellick Forestier; Auguste; Ben and his son Ben; Charlot; Congo; Dick; Edmond, Louis Labrique; Millien; Nelson; Octave; Plaisance; Pichon; Nrain; Rubin; Angele and her child Eugene, Braman, and her three children Jeanne, Ursin, and Emile; Claire; Cilla and her children, Henriette and Marie Louise; Frozine; Mary Laroude; Mary Jacob; Mary Pierre and her child Amelie; Poupoine; Sarah; Therize Bienvenu; Therize Lacoste; Nelly; Martin and her child Cidalysse	1850	Tulane University, Citizens Bank Minute Book No. 6: 1850/06/11; Tulane University, Kuntz Collection No 600; 1850/6/20
Levee Steam Cotton Press Company	steam saw mill and unnamed individuals	1843	Tulane University, Citizens Bank Minute Book No. 5: 1843/11/20

Owner	Mortgaged Collateral	Dates	Source
Livaudais, Jacques Adolph	plantation and 30 individuals, including: Petit Edmond, William; Pichon; Valentin; Marie Pierre; Amelie; Cydalise; daughter of Marie Martin; Marie Jacob; Edouard Guoye, Jack; Charles; Henry Dix; Gustave; Claire; Antonia; Eddy; Zoe	1851	Tulane University, Citizens Bank Minute Book No. 6: 1851/09/16; Tulane University, Kuntz Collection No 600, 1851/10/09
Livaudais, Jacques Adolphe and Pierre Lacoste	the following individuals: Raymond; Charles; Anthony; Tom; Ned; Harry; Gilbert; Joseph; Mills or Milne; Ellick; Lewis; Simon; Jasmin; Jean; William; Bill; Vulcain; Marie Joseph; Marie Martin; Rose; Justine; Grand Ellick; Tom Gros; Anthony; Louis Coulon; Vulcain; William; Ned; Charles; Gilbert; Raymond; Jean; Harry; Bill; Simon; Mills; Joseph Coulon; Jasmin; Justine; Marie Joseph; Rose Coco; Jean Louis	1834-1851	Tulane University, Kuntz Collection, No 600, 1834/1835, 1851/10/09
Millaudon, L. and Nicoletz, T.	unnamed individuals	1834	Tulane University, Citizens Bank Minute Book No. 1: 1834/09/20
Parrin, Charles	unnamed individuals	1834	Tulane University, Citizens Bank Minute Book No. 1: 1834/12/12
Ribus, M.	20 unnamed individuals	1840	Tulane University, Citizens Bank Minute Book No 3: 1840/04/09

Ouachita Parish

Braird, D. plantation and 17 unnamed individuals

c. 1848 Tulane University, M-1847, Citizens Bank Mortgage Book

Plaquemines Parish

Baphy, B. sugar plantation and 29 unnamed individuals

c. 1848 Tulane University, M-1847, Citizens Bank Mortgage Book

Bayby, Mrs. plantation and 11 unnamed individuals

c. 1848 Tulane University, M-1847, Citizens Bank Mortgage Book

Bayhi, Pierre land and 18 unnamed individuals

1848 Tulane University, Citizens Bank Minute Book No. 6: 1848/05/02

Bonneral, Alexander land and the following individuals: Bob; Dirk Glover; Ben Jones; Tom; Susanne and her children Julienne, Justine, Cato, and Levy; Edmond Ruffin; Nancy; Nathan Dugas; Lannette; James Smith

1855 Plaquemines Parish, Mortgage Book B, p 212, 1855/08/08

Owner	Mortgaged Collateral	Dates	Source
Courbault, J.	unnamed individuals	1834	Tulane University, Citizens Bank Minute Book No. 1: 1834/08/07
de Lizarde, Hermanos	unnamed individuals	1834	Tulane University, Citizens Bank Minute Book No. 1: 1834/12/26
Dufau, C. B.	unnamed individuals	1834	Tulane University, Citizens Bank Minute Book No. 1: 1834/06/26
Egana, Juan Ignacio	Fanny Plantation and the following individuals: Frank King; Daniel Honard; Alfred; Richard; George; Claiborne; Buford; Wilson; John <i>Robinson</i> ; <i>Bruja</i> ; John Hawkins; <i>Lot</i> ; Henry Lot; Collins; Hezekiah; <i>Pleasant</i> ; Lu; Leon; William Parker; Peter Kelly; <i>Israel</i> ; Peter Fischer; Moses; Jim Fischer; Jack; Daniel Pope; Big Jim; Alexander; Dick Campbell; July; George Burke; Coon; Frank <i>Duplessis</i> ; Robert <i>Sternan</i> ; Dave; John Burke; John Dawson; Nelson; Charles; Charles; Robert <i>Wise</i> ; Martin; Abraham <i>Bonlin</i> ; Sambo; Long Tom; Ismael; Bob; Cesar; Lisbon; Abraham; Sam Homer; February; Ashley; Felis; St. Louis; Edward; Sam Roman; Marie; Sarah; Kitty; Rachel; Sally; Jules; Celeste; Lewis; Minerva; John; Catherine; Burgess; Warren; Phillis; Rose Ashley; Josephine; Julia; Beckey; Charlotte; <i>Zarbelle</i> ; Frances; Ellen; Caroline; Ben; <i>John</i> ; Emily; Rachel King; Rose Burke; Emily; Lee; <i>Ping</i> ; Harriet; Susanne; Louise; Ellen; Peggy; Rachel; <i>Jener</i> ; Lucinda; Jeannette; Martha; Sidney; Ann; Sophie; Liddy; Phoebe; Flower; Rose; Simon; George; Elizabeth; Catherine; Bessy Miller; Louise Smith; Joe; Happy; Nancy; Rebecca; Washington; Harie; Juliette; Charlotte; Jane; Long Becca	1858-1859	Tulane University, Citizens Bank Minute Book No. 8: 1859/05/23, Plaquemines Parish, Mortgage Book B, p. 416, 1858/06/05, p. 468, 1859/05/30,
Erwin, James	plantation and the following individuals: Joe; Henderson; Ned; Abraham; Watts; Moses, Valerie; Baptiste; Andrews; Phebe; Rose; Rose; Judith; Eugenia; Judy; Kitty; Hortense; Delsy	1839	Tulane University, Citizens Bank Minute Book No. 2: 1839/05/02, 1839/05/09, Citizens Bank Minute Book No. 3 1841/02/27, Plaquemines Parish, Mortgage Book R-4, p. 85, 1839/07/03
Farrar, Mary	66 unnamed individuals	1848	Plaquemines Parish, Book 2 p 151, 1848/03/21
Frederic, Adam	land and the following individuals: Mars; Isaac; Charles; Thom; Rose and her two children Joseph and Jim; <i>Tris</i> ; Rachelle	1838	Plaquemines Parish, Mortgage Book R-4, p. 39, 1838/03/24
Knox, Andrew and Maria Jane Prince	plantation and the following individuals: Abram, his wife Kitty, and son Phil; Dick; Any; Malfored; Phillis; Harriet; Maryland Dave; Washington; Jack	1845	Tulane University, Citizens Bank Minute Book No. 5: 1845/03/13, Plaquemines Parish, Book R-4 p. 279, 1845/03/18

Owner	Mortgaged Collateral	Dates	Source
Latour, Mrs Arsine	land and the following the following individuals: Ben; Bob; Dick; Tom; Levy; Cato; Edmond Ruffin; Nathan Dugas; James Smith; Habelle; Laurette; Nancy Ruffin; Arinella, Clay; Mary Ann Scott; Maria Jane; Susannah and her children Julie and Julian		Plaquemines Parish, Mortgage Book R-4, 1848/05/13
Lizardi, Manuel Julian; Egana, Juan Ignacio	plantation and the following individuals: Auguste; Frederick; Sam; Henry; Lawrence; Justin or Juctin; Jim; Cornelius; William; Philippe; William Taylor; Edmond; Allick; Jack; Henry; James Rouge; Marion or Mary; John; George; Edward; Francis Forstall; Ephraim; illegible Forestall; Alexis; Armstrong; Joshu; <i>Abraham</i> ; John (alias Rosemonde); Ben; Argin; Robert; Henry Black; Sam; Lymus; Frederick; David (alias Davis); Anatole; Jefferson; Hammel; Steven; Tom; Ben; Rose and her two children Caliste and Edward; Eliza; Nancy and her two children Guillamme and Peggy; Sarah and her three children Chedric, Henry, and Sarah; Frank; Lydia alias Adelaide; Betsy alias Garielle; Clara; Helen; her three children Louisa; Aimee; Cesarine; Violette; Ernestine; and her child Bacchus; Rachel; Leontine; Nancy; Nancy and her child Harriet; Bassine (alias Marienne); Kitty; and her children Helena, Solomon, and Louis; Letty; Cecilia; Lucy; Florence; Henrietta; Eleonor	1850	Plaquemines Parish, Conveyance Book 4, p. 469, 1850/07/12
Marigny, Bernard	land and the following individuals: Blaise; Gilles; Ben; Charles; Augustus; Allen; Riny; Henderson; Grand Olivier; Olivier; Grand Henry; Ephraim; James; Isaac; Garry; Thom; Anthony; Little Henry; William; Peter; Randall; Alli; Manuel; Sandy; Gorman; Brutus; Lubin; Taliba; Augustin; Campre; Thomas; Michel; Bonann; Pilate; Soleman; Ondon; Phaeton; Francois; John; Grande Diana; Petite Diana; Marthe, Elvy; Agnes; Ammy; Lucinda; Polly; Grande Marie; Terry; Fanny; Susanne; Little Fanny; Charlotte; Little Mary; Rachel; Jeanne; Phebee; Jucie; Julienne; Lisa; Aimee; William; Sam; Miner; Frank; Elisa; Charles; Fenton; Maria; Denis; Marie Covington; Marie Bill; Biguy; John Maguan; Marriam; Grande Juan; Aimer; Colutin, Theodore; Manuel; Ackrel; <i>Pelam</i> ; Sam; Sam; Camil; Jacob; Henry, Ben, <i>Laon</i> , Davie; Squire; Celestin; Perry; Adam; Anna and her unnamed child; Jane; Leocadre; Marthe; Mathilde; Gaines; Patrina; Harry; Randall; Allen; Anny; Ersis; Sam; Peter Manuel; Petite Anna; Henriette; Lariane; John	1836-1845	Tulane University, Citizens Bank of Louisiana Papers, 1834-1914, Folder 1: 1836/06/23, Citizens Bank Minute Book No. 5: 1843/01/07; Plaquemines Parish, Mortgage Book R-4, p. 315, 1845/10/28; St. Tammany Parish, Book 64, p. 479, 1845/10/28
Reggis, Charles	unnamed individuals	1834	Tulane University, Citizens Bank Minute Book No. 1: 1834/07/22
Saul	unnamed individuals	1834	Tulane University, Citizens Bank Minute Book No. 1: 1834/06/26

Owner	Mortgaged Collateral	Dates	Source
Stackhouse, W. and H.	Five Oak Grove plantation, New Hope Plantation, land, and the following individuals. Abraham Knox; Abraham <i>Boukrouit</i> ; Mary Jones; William; Bill; <i>Coradon</i> ; Kate, Henry; Phelia; Lucy and her unnamed child; Perry; Milly; Angelina; Julia, Roland; Prude; Lewis Bradley; Phil; Deer Creek Jesse; Wilford; Axy; Crockett, Solomon, Arthur; Isidore; Humphrey; Colbert; Sarah and her unnamed child; Henriette and her child Nancy; Omaretta; Feliz Guillaume; Fanny and her four unnamed children; Nancy; Joe; Deek Kite; John; Lewis; Little Phil; <i>Jaonna</i> ; Ephraim, Sully; Jim; Squire; Theodore; Ackrel; <i>Telan</i> ; Sam; Daniel; Jacob; Henry; Ben; <i>Lanon</i> ; Davis; Celestin; Adam; Allen; Fanny; Antoine; Eugene; Claire; Jane; Leocudre; Martha; Anny; Mary; Aimee; Anna; Lorianne; Joe; James; Thom; Peppee; Tom; Phill, Peter; Sam; Henry; Jackson; Mary; Isaac; Jacke; Ned; Bazile; Raymond; Rachel; Adam; Honore; Laurent; Theodore; Pegne; Petion; Camille; Acknel; Felan; Sam the priest; Tom; Daniel; Jacob; Henry; Ben; Lanon; Davis; Celestin; Perry; Adam; Allan; Fanny; Antonio; Eugene; Eloise; Jane; Lucinda; Martha; Patience; Anny <i>Burtre</i> ; Mary; Aimee; Sarah; Anna; Lucianne; <i>Jour</i> (alias Joe), James; Thom; Raymond; Margarita; Joseph; Philomon; Henrietta; Charles; Heloise, Marianne; Celestin; Pierre; Frozine; Constance; Celestin; Joseph; Lannon; Francois; Dotreville; Victor; Dorothee; Rob; Melite; Pauline; Rose; Louis; Joe; James; Therese; Mariette; Edouard; Augustin; Baptiste; Francois; Eulalie; Peter; Dick; Tom; Bill; Lucile; Lucile Joe; Henry; Phoebe; Rachel; Mary; Ledy; Olivia; Charlotte; Jean; <i>Valcone</i> ; Charles; Albert; Henry Meyer; Long John; <i>Colonel</i> ; Celeste; Tom; Ursine; Antoine; Bazile; Raymond; Lloyd; Rachel; Adam; Honore; Laurent, Theodore; <i>Regan</i> ; <i>Petion</i> ; Camille; Raymonde; Marguerite; <i>Eclante</i> ; Babet; Joseph; Philemon; Henrietta; Charles; Helios; Ursin; Antonio; Marianne; Celestin; Pierre; Frazine; Constance; Casimir; Celestine; Joseph; Janen, Francoise; Detreville; Carter; Porachi; Bob; Nedlite; Zanlin; Rose; Louise; Zoe; Hiers; Fox; James; Theresa; Henriette; Edward; Augustine; Baptiste; Francis; Evalle; Brisson; Peter, Criske; Jean Congo; Tom; Bill; Lucille; Lucille Joe; Fanny; Phoebe; Rachel, Mary, Liddy; Olivia; Charlotte; Jean; Valcour; Charles; Alberte	1851-1865	Tulane University. Citizens Bank Minute Book No 7: 1851/11/11, 1852/01/13, 1852/01/17, Citizens Bank of Louisiana Papers, 1834-1914, Folder 4, 1865/03/24, Folder 5, Plaquemines Parish, Conveyance Book 6, p. 430, 1852/10/13; Mortgage Book B, p. 293, 1856/10/15

Owner	Mortgaged Collateral	Dates	Source
Starck, Mary F	land and the following individuals: Billy Ruffin; Scylla; Ben, James Ruffin; Nelly; Fanny; Godfrey; Francois; Little Fanny; Jack; Becky; Sam; Nancy; Hick; Peggy; Scipio; Solomon, Little Nelly; Grandisson, Dick; Ben; Richard; Mary; Alexander; Melita; Betsy; Susannah; Susan; Betsy; Lydia; Dick; Lucy Jane; Lydia; James Perry; Rose; Emilia; Joe; Sally; Gradisson; Hannah, Meary; Frankie; Colbert; Jim, Kitty; Big Ben; Little Ben; Alfred; Emilia; Isaac; Aimee; Harriet; Winny; Edward; Littleton; Harry; Delfy; Fanny; Adeline; Louise; Rachel; Emily; Sarah; John; Elisa; Thomas	1848	Plaquemines Parish, Mortgage Book R-4, 1848/03/22
Stinson, Joseph	the following individuals: Ben; Dary; Jane; Grandison; Ron; Anna; Ben; Suzanne; Charlotte; Serina; Lucy Jane; Mithia; Suzan; Dick; Peterson; Little Betsy; Same; Joe; Colbert; Kitty; Alfred; Littleton Ben; Jeane; Amy; Harriet; John Tilman; Theodore; Fanny; Jackson; Henry; Cyrus; Louisa; Rachel; William; Handy; Sam; Big George; George; John Richard; Presecilla; Ellen; Emily; Winny; Edward; Jefferson; Harry; Willis; Adeline and her child Alberty; Julia; Jim Martin; Washington; Frank; Hilary; Grace; Guillame; Nathan	1857	Tulane University, Citizens Bank Minute Book No. 8: 1857/01/02; Plaquemines Parish, Mortgage Book B, p. 315, 1857/01/17
Verbois, N	land and unnamed individuals	1859	Plaquemines Parish, Mortgage Book B, p. 458, 1859/03/11
Wilkinson, Catherine; Joseph Stimson	the following individuals: Joseph; Nancy; Jamie; Little Nelly; Old Nelly; Francis; Peggy; Buck; Lydia; Alexander; Betsy; Ben; Mary Jones; Margaret; Sally; Mary Ann; Martha; Hannah; Suzanne; Lucy Jane; Colbert; Kitty; Little Ben; Alfred; Jane; Winey; Thurston; Sam; unnamed child; Edward; Littleton; Harry; Fanny; Willis; Jackson; Adeline; Amy; Dailialia; Ellen; Hamilet; John Tilman; Emily; Louisa; Rachel; Julia, William; Jim Martin; Sandy; Washington; Sam; Frank; Big George; Henry; Albert; Gras; unnamed child; Hilary George; Riddle; Richard; Ben; Dary; Jane	1857	Tulane University, Citizens Bank Minute Book No. 8: 1857/01/02
Blush, John	49 unnamed individuals	1841	Tulane University, Citizens Bank Minute Book No. 3: 1841/03/11

Pointe Coupee Parish

Owner	Mortgaged Collateral	Dates	Source
Clairborne, Ferdinand	plantation, land, and the following individuals: Phil, Ed; Robert; Ketly; Barrus; Dempse; Charlotte; Fanny, Henry; Melina, William; Mary; Joe; Francis; Creacept; Claiborne; Marshall; Catherine; Cornelia; Julia; Francis; Laura; Henriette; Bishop; Alfred; Mariah; Desire; Arch; Oscar; Celia; Martin; Little Creacy; Celestin; Rhody; Madeline, Alexander; Fill; Lewis; Rebecca; Cranville; Harriet; Emma; Flecher; Suzan; Rene; Allen; Caleb; Polly; Louisa; Benedict; Francoise; Sibby; Marcelin; Ambroise, Terence; John; Walker; Viney; Big John; Ann; Jack; Alex; Minor; Hamrole; Israel; Little Mary; Washington; Tom; Allen; Little Charlotte; Harrisson; Rachel; Bambre; Edmond; Foster; Eliza; Pusle; Mimy	1861	Tulane University, Citizens Bank Minute Book No. 8: 1861/04/11; Pointe Coupee Parish, Legal and Conventional Mortgage Book H, p. 325, 1861/04/14, West Feliciana Parish, Mortgage Book Q, p. 92, 1861/04/13
Cooley, Ebenezer; Mary Elizabeth Collins; and John Holmes	Mary plantation and the following individuals: Richmond; William Hunter; Jack; William Thomas; Wades; Xavier; Madison; Jean Baptiste; Black Jim; Joe; Marshall; Henry or Harry; Lamon; Victor or Joe; Abraham; Allen; Maria; Mathilda; Era; Yellow Sally and her child Howard; Paul; Andrew; Fanny; George; Louisa; Sara; Sally Jackson; Jackson, Isaac; Eliza	1859	Tulane University, Citizens Bank Minute Book No. 8: 1859/06/27; Pointe Coupee Parish, Legal and Conventional Mortgage Book G, p. 641, 1859/07/05
Gwynn, Samuel	unnamed individuals	1837	Tulane University, Citizens Bank Minute Book No. 3: 1837/05/20
Hall, George Otis; Alphonse Miltenberger; Gustave Miltenberger	9 unnamed individuals	1857	Pointe Coupee Parish, Legal and Conventional Mortgage Book H, p. 173, 1857/05/11
Harrison, John	plantation and 67 unnamed individuals	1860	Tulane University, Citizens Bank Minute Book No. 8: 1860/01/23
Hubert, Louis A.	land and the following individuals: James Allen; Charles Clayton; James Nett; Sam; Edward; Washington; George Wart; Albert; Isaac; John; George; Charles; Betzy; Maria; Lucy; Sally Anne; Flora; Fanny; Sally John; Eliza Roves; Helene; Julia; George; Mary; Eveline; Jane; Eliza; Mara; Peter	1836	Pointe Coupee Parish, Legal and Conventional Mortgage Book C, 1836/12/31
Knapp, Mrs. Sophia	plantation and the following individuals: John Suzan and his wife Nancy; Stevens; Joe; Hannah and her child Christmas; <i>illegible</i> ; Frank; Toby; Ann; Sarah; Billy; Genny, Jane	1854	Tulane University, Citizens Bank Minute Book No. 7: 1854/05/05; Pointe Coupee Parish, Legal and Conventional Mortgage Book F, p. 161, 1854/05/06
Ledoux, Amaron and George Hall	the following individuals; Randall; Beverly; unnamed individuals	1841	Pointe Coupee Parish, Legal and Conventional Mortgage Book C, No. 1365, 1841/03/18

Owner	Mortgaged Collateral	Dates	Source
Miltenberger, Ledoux; J Patrick	plantation and unnamed individuals	1860	Tulane University, Citizens Bank Minute Book No. 8: 1860/11/08
Mocenu, Mrs. Adeline	plantation and the following individuals: Ben, Jean Pierre; Paul, Robert; Jim; Arthimis; Caroline; Martha; Ruthe; Louisa; Marie <i>illegible</i> ; Remi; Celestin; and three unnamed individuals	1837	Pointe Coupee Parish, Legal and Conventional Mortgage Book C, No. 651, 1837/10/28
Morrison, Jacob Haught and Virginia Julia Seghers	plantation, land, and the following individuals: Pollo; Isaac; Prince; Rebecca; Prescilla; Scipio; Daniel; Will; <i>Harotinus</i> ; Phillis; Ancila or Amelia; Rushwood; Mary; Emma; Suc; George; Caesar; Michel; Rose; Kate; Henry; John Baptiste; Victoria; Stephen; Buck; Paulina; Sam; Dick; Robon or Robert; Milton; Cynthia; Susan; Henry; John Trusbee; Hannah; Big George; Mary; Laurear or Laurent; Martin; Rosella; Harry; Presillia; Lucy; Lewis; Michel; Adele; Julienne; John; Big Mary; Delia; Madelaine; Virginia; Gustine; Lyman; William; Paulin; Mary Tom; Charles; Little George; Marallin or Marcellia; Ann; Bazile; Cecilia; Sylvia; Tom; Cecilia; unnamed individual; Hard Times; Victoria; <i>Symoora</i> ; Mary Jane	1860	Pointe Coupee Parish, Legal and Conventional Mortgage Book H, p.110, 1860/02/27; Pointe Coupee Parish, Legal and Conventional Mortgage Book H, p. 188, 1860/04/26
Moore, Philip M. and Mary Elizabeth Collins	plantation and the following individuals: Dick; Daniel; Joe; Esan; Thirence; Bazil; Prince; Milly; Arsene; Hannah; Lewis; Germain; Abesse; Mathilde; Felicity or Prince; Charlotte; Amelia; Azilia; Etienne; Fanny; Frivoh; Old Hannah; Ponpon; Celia; Sarrah; Zaire or Rachel; Theresa; Milto	1859	Tulane University, Citizens Bank Minute Book No. 8: 1859/01/10, 1859/06/27; Pointe Coupee Parish, Legal and Conventional Mortgage Book G, p. 547, 1859/01/17, Pointe Coupee Parish, Legal and Conventional Mortgage Book G, p. 641, 1859/07/05
Morgan, Charles and Hyacinthe Allain	plantation and the following individuals: Archer; Y. Case; Peter; George Walden; Isaac; Solomon; Henry <i>illegible</i> ; Hypolite; Jean Pierre; Javier; Jean Baptiste; <i>Alisies</i> ; Joe; Rob; Lee; <i>Fransis</i> ; George; Pierre; George Langdon; Henry; Amos; John; Black John; Jon Fuller; American Bill; Perry; Upton; Jessup; Remond; Walker; Gabe; <i>Punch</i> ; Polly; Ally; Rachel; Mary Ann; Isabel; Nancy; AnnMarie; Victorine; Clare; Grace; Mary; Bobby; Lucey; Milley; <i>illegible</i> ; Silbey; Rosine; Dolly; Fanny; Hanny; <i>Muckey</i> ; Mary Ann; Caroline; Rickey; Nancy; Lucey; Amanda; Louise; Susan; Lucy; Sibricy; Jeneh; Eliza; Malriney; Lindey; Lied; <i>Hipollan</i> ; <i>Poladne</i> ; Hannah; Jacob; Pierre; Denis; Joe; Susan; Molinda; Gabriel; Philip Patience; Virginia; Harrison; illeg.; Jean, Ellick; Cozy; Little Claire; Mary; Jean Louis; Charity; Henry; Stephen; Jonke; <i>illegible</i> ; and 7 unnamed individuals	1838	Pointe Coupee Parish, Legal and Conventional Mortgage Book C, p. 753, 1838/05/31

Owner	Mortgaged Collateral	Dates	Source
Simmes, Bennett and Mary Jones Kirk	plantations, land, and the following individuals: Godfrey; Drady; Flora; Ted; Lewis; Godfrey Jr., Cross; Marth, Pierce, Ignatius; James; Richmond; Daniel; Mary Ann; Scania; Betty; Moses, Sarah; Lucinda; Claim and his wife Suzan; Aleck; Ann; Ciam Jr ; John, Menia; Lely; George, Lucy; Ellis; Joe; Harriet; Robert; Christian; Julia, Mary Turner, Mary Brown; John; Rebecca; Madison; Lewis; Rose; Chapman, Tracy; Joe; Cora; Agnes; Amanda; Dennis; Rachel; Marthas; Mary Ann, Eugene; Marceline, Norwood and his wife Brund; Henry; Martin and his wife Doly; Dick; Rosaline; Albert; William; Martha; Destin (alias Adestin); Field; Paul; Mary; Robert; Charlotte; Ben; Wamson; Sarah Ann; Billy; Ellen	1857	Tulane University. Citizens Bank Minute Book No. 8: 1857/09/28; Citizens Bank of Louisiana Papers, 1834-1914, Folder 5; Pointe Coupee Parish, Legal and Conventional Mortgage Book G, p 291, 1857/10/07
Smith, Montgomery	land and the following individuals: Gilbert; Randall; Kielen; Lorenzo; Little Randall; Maria; Ann; Eliza; Ellen	1837-1839	Tulane University. Citizens Bank Minute Book No. 2: 1837/05/17, 1839/03/12, 1837/11/16; Pointe Coupee Parish, Legal and Conventional Mortgage Book C, No. 628, 1837/05/29, No. 662, 1837/12/13; No. 799, 1838/08/20
Sorid, Eugenia M.	plantation and the following individuals: Abram; Allen; Bob; Coleman; Dave; Elleck; Frank; George; Henry; Jack M; Lake; Moses; Nace; Richmond; Sandy; Aggy; Chancey; Dianah; Elisa; Sarah; Virginia; Caroline; Elsey; Cynthia Ann; Noah, William; Winny; Lucinda; Chancy; Christine; Isabella; Mathilda; Mary Ann; Roderick; Bob; Cuffy; Lydia	1859	Pointe Coupee Parish, Legal and Conventional Mortgage Book H, #50, p. 24, 1859/12/08
Taylor, William and Lucy	plantation and the following individuals: Eliza; Taylor; Davis; Troy; Nancy; Parrot; Letitia; infant; Richard; Siby; Mary Ann; Nancy; Jane; Lucinda; Winney; Tom, cook; Jenny; Francis Black; Matilda Taylor; Tom Black; Susan; Loyd; Joe; Peggy; James; Jack; Mars; Betty; Stephen; Sina; Sophy; Judy; Anthony; Luke; Gins; William; Henry; Mary; Sarah; Parris Black; James; John; Willis; Sanny; <i>illegible</i>	1838	Pointe Coupee Parish, Legal and Conventional Mortgage Book C, No. 693, 1838/02/15
Williams, Henry A., John and Robert Boyd	plantation at Bayou Letsworth and the following individuals: Henry; Hannah; Adam; Francis; Ben; Washington; Adam; Letty; Biddy; Harriet and her child Louis; Ely; Polly; Judy and her child Mary; Emily and her child Eliza; Joe; Letitia; Joe; Lamb; Randall; Nancy and her child John; Davy; Jenny and her child Louisa; Mathilda; Frank	1830-1853	Tulane University. Citizens Bank Minute Book No. 6: 1850/07/15; Citizens Bank Minute Book No. 7: 1853/05/19; Ascension Parish, Mortgage Book 6, p.428, 1838/03; Pointe Coupee Parish, Legal and Conventional Mortgage Book C, No. 694, 1838/02/26, No. 784, 1838/07/18, Legal and Conventional Mortgage Book E, p. 376, 1850/08/12

Owner	Mortgaged Collateral	Dates	Source
<u>Rapides Parish</u>			
Archinaud, Cesar	plantation and 47 unnamed individuals	1838-1848	Tulane University, Citizens Bank Minute Book No. 2 1839/03/21, 1838/11/08, M-1847, Citizens Bank Mortgage Book
Archinaud, E.	Joseph Gale; James Johnson; William McClain; Hannah Bell; Ann; Young Dave; Young Henry; Young Harriet; George	1860	Tulane University, Citizens Bank Minute Book No. 8; 1860/12/27
Archinaud, Francois	land and unnamed individuals	1839	Tulane University, Citizens Bank Minute Book No. 2; 1839/03/21
Archinaud, Richmond and Evariste	the following individuals: Seipio; Peter; Joe; Marck; Charles; Henry; Dick; Thomas; Ellick; Wilson; Tom; Edward; George; Oliver; James; Noah; Jerry; Jamen; Joseph; Lucy; Grace; Judith; Isabel; Louisa; Minda; Selvey; Harriet; Nelly; Anny; Naney; Annette; Jude; Martha; Mary; Hannah; Rose; and Louisa	1838	Tulane University, Citizens Bank Papers, Folder 5, 1838/02/24
Gasseau, Mrs. J. B.	plantation and 19 unnamed individuals	1853	Tulane University, Citizens Bank Minute Book No. 7; 1853/04/07
Gill, A B and W. H	plantation and unnamed individuals	1843	Tulane University, Citizens Bank Minute Book No. 1; 1835/03/27; Citizens Bank Minute Book No. 5; 1843/01/28, 1843/08/19
Ryan, Michael	plantation and unnamed individuals	1858-1861	Tulane University, Citizens Bank Minute Book No. 8; 1858/07/01, 1861/02/11
Sullivan, J. B.	plantation and 108 unnamed individuals	1859	Tulane University, Citizens Bank Minute Book No. 8; 1859/01/27
<u>St. Bernard Parish</u>			
Allard, G N; E. Durrin	unnamed individuals	1834-1837	Tulane University, Citizens Bank Minute Book No. 1 1834/08/29, Citizens Bank Minute Book No. 2; 1837/08/03
Beauregard, L. F.	unnamed individuals	1834	Tulane University, Citizens Bank Minute Book No. 1; 1834/07/22
Bienvenu, Antione	unnamed individuals	1834	Tulane University, Citizens Bank Minute Book No. 1; 1834/10/20
Bienvenue, L	plantation and 16 individuals, including the following: Peter; Euphsosine; Alistine and her daughter Angel; Angel's daughter Laudine; Dilli; Mark; Charles Banks; Peter Lasker; Joshua; Sophie	1834-1856	Tulane University, Citizens Bank Minute Book No. 1; 1834/09/20; Citizens Bank Minute Book No. 8; 1856/11/04; M-1847, Citizens Bank Mortgage Book

Owner	Mortgaged Collateral	Dates	Source
Canaby-Peyroux, Aime	plantation and unnamed individuals	1844	Tulane University, Citizens Bank Minute Book No. 5: 1844/07/08
Darcantel, Charles and Fred E Roy	22 individuals including Joe, Petit Joe; Joseph; Severin; Ovide; Henry; Alfred; Charlotte Creole; Rosn; Laurette	1856	Tulane University, Citizens Bank Minute Book No. 7: 1856/05/20
<i>Darcantel, Henry</i>	unnamed individuals	1834-1843	Tulane University, Citizens Bank Minute Book No. 1 1834/09/20, Minute Book No. 5 1843/11/20
DesBouchel, Victor	unnamed individuals	1834	Tulane University, Citizens Bank Minute Book No. 1: 1834/09/20
Ducros, L. and J.	plantation and 22 individuals near Bayou Boeuf including: Lonnie; Mary; Caty; Amis; William; Jesse	1862	Tulane University, Citizens Bank Minute Book No. 8 1862/02/10
<i>Freme, B</i>	unnamed individuals	1834	Tulane University, Citizens Bank Minute Book No. 1: 1834/09/20
Heligsbury, S. G.	land and unnamed individuals	1838	Tulane University, Citizens Bank Minute Book No. 2: 1838/02/21
Hiligsberg, J.	brickyard and 38 unnamed individuals	1851	Tulane University, Citizens Bank Minute Book No. 6: 1851/03/11
Hiligsberg, L. G.	unnamed individuals	1834	Tulane University, Citizens Bank Minute Book No. 1: 1834/09/03
<i>Jordan and Reggio</i>	121 unnamed individuals	1855-1857	Tulane University, Citizens Bank Minute Book No. 7 1855/02/02, Citizens Bank Minute Book No. 8: 1857/01/30
<i>Jordee, P.</i>	plantation and unnamed individuals	1842	Tulane University, Citizens Bank Minute Book No. 4: 1842/01/22
Lanquilles, brothers	7 unnamed individuals	1834-1842	Tulane University, Citizens Bank Minute Book No. 1: 1834/09/20; Citizens Bank Minute Book No. 4: 1842/04/04
<i>Lorin, illegible</i>	plantation and unnamed individuals	1842	Tulane University, Citizens Bank Minute Book No. 4: 1842/06/02
Olivier, Eliza	land and 22 unnamed individuals	1857	Tulane University, Citizens Bank Minute Book No. 8: 1857/03/06
Peyroux, Emile	land and the following individuals. Mathilda; Dorestan; Celestin; Cecile; Isaac Essex; Henry; Isaac	1851-1854	Tulane University, Citizens Bank Minute Book No. 6: 1851/02/18; Minute Book No. 7: 1854/06/16; Citizens Bank of Louisiana Papers, 1834-1914, Folder 3: 1854/06/29

Owner	Mortgaged Collateral	Dates	Source
Peyroux, P Oscar	11 individuals, including: Celestine, Marguerite; Felicite; Mirthe; Felicia; Francis; Sophie; Kathy	1834-1853	Tulane University, Citizens Bank Minute Book No. 1: 1834/08/22; Minute Book No. 6: 1846/08/2; 1850/06/18, 1850/06/25; Minute Book No. 7: 1853/11/15
Peyroux, Sylvain	Dosesthan and other unnamed individuals	1834-1851	Tulane University, Citizens Bank Minute Book No. 1: 1834/09/20, Citizens Bank Minute Book No. 7: 1851/09/16
Reaud, Pierre; V. Reaud	plantation and 41 unnamed individuals	1851	Tulane University, Citizens Bank Minute Book No. 6: 1851/01/21
Reggis, Mrs.	10 unnamed individuals including Mary and her unnamed child	1842-1851	Tulane University, Citizens Bank Minute Book No. 4: 1842/05/09, Citizens Bank Minute Book No. 7: 1851/11/25
Roy, Fred E.	land and 12 unnamed individuals	1856	Tulane University, Citizens Bank Minute Book No. 7: 1856/05/20
Szymanski, Y.; L. A. Marchand	plantation and unnamed individuals, including the following: Charles; Julie; Louis; Louisa; Isabelle; Congo; Henrietta; Polka; Joe; Janvier; John; Sam; Rubin; Peter	1852-1855	Tulane University, Citizens Bank Minute Book No. 7: 1852/03/16, 1855/04/27
Vangibben, Henry	plantation and unnamed individuals	1860	Tulane University, Citizens Bank Minute Book No. 8: 1860/02/27
Villavaso, Michel; Joseph and Michel Cantrelle	land and the following individuals: Prince; Saxon; Hampton; <i>illegible</i> ; Frank; Dauty; Thom; January; Willis; <i>Mynus</i> ; Wilson; Brand; Isaac; Billy; Sam Carpenter; David; John Grey; Felician; Charles; Nelson; Thom Byrne; Jack <i>Arcucil</i> ; Jack <i>Cucullin</i> ; George; Adams; Alexis	1841-1853	St. James Parish, Book 19, p. 621, 1841/08/19; Tulane University, Citizens Bank Minute Book No. 1: 1834/09/20; Minute Book No. 5: 1846/03/26; Minute Book No. 6: 1846/10/30; Citizens Bank Minute Book No. 7: 1853/03/10

Owner	Mortgaged Collateral	Dates	Source
St. Charles Parish			
Boulogny, D.	plantation and the following individuals: Jean Louis; Bernard, Celestin; Bob; Henry; Elizabeth; <i>Mevanthe</i> ; Fanny and her son Albert; Sally; Long John; Bill; Jules; Abraham; Meg; Daniel, John Davis; John Tilewton; Ben; Jacob; Harry; Sam Williams; Bandal, Yellow Harry, Yellow Abraham; Mary; Mary Louise; Louisa; Louise, Zoe <i>Silvie</i> ; <i>Delly</i> ; <i>Linda</i> ; Sophie; Adolphe; Cloe; Felouise; Octave; Eugene; Peggy; Joanna; Auguste; Elizabeth; Ainee; Justine; Sarah; Asia; Benard; Louis; Madeline and her child Lucinda	1859	St. Charles Parish, Mortgage Book 11 p. 37, 1859/03/8
Boussel, Th	the following individuals: Edmond; Elleelse	1855	St. Charles Parish, Mortgage Book 10, p. 77, 1855/04/0
Campbell, Parker	land and the following the following individuals: Jacob; Abram; Archy; Aleck; Black Sam; Bill; Fisher; George; Hepps; Merraday; John; Jordan; Thos Lune; Manuel; Moses; Moses Harris; Major; Matthew; Philip; Phill; Peter; Solomon; Sam; Toby; Talleyrand; William; Washington; Aussie; Caroline; Lisa; Marianne; Nancy; Jodie; Sally; Lalie; Maria; Rachel; Angele; Vincent; Suzanne; John; Milite; Edward; Julianne, Sarah; Pierre; Betsy; James; Richard; Paul	1859	Tulane University, Citizens Bank Minute Book No. 8: 1859/02/03; St. Charles Parish, Book B, p. 370, 1859/0/05
Darpy	the following individual: Sarah	1859	Tulane University, Citizens Bank Minute Book No. 8. 1859/07/11
Davis, Ezra	plantation and unnamed individuals	1859	St. Charles Parish, Mortgage Book 11, p. 68, 1859/11/14
Fortier, Mrs. A	plantation and unnamed individuals	1848	St. Charles Parish, Mortgage Book 7, p. 71, 1848/0/16
Fortis M. A	land and 10 individuals, including the following: Auguste; Auguste	1851-1856	Tulane University, Citizens Bank Minute Book No. 7: 1856/03/14, 1851/12/23
Garcia, Felix	plantation and the following individuals: Bella; Henry	1847-1850	St. Charles Parish, Mortgage Book 7 p. 66, 1847/11/13, p. 39, 1847/06/1, p. 40, 1847/0/08; Conveyance Book A, p. 131, 1850/06/05

Owner	Mortgaged Collateral	Dates	Source
Garcia, Felix, Charles, Theodule, and Elvine Rousset, Julian Vienne	land and the following individuals: Abraham; Bill; Jacob; Peter; Jordan; Madison (alias Marcelle), Capitan Fish, Baptiste; Sam; Philippe; Edmond; Marianne; Suzanne and her children Jean and Nelly; Rachel and her two children Angile and Victor, Liza (alias Lily), Sully; Caroline, Toby; Talleyrand; Nellie; Nathan; Arthur Field; Sam Carroll; Alexander Jackson, Archer Carroll; George McHenry; Moses Harris; Henry Nazareth; Henry Hews; Betsy Gatewood and her children Marth and James; July Ann Johnson and her unnamed son; Eppse Johnson; Solomon Jones; William Denning; Henry Whetson; Len Thompson; Moses Howell; Rhody Flagg; Major Gillian; John Ashby; Nancy Rivers; Sam Red; Amy; Washington Spencer; Edmund; Allick	1853	St. Charles Parish, Mortgage Book 9, p. 111, 1853/01/03; Conveyance Book A, p. 174, 1853/01/03; Tulane University, Citizens Bank Minute Book No. 7, 1854/08/18
Haydel, Bd.	land and the following individuals: William; Rene; Peter Jean; Jacob; Gran Jean Louis; Edmond; Phanor; Victorise (alias Groton); Sebere; Henrietta; Marie and her three children Julie, Lewis, and Anais; Ursula; <i>Julia</i> ; Michael; Laurand (alias Captain); <i>Felossese</i> ; Adele; Heloise; <i>Cital</i> ; Adeline; Pierre; Zoe and five unnamed children	1846	St. Charles Parish, Mortgage Book 7, p. 84, 1846/08/05
Labranche, Alcee	plantation and the following individuals: Nomme; Bartlett and unnamed individuals	1834-1851	Tulane University, Citizens Bank Minute Book No. 1: 1834/12/26, Minute Book No. 5: 1843/05/24, Minute Book No. 6: 1849/10/30, 1851/06/17, St. Charles Parish, Mortgage Book 9, p. 30, 1851/08/30
Labranche, L.	unnamed individuals	1834	Tulane University, Citizens Bank Minute Book No. 1: 1834/07/22
Landreaux, Mrs. H.	unnamed individuals	1847	St. Charles Parish, Mortgage Book 7, p. 184, 1847/3/7
Lansaux, Adele Rixner	land and the following individuals: Daniel; John; Anne and her <i>Felonise</i> , Pierre, and Jim; Andrew; Michael	1860	St. Charles Parish, Mortgage Book 11, p. 185, 1860/10/31
Logan, Samuel	Eddy and his daughter Patsy; Masin; Sandy	1849	Tulane University, Citizens Bank Minute Book No. 6: 1849/06/07, St. Charles Parish, Mortgage Book 9, p. 16, 1851/06/04
Lurupuru , W. A.	plantation and 40 unnamed individuals	1842	Tulane University, Citizens Bank Minute Book No. 4: 1842/02/09
Mailles, George	plantation and unnamed individuals	1860	Tulane University, Citizens Bank Minute Book No. 7: 1860/04/04

Owner	Mortgaged Collateral	Dates	Source
Piscros, Francois H	plantation and the following individuals: Lewis; Anson; Ben; Colos; Hatani; Laurence, Francois; Gabriel, Hanalin; Charles; Joe; James Green; Jaques; Lazaou; Harry, Henry; Henry Holloway; Abraham; Michael; Alepis; Sandy; Richard; Jean Baptiste; David Livandais; Sawyer, Nat; Moses Holloway; Macke; Andres; Gross Davis; Richard Congo; Hyacinth, Anderson; Pierre; Gros Neilson; Ludolpohi; Baptiste; Hasse; George, Lydia; Helene; Fanny; Judith; Frances; Petvone; Sally; Sylvie; Louise; Ursula; Polly Classear; Grosse Polly; Charity; Anna; Trippy; Grosse Anna; Emilie; Jasse; Martha; Maria; Rachel; Paul; Robertson; Joseph, Robess; Francois; Henry; Sesaphine; Antoinette; Emilie; Eugenia; Celestine; Francois, Sally; Suzette	1838-1853	Tulane University, Citizens Bank Minute Book No. 1: 1835/03/27, Citizens Bank Minute Book No. 5: 1843/11/02, Citizens Bank Minute Book No. 7: 1853/06/23; St. Charles Parish, Mortgage Book 7, p. 14, 1835/04/20
Taylor, Lucy Thorn,	land and the following: Bill, Maria; Ben	1853	St. Charles Parish, Conveyance Book C p. 189, 1853/04/28, St. Charles Parish, Mortgage Book 11, p. 256, 1853/04/28
Walker, A. W., J. T. Piseros, Bayles and Victoria Lebranche; Thomas Bisland	plantation and the following individuals: <i>Leurs</i> ; Antoine; Hilaire; Francois; <i>Marcuire</i> , Charles; Joe; Jack; Henry; <i>Colad</i> ; Richard; Jean Baptiste; Davis <i>Louadais</i> ; <i>Maidse</i> ; Pierre; Baptiste; George; Paul; Robert; Haul; Little Francois; Bastier; Ursin, Jean; Prosper; Sam; Ledge; Gros Davie; Lazarus; Alex; Andre; Hyancinth; Sally; Julie; Louise; <i>illegible</i> ; Polly; Charity; Anna; Rachel; Jeanne; Martha; Emelie; Celestine; Lydie and her daughters Coralie, Little Lydie, and Justine; Melinda; Job <i>Pranson</i> ; Robert Jackson; Bazile; Gabriel; Ned; John Aime; Isaac; Pierre, Helene; Aaron; Adam; Aduni; Alfred; Anderson; Anthony; Althea; Bartlett; Buck; Burton; Caldo; Chapman; Charles; Christopher; Eliza; Edwin; Eugene; Frank; Gurga Munsford; Giles; Henry; Humphrey; Jacob; Big James; Little James; Jessy; Joe; Big John; John; John C.; Little John; Josiah; Jordan; Joe; Juntum; Gerry; Lundum; Jenny; Manuel; Michael; Ned; Nickerson; Norman; Patrick; Paul; Phette; Pierre; Solomon; Sam; Sandy; Stanny; Stephen; Sawny; Thurston; Addam; Abey; Candide; Charlotte; Frances; Little Henrietta; Big <i>Big Maria</i> ; <i>Little Maria</i> ; <i>Marie</i> ; <i>Marie Jeanne</i> ; <i>Mary</i> ; <i>Matilda</i> ; <i>Martha</i> ; <i>Pilagie</i> ; <i>Sally</i> ; <i>Sarah</i> ; <i>Sylvie</i> ; <i>illegible</i> ; <i>Ursula</i> ; <i>Victoria</i> ; <i>Jdee</i> ; <i>Susannah</i> ; <i>Rachel</i> ; <i>Louisa</i> ; <i>Toby</i> ; <i>Edouard</i> ; <i>illegible</i> ; <i>William</i> ; <i>Sylvie</i> ; <i>Zoe</i> ; <i>Sissy</i> ; <i>Elizabeth</i> ; <i>Lidia</i> ; <i>Phrasim</i> ; <i>Manuel</i> ; <i>Beamais</i> ; <i>illegible</i> ; Aleck; Sarah; Emilie; Elsey; Jeanne Boone; Toby; Harriet; Lydie; Nanny; James; Marie; Sambo; Adam; Eve; Henry; Jean Baptiste; Bastien; Francois; Oscar; Hilarie; Sally; Ned; Uriah; Libby; Caroline; Phillip; Susan; Maria Yellow; Frank; Bella; Samson; Venus; William, Linda; Hanes; Beck; <i>Charleston</i> ; Lavinia Maria; Dorsey; Hyacinthe; Paul; Annah; Rachel; Sam; Solomon; Maney; Rose, Ursine; Julia	1852-1857	Tulane University, Citizens Bank Minute Book No. 7: 1853/06/23, Citizens Bank Minute Book No. 8: 1857/04/23, 1857/06/01; St. Charles Parish, Conveyance Book A, p. 203, 1853/07/15, p. 148, 1852/09/01; Conveyance Book B, p. 263, 1856/02/20, Mortgage Book 9, p. 161, 1853/07/15

Owner	Mortgaged Collateral	Dates	Source
<u>St. Helena Parish</u>			
Kemp, Demcy	land and the following individuals William, Samuel; Henry; Anthony; George; Lewis; Thomas, Richmond; Albert; Harry; Hannah; Rose; Sophia; Sarah; Sam; Delphy, Debly; Mary, Priscilla, Kizzy, Martha; Charles; Ephraim, Anderson, Manda; Israel, Charlotte; Adaline; Benjamin; Frank; Susan; Norrell; Jacob; Dennes	1838	Citizens Bank of Louisiana Papers, 1834-1914 Folder 2, 1838/04/14
<u>St. James Parish</u>			
Aime, Valcour and Josephine Roman, Valerin Choppin	the following individuals: Grand Augustin; Charles Creole; Ben; Celestin; Julien; Gabriel; Kito; Tom; Lewis; Plato; Manuel; Petit Augustin; Auguste; Gros John; Jack; Sibra; Gros Jim; Georges Murray; Petit Jim; Charlot; Davis; Frank; John Cochen; Benjamin; Ned; Matt; Louis Davy; Jerry; Watson; Jaret; Henry; Adams; Jeorg Taylor; Gim Sim; Harrison; Charles Martail; Ben Lunette; Gros Louis; Petion; Nielisse; Theodule; Adolphe; Frontise; Rosette; William Cordounier; Baptiste; Susanne and two children; Poyon and Noel; Grande Isabelle; Magdeline; Eulalie; Marava and her child Juliette; Syhrie; Ketty; Dianah; Mathilde; Virginie; Marie; Henriette; Becky and an unnamed infant; Celeste and her three children Pierre, Celestine, and Antonine; Fanchennette and two children Eugene and Sally; Charite and her four children Francois, Cressey, Jasmin, and Jauri; Catharine and her two children Joseph and Cateau; Kesier; Heddy and her two children William and Bastin; Amiee; Nancy; Melicere; Liza; Francoise (La Grosse) and her two children Alexandre and Ceriasse; Euragie; Souky; Betsey; Juliette; Becky; Bony; Kety; Gilblas; Angelique and her unnamed infant; Francoise (Petit); Annette; Pichon; Gineriere; Kedy; Andre; Valere; Francis; Lubin; Sanape; Papillon; Charles; Mercure; Casimir; Marlborough; Cartonch; Smith; Hector; Piram; Cupidon; Jupiter; Ajax; Radamanthe; Polleux; Achille; Agobar; Baptiste; Toussaint; Rosette; Venus; Jeannette; Fanchon; Clotho; Mani; Hemide; Penelope; Martha; Zabille; Marinette; Abenite; Jeanie; Hibe; Hyacinthe; Cephale; Tounsered; Annah	1836 - 1860	St. James Parish, Book 15, p. 444, 1836/09/03, p. 464, 1836/11/03; Book 16, p. 43, 1836/12/28, p. 384, 1837/08/22; Book 17, p. 352, 1838/07/18, Book 17, p. 377, 1838/08/01; Book 28, p. 199, 1849/10/11; Book 27, p. 117, 1850/04/12; Tulane University, Citizens Bank Minute Book No. 2: 1838/03/14, 1838/03/27; Citizens Bank Minute Book No. 8, 1860/05/28
Arceneaux, Joseph Leon and Arthemise Bergeron	plantation and the following individuals: Lindor; John; Ned; <i>Naripe</i> ; Henry; Liza; Mary; Seraphine, Celeste; Adam; Laurette; Jean Baptiste; Martha; Gregoire	1837	St. James Parish, Book 16, p. 363, 1837/07/27

Owner	Mortgaged Collateral	Dates	Source
Armant, Family	the following individuals: Pompili; Charles; Robin; Flasian, Angelique; Agnes and her unnamed children; Clara; Isabelle; Caeraean; Ned; and unnamed individuals	1860	St. James Parish, Book 34, p. 193, 1860/02/27
Armant, Jean Baptiste and Rose Carmelite Cantrelle	plantation and the following individuals. Bambara, Camire; Baptiste; Pierre Sond; Tom Congo; Zamor, Michel; Lubin, Louis Congo; Adams; Jean Congo; Sharlot; David; Michian; Souvenir; William Petit; Alexis; Valere; Peter; Issac; Hector; Samson, Politho; Tom; Louis Mina; William Jackson; Alexis Cadcein; Leveille; Casmir, Toussaint; Petit Jean, Celestin; Cango; Jaco; Francois Calotte; Primus; Velux Isaac; Abraham; David Miller; William Iman; Daniel; Billy Buck; Ben Watson; Moses, Martin; Dicke; Michel Jeune; Memphis; Michel Cadein; Gros Sam; Jack Boucher; Robertson; David Braman; James O'Neill; Laray; Jack Plaquemine; Demi; Philippe; Petit Abraham; Will; James; Cilus; Humphrey; Smart; Basil; Francis; Sylvester; Mulatre; Gabriel; Mani Therese; Mandialle; Victoria; Helena; Marianne; Hennan Congo; Thebe; Francoise Macom; Rosette; Maria; Fanny; Sissley; Hennan Mina; Hannah Congo; Hannah Virginie; Emilie; Pesine; Terzile; Nancy, Sally; Julee; Nanny; Franqui; Sally Valerie; Nanny Omphrey; Marguerite Denis; Charite; Nelly; Petite Rosette; July; Becky; Sophie; George; Agnes; Jeanne; Marianne; Lisc; Pierre; Emile; Arthemise; Stephen; Pelagie; Elizabeth; Mars; Michau; Gabriel; Aspasie; Honore; Anderson; Cyprien; Drausin; Louis; Joseph	1834-1840	St. James Parish, Book 13, p. 705, 1834/08/19, p. 733, 1834/08/25; Book 18, p. 366, 1840/01/14
Armant, Jean Seraphin and Louise Amelie Fuselier	plantation and the following individuals: Randall; Ketto; Ben; Richard; Scipio; Little Bob; Sam; Elisa; Eliza and her son John; Lucy; Charite; Took; Diana and her daughter Betsey; Robert; Saphy; Will; Bob; Foulard; Jim; Claris; Valentine; Sarah; Maria; Melierte; Eugene; Bob Chartant; Sambo; Jerphy; Jack; Victoire; Lubin, Nuriea; Eustache; Joseph Boulanger; Joseph; Francois; Francis; Henry; Figaro; Jose; Noel; Tom; Janveir; Nancy; Jane and her two children Nancy and Marceline; Sylvain; Louis; Valentin; Henrietta; Betsey; Marie Louise; Henriette and her three unnamed children	1836-1847	Tulane University, Citizens Bank Papers, Folder 2, 1838/12/17; Citizens Bank Minute Book No. 2: 1837/05/17, 1837/05/27, 1840/01/03, St. James Parish, Book 15, p. 422, 1836/07/27, p. 429, 1836/08/06; Book 16, p. 313, 1837/07/03, p. 371, 1837/07/22; Book 17, p. 439, 1838/12/12, p. 447, 1838/12/17; Book 18, p. 623, 1840/08/17, p. 660, 1840/09/01; Book 19, p. 366, 1840/12/19; Book 25, p. 271, 1847/08/18
Armant, Mrs.	land and 41 unnamed individuals.	1838-1848	Tulane University, Citizens Bank Papers, Folder 2, 1838/12/17, Citizens Bank Minute Book No. 4: 1842/02/19; M-1847, Citizens Bank Mortgage Book
Bergeron, G.	plantation and 52 unnamed individuals	c. 1848	Tulane University, M-1847, Citizens Bank Mortgage Book

Owner	Mortgaged Collateral	Dates	Source
Bergeron, Michel and Constance Bergeron	plantation and the following individuals: Squire; Ben; Francois; Augustin; Simon; Michel; Louis; Pierrot; Joseph, Jean Baptiste; Cyprien, Jean Louis; Francois; Ben; Leveille; Augustin, Simon; Louis; Samson, Esquire; Andre; Augustin; Justine; Delphine; Henrietta, Manette; <i>Elionsore</i> ; Celeste; Marguerite; Julie; Hypolite; Zenon, Syhre, Edmond; Ophelia; Poupone; Angelina; Syhain; Adile; Millin; Etienne, Rock; Dick; <i>Unin</i> ; Jacques; Palsey, William; Allin; Baptiste; Grand Jean Louis; Catherine, Victorin; Victorine	1834-1847	Tulane University, Citizens Bank Minute Book No. 1: 1834/08/22; Citizens Bank Minute Book No. 6: 1847/03/25, St. James Parish, Book 13, p. 768, 1834/10/10; Book 16, p. 352, 1837/07/26, p. 420, 1837/08/30; Book 17, p. 321, 1838/06/22, p. 335, 1838/06/26; Book 18, p. 367, 1839/12/30
Bergram, Mr.	plantation and 23 unnamed individuals	1837	Tulane University, Citizens Bank Minute Book No. 2: 1837/07/15
<i>Bienvenu</i> , L	plantation and unnamed individuals	1859	Tulane University, Citizens Bank Minute Book No. 8 1859/12/22
Blouin, Evariste and Denise Arceneaux	plantation, land, and the following individuals: Becky; Sarah; Lucy; Manette; Nelly; Raymond; Philippe; Bazile; Marie Jeanne; Jean Baptiste; Paulin; Marie Louise	1835	Tulane University, Citizens Bank Minute Book No. 1: 1835/02/20; St. James Parish, Book 14, p. 113, 1835/04/09; p. 203, 1835/04/28
Butler, Caroline	the following individuals: Randall; Eliza and her eight children Francis, Emily; Caroline, Cezar, Henry, Fonty, Lucy, and Robert; Saul; Winney her six children Wyatt, Bedford, Leroy, Davy, William, and Patsy, and Patsy's two children Jerry and Nelly; York; Peter; Archibald; Sam; Hannah and her five children Jones, Pleasant, Miles, and Letty; Maria	1844	St. James Parish, Book 21, p. 118, 1844/07/26; p. 123, 1844/07/30, p. 189, 1844/08/06; Tulane University, Citizens Bank Minute Book No. 5: 1844/07/30
Cantrelle, Joseph Xavier and Louise Dejean	plantation and the following individuals: Justin; Nanciser; Francois; Louis; Andre; Dick, Charles; Bill; Billy; William; Adams; Ferdinand; Joe; Jean Baptiste; Eugene; William; Rose and her son Valsin; Jane; Maria; Euphrosine; Nancy and her child Francisque; Phoebe; Louise	1834-1844	Tulane University, Citizens Bank Minute Book No. 1: 1834/08/07; St. James Parish, Book 13, p. 690, 1834/08/13, p. 731, 1834/08/20; Book 21, p. 128, 1844/08/03, p. 131, 1844/08/03
Champagne, Evariste and Caliste <i>Sexchjineider</i>	plantation and the following individuals: Galsin; Louis; Justin; Francois; Jean Pierre, Marianne; Charlotte	1837	St. James Parish, Book 16, p. 473, 1837/12/12
Chapdu, Alexandre	plantation, land, and the following individuals: Anachreon; Thomas; Sunday; John; Isaac; Gabrieli; Adelle; Marie; Charlotte; Aima; Maria; Etienne; Gustave; Flore; Victorie; Zoe; Pauline; Lise	1834-1844	St. James Parish, Book 13, p. 736, 1834/09/10, p. 748, 1834/09/18; St. James Parish, Book 21, p. 150, 1844/08/24, Book 21, p. 148, 1844/08/24
Croizet, Suzanne	plantation and the following individuals. <i>Janvier</i> ; Jim; Pierre; Benard; Jean Baptiste; Lausen; <i>Chapio</i> ; Henry; Francoise; Clarisse; <i>Tenerieve</i>	1837	St. James Parish, Book 16, p. 100, 1837/03/21, St. James Parish, Book 16, p. 131, 1837/03/27

Owner	Mortgaged Collateral	Dates	Source
Delogny Jr., Edouard Robin and Caroline Trudeau	plantation and the following individuals: George; Thom Zuce; Joe Congo; Amos; Ben, Ambrose, Stepney; Oliver; Salomon; Bob Osburn; Willis; Martin; Walker; Morris, John; Warrick; Joe Walker; Lubin, Felix; Davy; Sam; Remy; <i>Chricopher</i> ; Washington, Charles; Tom Levox; Louis; Faro; George Congo; Bob; Manette; Venus, Maria; Betsey, Adelaide; Marie Tuseau; Catherine, Agathe; Charlotte; Anna; Eleonire; Cesaire, Rachel, Mary; Victorine; Thelma; Mary Davis; Adelaide; Effie; Victor, Louis; Celestine; Frana's; Manette; Alexandre; Jonny; Dolly; Celestin; Maurice; Harry, Gordon; Tom; Jessy, Peter, Henry; Charles; Duncan; Alerte; Chamblain; George; John Tureaud; Benjamin; Charles; Jay'ou; Premier; Marie Lucie; Lulle; Fanny; Maria; Esther, Clessyde; Susanne; Elizabeth; Adelaide; Nannie; Toussine, Eulalie; Millicente, Ronni; Pauly; Eilbert; Bernard; Augustine; Eleonore; Irma; Molly; Eliza; Nancy; Jims land and 43 unnamed individuals	1835	St. James Parish, Book 14, p. 65, 1835/03/24
Donaldson, Edward		1851	Tulane University, Citizens Bank Minute Book No. 6: 1851/06/17
Duplantier, Armand; Edouard and Charles Fortin; Celeste Parent; Marie Arsene Fortin; Felicie Communy	plantation and the following individuals: Azor; <i>Arlequin</i> ; William; Pacane; Nick; Mimi; Coto; Phil; Harmstead; Paul; Andre; Emond; William; Brack; Celestin; Commondore; Tom yellowbelly; George; Billy; Lindor Congo; Caira Borgene; Jean Pierre; Tamba; Charlos; Adam; George Saly; Louis Betsy; Louis Hita; Nat; Eugene; William; Jacques; Noel; George; Antony; Quioter; Baltimore; Isaac; Antony Gloster; James; John Green; Johnson; Petit Billy; Allan; Riss; Willey; Francisque; Catherine; Mary; Julie; Marianne Hilow; Betsey; Canba; Manon; Cleonise; Lucie; Marie-Jeanne; Marianne; Minerve; Polly; Fity; Josephine; Edwilge; Nanette; Frederick; Souris; Florestine; Mathilde; Sally; Adelaide; Vinant; Bernard; Elsy; <i>Bellevere</i> ; Mina; Ketty; Ortere; Michel; <i>Alssed</i> ; Jacob; <i>Pelagce</i> ; Charles; Francoise; Charlotte; Julis; Francoise Petit land and the following individuals: Louis; Jean Pierre; Valsin; Justin; Charlotte; Marianno	1837	St. James Parish, Book 16, p. 188, 1837/04/27, p. 202, 1837/05/05, Tulane University, Citizens Bank Minute Book No. 2: 1837/05/13
Dupresne, Isadore and Adam Champagne; <i>Theodule Tupagnier</i>		1852	Tulane University, Citizens Bank of Louisiana Papers, 1834-1914, Folder 3: 1852/09/13; Citizens Bank of Louisiana Papers, 1834-1914, Folder 3: 1852/09/13

Owner	Mortgaged Collateral	Dates	Source
Fabre, Joseph Paul and Amelie Perret	plantation and the following individuals: Pierre Congo; Henry; Jerry; Eugenie; Pompee; Baptiste Congo; Charles; Victor; Tousaint; Edmond; Benjamin; Petit George; Lucie; Octave; George anglais; Michel; Amelie and unnamed infant son; Julien; Luckey and her three children Celistin, Armstead, and Magdeline, William; Alfred; Louisa; Damon; Apollon; Mark; Joseph; Ramien; Philippe; Flora; Hyholite; Jacquah, Tom; Marie and her son Augustin; Louis; Eliza and her three sons Etienne, Zenon, and Germaine; Conacon, Narcisse Hopier; Eugenie; Peter; Drauzine; Henriette and her two children Francisque and Drauzine; Caroline; Ervin; Louis Bourgeois, Diana; Frederic	1834	Tulane University, Citizens Bank Minute Book No. 1: 1834/08/22; St. James Parish, Book 13, p. 786, 1834/10/18; St. James Parish, Book 13, p. 806, 1834/11/11
Gaennie, Gervais and Louis Rene	land and the following individuals. Alexandre; Joly; Alexandre Congo; Jos; Henry; Alexandre; Jos Woodlen; Priscille; Fanny; Henriette; Clementine; Marianne; Catherine; <i>Vetcher</i> ; Washington; Marguerite; Charles; Priscillane; Marianne; <i>Theresa</i> , Henry; Hillard; David; Gilbert; Moses; John	1842-1843	St. James Parish, Book 20, p. 25, 1842/04/15, Tulane University, Citizens Bank Minute Book No. 5: 1843/01/28
Godbery, James William and Marie Estelle Dupuis; William Peter Welham and Rene Seraphine Theriot; Catherine Mariner	plantation, land, and the following individuals: Ashly; Charles; Adam; Sandy; Will; Gasmill; Wyatt; John; Butler; Little Charles; Dick; Abraham; Rose; Hannah; Fanny; Celina; <i>Marguinte</i> , Sally; Mary, George; Arenu; Emelina; <i>Olor</i> a; Jim Boy; Israel; Big Mary; Ann; Jenny; Prince; Henry	1837-1839	St. James Parish, Book 16, p. 302, 1837/06/22, p. 340, 1837/07/15; Book 18, p. 173, p. 241, 1839/04/17
Gourdin, J.	unnamed individuals	1835	Tulane University, Citizens Bank Minute Book No 1: 1835/02/20
Hoa, Albert and Pierre	plantation and the following individuals: Rose and her three children, Norbert, Denis, and Anais; Henriette; Sophie; Euiele; unnamed child of Jeanne	1838	St. James Parish, Book 17, p. 384, 1838/08/14
Jacob, Ursin and Eleonore Perret; Edouard Jacoband and Celestine Malarcher; Jean Louis Haudressy and Adelaide Tureaud	plantation and the following individuals: Creipin; Edmond; Chelsey; Viux Charles; Claiborne; Perry; Singleton; John Lonagere; <i>Tortue</i> ; Petit John; William Berry; Thelemaque; Randall; Joseph; Jefferson; Daniel; Sam; John; Semon; Isaac; Charles; Billy; William; Iem; Isaac Forgeron; Auguste; Aimee; Hannah; Marie Joseph; Ketty; Diana; Eggo; Marie; Sioney; Maria; Catherine; Therese; Bill; Harriette; Hellene; Marie	1837-1849	St. James Parish, Book 16, p. 84, 1837/02/21; p. 98, 1837/03/01; Book 28, p. 219, 1849/06/11

Owner	Mortgaged Collateral	Dates	Source
Johnson, Henry	plantation and the following individuals: Aubry, John; Doctor, Richard; James; Mitchell, James; Stephen, Anthony; Billy; Milly; Betty; Polly; Nancy; Sarah; Sophy	1839	St. James Parish, Book 18, p. 244, 1839/05/29
Jourdan, Jean Baptist Noel and Julie Laplanche, Emilie Jourdan, Edouard Jacob and Vasseur Webre	plantation and the following individuals. Washington; Peter; Samboli; Cyrus; Jim; Charley; Archy; Cato; Bacchus; Aaron, Mingo; Peter Wig; Henry Isaac; Felix; Henry, Francois; Jackson; Tom Edmonds; Vincent; Oxem; Paul; Sandy; Dick; Joe; Alfred; Isaac; Bill, Jean Baptiste, Brown; Jack; John; Honore; Montgomery; Sylvie; Winey; Vessy, Caroline; Hannah, Maria with three children Euphrosine, Charles, and Rosana, Mary with five children Livina, Mathilde; Marie; Alphonse, and Fanny; Winnie and her daughter Elizabeth; Clara and her three children Louise, Auguste, Jean; Cicey and an unnamed infant son; Amelia; Mary; Susan; Aimee; Charlotte; Alec; Honore; Henry; Daniel; Montgomery; Jackson; Louis; Tom; Levy; James; Clem; Archy; Paul; Alexandre; Axem; Jacky; John; Jerry; Marie Joseph; Sylvie; Winny; Annaka; Byra; Caroline; Sarah; Christine; Charlotte; Aimee; Rose; Anna and her son Tom; Mary and her son Jacob; Vicey; Ninene mulatto; Marie Locure; Maria; Little Louis	1834-1860	Tulane University, Citizens Bank of Louisiana Papers, 1834-1914, Folder 4, 1860/04/13; St. James Parish, Book 34, p. 735, 1860/12/03, Tulane University, Citizens Bank Minute Book No. 1; 1834/08/07; St. James Parish, Book 13, p. 696, 1834/08/16, St. James Parish, Book 13, p. 711, 1834/08/20; St. James Parish, Book 21, p. 135, 1844/08/06; St. James Parish, Book 21, p. 137, 1844/08/06
Landry, Joseph and Ethelvina	plantation and the following individuals: Jackson; Bob; James; Ruban; Peter; Robert; Cooper; Henry; Moses; Louise; Jane; Marie Louise; Melandy; Agnes; Janvier; Leroy; Valevin; Victoire	1838	St. James Parish, Book 17, p. 243, 1838/05/04, St. James Parish, Book 17, p. 284, 1838/05/12
LeBourgeois, Louis and Erazie Haydel	plantation and the following individuals: Jessy Commandeur; James Cook; Joe; Geo Charpentier; Azie; Robine; Joseph; Draid; Sassich; David; Mack; Jeffrie Spid; Jeffrie Brunt; Abraham; Toussaint; George Calfer; George Bischan; Goand Daniel; Daniel Walkins; John Jackson; Peter; Kitt; African; Tiet; Adam; Jas NeClace; Valin; Baptiste; Jean Baptiste; James Lacour; James Pagnol; Augustin; Andre; Charles; Azer; Antoine; Toussaint Jeinie; Moliere; Francois; Rachel; Syllia; Adam; Fanny; Washington; Robertson; Lucinda; Eve; Zinon; Marianne; Meley; Olivier; Claire; Suzanne; Marie Joseph; Henrietta	1834-1842	Tulane University, Citizens Bank Minute Book No. 1, 1834/08/07, Citizens Bank Minute Book No. 4, 1842/05/09 St. James Parish, Book 13, p. 693, 1834/08/16, p. 712, 1834/08/16; Book 20, p. 94, 1842/05/27
Leche, Jean and Marie Scholastique Keller	plantation and the following individuals: Sam; Dick; Perry; Scipion; Thelemaque; Celeste; Marie; Victire; Victorine	1837	St. James Parish, Book 16; 337, 1837/07/17, p. 347, 1837/07/20

Owner	Mortgaged Collateral	Dates	Source
Millet, Marguerite	plantation, land, and the following individuals: Lindor; Andre; Amisise; Sylvertre; Jacques Congo; Michel Senegal; Kampe; Gabriel; Francois; Jacques; Antoine; Valentin, <i>Elarcow dor Gaspard</i> , Agathe Cuineese; Henrietta; Charlotte and her unnamed child; Berthilde and her twin children; Maryann; Jean Louis; Eliza; Suzanne, Rosalee; Celestin; Rosette; Toussin, Jean Baptiste; Octavie; Francoise; Venus	1835-1845	St. James Parish, Book 14, p. 118, 1835/04/11, p. 141, 1835/04/18, Book 20, p. 120, 1842/06/20; Book 21, p. 80, 1844/05/31; Book 22, p. 62, 1845/04/04, p. 60, 1845/04/04
Nicholas, Robert Carter and John Spear Smith	plantation and the following individuals: Albert; Henderson; Armstead; Alleck More, Alleck Ellis; Barnaby; Bob, Beverley; Ben Batts; Buck; Austin; <i>Euffy</i> ; Godfrey, Harry; Henry Green, Hendry Bedford; Joe Locust; Jesse; Louis Ellis; Louis Brackenridge; Jim Franklin; Nelson; Napper; Peter; Spotswood; Sam Page; Thomas; Winter; Betty; Delphy; Emily; Fanny; Harriet; Judy; Linder; Frances; Louisa; Maria; Mary Eustes; Lucy, Mary Prenie; Nancy Napper; Nelly; Lucky Cole; Sizan; Sarah; Sylva; Eugenece, Winny; Betty Ellis; Eliza; Spencer Powell; Milly; Edward, Sylva, Jane; Gracy; Caroline; Succordy; Elmore; Tom Daphny; Bill Patterson; Salomon; Nancy Linder	1835-1845	St. James Parish, Book 14, p. 124, 1835/04/14, p. 140, 1835/04/18, Book 22, p. 58, 1845/04/03, p. 55, 1845/04/03; Book 21, p. 118, 1844/07/26, p. 123, 1844/07/30, Book 21, p. 189, 1844/08/06, Tulane University, Citizens Bank Minute Book No. 1 1837/05/27, Citizens Bank Minute Book No. 2; 1837/07/15, 1838/03/14, 1838/03/27, 1838/11/0
Ordman, J. B.	unnamed individuals	1834	Tulane University, Citizens Bank Minute Book No. 1 1834/08/07
Patin, Heirs of Louise	plantation and the following individuals: Leandre; Francois; Gilblas; Lazre; Tobie; Mandrin; Mars; Pret-a Boire; Airi; Valere; Francis; Lubin; Tanasse; Papillon; Charles; Onusre; Mercuce; Joe; Thomas; Casimir; Malborough; Cartouche; Antoine; Bacchus; Mahomet; Smith; Johnny; Paris; Hector; Pirain; Cupidon; Argus; Jupiter; Ajax; Radamanthe; Pollux; Achille; Lovelace; Thom; Gognon; Agobar; Doho; Ellick; Julian; Baptiste; Martin; Pierre; Toussaint; Jean; Augustine; Theotis; Rosette; Venus; Zaire; Jeannette; Fanchon; Clotho; Marie; Hermide; Servilie; Penelope; Adeline; Suzanne; Mary; Rose; Benedicte; Francoise; Eugenie; Marthe; Zabelle; Marinette; Pallas; Cybelle; Abenile; Jeanne; Hebe; Angelle; Hyacinthe; Celestine; Desiree; Adele; Rosine; Zephyre; Adoeris; Cephae	1834-1844	St. James Parish, Book 13, p. 699, 1834/08/06; p. 723, 1834/08/20; Book 21, p. 141, 1844/08/15
Priestley, William; Margaret Fulker; Jane Priestley; Catharine Caroline Priestley; Priestley & Bien; <i>Harris Ferry</i>	plantation and the following individuals: Bob; Lee; Bousgagne; Oscar; Davy; Bill; Chelsey; Ness; Tom; Leach; Charlotte; Coley; Millly	1837-1858	St. James Parish, Book 16, p. 331, 1837/07/14, p. 373, 1837/07/22; Book 25, p. 224, 1847/03/18; Tulane University, Citizens Bank Minute Book No. 8: 1858/03/04

Owner	Mortgaged Collateral	Dates	Source
Roman, Andre Bienvenue and the heirs of Louise Patin	plantation and the following individuals: Charles Green; Scipeon; Sylvestre; Sunday; Sam; Paris; Patrick; Long Tom; Petit Tom; John Bristle; John <i>Scabre</i> ; John Insel; Abraham; Dick; Bili; James Parker; Joe <i>Cabre</i> ; Charles <i>Vieux</i> ; Charles Wagner; Wilson, William; Lodivelli; Elias; Walter; Cesar; Bob; Relf; Claiborne; Ness; Honore; Frederic; Isaac; Richard; Joe; Etienne; Mary Sandy; Maria; Anne; Hannah; Kitty; Jane Dick; Harriet; Henrietta; Henny; Eliza and her two children Louisa and an unnamed child; Eliza and three children Eddo, Caroline and Jacob; Nielle Lucie and two children John and Christine; Lucie; Zemire; Lydia; Mary; Rachel; Rosette; Fanny; Alfred; Jane; Diana and her two children Henry and an unnamed child; Fanchette	1834-1854	Tulane University, Citizens Bank Minute Book No. 1: 1834/08/07, Citizens Bank Minute Book No. 2 1837/06/19, Citizens Bank Minute Book No. 7 1854/12/29; St. James Parish, Book 14, p. 108, 1835/04/08, p. 135, 1835/04/18, Book 15, p. 442, 1836/09/03; Book 22, p. 65, 1845/04/05, p. 68, 1845/04/05
Roman, Sosthene and Arthemise Landreaux; Jacob Denny, William Hiesonymus, and Webb Ross	plantation and 105 individuals, including the following: Joe Dick; Tom; Sam; Edward; Zaccharie; Flander; Jean Baptiste; Buck; Jack; Henry; Jolly; Simon; La Fortune, Allain; Joly; Apollon; Joe <i>Peytavin</i> ; Richard; James; Jean Pierre; Fortune; Frank; Isaac; Martin; Alexandre; William; Prenee; Louis; Leandre; Louis; Jean; Noble; Francoise; Nielle Lucie; Marianne; <i>Properpine</i> ; Rose; Sylvie; Hobe; Maime; Sarah; Petit Phillis; Maria; Sally; Jeune Lucy; Louisa; Becky; Megere; Kitty; Little Ann; Henrietta (Jeune); Joannah; Aggay; Julia; Cecile; Charite; Dianah; Mathilda; Bazile; Jacob; Fanny; Babet; Manon; Fiyaro; Marguerite; Jeannette; Agnes; Auguste; Charles; Lubin; Charlotte; Mariette; Brigitte; Flore; Leanneton; Thomas; Charles; Bob; Amable; George; Henry; Hutton; David; Alerte; Rubin; Willis; Sephin; Bien Aime; Ismael; Joe Griffe; Blaise; Lubin; Alexandre; Petit Noel; Delcy; Antoinette; Nanette; Grand Phillis; Fanchonnette; Julie; Nanette; Celestine; Ariane; Louise; Sophie; Marguerite; Stephen; John	1835-1857	St. James Parish, Book 14, p. 350, 1835/11/02, p. 358, 1835/11/07, Book 16, p. 169, 1837/04/18, p. 195, 1837/04/28, p. 349, 1837/07/25, p. 375, 1837/07/29; Book 17, p. 170, 1838/04/07, p. 198, 1838/04/12; Book 18, p. 1, 1839/01/05, p. 29, 1839/01/11; Book 23, p. 114, 1845/11/06, p. 111, 1845/11/15; Tulane University, Citizens Bank Minute Book No. 1: 1837/05/27, Citizens Bank Minute Book No. 2: 1837/07/15, 1838/03/14, 1838/03/27, 1838/11/0; Citizens Bank Minute Book No. 6: 1850/04/09; Citizens Bank Minute Book No. 8: 1857/05/18
Roman, Victoire	unnamed individuals	1834	Tulane University, Citizens Bank Minute Book No. 1. 1834/08/22
Smith, R. C. and Nicholas	unnamed individuals	1834	Tulane University, Citizens Bank Minute Book No. 1 1834/08/07
Strong, Jesse	plantation and the following individuals: Henry; Nash; Green; David Black; Ben Black; Anthony Black; Noah Black; Nelson Black; Silvia; Winney	1834-1845	Tulane University, Citizens Bank Minute Book No. 1 1834/08/07; St. James Parish, Book 14, p. 4, 1835/01/07; p. 131, 1835/02/04, Book 21, p. 254, 1845/01/07; p. 252, 1845/01/07
Taney, Louis M. and Marie Cephalie Fabre	plantation and the following individuals: Billy; Judith and her two daughters Hannah and Bazile; Agathe; Gand	1837	St. James Parish, Book 16, p. 298, 1837/06/20, p. 317, 1837/06/29

Owner	Mortgaged Collateral	Dates	Source
Votre, Mrs. George	land and unnamed individuals	1842	Tulane University, Citizens Bank Minute Book No. 4: 1842/03/23
Webre, Georges	Linder, Agathe, Gabriel; Francis, Jean Louis; Eliza; Toussaint; Octavie; Buthilde; Adam, Luzann; Rasalin, Citistin; Amisere, Campi; Sylvestre	1835-1844	Tulane University, Citizens Bank Minute Book No. 1: 1835/03/25, Tulane University, Citizens Bank Minute Book No. 5: 1844/05/31

St. John the Baptist

Arnaud, Mrs J E.	plantation and the following individuals: Brisson; Peter and other unnamed individuals	1838-1846	Tulane University, Citizens Bank Minute Book No. 2: 1838/05/04, 1838/09/06, 1838/10/01, Citizens Bank Minute Book No. 5: 1843/05/24, 1844/10/04, 1844/10/23, 1846/02/19
Bell, C	plantation and 37 unnamed individuals	c. 1848	Tulane University, M-1847, Citizens Bank Mortgage Book
Boulginy, Dominique	sugar plantation and 44 unnamed individuals	1852	Tulane University, Citizens Bank Minute Book No. 7: 1852/09/09
Garcia, Felix and Adolphe Jorapum	the following individuals: Ferdinand, Jean; Tom; Bill; Lucile; Rachel; Lucile Joe; Machel Martin; Hanny; Phebe; Maffy (alias Mary); Charlotte and her children Jean and Valcount; Albert; Anson; Caroline	1846-1853	St. John the Baptist Parish, Conveyance Book Y, p. 68, 1846; Tulane University; Tulane University, Citizens Bank Minute Book No. 4: 1842/06/30; Citizens Bank Minute Book No. 7: 1853/05/05, 1853/05/12, 1853/07/14
Garcia, Felix and Dunlap Momure Inc	Arnaud plantation and 25 unnamed individuals	1852	Tulane University, Citizens Bank Minute Book No. 7: 1852/05/20
Trigras, L. S.	plantation and unnamed individuals.	1842	Tulane University, Citizens Bank Minute Book No. 4: 1842/01/19
Panes, Marie Louise	unnamed individuals	1834	Tulane University, Citizens Bank Minute Book No. 1: 1834/08/22

Owner	Mortgaged Collateral	Dates	Source
St. Landry Parish			
Angamarse, Eugene Henri	plantation and the following individuals: William Brown; Rose; Tom Mumford; Allen Brown; Jow; Tom; Edmond Sampson; Charles Williams; Peter Camble; Ben Street; Henry Haskins, Jemen Jones; Jack Ludwick; Antoine; Chapman; Ben; Henry, Charles; Phil; Edmond; George; Fanny; Jilly; Angeline; Agathe and her child Hense, Julie, Tilly and her child Henriette; Silvestre; Sethe; Adolphe; Jules child of Tilly Ann, Mary Walker; Lucy Ann; Mareilla; Eliza Ann and her son Ernest; Becky Prior	1850-1851	Tulane University, Citizens Bank Minute Book No. 6: 1851/02/18; St. Landry Parish, Mortgage Book 5, p.47, 1850/03/22
Chretien, Appolite	plantation and unnamed individuals	1849	Tulane University, Citizens Bank Minute Book No. 6: 1849/11/20
Cooke, J. A.	sugar plantation and unnamed individuals	1857	Tulane University, Citizens Bank Minute Book No. 8: 1857/02/10
Cooke, Thomas and Thomas C. Anderson	land and the following individuals. Jim Bell; Moses Hall; Daniel Sharp; Ive Williams; Peter; Jim Carpenter; Andrew; Reuban; Alexander; Lizzy; Eliza; Mary Jane; Beddy; Tom	1853	Tulane University, Citizens Bank Minute Book No. 7: 1853/06/09, St. Landry Parish, Mortgage Book 7, p. 1, 1853/06/30
Denegre, William	land and the following individuals: Sam; Peter; Tom; Richard; James Posey; John; Eugene; Joe; Amanda; Molly; Joe Saul; Nancy; Ninny; Milly; Louisa; Finny; Jane; Beck; Thomas; Willy; Lemuel; George; Flora; Howard; Anthony; Alfred; Alleck; Fanny; Maria; Agnes; Patience; Juliette; Celeste; Manuel; Mary; Charlie; Melinda; Lucinda	1858	St. Landry Parish, Mortgage Book 9, p. 86, 1858/08/31
Doyle, John	land and the following individuals: Eliza and her child Charlotte	1837	St. Landry Parish, Conveyance Book IJ-1, p.125, 1837/07/21
Flaujac, Garrigues; Chretien, Hippotite	land and the following individuals: Anthony; Wally; Macuya; Etienne; Jefferson; Marguerite; Henriette and her children Terry and Carmelite; Delphine and her child Ceaser; John	1832-1850	St. Landry Parish, Mortgage Book 2, p. 110, 1832/06/11; Conveyance Book IJ-1, p. 137, 1837/09/13; Mortgage Book 5, p. 36, 1850/01/23
Hill, Dr George	plantation with the following individuals: Sam; Amanda; Thomas; Willy; Lemuel; George; Peter; Molly; Flora; Howard; Anthony; Poisante; Alfred; Alleck; Fannie; Thom; Nancy; Richard; Maria; Agnes; Patience; Winny; Juliet; Celeste; Manuel; Milly; Mary; Louisa; Charlie; Tinny; Melinda; James Posey; Jane; John; Eugene; Beck; Lucinda; Joe	1858	Tulane University, Citizens Bank Minute Book No. 8: 1858/08/21, Citizens Bank of Louisiana Papers, 1834-1914, Folder 5

Owner	Mortgaged Collateral	Dates	Source
Moore, William	land and the following individuals: Asey Sparks; Bon Luckett; Joe Dawsey; James Hawkins; Augustus Speake; Magloire; Milley Luckett and her unnamed child; Marie and her child Laura; Delia; Millie Gage and her child Bob; Elizabeth Luckett	1837-1838	St. Landry Parish, Conveyance Book IJ-1, p. 188, 1837/04/18, p. 190, 1838/02/24; Tulane University, Citizens Bank Minute Book No 2 1838/02/12
Offutt brothers	unnamed individuals	1835	Tulane University, Citizens Bank Minute Book No 1 1835/05/11
Overton, John H. and Patrick H	land and the following individuals: Virgil; Peter; William; Billy; Amos; Harry; Claiborne, Sterling; Shepherd, Charles; Azores; Peter Jones; Robert; Hector; Joe Lu; Joe Blanks, Beverly; Jeff; Daniel, Solomon; Bob; Bill; Virgil; Mitchell; Becky; Caroline and her children Henry and an unnamed child; <i>Tempy</i> with her child David; Rose and her children Bill and Lydia; Betsy and her five children Henderson, Becky, Dan, George, and an unnamed child; Hannah and her two children <i>illegible</i> and Sukey, Phillis and her unnamed child; Rachel and her child Phillis; Patty and her child Phebe; Flora and her unnamed child	1838	St. Landry Conveyance Book IJ-1, p.177, 1838/01/20
Smith, Raphael J.	land and the following individuals: Aaron; Harriet; Henrietta; Sarah Ann; Arthelia	1837	St. Landry Conveyance Book IJ-1, p 148, 1837/07/31
Smith, Robert E.	land and the following individuals: Essex; <i>Melly</i> ; Maria; Charlotte; Matilda; Harriet; Susan; James; Henry; Nelson; Auguste; Mary; Henriette; Catherine; Louisa an infant girl, Julia; Clarissa	1837	St. Landry Conveyance Book IJ-1, p. 137, 1837/06/29
<u>St. Martin Parish</u>			
Amy, Mrs Carmelite	land and the following individuals: Jack; Joe; William; Guillaume; Martin; Jean Baptiste; Rose; Darg	1856-1858	St. Martin Parish, Conveyance Record 26, p. 123, 1858/04/12, St. Martin Parish, Conveyance Record 24, p. 342, 1856/07/03; St. Martin Parish, Conveyance Record 26, p. 59, 1858/11/29
Boutelou de St. Aubin, Francois Charles	land and the following individuals: Sam; Bessey (alias Ellen); Isaac; Maryann; and 7 unnamed the following individuals	1838	Assumption Parish, Mortgage Record 1831-1835, p 209, 1838/10/30, Mortgages 1835-1841, p. 128, 1837/08/10; Mortgage Book 1834-41, p. 209, 1838/10/18; St. Martin Parish, Conveyance Record 11, p 11; Tulane University, Citizens Bank Minute Book No. 2: 1838/09/03
Boutte, Celeste	land and the following individuals: Louise; Hector or Nelson; Lubin; Zoe; Zenon; Edward ; Alexandre; Petit; Eliza; Victor; Jean Louis	1838	St. Martin Parish, Conveyance Record 10, p. 37; p. 307, 1838/03/17, p. 370, 1838/05/29

Owner	Mortgaged Collateral	Dates	Source
Canby, Sarah	the following individuals: Denis; John; Washington; Henry Shy; Mary; Maria; Caroline; Ned Tavis; Godfrey; Kitty Daniel; Little Daniel; Mary Daniel; Martha; Henry Rider, Tesse Rider; Little John Pickett; Sarah Pickett; Ann Rufus; Little Rufus; Edmond Daniel; Martha Daniel; Van Buren Daniel; Martha Tom; Fanny Travis; Charlotte Randolph; Ann; Henry Kohn; Little John Pickett; Monroe Daniel; Nannoy, Henry; Peter; Sam, Manuel; Dolly	1840	St. Martin Parish, Conveyance Record 12, p. 150, 1840/04/30, p. 217, 1840/06/04
Darby, Widow S. M.	plantation and 50 unnamed individuals	1844	Tulane University, Citizens Bank Minute Book No. 5: 1844/04/10
DeBlanc, Contance	land and the following individuals: Blaise, Dick; Bob; Dub; Hishem; Henry; George; John; Mearlin; Philippe; Nelson; Harry Parker; Lajeunesse; Etienne, Green, Charles; Pierre, Harry Hatcher; Sandy; Manuel; Louis, Julia; Francois; Milly; Baptiste, Fanchonnette; Jeanne; Zenon; Ursula; Fanchon; Cloementine; Alixandre; Julia, Rose; Victoire; Annette; unnamed; Mearia; Jack and Winny; Meary; Varker; Adeline; Patience; Scilly, Marianne	1844	St. Martin Parish, Conveyance Record 15, p. 116, no 10565, 1844/06/15
DeBlanc, Desplanet and Marie Francoise Delacroix	land and the following individuals: Charles, Lloyd; Congo; Daniel; Achilles; Alcendor; Symior; Julien; Francois; Andre; Henry; Levende; Bill; Lewis; Cheri; Robert; George; Cesar; Pierre; Mick; John; Didier; Harry; Jacob; Jean Baptiste; Celestine; Equisthe, Tom; Malvina; Marianne; Magdelaine; Clarisse or Charlotte; Anna; Martha, Mary; July; Emmy; Caty; Poupponnade	1837-1838	St. Martin Parish, Conveyance Record 10, p. 202, no 8162, 1837/07/17; Conveyance Record 11, p. 5, no 8329, 1838/07/13
DeBlanc, Louis D. and Marie Constance Labianche	land and the following individuals: Maria; Julie; Catiche; Caty; Betsy; Rierden; James; Dennis, James; Clarisse; Elizanne; Dublin; Nicaud; Violette; Henry Maria's child; James, Maria's child; Dominique Catiche's child	1838	St. Martin Parish, Conveyance Record 10, p. 294, no 8239, 1838/03/06
Delacroix, Francois D.	land and the following individuals: Apollon; Louis; Allen; Steven; Henry; Delphine; Sally; Lucy; Adelaide; Felicite; Alexandre; Laurent	1838	St. Martin Parish, Conveyance Record 10, p. 303, no 8246, 1838/03/13
Delahoussaye, Octave	land and the following individuals: Dick; Alfred; Thomas; Jim; Isaac; Julie; Edouard; Jolivet; Patsy; Ophelia; Lelia; Marie; Maria; Dickson; Patsy; Sophie; Francisque	1849	St. Martin Parish, Conveyance Record 1-D, p. 258, no 92, 1849/10/02
Duclozel, Olivier Pierre and Marie Emeranthe Latiolais	land and the following individuals: Abraham; Doustan; Dick; Norbert; Mentor; Sam; John Bull; Bill; James; Senegal; James; Hilerie; Charles; Samuel; Nellie; Sylvie; Peggy; Zenon; Moses; John; Sam; James; Benn; Belzey; Marie	1837	St. Martin Parish, Conveyance Record 10, p. 204, no 8164, 1837/07/21; St. Martin Parish, Conveyance Record 10, p. 206, no 8165, 1837/07/22

Owner	Mortgaged Collateral	Dates	Source
Eyssallenne, Joseph	land and the following individuals: Alexander; Fern; Dick; Thomas; Pem; Alfred; Isaac; Julie; Edouard; Joliet; Clemence; Ophelia; Lelia; Eleanor; Marie; Nelssey; Marie; Dickson; Patcey; Sophie; Francis; Patsy; Grace; Clemence	1835-1851	St. Martin Parish, Conveyance Record 9, p. 308 no 7761, 1835/06/08; St. Martin Parish, Conveyance Record 14, p. 265 no. 10336, 1843/09/02; St. Martin Parish, Conveyance Record 17, p. 386, no 11565, 1848/07/15; St. Martin Parish, Sheriff Book 2, p. 163, 1849/07/10; Conveyance Record I-D, p. 261, 1849/10/02; St. Martin Parish, Conveyance Record 20, p. 373, no 12565, 1851/12/03; Tulane University, Citizens Bank Minute Book No. 1: 1835/05/25, Minute Book No. 6 1848/05/11
Fagot, Charles	land and the following individuals: Nick; Paim; Bill; Anny; Julie; Charlotte; Peggy; Sophie, Lavinia; Ketty; Etienne; Don Louis; Marie; Celeste; Honourine; Lucile; Henry	1837-1849	St. Martin Parish, Conveyance Record 10, p. 225, no 8186, 1837/09/16, Conveyance Record 11, p. 135, 1838/11/03; Conveyance Record I-D, p. 259, 1849/10/02; Tulane University, Citizens Bank Minute Book No. 2 1838/03/03, Citizens Bank Minute Book No. 5: 1843/04/29; Citizens Bank Minute Book No 6: 1849/05/15
Fenwick, Joseph	land and the following individuals: Nat; Stephen; John; Henry; Bob; Rachel; Amanda; Nelly; Alsey; Mary; Joseph; Celia; Eliza; Mary Claire; James; Eleonore; Louisiana	1837	St. Martin Parish, Conveyance Record 10, p. 208, no 8168, 1837/08/17
Fuselier, Clara and Pierre Paul <i>Briant</i>	plantation and the following individuals: Bessy; Charles; Mearie; Valsin; one unnamed infant; Marulle; Delphine, Theodore; Henry; Auguste	1844	St. Martin Parish, Conveyance Record 14, p. 341 no 10409, 1844/01/02
Gudry, Jean Baptiste Jr.	land and the following individuals: Jean Baptiste; Joe; William; Martin; Jack; Guillaume	1838	St. Martin Parish, Conveyance Record 10, p. 265, no 8216, 1838/01/06; Conveyance Record 10, p. 356, no 8292, 1838/05/15
Heard, Edward J	land and the following individuals: Lewis; Collin; Nealy; Jack; William; Charles; Abraham; Betsey; Olivia	1840	St. Martin Parish, Conveyance Record vol 12, p. 153, no 8760, 1840/05/04
Hickey, Philippe	plantation and the following individuals: Richard; Jacob; Bill; Dan; Ben; Horace; Mike; Ned; Luke; Sam; Daniel; Sarah; Susan; Vina; Chloe; Rose and her 2 unnamed children; Mary; Louise; Zelia; Amy and her 2 unnamed children; Abby; Syney; Molly	1838	St. Martin Parish, Conveyance Record 11, p. 17, no 8336, 1838/07/29; Conveyance Record 10, p. 365, no 8297, 1838/05/10; East Baton Rouge Parish, Mortgage Book K, p. 15-16, 1838
Judice, Jacques and Marie Louis Hyacinthe Boutte	land and the following individuals: Joe; Francisque; Leanne; Henrie; Adeline; Lellie; Jean Louis; Dan; Auguste; Celestin; Madelaine	1834	St. Martin Parish, Conveyance Record 9, p. 178 no 7668, 1834/11/22; Tulane University, Citizens Bank Minute Book No. 1: 1834/10/20

Owner	Mortgaged Collateral	Dates	Source
Marsh, Jonas; John Fitz Miller	plantation and the following individuals: Austin; Alfred ; Joe Small ; Thomas Monroe, Ben Brown; Phillip; Frank; Peter Jones; George Doddsin; William Jones; Archey Zucker; Billy Quash; Monroe; Jim Henry; Bull Daniel; Henry Jones; Jacob; Old Levin, Dennis, William White; Bill Freeman; Gilfred; Jackson; Bill; Ruth Lafayette; George Wallace, Bill; Franklin; John Jackson; Nicholas; Joe Radfield; Edward, May; Tom William; George Woolfolk; Lassin; Dick; Moses Lafayette; Charles Ban; Gemison, Jane; Rachel; Francillette; Lucky; Sally; Alley; Nancy Brown; Betsey; Judiah, Aveline; Arcenos Jane; Anise; Piggy; Nancy; Mathilde; Fanny, Rachel; Clarissa; Robert; unnamed boy; unnamed girl; George; Suzan; Geoking; unnamed child, unnamed child; unnamed boy; unnamed boy; unnamed boy; unnamed girl; unnamed boy; Moses; Billy Ferry; Simbury; William; Bill Woolfolk; Gimison; Fanny, Sudia; George; George; child of Nancy; child of Betzey; unnamed child of Sudia; unnamed child of Sudia; Martha E; Henry Davis; Adam; Gilbert; Abraham, Josephine; Catherine; John Baptiste; John Pierre; Kit; Cyrus, July Ann; Tim; Dorcas, John Trevoish; Becky; Nancy; unnamed child; Delphius; Isaac; Charlotte; Sophie; 2 unnamed children; Isaac; Jack, Abbe, Jim; Nelson; Clintot; Sam Cooper; Manuel; Dareas; Julian	1838-1844	St. Martin Parish, Conveyance Record 10, p. 326, no 8269, 1838/04/07; Conveyance Record 11, p. 57, no 8361, 1838/09/26; Conveyance Record 12, p. 38, no 8656, 1840/02/01; Conveyance Record 12, p. 279, no. 8866, 1840/08/24; Conveyance Record 15, p. 7 no 10468, 1844/03/08, Conveyance Record 12, p. 110, no 8733, 1839/03/28; Tulane University, Citizens Bank Minute Book No. 2, 1838/06/21, 1838/09/3, 1838/09/24, 1839/05/09, Citizens Bank Minute Book No. 3 1840/01/11; Citizens Bank of Louisiana Papers, 1834-1914, Folder 5
Morse, Isaac Edward	land and the following individuals: Courtney; Mary; Maria; Isaac; Laura; Patsy	1837-1844	St. Martin Parish, Conveyance Record 16, p. 329, no. 11270, 1837/12/16, St. Martin Parish, Conveyance Record 10, p. 256, no 8209, 1844/07/21
St. Marc Darby, Francois	plantation and the following individuals: Blaise; Lajumesse Martin; Pierre; Philippa; Charles; Manuel; Bob; Dick; Isaac <i>Hirhem Harry</i> ; Nelson; Sandy; George; <i>Harry Paster Genne</i> ; Dal' Louis; Adeline; Louis; Jeanne; <i>Bank lanhomille</i> ; Julie, Francois; <i>Ratier</i> ; Sally; Mary; <i>Jack</i> ; Mary; <i>Molly</i> ; Baptiste; <i>Amanthe Marie</i> ; Ann; <i>Eustes</i> ; <i>Ken</i> ; Victoire; <i>Greur</i> ; Paul; John; Rein; Barry Parker; <i>Sherena</i> ; Henry Hasher; Samuel; Jacksonnetta; Zenon; Frank; Fanchon; Clementine; Alexandre; <i>Halie</i> ; Rose; Annette; unnamed child; Sissy; Maria; Parker; Patience	1838	St. Martin Parish, Conveyance Record 10, p. 351, no 8290, 1838/05/14; St. Martin Parish, Conveyance Record 10, p. 352, no 8291, 1838/05/15
Voorhies, Cornelius and Marie Cidalise Mouton	the following individuals: Isaac; Charles; Edward; Norbert; Ned; Nelson; Octave; Gustave; Joe; Zany; Sarah; Frederick; Amanda; Henry; Orphelia; Martha; Octavia	1841	St. Martin Parish, Conveyance Record 10, p. 86, no 9035/ p. 30, no 8995, 1841/06/08; Tulane University, Citizens Bank Minute Book No. 3 1841/05/06

Owner	Mortgaged Collateral	Dates	Source
St. Mary Parish <i>Brushinn, W.</i>	Billush plantation and 60 unnamed individuals	1839	Tulane University, Citizens Bank Minute Book No. 2: 1839/04/04, 1839/04/08
Darby Brothers	plantation and the following individuals: Blaise; Dick; Green; Bob; Pub; Hishem; Henry, George; John; Martin, Charles; Pierre; Philippe; Nelson; Harry Parker; Lajeunesse; Etienne; Harry Hatcher; Samly; Manuel; Louis; Julia; Francois; Milly; Baptiste, Fanchonnette; Jeanne; Zinon; Ursula; Fastron; Clementine; Alexandre; Uialle; Rose, Victoire; Annette; unnamed individual; Maria; Jack; Winny; Mary; Parker; Adelaide; Patunia; Scilly, Mariane; Hannah; Caroline; Renny; unnamed individual		St. Mary Parish, Mortgage Book 17, p. 116, 1854/02/06
Fusellus, Gabriel and Jules Mossy	plantation and the following individuals: Jim; Bram; Joe; Peter; Old Jim; Rhody; Dave; Guy; Nancy Joe; Josephine; Joe; Alphons; Jesse; Rosa; Nancy; Joe; Vinat; Willis; Patsy, Thomas; John Henry; Moses; Ben; Louis; Nancy Gorey; Peggy; Kitty; Fulton, Edmund, Old Garey; Nelson; Jud; Phillis; Edmund (alias Kid); Sampson; Nancy; Jefferson; Ben Rosiur; Will; Jerry Hunz; Adam; Reiss; Giles; Hellier; John Barnett; Dolly; Frank Joe; Caroline; Sarah Jackson; Albert Collier; Haywood King; Violet Shephard; Phyllis; Aveline; Oliver; three unnamed individuals; Louisa Rogers; Victoria; Patience Gur; Milly; Gilbert; Eliza; William Wilson; John Clark; Dick Duncan; Nancy Donaldson; Bartley; Zenon; George; Billy; Cobb Wright; Charles; Eliza Lou Grant; Jackson; Louisa; Harriett; Hannah; Reubin; Casar Scott; Dick Bowlkes; Fielding	1855	Tulane University, Citizens Bank Minute Book No. 7: 1855/01/16, St. Mary Parish, Mortgage Book 18, p. 3, 1855/01/26
Gerbeau, Josephine, Pinckney Bethell	plantation and the following individuals: Edmund; John; George; Charles; Philippe; Celestin; Adelaide; Sam; Louisa; Julia; <i>Western</i> ; Rosette; Emma; Francoise; Marianne; Maria; Peggy; Minda; James; Samuel; Cornelia; Celiete alias Pousse; Azelia; Seline; Raphael; Manuel; Nancy; Christine; Jacob; Thomas; John; Harry alias Aimee; Abraham; William; <i>Kerba</i> ; Nina; Betsy; Clara	1857	St. Mary Parish, Mortgage Book 19, p. 123, 1857/04/08

Owner	Mortgaged Collateral	Dates	Source
Huger, John Middleton and Samuel M Ogden	Cote Blanche plantation and the following individuals: Big Jim; Old Nelly; Washington; Nelly; Armistead; Nicey; Cinthia; Milly; Meclina; Caster; Albert; Rosine; Jefferson; Minerva; Saunders; Ted; Old Harvey; Mangey; Dixon; Edmond; Susan; Tosch; Violet; Dave; Nelson; Caroline; Emily; Melinda; Toney; Thomas; Elizabeth; Susan; Miria; Menna; Jake; Old Tom; Munroe; Fanny; Tom; Nanny; Courtney; Beckey; John; Stephen; Eliza; Modilla; Meunda; Carey; Harry Boyston; Old Jacob; Nancy; Jack; Isham; Old Major; Major; Alick; Sophy; Old Tom; Billey; Abraham; Minta; Bolly; Edmund; Sam; Peggy; George; Roderick; Harry; Edda; Cretea; Charity; Martha; Pat, Sally, Jim; Betsey; Lucy; Joe; Calvin; Louis; Jackson; Tabby; Andy; Coleman; Dorcas; William; Artemes; Rhody; Amy; Spencer; Leah; Gilbert; Dinah; Barbara; Patience; Nathan; Peyton; Peter; Old Mary; Old Jane; Jane; Old Sarah; Toney; Affy; Patty; Phillis; Molley; Thomas; Chloe; Beck; Aaron; Sally; Andrew, Mary Poiney; Dick; Old Hannah; Tony Jack; Jenah; Stephey; Joseph, Rudy; Audez; Daphne; Little Hannah; Littly Patty; Bristol; Ned; Charlotte; June; Sabrina; Philip; Rose; Belmont Jack; Mariah or Murrhah; Russ; Gui; Venus; Violet; Dorcas; August; William; Jackson; Anthony; Mary; Sophy; Amos; Frank; Racchus; Little Jack	1846	St. Mary Parish, Mortgage Book 12, p. 385, 1846/04/21, Tulane University, Citizens Bank of Louisiana Papers, 1834-1914, Folder 5
Marsh, John C.	plantation and the following individuals: Peter; Jack; Jim; Gus; Joe; Ned; Sawney; Bill, New Frank; William; Old Frank; Cain; Arcly; Henry; Sabrey; Athena and her children Jake and Betsy; Sarah and her children Elsey and Phill; Suckey and her children John, Mary Ann, Jerry, Margaret, and Peet; Milley and her child Betsy; Little Betsy; Little Maria and her child Little Louisa; Suze; Jane; Louisa; Slyvia and her children Rosalie, Harriet, and John Lous; Sally and her children John, Effy, Mary Ann, and George; Mary and her children Frances, Purvey, and Eveline; Charity; Chloe; Grace; Big Maria and her children Edward and Durand; Hona; Foster; Bob; Gus; Durand; Bill; Little Ned	1838	St. Mary Parish, Mortgage Book 1837, p. 195, 1838/03/15
Moore, John	the following individuals: George; George; Sam; Nancy; Rose; Bob; Caroline; Abby; Therese; Howard	1843	St. Mary Parish, Mortgage Book 11, p. 260, 1843/06/01

Owner	Mortgaged Collateral	Dates	Source
Nicholas, R. C. and B. G. Tenney	sugar plantation on Cote Blanche and the following individuals: Abram; Nelson; Washington; Edmund; John; Tom; Ruben; Amistad; Richmond; James; Henry; Major; Sam; Stephen; Peyton; Big Jim; Monday; Pompey; Peter; Big Sam; Charles; Major Thomas; Sanders; Jacob; Jefferson; Dixon; Marion; Harry; Bill Cooper; Tom Cooper; Jacob; Old Ben; Lucy; Molly; Rody; Susan; Dinah; Liza; Amy, Milly, Sally; Nelly; Tepi; Fanny; Violet; Chanty; Caroline; Mary; Tabby; May; Hormlid; Mary, Dave; Tom; Joseph; Andrew; Fred; Venus; Mannory; Edy; Leah; Lyncheu; Amy; Polly; Milly, Susan; Barbey; Nancy; Dely; Caloin; Solomon; Ninnals; Tom; Caroline; Edmund, Sohpy; Minerva; Cotney; Palum; Artamus; Ellen; Emily; Coleman	1837	Concordia Parish, Mortgage Book J-K, p. 10, 1837/07/11; Tulane University, Citizens Bank of Louisiana Papers, 1834-1914, Folder 1, 1836/02/06
Nicholas, Robert Carter	Cote Blanche Plantation and the following individuals: Jacob; Little Mayor; Stephen, Little Jacob; Nelson; Edmond; Amistad; Monday; Big Harry; Washington, Peyton; John; Young Jon; Big Mayor; Bill; Peter; Fersh; Richmond; Eliza; Tammy, Charity, Caroline; Nelly; Violet; Diana; Tubby; Nancy; Harriett; Nicy; Milly; Lacy, Little Mary; Rhony; Sally, Minty; Saunders; Jefferson; Minerva; Dickson; Harry; Davy; Tom; Naney; Courtney; Eddy; Paully; Susanna; Jacob; Barley; Patrick, Coleman, Frederick; Minerva, Cintly; Molly; Penina; Abraham; Buster; Leah; Vina; Solomon, Joe; Calvin; Martha; Amy; Jane; Edmond; Modilla; Alexander; Handy, Little Tim; Charles; Sorberton; Sophia; Lindy; Elizabeth; Albert; Minerva; Jack; Ceras; Betsy; Thomas; Casey; Tomy; Lewis; Marthon; Rindey; Emily, Artemis; Patrick; Becky; Louisa; Margaret; Sam; George; Peggy; Harold; Willy, Mamah; Jackson; Spencer; Charlotte; Lorean; unnamed individual; Harnby; Robinson; Hisam; Virginia	1837	Tulane University, Citizens Bank Minute Book No 2: 1837/06/19; Citizens Bank of Louisiana Papers, 1834-1914, Folder 1, 1836/02/06 ; St. Mary Parish, Conveyance Book F, p. 401, 1845/08/03
Pavy, Pierre Joseph	plantation and the following individuals: George; Frederick; Matilda	1837	St. Mary Parish, Mortgage Book 9, p. 77, 1837/06/27; Mortgage Book 10, p. 131,

Owner	Mortgaged Collateral	Dates	Source
Tenny, Bernard	Cote Blanche Plantation and the following individuals: Abram; Nelson; Washington; Edmund; John; Tom; Ruben; Anstead; Richard; James; Henry; Major, Sam, Stephen; Peyton; Big Jim; Munday; Pompey; Pam; Peter; Big Sam; Charles; Major Thomas; Janaus; Scott; Jefferson; Dixon; Monroe; Harry; Bill Cooper; Sam Cooper; Jacob; Old Ben; Lucy; Milly; Rody; Susan; Dinah; Lize; May; Milly; Sally; Milly; Jesse; Fanny; Violet; Charity; Caroline; Nancy; Tabby; Mary; Honield; Macy, June; Caroline; Edmund; Sophy; Dave; Tom; Joseph; Andrew; Ted; Venus; Mannary; Edy; Leah; Lynchen; Anny; Polly; Milly; Susan; Barbary; Nancy, Dolly; Calvin; Saloman; Moncron; Colney; Palnn; Actanuse; Ellen; Emily; Colmon	1837	Tulane University, Citizens Bank Minute Book No. 2: 1837/06/19; St. Mary Parish, Mortgage Book 9, p 18, 1837/07/14
Tenny, Bernard and Robert Carter Nicholas	Cote Blanche Plantation and the following individuals: Ben; Jacob; Charles; Luba; Tom, Little Major; Steven; Little Jacob; Nelson; Big Sam; Edmund; Armstead; Monday, Big Harry; Washington; Peyton, Big Jim; Reuben; Pomprey; John; Little Jim; Young Jim, Big Major; Bill; Little Sam; Peter, Joe; Richmond; Eliza; Susan; Fanny, Charity; Caroline; Nelly; Violet; Dina; Tyret; Job; Betsey; Nancy; Harlett; Micey, Nelly, Liney; Little Mary; Rhody; Sully; Big Henry; Minthy; Saunders; Jefferson, Dickerson; Harry; Dave; Tom; Mary, Cortesey; Cury; Polly; Susan; Jacob; Andy; Jarban; Patience; Coleman; Frederick; Minerva; Sidney; Milly; Penina; Carter; Leah; Vina; Solomon; Ive; Calvin; Martha; Amy; Jane; Elinor; Mordilla; Alexander	1845	St Mary Parish, Conveyance Record F, p. 372, 1845/05/03
<u>St. Tammany Parish</u>			
Baham, Renez	land and the following individuals: Luca; Peter Buck; Charles; Lewis; John; Peter; Jack; Charlotte; Betsey and her unnamed infant; Caroline; Fanny; Catherine; Alexander; George; Pierre; Isaac; Cecile; Sylva	1838	St Tammany Parish, Mortgage Book 1835 -1838 (vol. 63), p. 516, 838/03/18
Belargen, David	land and the following individuals: Thurston; Justin; Sam; Nelly and her three children Lewis, Martha, and Joe; Fanny and her three children Rosalie and two unnamed children; Adam; Caleb; Amistad; Daniel; Vina and her two unnamed children	1843	St. Tammany Parish, Mortgage Book 64, p 399, 1843/11/07, p. 400, 1843/11/22
Cousin, Terrence	land and the following individuals: Clark; Hesspi; Cynes; Wesley; Sonthy; Caleb; Tom; Jessy; George; Elias; Lewis; Hector; Old George; Joshua	1838	St. Tammany Parish, Mortgage Book 1835 -1838 (vol. 63), p. 478, 1838/02/01

Owner	Mortgaged Collateral	Dates	Source
Deguy, Mrs. F V	brickyard and 16 individuals; including: John Mason, his wife Elve, and their children Mary, Elizabeth, Maria, Helene, and John; Alphonse; Ned Hawkins; Charles Hawkins; Armstead; John Monk; Chidrick; Alfred	1856 -1859	Tulane University, Citizens Bank Minute Book No 7 1856/03/07, Citizens Bank Minute Book No 8: 1859/12/12
Dunn, William	plantation and unnamed individuals	1841	Tulane University, Citizens Bank Minute Book No 4 1841/09/30
Felice, Felicite; Elizabeth Elise De Gruy	land and the following individuals: Zacharie; John Mason, his wife Chloe, and their 8 children: Mary, Pita, Ann, Elizabeth, Maria, Helene, John, and unnamed infant, Aaron, his wife Emeline, and their 3 children Fanny, William, and George; Hephonse; Neo Hawkins; Charles Hawkins; Armstead; John Clark; Chedrick; Aeprea	1852-1856	St Tammany Parish, Book B, p. 377, 1856/03/25
Griffin, Hippolyte	Fontainebleau plantation; brickyard; with the following: Nelly; Catiche; Victor; and other unnamed individuals	1852-1855	Tulane University, Citizens Bank Minute Book No. 7. 1852/02/10, 1852/02/17, 1855/06/15
Guesnon, Omer	land and the following individuals: Charles; Henry; Jerry; James; Nick; George; Marseille; Flora; Marguerite	1838	St Tammany Parish, Mortgage Book 1835 -1838 (vol. 63), p. 511, 1838/01/31
Lesassier, Camelife	land and the following individuals: John; Elizabeth and her child Pauline	1837	Mortgage Book 1835 -1838 (vol. 63), p. 489, 1837/12/25
Lewis, John Hampden	land and the following individuals: Tom; Mary; May; Rhina; Moses; Nancy; Frederick; Hannah; Cesar; Bella and her four children Sophia, Lizzy, Phillip, and Lucina; April; Hannah and her three children Isaac, Mary Ann, and Flora; Scott; Daphney and her two children George and David; Big Billy; Old Sue; Londa; Sue and her four children Silus, Nelly, Primus, and an unnamed infant; Patrick; Amelia; Maurice; Primus	1841	St. Tammany Parish, Mortgage Book 64, p. 285, 1841/10/18, p. 384, p. 531; Tulane University, Citizens Bank Minute Book No 5: 1846/02/05
Marigny, Bernard	plantation and the following individuals: Big Ben; Charles; Henderson; Big Henry; Garry; <i>illegible</i> ; Anthony; Small Henry; William Harper; Peter; <i>illegible</i> ; Isaac; Denis; German; Taliba; Thomas; Ronamy; Pilate; Solimon; Harmon; John; Sam; Ephraim; Gilles; Big Fanny; Augustin; Milis; Sandy; Fenton; Diana; Hesly; William; Hetty; Sophie; Lucile; <i>illegible</i> ; Grande Marie; Lizal; Fanny Carter; Arelaine; Lisabeth; <i>illegible</i> ; Jeanne; Adam; John; Nancy; Charlotte; unnamed individual; Milly; Rachel; Jeanne; Caroline; Julienne; Lizal; Lucindy; Martha; Maria; Sarah; Major; Gustave; Annee; Lavina; Celina and her unnamed two children; Anna and her children Francois and Eulahe; Augustin; St. Jean	1834-1851	Tulane University, Citizens Bank Minute Book No 1 1834/09/20, Citizens Bank Minute Book No 3: 1841/03/29, 1841/04/01, 1841/02/17, Citizens Bank Minute Book No. 4: 1842/02/26, 1842/01/19, Citizens Bank Minute Book No. 5: 1845/07/31; Citizens Bank Minute Book No. 6: 1850/11/19; Citizens Bank Minute Book No. 7: 1851/09/16; Citizens Bank of Louisiana Papers, 1834-1914, Folder 3: 1841/07/03

Owner	Mortgaged Collateral	Dates	Source
Marigny, Bernard	Fontainbleu Plantation and the following individuals: Nestor; Gilbert; Manuel; Ned; John; Emery; Tandely; Pierre Bastim; Bazile; Raimond; Morphine; Pierre Jason; Appoton, Wait; Capitaine; Valery; Jasmin; Ned; Hurns; Frederic; Georges; Ned Alix; George, Ponpon ; Pierre; Oreste; Virgile; Lendor; Celestin; Jackson; Lannon; Perry, Tom; Prosper; Davis; Ephraim; Jasmin; James; George; Nelson; Bob; James; Jack; Thomas; Robert; Petite Steven; Cyhrien; Mahomet; Francois; Gedale; Bartholome; George; Jean Baptiste; Davis; Anguste; Bill; Ulysse; Frosine; Leveadie; Adelaide; Coree; Delphine; Amelie, Acanchore; Petite Mary; Margaret; Marie, Marthe, Charlotte; Celie; Gran Jane; Alix; Catiche; Pinba; Petite rachel; Feliece, Anna; Nelly; Patience; Patty; Cesaire; Annah; Mehely; Constance; Amelie; Hannah; Melite; Mary; Marianne; Jane; Rachel; Louisa; Petite Melite; Adeline, Asarine; George; Juliene; Lewis; Vicotr; St. Louis Jean; Amson; Allen; Louis; Manuel; Clemence; Jacques, Rosaline; Mariannette; Celestine; Becky; Violette, Anna; Agnes; Madeline; Genevieve; Elizabeth, Climene; Rachel; Patsy; Mariannette, Bonne; Marguerite; Francoise; Dorant; Clinace and her child; Patrick; Nelizet and her children Marie Noel, Aguoi, and Jaques; Petite Melite; Violette; Allen; Louis, George; Mary Bill; Bill; Israel; Lisa; Aguoi; Julian; St. Louis; Petite Steven, Clement; Valerie Golette, Nelson; Ned Golette; Petite Prosper, Dreste; Gros Valnz; Lucille and child; Aimee Kentucky; Agathe; Matilde; Belisaine; Petite Zenon; Sam, Selina and her two unnamed children; Julienne and her two unnamed children; Poicu; Petite Mary; Abraham	1834-1845	St Tammany Parish, Book 62 p. 204, 1834/09/06, Book 63 p. 232, 1837/05/12; Book 64 p. 221, 1841/04/28; Book 64 p. 479, 1845/10/28
Marigny, Bernard	land and the following individuals: Marie Corington; Marie Bill; Bigny; John Magnane; Celestin Mannane; Grande Jeanne; Anna; Jean; Adams; January; Thomas; Proster; Amelie; Reine and her son Cecil; Mary; Acquoi; El-Valentine; Grande Amelie; Lison; Antoinette; Patty; Bill; Bill (alias Belle Carting); Frederick; Pauline; Henderson; Mase; Joe; Pitu; Bon Ami; Ameline; Pinta; Alix; Fanny and her four children Antoine, Eugene, Claire, and an unnamed infant; Blaise; Gilles; Ben; Charles; Augustus; Allen; Remy; Henderson; Grand Olivier; Olivier; Grand Henry; Ephraim; James; Isaac; Garry; Thom; Anthony; Little Henry; William; Peter; Randal; Alli; Manuel; Sandy; Gorman; Brutus; Lubin; Taliba; Augustin; Canphre; Thomas; Michel; Benjamin; Pilate; Soliman; Oudon; Phaeton; Francois; John; Grande Diana; Petite Diana; Martha; Elvy; Agnes; Anny; Luncinda; Polly; Grande Marie; Jenny; Fanny; Susanne; Little Fanny; Charlotte; Little Mary; Rachel; Jeanne; Phoebee; Lucie; Julienne; Sisa; Aime ; William; Sam; Miner; Frank; Elisa; Charles; Fenton; Maria; Denis; and unnamed individual		St. Tammany Parish, Book 64 p. 44, 1839/04/08, p. 149, 1840/03/25; Tulane University, Kuntz Collection no. 600, 1834/11/1, 1836/7/5

Owner	Mortgaged Collateral	Dates	Source
Marigny, Mrs., Lebeuf, Martial	brickyard with Caroline and her two unnamed children; York; Charles, Lawson, and 40 other unnamed individuals	1850-1859	Tulane University, Citizens Bank Minute Book No. 6 1850/04/24; Minute Book No. 7, 1851/11/04, 1852/02/24, 1852/01/21, 1852/03/02, 1852/04/27, 1856/01/07; Citizens Bank Minute Book No. 8 1859/05/23
Merle, John	land and the following individuals: Richmond; Perry; Charlie; Humphrey; Lisbon; Joe; Pleasant; Anderson; Tannely, John; Henry; Davy; Fred; Bill; Bristo; Michel; James; John; Squire; Polley; Polly and her child Sarah; Sarah	1835-1838	Tulane University, Citizens Bank Minute Book No. 2: 1839/02/15; St Tammany Parish, Book 63 p. 442, 1835/10/14; Mortgage Book 64, p. 6, 1838/11/20
McQueen, William	plantation and the following individuals: Tom; Lott; Sam; Frederick; Cesar; William, Moses; John, Apri; Tom; Billy; <i>Benmus</i> , Sun; William; Moris; Mary; Hannah; Cate and her child Patty; Renah; Patty; Jenny; Daphne; Dilla; Hannah; Nelly; Mecury; Christiana; Little Tom	1835-1839	St. Tammany Parish, Mortgage Book 62, p. 329, 1835/03/18; Mortgage Book 63, p. 230, 1837/04/13, Mortgage Book 64, p. 79, 1839/08/15
Morgan, David B and Mary C	land on the Black River and the following individuals. Frederick; Sally and her 8 children Agnes, Jordan, Eliza Jane, Richard, Elizabeth, Amelia, Sally, and Matilda; Maria and her five children Robert, Jefferson, Edmond, Eliza, and Benjamin, <i>Delysha</i> and her 5 children Tom, Nelson, Jim, Elisa, and Rachel; Nancey; Grace; Louisa and her unnamed child; Yorick; Jim; Thornton; Preston; Sam; Caleb; Armistead, Daniel; Abner; Nelly and her 5 children Lewis, Martin, <i>Jio</i> , Deli, and Claiborne; Fanny and her children Rosalie, Alfred, William, and Alexander; Viney and her children Julia, George, Mahadier, and Charles; Frederick; Tom	1838-1852	Tulane University, Citizens Bank of Louisiana Papers, 1834-1914, Folder 2 1838/01/12, Citizens Bank Minute Book No. 5 1843/11/13, Citizens Bank Minute Book No. 7- 1852/01/06, 1852/04/06, 1852/02/10; St. Tammany Parish, Mortgage Book 63, p. 449, 1837/08/15; St. Tammany Parish, Book -A (vol. 65) p. 21, 1847/08/03
Parent, Charles	land and the following individuals: Edmond; Nace; Griffin; Jacob; Adam; Solomon; John; Adam; Charles Whitman; William; Mason; Charles Day; Charles Moon; Nace Sam; Isabella; Charlotte; Emile; Malinda; Cloe; Caroline; Zacharie; Elick; Rob; Emeline; Pauline; Josephine; Maria; Henrietta; Eliza	1837-1843	St. Tammany Parish, Mortgage Book 63, p. 346, 1837/07/15, p. 540, 1838/05/08; Mortgage Book 64, p. 396, 1843/11/06
Penn, Alexander Gordon	land and the following individuals: Abraham; Levin; Charles; Abbey; Ann; Mary; London; Celina; George; Betsey	1838-1840	St. Tammany Parish, Mortgage Book 1835 -1838 (vol. 63), p. 502, 1838, Mortgage Book 1838 - 1847 (vol. 64), p. 160, 1840/05/02; Tulane University, Citizens Bank Minute Book No. 5: 1843/01/28
Strawbridge, George	brickyard and the following individuals: Joe; Sam; Jerry; Jim Burke; Jacob; Will Burke; Dorsey; Clinton; <i>Norfle</i> ; Rose and her 6 children Mary Jane, Green, Solomon, Whitman, Emile, and Stephen; Alexander	1855-1857	Tulane University, Citizens Bank Minute Book No. 7: 1855/05/04; St. Tamman Parish, Book B, p. 238, 1855/05/11; Conveyance Book B, p. 446, 1857/05/06

Owner	Mortgaged Collateral	Dates	Source
Suvis, John S. L.	plantation and 15 unnamed individuals	1842	Tulane University, Citizens Bank Minute Book No. 4: 1842/04/18
Webber, Justus H.	brickyard and the following individuals: Underwood, Nancy; Little John (alias Isaac); Nob, Isaac; Jim; Edinboro; Susan; John; Molly; Larry; Priscilla; Sam; Bob	1852-1853	St. Tammany Parish, Mortgage Book B, p. 10, 1852/10/05, p. 88, 1853/03/09; Tulane University, Citizens Bank Minute Book No. 7: 1853/01/13, 1853/02/17
<u>Tensas Parish</u>			
Butler, Ira, John Murdock	land and 9 unnamed individuals	1846	Tulane University, Citizens Bank Minute Book No. 5 1846/03/19
<u>Terrebonne Parish</u>			
Barrow, R	two plantations and 20 unnamed individuals	c. 1848	Tulane University, M-1847, Citizens Bank Mortgage Book
Chandler, Joseph	plantation and the following individuals: Set, George; Lewis; Bill; Rack; Prince; Charles; Doyd; Bean; Ann; Milly; Isabella; Kitty; Lucy; Hannah; Sarah; <i>Rachel; Leon; Henry</i>	1838	Terrebonne Parish, Mortgage Book B, Pt. I, Entry 500, 1838/05/28
Gibson, Tobias	plantation and the following individuals: Jacob; Bob; Croxten; Isaac; Harry; Peter; Joe; Terry; Melissa; Barbary; Martha; Frances; Celeste; Nancy; Eveline; Cassa; Sally; Henry; Watkins; Andrew; Reuben; Charles; Bernetta	1838	Terrebonne Parish, Mortgage Book B, Pt. I, Entry 497, 1838/03/08
Lawless, R. C	plantation and unnamed individuals	1857	Tulane University, Citizens Bank Minute Book No. 8 1857/08/24
Pierce, Mrs. John	plantation and the following individuals: Billy; Big John; Harry; Figin; Young Billy; George; Jim; Henry; Phillip; Sid; Charles; Eli; George; Stephen; Thomas Jefferson; Robert; Arthur; Sam; Dick; Walter; Eugene; Charles; Tom; Archibald; Howard; Webster; Betsy; Cortney; Betsy John; Milly; Rachel; Mathilda; Margaret; Frances; Rosella; Martha; Patsy; Sarah; Lydia; Maria; Amanda; Harriet; Jane; Virginia; Rebecca; Elizabeth; Ella; Lucy; Cortney; Rachel; Eliza; Cornilia; Nelson; John; Susan	1855	Terrebonne Parish, Mortgage Book F, Entry 1836, 1855/04/12; Tulane University, Citizens Bank of Louisiana Papers, 1834-1914, Folder 5: 1835/05/07
Semple, Joseph	plantation and unnamed individuals	1858	Tulane University, Citizens Bank Minute Book No. 8: 1858/01/28

Owner	Mortgaged Collateral	Dates	Source
Shaffer, William A.	land and the following individuals. Simon; Abram; John; Joseph; Lenard; Lucy; Hanna; Sarah; Sarah Ann; Polly; James	1838	Terrebonne Parish, Mortgage Book B, Pt I, Entry 501, 1838/04/21
Shields, R. B.	plantation and the following individuals: Ben; Chandler; Jaret; Manson; Taylor; Louisa; Jantie, Charity; Lydia; William; Jack; Leah; Rohina; Mansero; Leri; Parker; Mark; John; Yellow John; Long John; Hannah; Rose; Kitty and her unnamed child; Amanda; Minerva; Sarah, Henry; Letty; Caleb; Sam; Cyrus	1858	Tulane University, Citizens Bank Minute Book No. 8: 1858/01/28; Citizens Bank Papers, Folder 5
Woods, William L	plantation and the following individuals: John; Harry; Charles; Betsy; Betsy; Milly; Matilda; Rachel; Courtney; Margaret; George; Frances; Martha; Tim; Betsy; Sarah, Dick; Lydi	1837	Terrebonne Parish, Mortgage Book B Pt. 1, Entry 484, 1837/10/28

Washington Parish

Bertaud, brothers	plantation and 10 unnamed individuals	c. 1848	Tulane University, M-1847, Citizens Bank Mortgage Book
Bourdin, Jean	unnamed individuals	1834	Tulane University, Citizens Bank Minute Book No. 1 1834/09/22
Murray, M.	plantation and unnamed individuals	1859	Tulane University, Citizens Bank Minute Book No. 8: 1859/05/16
St. Mark, S	plantation and unnamed individuals	1841	Tulane University, Citizens Bank Minute Book No. 4 1841/05/31

West Baton Rouge

Allain, Valerie	unnamed individuals	1835	Tulane University, Citizens Bank Minute Book No. 1: 1835/11/27
Allain, William	plantation and 22 unnamed individuals	c. 1848	Tulane University, M-1847, Citizens Bank Mortgage Book

Owner	Mortgaged Collateral	Dates	Source
Barrow, Robert H.	Patton plantation and the following individuals: Dick Latimore; Mathilda; George Hallaged; Marshal; Ben; Dan; Celeste; Johan; Esther; Elsey; Rose; Eliza; Deliah; John; Jake Bradford; Mary Johnson; Sarah; Margaret; Emiline; Victoria; Julia; America; Wick; Barthy; Little Joe; Elora; John Latimore; Elizabeth; Old Nancy; Harriet Hunt; Willis; Jane; Arian; Jake Thompson; Phillis; Elizabeth Cook; illegible, Louisa; Big Joe; Jenny; Dorcas; Charles Harris; Little Harriet; Isadora; Lyn, Biddy; Edmonia; Hnery; Chancy; Henny Hunt; Letty; Turner; Maria Rust; Little Turner; Celeste, Maria Morris; Arelda; George Sample; Little Mary; Ann; Zena; Joshua; Dicey, Eliza; Dick Young; Little Robert; Bob Riley; Adolphus	1853-1855	Tulane University, Citizens Bank Minute Book No. 7: 1855/04/15, West Baton Rouge Parish, Mortgage Book U, p 457, 1853/04/17
Beal, Robert	land and 2 unnamed individuals	1855	Tulane University, Citizens Bank Minute Book No. 7: 1855/07/10
Blanchard, Ziphian	plantation and the following individuals. Joe Brown; Edward; Little Joe; Ben; Pierre; Charles, Valentin; Joseph; Maurice; Politte; Silvain; Tom; Frank; Charles; Plume; Leandre, Brami; Henry; John; Pana; Charlotte, Sally; Dalize; Claire; Louise, Clemence; Marianne; Sally, Silie; Marie, Julienne; Julie; Adiline; Aimee; Sizy	1838	West Baton Rouge, Mortgage Book M, p 108, 1838/03/11
Clark, Samuel M. D.	plantation and the following individuals: Wilfird; Lawson; John; Ed; Peter; Sara; Fanny; Martha; Leah, Hannah; Betsey; John; Harriett; Washington; Caroline; Davy; Robert, John; Thomas; Sophia; Lucy; Joe; Dick; Jim; Martin; Dolly and her child Armand; 2 unnamed individuals; Martha; Ellen	1837-1849	West Baton Rouge Parish, Mortgage Book M, p. 68, 1837/10/21, p 273, 1838/08/02, Mortgage Book R, p 98, 1849/03/18; Tulane University, Citizens Bank Minute Book No 2 1838/06/04
Devall, James and Emilie Bernard	plantation and the following individuals: Dick; Daniel; Peter; Ralph; Richard; Isaac; Louis; Will; Tony; Fanny; Marianne; Eliza; Dorothee; Henry; Charlotte	1838-1839	West Baton Rouge Parish, Mortgage Book M, p. 66, 1837/10/19, p. 96, 1838/02/27, Mortgage Book N, p 173, 1839/04/04
Dougherty, John	plantation and unnamed individuals	1860	Tulane University, Citizens Bank Minute Book No. 8: 1860/12/17
Doussan, Joseph Antoine and Lise Patin	plantation and the following individuals: Pierre; William; Fris; Manette and her two unnamed children	1836-1837	West Baton Rouge Parish, Mortgage Book L, p. 264, 1836, Mortgage Book M, p 75, 1837/12/09
Favort, Louis	plantation and the following individuals: Louis; Bob; Jack	1838	West Baton Rouge Parish, Mortgage Book M, p. 84, 1838/01/24
Favort, P.	land and unnamed individuals	1837	West Baton Rouge Parish, Mortgage Book N, p. 27, 1837/07/27

Owner	Mortgaged Collateral	Dates	Source
Grand-Pre, Etienne, Patn, Mrs C and Mrs. F Allain	plantation and the following individuals: Honore; Noel; Ben; John; Scott; Hyppollite; Linore; Joseph; Celerie; Rose; Genevriere; <i>illegible</i> and four children <i>illegible</i> ; Melite; John; and Athalie; Aurilie and her child Louisa; Fris; Tina; Mary; Pierre	1834-1848	Tulane University, Citizens Bank Minute Book No. 1: 1834/10/13; Minute Book No. 6: 1847/01/11; West Baton Rouge Parish, Mortgage Book L, p. 78, 1835/02/28, Mortgage Book O, p. 343; Mortgage Book P, p. 167, 1845/02/19, p. 530, 1848/02/15
Hiriart, Sebastian and Marceline Major	plantation and the following individuals: Baptiste and his wife Marianne; Yellow Dick; Moses; Adonis, Little Sam; Big Sam; Big Dick and his wife Jenny; Cornelius; William; Richard; Little Tom; Jenkins; Hubers and son Fridon; Nilson; Ephraim; Marshall; Ben; Noe; Little York; Big York, Randan; Daniel; Charles; James Crack; Big John; Big Jesse; Little John; Little Jesse; Salomin; Bob; Esau; Elick; Joshua; Moses Erwin; Dick Plaquemine and his wife Marie Mahere; Big Isaac; Little Isaac and his wife Little Aimee; James Bishop and his wife Lucy; Drayman Tom; Frank; his wife Cassy, and their children Pelagre and Angela; Allen; Jenny and her son Lafayette, Baptiste; Big Abraham and his wife Molly; Jack; Constance and her daughter Chalmette, Pierre, Bebel; Elick; Ben Borie Plaquemine; Billey Ernest, Nick; Peter; Landry and his wife Letty; Wilson; Lubin and his brother Pierre; Rachel and her son Achille, Aleyon; Antoine; Barras; Constant; Beverley; Clinton; Petion; Jackson; Francois, Robert, Bob; Benjamin; Simon; Casto; Sarah and her children Eugene and Louise; Caroline	1835-1847	Tulane University, Citizens Bank Minute Book No. 1: 1835/11/27, Minute Book No. 5: 1845/05/19; Citizens Bank of Louisiana Papers, 1834-1914, Folder 3, 1847/05/21; West Baton Rouge Parish, Mortgage Book K, p. 271, 1836/02/24, Mortgage Book M, p. 493, 1841/06/26, Mortgage Book P, p. 220, p. 455, 1845/07/29, Mortgage Book Q, p. 313, 1847/07/26, Mortgage Book S, p. 180, 1849/07/28
Kinchelloe, W.	the following individuals: Achille; Abraham; Allen; Ben; Badgio; Dick; Eugene; Frank; Isidor; Isaac; Joshua; Big John; Petit John; Jackson; Jack; Lubin; Lafayette, Marechal; Peter; Old Pierre; Salomon; Sandy; Tom; Wilson; William; York; Angela and her son Bill; Constance and her children Adelia, Rachel, and Cidalise; Chalmette; Clemence; Little Justin; Louise; Old Lucy; Mary Ann; Mary and her children Celestin, Abraham, and Basil; Molly; Pelagia; Rachel; Letty; Harriet and her three children Alia, Patsey, and Mary; Melinda; Anna; Nancy; Cornelia	1850	West Baton Rouge Parish, Mortgage Book R, p. 320, 1850/07/11, p. 327, 1850/07/26; Tulane University, Citizens Bank Minute Book No. 6: 1850/07/09
Landry, A. and P. Verbois	plantation and 7 unnamed individuals		West Baton Rouge Parish, Mortgage Book T, p. 312, 1854/05/18
Landry, Joseph	plantation and the following individuals: David; Nelson; Julienne; Henriette; Julien; Jean; William	1838	West Baton Rouge Parish, Mortgage Book M, p. 91, p. 100, 1838/02/17
Landry, Ursin	plantation and the following individuals: Jean-Louis; Alick; George; Maria; Eliza; Marianne; Augustin; Rose; Ben; Elizabeth	1838	West Baton Rouge Parish, Mortgage Book M., p. 120, p. 131, 1838/03/26; Mortgage Book N, p. 109, 1838/07/26

Owner	Mortgaged Collateral	Dates	Source
Lobdell, John L.	plantation and the following individuals: Humphrey; Little Nancy; Emma and her children Jean Baptiste and Mary Catherine; Alfred; Maria; Nannette; Peter; Henry; Sercy; Grace; Polly; Frances; Louisa; Martin; Gabriel; Handy; Nancy Sercy; Alexander; Munro; Milly Sercy; Jack; Jeannette; James Munro; Nanette; William; Randell; Sally; Amus; Edmund; Simon; Prince; Albert; Charlotte; Shadrach; Sarah; John Reed; Jane; Charles; Turner; Jesse; Sally; George; Mathilda; John Monroe; Doctor; Esther; Auma; William Dime; Aylsey; Abraham; Andrew; Ellazma; Presilla; Caroline; Isaac Cooper; Joe; Hillary; Little Ben; Flora; Hannah; Jourdan; Ellen; Rina; Dicey; Joyce; Joe Boon; Polly; William Boon; Isam; Emily Rean; Rosanna; Mary Ann; Lucinda; Lavinia; Old Ned; Toby; Lodaiska; Wilson; Terecine; Delphine; Clarice; Molly; Ned; Cemental; Netty; Amelia; Burnettal; Merridy; Indy; Wealthy; Adeline; William Gray; Arinall; Maria; Julia; Virgil; Eveline; Clarissa; James; Christina; Henderson; Lucy; Johny; Emma; Elizabeth; Kitty; Polly Boon; John Monroe; Edmond Harris; Litty; Yellow Joe; Jacob; William Simom; Wesly; Terrence; Joe Sercy; George; Martha; Gabriel; Eliza Ann, Louisa; Harry; Patsy; Armand; Mernday; Hillary; Walter; Anna Gray; Sandy; Clarisse; Celeste; Jesse; Emily Leon; Margaret; L. Anna; Rosetta Pinace	1855-1859	Tulane University, Citizens Bank Minute Book No. 7: 1855/06/08; West Baton Rouge Parish, Mortgage Book X, p. 83, 1855/06/15, p. 107, p. 123, p. 776; Tulane University, Kuntz Collection, No. 600, 1858/03/15
Michel, Jean Pierre	plantation and the following individuals: Peter; Edward; Joshua; David; York Paul; Alexander, Alan; Peter, Hudier; Martha; Pauly; Lany; Simon; Nancy; Maria; Priscilla; Melanie; Lady; Albert; <i>illegible</i> ; John; Thomas; Mary; Paul; Peterson; Pauline	1837-1845	West Baton Rouge Parish, Mortgage Book M, p. 63, 1837/10/18; Mortgage Book N, p. 37, 1837/11/15, p. 200, 1838/07/13, East Baton Rouge Parish, Mortgage Book K, p. 13, 1838/07/09, p.416, 1845/01/16
Nolan, John	plantation and the following individuals: John Barns; Preston; Joe Henson; Bazile; Big Frisly; Jack; John - Louis; Collins; Little Joe; William; Bill; Lewis; Isaac; George Washington; Bob; Jeffry; Robert; Henry; Jackson; Edmond; Tom; Jack Harry; Steven; Charles; Frisly; Bill; Sam Tilman; Edward; George; Sam; Cempey; Sarah; Lucinda; Big Peggy; Delcey; Helen-Thomas; Kissiah; Ann; Big Hannah; Lorendy; Augustine; Pauly; Mary; Orille; Henriette; Henriette Batts; Sally; Betsey; Anna; Seraphine; Charlotte; Birdy; Jenny; Rosetta; Charlotte; Sophy; Nancy; Brittany; Nelly; Sally; Philis; Rachel; Psthena; Helen; Little Charlotte; Caroline; Lesine; Rosemond; Ardine; Oliver; Kitty; Isabella; Denis; Marianne; Indiana; Sam; Eliza; Agnis; Maria; Louisa; Lucinda; Monarch; Thomas Madison; Lizzie		West Baton Rouge Parish, Mortgage Book M, p. 79, 1838/01/11, p. 146, 1838/05/17

Owner	Mortgaged Collateral	Dates	Source
Patin, Victorin and Lise	plantation and the following individuals: Pierre; William; Luci; Manette and her two unnamed children; Baptiste; Etienne; Philippe; Jean Baptiste; <i>Didier</i> ; Magloire; Sheratin; Azenor; Theodate, Julien; Venerand; Xavier; Cerenu; Marie; Victorin; Sidey, Annette; Octavin, Fanny; Grand <i>Hadrick</i> ; Giles; Jim Hudsun; John; Alexis; Jean Pierre; Isaac; Sam Knox; Jim Grant; Jim Ham; Randal; Hadrick Bank; Phill; Daniel; Sam Brown; Salomon; Coffey; Billy; Charlotte; Marianne; Lea; Maria; Silly; Romaine	1836-1838	West Baton Rouge Parish, Mortgage Book K, p 275, 1836/02/26, p. 335, 1836/07/09; Mortgage Book M, p. 142, 1838/05/11, p. 171, 1838/06/16; Tulane University, Citizens Bank Minute Book No. 6: 1847/01/11
Patrick, Jean	plantation and the following individuals: Cherubin; Azenor; Dave; Baptiste; Henry; Charles; Sam Knox; Sam Brown; James Hudson; James Ham; James Grand; Alexis; Richard; Phillipe; Venerand; Salomon; Giles; Field; Levin; Xavier; Jack; Julien; Coffey; Jean Pierre; John, Billy; Ned; Big Hadrick; Isaac; Etienne; Little Hadrick, Lewis; Daniel; Terence; Annette; Linda; Romaine and her three children Dorval; Lodoiska; and Hippolite; Hortense; Mariah; Rosalie; Lea; Dilet; Nelitto; Octavina and her child Adam; Manette and her child Edward; Marianne) and her child Merovi, Lucie and her child Robert; Mary and her child Patience; Sophie and her child Adonis, Fanny; Victoire; Poupponne; Michael Hortense and her two children Celestine and an unnamed individual; Patience; Virginia; Antonio	1839	West Baton Rouge Parish, Mortgage Book M, p. 310, 1839/06/05
Pipes, Charles	land and the following individuals: Jim, Henry, Bill; Ned; Burr; Sam; Jefferson; Steven; Sam, Henry; Henriette; Mary; Sally; Louis; Helen; Citus; Ann; Catherine; Mary; Prince; John	1838	West Baton Rouge Parish, Mortgage Book M, p. 111, 1838/03/13 p 181, 1838/06/29
Robertson, Mrs A. S.	the following individuals: Susan and her child Cornelius; Baptiste, his wife Nancy, and their three children Robert, Ella, and an unnamed individual; Diney and her three children Mahala, Melinda, and unnamed individual; Peter; Betsey; Chadrick	1859	West Baton Rouge Parish, Mortgage Book A-B, p. 122, 1859/03/19
Robertson, W. B.	plantation and the the following individuals: Sally; Dolly; Minerva and her three children Lavinia, Essex; and Justine; Susan and her three children Margaret; Emma; and Jack; Polly; Charles; Dorcas; Stephen; Peter	1847	Tulane University, Citizens Bank Minute Book No. 6: 1847/08/22, West Baton Rouge Parish, Mortgage Book P, p. 451, 1847/05/15

Owner	Mortgaged Collateral	Dates	Source
Robertson, William Blunt, Edward White Robertson and Charles Dickinson Robertson	plantation and the following individuals: Godfrey; Sally; Robert; Old Shabe; Frozine; Lizzie; Yorick; Louisa Jeff; Little Yorick; Lucy; Charles Lobdell; Mary Ann; Nancy; Dorcas; Joshua; Dolly; Gathy; Charles Banks; Josephine; Little William; Dave; Little Josephine; Eugene; Charles Warner; Sam; Emily; Dorcas; Wyatt; Little Wyatt; George Sury; Sam Smith; Charlotte; Edward; Parker; Lucinda; Harriett; Little Lucinda; Peter Grimball; Louisa Parker; Tom; Jim; John; Big Ellen; Little Ellen; Kitty; Peter Verdies; Peggy; Rose; Minerva; Essex; Gustine; Margaret; Amy; Irene; Jack; Neuman; Dimery; Joe Austin; Mitchell; Cam; Winter; Prince; Tom; Lucy Gorham; Eliza Banks; George Lewis	1859	West Baton Rouge Parish, Mortgage Book X, p. 766, 1859/03/31; Tulane University, Citizens Bank of Louisiana Papers, 1834-1914, Folder 5
Shannon, Thomas	sugar plantation, land, and the following individuals: Phill; Small Phill; George; Phill Clay; Louis; Antoine; Small Joseph; Sam; Willis; Bastien; Prince; Frederick; John Mary; Tom Congo; Isaac Lavith; George Walker; Jacque; George Mulatto; Lerne, Azinor; John Sally; Gasmay, Chapperd; Little Tom; Little Isaac; George Attakaps, Agricole; John Third; Davis; Bill; Hippolitte; Jean Louis; Honore; Pierre; Dick Clark, Cupidon; Francois; Ned, William; Martin; Charles; Opportune; Fanny; Rosalie, Guinie; Violer, Selphine; Hilene; Lisette; Rose; Small Hannah; Mariane; Phebe, Sintee, Augustine; Marie; Agnes, Mathilda; Small Lucy; Patsy; Sally Henry; Marguerite, Jane; Becky, Small Sally; Mariah; Anna; Peggy; Chrispin; Aimee	1836	West Baton Rouge Parish, Mortgage Book K, p. 278, 1836/02/29
Verbois, Pierre	plantation and the following individuals: Antoine; Julienne and her three children Cadet, Helina, and Leverin; William; Henriette and her child Alfred; Albert; Dick; Louisa and her three children Alexandre, Adolphe, and Antoine; Nane and her child Lucie; Maria; David; Nilson, Julien; Jean	1847-1848	West Baton Rouge Parish, Mortgage Book P, p. 432, 1847/04/28, p. 435, 1847/04/23; Mortgage Book Q, p. 299, 1847/05/06
Ware, Joss	plantation and the following individuals; including: Peter; Baptiste; Chadrick; Susan, Sarah; Betsey; Jenny; Nancy; Cornelius; Robert; Mahala; Melinda; Ella; Aaron; Catherine; John; Adam; Alex; Julian	1859	Tulane University, Citizens Bank Minute Book No 8: 1859/03/14, West Baton Rouge Parish, Mortgage Book X, p. 759, 1859/03/18

Owner	Mortgaged Collateral	Dates	Source
<u>West Feliciana Parish</u>			
Barrow, Robert H.	plantation, land, and the following individuals: Tom Sears; John; William Duke; William Davis; Aleck; Peter Wilson; Peter; William R.; Billy; Mike Marshall; Moses; Charles; Dave; Frank; Jake; Fisher; William; Nimrod; Henry; Elisha; Lotty; Harriet; Big Margaret; Little Margaret; Virginia; Chloe; Milly; Violet; Charity; Rachael; Sally; Eliza; Miranda; Edy; Ann; Betsey; Hannah; Angeline; Alix; William; Edward; Henry; Carroll; Willis; Ephraim; Wilson; Manuel; Ben; Ellen; Betsey; Louisa; Emily; Rebecca, Sarah; Matilda; Phoebe; and unnamed individual	1855	West Feliciana Parish, Mortgage Book O, p. 575, 1855/04/18
Barrow, Robert J. and Mary E Craff	Rose Bank plantation, Bay Wood plantation, and the following individuals: Tom; Essex; Deline; Issac; Mary Hall; Amy; Lizzy; Charlity; Elizabeth; Jerry; Linda; John; Henry; Harriet, Mathilda; Peter; Matthew; Deed; Nelson; Maria; Mary; Silla; Nelly; Kate; Nimrod, Suba; Milly; Morris; Richmond; Solomon; Jim Russell; Henry Johnson, Frank; Jeff, Charles; Lewis; Stephen; Queen; Mary Smith; Harriet Foster, Cherry; Kizzy, Sylvia; Hasty; Diana; Winney; Rhody; Courtney; Maria; Hannah, Chancy; Cherry; Susan; Lucy; Cynthia; Levi; Martha; Theresa; Moses; Jacob; Joe, Peggy, Jim; Jack; Abraham; Richmond; George; Idy; Sophia; Charles; Phillis, Sarah; Lorenzo; Ben; Handy; July; Bolin; Rosina; Daphney; Jordan; Sutton, Sylvia; David; Daniel; Eli, Wilson; Dilsey, Thomas; Ann; Frances; Harry; Johnnetta, Holoway; Allen; Chancy; Rosetta, Matt; Elzy; Harry; Henry Clay; Isabella, Nathan, Laurina; Emma ; Romeo	1851-1856	Tulane University, M-1847, Citizens Bank Minute Book No. 6: 1851/04/08, 851/07/08; Citizens Bank Minute Book No 7. 1851/12/02, 1855/02/02, 1852/02/06; West Feliciana Parish, Mortgage Book O, p. 119, 171, 1856/07/19
Bradford, David and Amanda Jan	land and individuals. Bosen; Eletia; Nancy and her son Emmy; Emmy's son Willis; 1838 Queen; John; Charity, Sabella; Hannah	1838	West Feliciana Parish, Mortgage Book K, p. 184; 1838/04/23
Brown, James	land and the following individuals. Harry; Patrick; John; Jim; George; Simon; Ned; Joe; Little Simon; Sam; Jim; Cesar; Bill; Isaac; Sally; Betsy, Jane; Harriet; Silvia; Sally; Nancy; Mariah; Rinah; Kally; Eliza; Calvin; Dick; Charles; Polly; Susan; Martha; Esther; Mary; Milly; Ellen	1837-1842	Tulane University, Citizens Bank Minute Book No. 5: 1842/12/16; West Feliciana Parish, Mortgage Book K, p. 93, p 107, 1837/06/24
Causland, Robert M.	land and individuals. Ben; Daniel; Fines; Jack; Sidney; Charlotte	1838	West Feliciana Parish, Mortgage Book K, p. 156, 1838/02/27
Coulter, James H.	plantation and the following individuals: Adam; Lucy; Caroline; Amelia; Charles; John; Manuel; Sam; George; Henry; Mahaley; Sarah; Joannah; John Deut; Louisiana; Lucy Garret; Jim; Charlotte; Eliza; Harriet; Henry; Betsey; Battiste	1853-1855	Tulane University, Citizens Bank Minute Book No. 7. 1855/03/02; West Feliciana Parish, Mortgage Book O, p. 536, 1853/03/08

Owner	Mortgaged Collateral	Dates	Source
Direr, Robert and Mary Kilgour	land and the following individuals: Watt; Tom; Vine, and her unnamed child	1837	West Feliciana Parish, Mortgage Book K, p. 118, p. 127, 1837/12/16
Doherty, Peter and Sarah B.	land and the following individuals: Harry; Abraham; Abner; Willis; George; Anderson; Felix; Martha and her child Josephin; Ellen and her child Josephine; Jane and her children Francis and Rhody; Bill; Adam; George; Alfred; Frederick; Lewis; Jack; Patt; Jim; Basil; Ned; Joe; Tom; Anthony; Rose; Rachel; Celia and her child John; Hannah; Betsey and her child Rou Ann; Suckey; Henney; Eliza; Lena; Rachel; Liz; Celine; Eve; Kitty; Caroline; Chancey; Adeline; Alsey; Old Nancy, Emma; Hasty; Annett	1855	West Feliciana Parish, Mortgage Book O, p. 547, 1855/03/15
Fair, James and Mary	plantation and the following individuals: John; Fountain; Jake; Roderick; Jake; Fill; 1838 Jack; Charles; Jet; Milly; Phillis; Nancy; Eady; Sabila; Charlotte; Grace; Mary; Ann; Mariah; Silda; Jenny, Wesley; Dane; Dick; Henry; Jim; Nan; Routh; Emeline; Rachael; Steven, Nancy	1838	West Feliciana Parish, Mortgage Book K, p. 170; p. 176, 1838/03/22
Farrar, Mary Ann	land and the following individuals: Alfred, Salma; Washington; Jane and her child Polly; Tempe's children Patsey, Dave, and Sabrey; Caroline's children Emily and illegible, Amcy's children Joe, Winney, and Stephen; Loroney's children Laura Ann and Tiney Ann	1846	West Feliciana Parish, Mortgage Book N, p. 251; 1846/02/24
Grover, Hiram J	land and the following individuals: Jim; Gabriel, John; Clara; Susan; Jane; Sylva; James; Sigudy; Tabor; Jane; Amy	1837	West Feliciana Parish, Mortgage Book K, p. 97; 105-106, 1837/10/02; West Feliciana Parish, Mortgage Book K, p. 105, 1837/10/28
Nervill, Gideon and Nancy	the following individuals: George, Bob; Nelly	1842	West Feliciana Parish, Mortgage Book M, p. 208, 1842/09/28
Pattillo, George H.	land and the following individuals: Jim; Lewis; George; Jess; Mike; Marinda; Harriet; Ruth; Fanny; Nathan; Frank; Marinda's daughter Martha; Charles; George Washington, Mack; Senne; Hannah; Milley	1834-1844	West Feliciana Parish, Conveyance Record I, p. 122, 1834/04/12; West Feliciana Parish, Mortgage Book K, p. 267, 1839/01/17; West Feliciana Parish, Mortgage Book M, p. 453, 1844/03/21

Owner	Mortgaged Collateral	Dates	Source
Perkins, John and Henry	plantation, various tracts of land, and the following individuals: William; Charles; Mary; Calamine; Spencer; Henry; Parker; Sarah; Harriet; Minor; Joe; Andy; Jim Dorsey; Amy; Adam; Daniel; Margaret; Jim; Isabel; Ann; Daniel Dean; Chloe; Eliza; Nat, Abram; Charles; Alsie; George; Susan; Nelson; Daniel Johnson; Rachael; Ben; Bicky; Peggy; William Scott; John Scott; John Briscoe; Alfred; Peter, Jim Carter; John Brooks; Stanly; George Burroughs; Francis Spencer; Sally, Susan; GEorge; Robert; Priscilla; Polly; John Hiem; Anna; Stephen; Emeline; Fanny; Hiram; Morie; Jim; Harry; Hetty; Harriet; Lucinda; John; Caroline; Grace; John; Joseph; Easter; Sophia; Charlotte; Babara, Fanny Gray; Susan; Mary, Henry; Ann; Julia Ann; Amanda; Celia; Emily; Louisa; Agga; Margaret; Little Sally; Martha; Jack; Dick; Ella; Mathilda; Maria; Minta; Wash; Dica; Lucy; Amy; Louis; Elvira; Theodira; Jim Henry; Beky; Newton; Alice; Isaiah; Bill; Morris; Viola; Vanness, Elizabeth; Patience; Leir; Abby; Ellen; Mia; Hagar; Patsy; Anthony; Judy; Tom, Fred; Wade; Green; Harvey; Abraham; Bill Gillis; Big Julia	1851	West Feliciana Parish, Mortgage Book O, p. 61, 66, 83, 87, 1851/04/12
Sims, Mrs Ann	land and the following individuals: Jacob; Richard; Jenny; Isaac; Louisa; Joyce; William; Rose, Jim; Ben; Stephen; Green; Virginia; Bill; Commodore; Abraham; Ned, Sam; Old Sam, Harry; Jackson; Henry; Eliza; Miles; Moses, Mathilda; Ellen; William, Grael; Jack; Louis; Daniel; Arstin; George; Harriet	1855	Tulane University, Citizens Bank Minute Book No. 7, 1855/12/14; West Feliciana Parish, Mortgage Book O, p. 551, 1855/03/23
Wilkinson, Joseph	sugar plantation and 128 unnamed individuals	1851	Tulane University, Citizens Bank Minute Book No. 6, 1851/01/01
Young, Robert	the following individuals. Joe, Milly, Spencer	1842	West Feliciana Parish, Mortgage Book M, p. 208, 1842/09/28

New Orleans Canal Bank

Ascension Parish

Bercegeay, Alphonse the following individuals: Mary and her children William and Wilson; James

1840

Ascension Parish, Mortgage Book 7, p. 473, 1840/08/06, p. 488

Owner	Mortgaged Collateral	Dates	Source
Braud, Justine	land and the following individuals: Jean Louis; Marcel; Lisse; Jane	1834	Ascension Parish, Mortgage Book 6, p. 8, 1834/03/06
Duffel, Edward	plantation and the following individuals: Baptiste; Rosalie and her two children Jose and Jean Baptiste; Nat; Constance and her three children Elsie, Henry, and Gustave, Raphael; Melanie and her three children Clef, Marianne, and Zeke; Auguste; Leonarde; Francis, Dinah; Hannah; Silu and her three children Andre, Heloise, and Josephine; Maria and her three children Jean Louis, Michel, and Benjamin; Malvina and her child Stephen; Loyise and her child Colin; Jenny and her child Rose; Frank; Jim; Franchonnette and her sister Sally; Suzette; Leonarde; Sam, Ben; Joe; William; Michel; Vincent; Billy; Vieux Sam; Bastien; Lan; Sam; Frank; Nace; William; Joe; Lucinda and her brother Thomas (alias Alfred); Aimee	1832-1841	Ascension Parish, Mortgage Book 5, p. 302, 1832/07/23; Mortgage Book 7, p. 311, 1841/03/13
Dugas, Ignace and Coralie Landry	land and the following individuals: Madelaine and her two children Julien and Celeste; Moody; Julie	1838	Ascension Parish, Mortgage Book 7, p. 6, 1838/05/15
Ford, Christopher; Randall, David	land and the following individuals: Jack; Nathan; Hanover; Randal; Joe; Jack; Richard, Brown; Squire; Elijah; Ceasar; Charles; Mary Ann; Virginia; Hannah; Julia; Aime; Martha, Lattia; Ralph; Sarah, Louisa; Henry; Mary; Susan; Aglaee Caroline, William; George Clark; Jerry; Daniel; Lucy; Lewis; Charlotte; Jim; Sidney; Lyddy; Elizabeth, Harry Byrne; Carter; Sarah; Winny; Hames; Squire; Harrison; Davy Skinner, Crecy and her unnamed infant; Mary Skinner; George Skinner; Henry Woods; Grace S.; Bill Martin; Minta; Thomas; Mary; William; Kitty; Albert; Harry S., Ben Bond; Cassandra; Susan B.; John B.; Sarah; Ben Bond Jr.; Satira Shadrach; Robert Woods; Cassy; Bill Amanda; Patsey; Sylvia Briscoe; Bill Briscoe; Frank, Maria; Georgiana; Virginia; Moses Wood; Maria Wood; Nick; Dolly; Sylvia; Sarah; Calvert; Charlotte, Emma; John; Rachel; Missouri; Mary; Fanny, Mathilda; Louisa	1845	Ascension Parish, Conveyance Book 19, p. 387, 1845/11/13; Conveyance Book 19, p. 387, 1845
Gravois, Edward and Marie Rose Landry	land and the following individuals: Celeste and her three children Louise, Elizabeth, and Bouret; Lubin; Timme; Jamier	1840	Ascension Parish, Mortgage Book 7, p. 234, 1840/06/29
Landry, Daucet and Lisa	land and the following individuals: Victor; Prince; Jimmy; Vaniz; Jean Baptiste; Fanny; Pilynaise; Diline; Celeste; Susan; Marie Louise; Alexandre; Valentin; Nichola	1835	Ascension Parish, Mortgage Book 6, p. 193, 1835/06/05

Owner	Mortgaged Collateral	Dates	Source
Landry, Narcisse and Gerade	land and the following individuals: Celestin; Auguste; Daniel; Pierre; Major; George; Christophe; Petion; Colces; Jacques; Edward; Celestin; Gilbert; Alexander, Bouli; Robin; Scott; Honore; Charles; Jack; Sam; Cupiclou; Pail; Bill; Frank; Jean Louis; Ned; Jean, Artheuse; Picep or Bob; Michil or Mitchel; Valentin; Michael; Lubin; Auguste; Gertrude and her child Andre; Marion and her child Suzanne; Julie and her two children Raphael and Felicite; Celeste and her eight children Honore, Catiche, Jeanette, Laura, Julien, Magdelaine, Celestine, and Gilbert; Venus and her two children Durosin and Jean Louis; Marianne and her two children Frosine and Priscilla; Marie and her three children Drausin, Rosetta, and Celeste; Katey and her three children Micotand, Susan, and Reuben; Fanny and her four children Noel, Betecie, Antoine, and Valcour; Madilain; Kitty and her four children Medare, Susan, Kitty, and Silvie; Jenny; Fanchanette and her two children <i>Opoline</i> and Julie; Mary; Rosalie; Victore; Babitte; Zoe and her child Catherine; Nore; Jacques; Paula; Alexander; Bill; Julie and her two children <i>Manetti</i> and Sophie; George; Jean Louis; Bob, Frank; Raphael, Felicite; Francois; Pierre; Jacques; Gertrude and her three children Henri, Eduard, and Adeline; Scott; Jane; Baptiste; Hortande; Marion and her four children Susan, Adelle, Jim, and Elizabeth; Auguste; Jane, Celestine; Petion; Michaelle; Jimmy; Medin; Mary and her child Joseph; Dio, Rosette; Valentine	1833-1842	Ascension Parish, Mortgage Book 5, p. 331, 1833/03/31, Mortgage Book 7, p. 434, 1842/05/03
Landry, Trasimon and Wife Modeste Brand	land and the following individuals: Gilbert; Sam Dawson; Ben Short; William; Joe Woodley; Joe Griffen, Bob Creghton; Ben; Martha	1839	Ascension Parish, Mortgage Book 7, p. 67, 1839/01/24
Landry, Valery	land and the following individuals: Isaac; Pompey; Celestin; Anatol; Davis; Petite <i>Maguire</i> ; Fanny William and her two children Adelaide and Lorenzo	1837	Ascension Parish, Mortgage Book 6, p. 322, 1837/03/31
Landry, Victor and Janette	land and the following individuals. Celestin; Francoise; Guillaume; Susan; Rosemond, <i>Eduard</i> ; Antoine; Leon; Carmelite; Elenor; Zepherine; Emma; Thomasin; Augustin	1832-1839	Ascension Parish, Mortgage Book 5, p. 295, 1832/06/04, Mortgage Book 7, p. 118, 1839/06/14
Lange, Albert	plantation, land, and the following individuals: Jack; Nathan; Hanover; Randall; Joseph; Jack; Richard; Brown; Squire; Elijah; Cesar; Maryann; Virginia; Hannah; Julia; Aimee; Martha and her child Rosalie; Lotitia; Ralf; Sarah; Louisa; Henry; Susan; Aglace; Caroline; William	1848	Ascension Parish, Mortgage Book 9, 139, 1848/8/22

Owner	Mortgaged Collateral	Dates	Source
Leblanc, Dermand	land and the following individuals: William; Janey; Ciran; Joe; Frank; Julien; Martin; Honore; Nelson; <i>Birundy</i> ; Zoe; Pilagie; <i>Fanchanetta</i> ; Nancy; Gabriel; Lucy; Rosalie; Marguerite; Balut	1836	Ascension Parish, Mortgage Book 6, p. 288, 1836/09/12
Leblanc, Marcelis	land and the following individuals: Mari Jeanne and her two children Cadet and Benjamin	1833	Ascension Parish, Mortgage Book 5, p. 341, 1833/03/21
Marchand, Victor	land and the following individuals: Jacque; Jean Pierre; Jacob; Toussaint; Lessin; Jaque; Isidore; <i>Oirille</i> and her three children Francois, Joseph, and Narcisse; Bazile and her two children Eve and Edmond	1832	Ascension Parish, Mortgage Book 5, 1832/08/18
Poursine, Joseph	land and the following individuals: Joseph; St. Cloud; Paul; Frank and his wife Justine; Augustine, his wife Sanchette and their four children Adele, Gustave, Gertrude, and Derausin; Louise and her children Agathe and Sohpy; Rhoda and her children Hagar, Lucy, and Blaise	1833	Ascension Parish, Mortgage Book 5, p. 341, 1833/03/21
Prevost, F. M	plantation and the following individuals: Abraham; Billy; London; Dick; John; Elias; Andre, <i>Warnur</i> ; Maria; Rachel	1833	Ascension Parish, Mortgage Book, 1833/03/23
Randall, David A	land and the following individuals: Brown, his wife Eliza, and their four children Maria, Charles, Nathan, and Aimee; Lewis, his wife Becky, and their three children Agnes, Virginia, and Reuben; Caesar, his wife Lizzy, with their son Frank; Hannah, her three children Squire, Abraham, and Martha, and her grandchild Hanover; Fanny, her son Dick, and her grandchild Jack; Jack; Bill; Jacques; Elijah; Julie; Marianne; Martha; Joe, Elijah, Lewis and his two children Richard and William; Randal, his wife Sarah, and her children Louisa and Harry; Agnes and her child Susa; Caser and his two children Caroline and Aglaee; Martha and her child Latitia, Hannah and her grandchild Hanover; Joe; Jake; Lewis; Becky and their three unnamed children; Drackter; Eliza and her three unnamed children; Randall; Sarah and her unnamed child; two unnamed children of Letty; Squire; Dick; Elijah; Fanny, Mary Ann; Julie; Ceasar; Brown; Eliza and her four children Maria, Charles, Nathan, and Aimee; Lewis; Becky and her two children Richard and William; Randall, Sarah and her three children Agnes, Virginia, and Reuben	1839-1845	Ascension Parish, Mortgage Book 6, p. 5, 1839/04/10, Conveyance Book 19, p. 387, 1845

Owner	Mortgaged Collateral	Dates	Source
<u>Assumption Parish</u>			
Boatner, Daniel and Elizabeth	land and the following individuals: Isaac; Peter, Jerry; Little Isaac; Big Hannah; Lucy; Jim; Elisha; Ned, Jack; Mary; Winney; Alfred; Little Hannah; Mansfield; Handy; Nancy, Cinda; Daniel	1833	Assumption Parish, Mortgages 1831-1835, p. 141, 1833/03/26
Dalfreres, Antonio	plantation and the following individuals: Narcissa; Augustine; Philippa; Margueritta; Juliana; Andre	1834	Assumption Parish, Mortgages 1831-1835, p. 187, 1834/03/01
Dominguez, Manuel and Maria	plantation and the following individual: Margueritte	1832	Assumption Parish, Mortgages 1831-1835, p. 107, 1832/07/02
Fernandez, Manuel and Julie	land and the following individuals: Grand Francois; <i>Telie</i> (alias Lydie); Pauline; Aimee, Jacob; Lawrence; Juliette; Mannette; Fifi; Auguste; Thomas; Victoire; Severin; Nancy (alias Marie Quace); Susanne; Madeline; <i>Mernaut</i> ; Peter Francois; Jean (alias Cherival); Azor	1833	Assumption Parish, Mortgages 1831-1835, p. 142, 1833/04/01
Guillot, Joseph	land with the following individual: Etienne	1839	Assumption Parish, Mortgage Book 1834-41, p. 263, 1839/07/25
Gravois, Joseph	plantation and the following individuals: John; Dick; George; <i>Eveline</i>	1839	Assumption Parish, Mortgages Book 11B, p. 229, 1839/03/11, Mortgage Book 1834-41, p. 233, 1839/03/14
<i>Huz, Antoine</i>	land and the following individual: Fanny	1840	Assumption Parish, Mortgage Book 1834-41, p. 286, 1840/04/14
<i>Martines, Philip and Manuela</i>	plantation and the following individuals: Charlotte, Augustine; Davy; Carry Morgan (alias Joe)	1833	Assumption Parish, Mortgages 1831-1835, p. 144, 1833/04/10
<u>Avoyelles</u>			
Coco, Lucien D.	land and the following individuals: Isaac; Henry; Julian; Dick; Clarisa and her child Ameline; Susanne and her three children Reuben, <i>Jalienne</i> (alias <i>Guste</i>), and Elizabeth; Warran; Nancy and her three children Louise, Llyod, and Melinda; Cary Carter; Hannah Carter and her three children Gabriel, Daniel, and William	1840	Avoyelles Parish, Conveyance Book O, p. 373, 1840/03/30
Irion, George A.	land and the following individuals: Prince; Amos; <i>Paul</i> ; Phil; Joshua; William; Henry; Bill; Abram; Kity; Aggy; Bob; Thadius; Sally; Mary; Eliza	1832	Avoyelles Parish, Conveyance Book I, p. 267, 1832/04/28
Miles, Lemuel	land and the following individuals: Ben; Fanny; Matilda; Jordan; <i>Elsueda</i>	1832	Avoyelles Parish, Conveyance Book I p. 256, 1832/04/25

Owner	Mortgaged Collateral	Dates	Source
Mills, Thomas	land and the following individuals: <i>Hester</i> ; George; Rachel; Cherry; Maria; David; Moses, Aaron, Sylva	1832-1833	Avoyelles Parish, Conveyance Book I, p. 272, 1832/04/30; Conveyance Book J, p. 202, 1833/06/29
Ogden, Edward	land and the following individuals: Andrew; Billy; Caroline; Henry; <i>Barbara</i>	1836	Avoyelles Parish, Conveyance Book M, p. 198, 1836/05/30
Robert, E. G.	land and the following individuals: John; Jinny and her son Andrew; Sarah Ann	1833	Avoyelles Parish, Conveyance Book J, p. 155, 1833/05/23
Stewart, William L.	land and the following individuals: James; Acy; Margaret and her unnamed child	1832	Avoyelles Parish, Conveyance Book I, p. 260, 1832/04/28
Tanner, Branch	land and the following individuals: John; Henry; <i>Armistor</i> ; Lucy; Dolly; George; Belinda; Washington; Mark; <i>Julie</i> ; <i>Arreta</i> ; Nancy; Phillis; Polly Molley; Hannah	1839	Avoyelles Parish, Conveyance Book O, p. 65, 1839/06/03
Tanner, Lodowick	land and the following individuals: Ben; <i>Jerry</i> ; Harry; Yates; Robert; Frank; Betsy; Lucy Ann and her child Amy; <i>Abby</i> and her child Margaret	1840	Avoyelles Parish, Conveyance Book O, p. 367, 1840/03/10
Voorhies, Bennett F.	land and the following individuals: John; Major; Joe; Julie; Maria	1832	Avoyelles Parish, Conveyance Book I, p. 300, 1832/05/28
Voochies, William	land and the following individuals: <i>Coleman</i> ; Ned; <i>Lewis</i>	1832-1833	Avoyelles Parish, Conveyance Book I, p. 298, 1832/05/28

Concordia Parish Parish

Routh, Stephen M	plantation and the following individuals: Stephen; <i>Perry</i> ; Susan; Hannah; Lucy; Rachel; Rachel <i>Henry</i> ; <i>Avy</i> ; Mary	1833	Concordia Parish, Conveyance Book F, p. 415, 1833/04/27
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East Baton Rouge Parish

Boyle, William	plantation and the following individuals: Harry; Isaac; Preston and his wife Mille	1839	East Baton Rouge Parish, Mortgage Book K, p. 86, 1839/05/23, West Feliciana Parish, Mortgage Book K, p. 408, 1839/05/27
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Owner **Mortgaged Collateral**

East Carroll Parish Parish

Goza, George
Washington

the following individuals: Violet; Moccrise; Meiles; Willis; Nauce; Jim; Charles; Jesse; Elza; Eloy; Balaam; Phebe; Rachel; Pompey; Wiley; Will; Edward; Jinny; Arena; Pluenza; Raney; Joe; Bob; Little Jesse; Delila; Ben; Reuben; Rozetta; Nathan; Harry; Ishmael; Washington; Betsey; Chesney; Dennis; Bill; Willis; Margaret; Jane; Lucinda; Judah; Rosina; Eliza; Harriet; Easter; Edward; Richard

Morgan, Oliver and
Jonathan

the following individuals: Peter, Bob; Jack; George; Enos; Susan; John, his wife Henny, and their 3 children, Jane, Oscar, and Joe; Arthur, his wife Matilda, and her unnamed child; Comfort and her 4 children Giles, Jim, Thadius, and Patsy; Sam; Lige; Allen; Little David; Cooper; Eliza; Charlotte; Delia; Ephraim; Armstead; Daniel

Dates **Source**

1840-1841

East Carroll Parish, Mortgage Book B, p. 105,
1840/05/22; Mortgage Book B, p. 95, 1841/10/04

1832-1835

East Carroll Parish, Conveyance Book A, p. 2,
1832/04/30; Mortgage Book A, p. 164, 1835/09/19

East Feliciana Parish

Boatner, William and
Sarah

the following individuals: Sam; Joe; Issac; Dick; Abram; Neubin; Alfrue; Isaac; Shields; Ellis; Ben; Limere; Tom, Burrel; Minur; Sandy; Polly; Hannah, Winney; Dianna; Lucinda; Amy; Dinah; Letty; Matelda, Judy; Rachel; Harriet; Jane; Noie; Leanoree, Leah; Deley; Nais; Nelly; Veiter, Mariah; Mary W; Martha; Sniersmiea

1832

East Feliciana Parish, Mortgage Book B, p. 339,
1832/04/24

Carter, William D. and
Elizabeth

the following individuals: Melinda; Laucinia; Thomas; Ned; Mary; Clifton; Boatsroain; Alley; Diana, Cyprus; Louisia

1839

East Feliciana Parish, Mortgage Book H, p. 298,
1839/12/05

Chapman, James

land and the following individuals. Jacob; Cornelius; Harry; Eliot; Alfred; Ben; Laud; Henry; John; Bill; Pelina; Eliza; Fillis; Rebecca; Cary Ann; Margarite; Mary; Eveline, Nancy; Clarisa.

1833

East Feliciana Parish, Mortgage Book C, p. 164,
1833/04/15

Clemons, Nancy

the following individuals: Isabell; Liner; Will, Abram; Burrel; John; Big John; Magul; Ellick, Boy Ben; Boy London; Stephen; Ephram; Veirtu; Isabela

1832

East Feliciana Parish, Mortgage Book B, p. 324,
1832/04/23

Delie, John L

land and the following individuals: Jim; Chusterzi; Sam; Prince; Jack; Austin; Maria; Mary; Cynthia; George; Harvey; Joe; Austin; Luck; Hannah; Polly; Adam; Margaret; Dorcas

1835

East Feliciana Parish, Mortgage Book D, p. 81,
1835/05/18

Owner	Mortgaged Collateral	Dates	Source
Dolch, Elizabeth D	plantation and the following individuals: Peter; Jim; Moses; Rachel; Ann; Sophy; George; Francis; William; Tony; Bob; Aaron, Maria; Bob; Agnes; Isabel; Henry	1833	East Feliciana Parish, Mortgage Book C, p 401, 1833/07/22
Gayle, John L and Martha	the following individuals: Tom; Nellie; Cuffe; Lucy	1832	East Feliciana Parish, Mortgage Book B, p 329, 1832/04/24; West Feliciana Parish, Mortgage Book H, p. 409, 1832/04/24
Gilden, Stephen and Mary	the following individuals: Jack; Milo; Fanny; Sophia; Alfred; Nathan; Syliva	1832	East Feliciana Parish, Mortgage Book B, p. 349, 1832/05/09
Hary, James	land and the following individuals: Isabell; Linn; Will; Abram; Burnell; John; John; Mogul, Elick; Ben; landon; Stephen; Ephraim; Hester; Isabel	1833	East Feliciana Parish, Mortgage Book C, p. 160, 1833/04/10
Kendrick, Benjamin	plantation and the following individuals: Abram; Beverley; Jim; Jinny; Delia; Fanny; Sophia; Patty, Fanny; Liar; Suda; George; Wiliam; Allin; Isaac; Green; Alfred; Dave; Adam; Rachel; Morgan; Susan; Winny; Malinda; Betsy; Mahala; Harriet; Eliza	1833	East Feliciana Parish, Mortgage Book C, p 183, 1833/05/06
McRae, Colin C	land and the following individuals: John; Charles; Sam; Luke; Rose	1832	East Feliciana Parish, Mortgage Book C p. 5, 1832/06/05
Mune, Daniel and Pamela	the following individuals: Slank; Judah; Minerve, Maryant; Mepoure	1832	East Feliciana Parish, Mortgage Book B, p 333, 1832/04/23
Myers, Burrel	land and the following individuals: Jane; Nancy	1832	East Feliciana Parish, Mortgage Book B, p 314, 1832/04/23; West Feliciana Parish, Book H, p 416, 1832/04/25
Nettlez, John and Ferorbes	the following individuals. Becka; Permelia, Monroe; Rachel; Lenah; Nelson; Lya (alias Lydia); Leanard	1832	East Feliciana Parish, Mortgage Book B, p 342, 1832/05/01
Nonwood, Noel	land and the following individuals. Sookkey; Rachel; Betty; Lydia; Caty; Hannah; Lot, Lilly; Silla; Simon; Polly; Isaac; Henny; Sarah; Little Isaac; Bob; Milly; Sampson	1833	East Feliciana Parish, Mortgage Book C, p 171, 1833/04/15
Pain, John C and Mary Louise	the following individuals: Nenolde; Henry; Elegn; Phillis; Mary	1832	East Feliciana Parish, Mortgage Book B, p. 326, 1832/04/03
Perry, Robert	land and the following individuals: Isaac; Crawford; John; Ben; Fred; Liman; Harry; Clary; Jonas; Emelie; Malvina; Milly; Nancy	1833	East Feliciana Parish, Mortgage Book C, p 140, 1833/04/06, West Feliciana, Mortgage Book J, p. 87, 1833/04/16; Tulane University, Citizens Bank Minute Book No. 5: 1846/02/26; Citizens Bank Minute Book No 7: 1851/12/30
Powers, John B. and Elizabeth	the following individuals: Jerry; Katy and her child Fountain	1838	East Feliciana Parish, Mortgage Book H, p. 198, 1838/05/05

Owner	Mortgaged Collateral	Dates	Source
Purnell, George W. and Mary Ann <i>Lunetto</i>	the following individuals: Robin or Bob; Nancy; Bill Button; Lewis; Jenny; Louisa or Laura, Bill Bladen; Jane; Caroline and her children Norman and an unnamed child; Riley; Bill Dale; Phaso; Bob Amis; Leah; Frances; Isabella	1847-1849	East Feliciana Parish, Mortgage Book H, p. 305, 1847/04/28; East Feliciana Parish, Mortgage Book H, p. 402, 1849/04/23
Rest, John and Mary	the following individuals: Frank; Charles; Lucy; Harriet; Milly; Jerry	1832	East Feliciana Parish, Mortgage Book B, p. 344, 1832/04/27
Scott, Thomas W.	land and the following individuals: Hannah; Rachel; Sony; Bob; Venus; Brian; Betsy, Harry; Jjoyo; Tiffany; Duke; Pat; Doll; Viny; Ann; Binah; Jam; Mary; Jjoyo; Jinny, Mingo; Juno	1833	East Feliciana Parish, Mortgage Book C, p. 174, 1833/04/24
Seals, James	the following individuals: Jim; Christie; Sam; Jack; Austin; Maria; Mary; Cynthia; George; Harold; Joe; Austin; Jack; Hannah; Polly; Adam; Margaret; Dorcas; Prince	1832-1835	East Feliciana Parish, Mortgage Book B, p. 331, 1832/04/24; East Feliciana Parish, Mortgage Book G, p. 467, 1835/05/18, West Feliciana Parish, Book H, p. 402, 1832/04/24
Waddell, Zachariah and Narcissa	the following individuals: Charles; Rachel; Anthony; Louisa; Polyabie; Louviej; George	1832	East Feliciana Parish, Mortgage Book B, p. 337, 1832/04/13
Waddill, David	land and the following individuals: Joalib; Fran; Jacob; David; Hester; Matilda; Caroline; Hildah; Nan	1833	East Feliciana Parish, Mortgage Book C, p. 162, 1833/04/13

Iberville Parish

Butler, Edward G. W.	land and the following individuals, including: Parrick; Alix; Albert; Joe; Joshua; Polly; Nancy; Miles; Stephney; Jordon, Celia; Sylvia; Billy; Lucy; Addison; Nelly; Harriet; Nelson; Bennet	1833-1843	Iberville Parish, Conveyance N, p. 557, No. 472, 1833/04/15, Conveyance Book V, p. 338, No. 215, 1843/03/27
Honore, Francise Belly	plantation on the right bank of the Mississippi River with the following individuals: September, his wife Francoise, and their five children Marie, Aimee, Marguerite, Francois, and Edmond; Iberville, his wife Poignon, and their child Jacques; Nicolle and her two children Honore and Commineau	1832	Iberville Parish, Conveyance Book N, No. 148, 1832/07/06
Landry, Anne B.	plantation on the right bank of Mississippi with the following individuals: Baptiste; Anna, Melite and her child Gustin	1832	Iberville Parish, Conveyance Book N, No. 155, 1832/07/13
Ricard, Genevieve B	land on the right bank of the Mississippi and the following individuals: Cayro, his wife Jabo, and their three children Aimee, Louis, and Vincent; Lalie and her five children Antoine, Francois, Voltaire, Elizabeth, and Lalie; Ospasie and her child Homer; Amus; Abraham; Julien; Elie; Zelle; Luke; Balaam; Jerry; Cader; Willis; Margaret; Kitty; Peter; Abraham Juke; Tom; Sophy; Agathe; Joe; Esther; Marie Mart; Theodore; John; Frank	1843	Iberville Parish, Conveyance Book N, p. 592, No. 507, 1843/03/24

Owner	Mortgaged Collateral	Dates	Source
Walker, Duncan S. and Robert J.	land and the following individuals; including: Solomon; Frederick; Glenn; Polly; Jim; Ben; Spencer; Gabe; Celia; Ephraim; Levin; George; Serina; Josephine; Robert; Mary; Charlotte; Taylor; Lewis; Travis; Owen; Isaac; Jesse; Mark; Mathilda; Nancy, Biddy; George; Maria; Jim Crow; Patrick; Peter	1833	Iberville Parish, Conveyance Book N, No. 572, 1833/06/17; Conveyance Book V, p. 336, No. 214, 1833/05/09

Lafayette Parish

Arceneaux, Emille	plantation and the following individuals: Celestine; Josephine; Constance; Eugenia; Pierre, Joseph; Celestin; Valirien; Olivia; Pierre; Ellen; Alcinder	1832	Lafayette Parish, Copies of Notarial Acts, 1774, 1832/05/25, no. 1775, 1832/05/25, no. 1781, 1832/05/22
McCaskill, Daniel and Caroline; Robert Nibbitt	land and the following individuals: Moses; Rose; Ellick; Samuel; Mary Ann; Gabriel; Charity; Gabriel; Marilla; Daniel; Bill; Henry; Rhoda; Lewis; Wisdom; William; Collin; Sally; Wiloughby; Rosanna; Henry; Liz	1832-1833	Lafayette Parish, Copies of Notarial Acts, entry 1769, 1832/05/3, entry 1965, 1833/05/20
Rice, Samuel B. and Martha Campbell Thrall, John B	land and the following individuals: Tom; John; Jim; William; Arthur; Ned; Will; Sevesitia, Mary; Maria, Anne; Reason; Richmond; Wilkins; Henry; Nana the following individuals: Belco; Milly; William; Eveline; Thom; John; Charlotte; Betsy, Teny; Mary; Billy, Dorcas; Jane; Jeff, Michael; Maria; Jeff, Sally; Patsy; Katey, Fielding; Dick; Thomas	1833-1837 1832	Lafayette Parish, Copies of Notarial Acts, entry 1977, 1833/05/29 Lafayette Parish, Copies of Notarial Acts, entry 1769, 1832/05/22
Wilcoxon, Floyd	plantation and the following individuals: Moses; Jack; Daniel; Harry; Tom; John; Alexander; William, Charles; George; Lucy, Nancy; Becky; Abby; Cassy; Little John; Betsy, Leathy; Nelly	1836	Lafayette Parish, Copies of Notarial Acts, entry 2503, 1836/06/15

Lafourche Parish

Bigg, Thomas	land and the following individuals: Jacques; Nago; Charles; Big William; Nelson; Jean; Sam, Alexander, Guyson; Alexander; Polite; Tom; Raisine; Henry; Davis; Gary; Faniel; Joseph; Little William; Tabor; Jack; Robert; Justin; Isaac; Antoine; Laurent; Michel; Lizette; John Robert; Casimir; Aaron; Lucien; Ellick; Gaisy; Richard, Appolon; Jeme, Constance and her unnamed child; Anne and her unnamed child; Maria and her unnamed child, Nanette; Lake; Mararite and her unnamed child, Artemise; Froizine; Esther; Tabe; Mary and her unnamed child; Laurine, Lisa and her unnamed child; Roddyand her two unnamed children; Fiste; Louise and six unnamed children; Caroline and her unnamed child; Susane; Marianne, Little John	1841	Lafourche Parish, Conveyance Book R, p. 304, 1841/06/24
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Owner	Mortgaged Collateral	Dates	Source
Bourg, Mathurin	land and the following individuals: Malando, Haley; Joseph; Peter	1833	Lafourche Parish, Conveyance Book J, p. 123, 1833/03/28
Labiche, Firmin	plantation and the following individuals: John; Zenon; Lucy	1832	Lafourche Parish, Mortgage Book I, p. 228, 1832/06/06
<u>Ouchita Parish</u>			
<i>illegible</i> , Jean	the following individuals: Battiste; Solomon; Mattild and her two children Henry and Susan; Nancy and her 4 children Ceil, Thersale, Margaret, and Lewis; Cherry; Louisa; America	1833	Ouchita Parish, Mortgage Book A, p. 196, 1833/05/14
Downs, Solomon Weatherbee	plantation and 56 unnamed individuals	1837-1841	Ouchita Parish, Mortgage Book B, p. 3, 1837/11/29; Tulane University, Citizens Bank Minute Book No 3: 1841/02/24

Pointe Coupee Parish

Bous, Francouis and Helen	plantation, land, and the following individuals: Charlotte and her 6 children Rosene, Rene, Leocadie, Josephene, Rosalie, and Elvi; Pompey and his wife Jeanne, and her 8 children Gustine, Gustane, Hilairi, Nunea, Zerine, Lindor, Iris, and Sethene	1841	Pointe Coupee Parish, Legal and Conventional Mortgage Book C, no. 1349, 1841/03/19
Bourdeaux, Augustin and Jane	plantation and the following individuals: Big Sally; Maria; John Baptiste; Caroline; Big Allan; Bill; Rose; Little Allen, Little Sally; Seleste; Louis; Zavier; Fanny; Marie; John; Phebes, Henry; James	1832-1849	Pointe Coupee Parish, Legal and Conventional Mortgage Book B, p. 400, 1832/05/08, Legal and Conventional Mortgage Book D, p. 873; Legal and Conventional Mortgage Book C, no. 1109, 1839/02/25
Cooley Jr, Ebenezer and Mary Collins	land and the following individuals: Richmond; Katy, Oliver; Benjamin; Robin; Henry; Hannah and her child Maria; Jim; Jack; Bill; Mary-Ann; Sally; Isaac; George	1842	Pointe Coupee Parish, Legal and Conventional Mortgage Book C, no. 1465, 1842/01/20
Dewey, Benedick and Sarah	plantation, land, and the following individuals: Robbin; John; Charity; Eliza	1832-1834	Pointe Coupee Parish, Legal and Conventional Mortgage Book B, p. 419, 1832/06/28; Legal and Conventional Mortgage Book C, p. 1, 1834/02/18

Owner	Mortgaged Collateral	Dates	Source
Ferrier, Jules and Julie	land and the following individuals: Armstead; Nancy; Similin	1837-1846	Pointe Coupee Parish, Legal and Conventional Mortgage Book C, 592, 1837; Legal and conventional Mortgage Book D, p 576, 1846/01/01
Jewell, Sarah Isaacs	plantation and the following individuals: Jim; Joe; Bristen; Garland; Liverpool; Bolin, Daniel; Claiborne; Yellow Bob, Black Bob; Martin; Solomon; Little Sam; Congo Sam; Ellick; Jaik; John; Jacob; York; Hercules; Colsy; Nilson; Frank; Bob; Phoebe; Clarke; Nancy; Big Mary Ann; Chancy; Winny; Sarah; Lucinda; Charlotte; Mary; Jenny; Rachael; Mary Ann; William; Dick; Bristen; Isaac; Nancy; Hannah; Rosalie; Rose; Betzy	1833	Pointe Coupee Parish, Legal and Conventional Mortgage Book B, p. 520, 1833/04/05
Major, Norbert	plantation, land, and the following individuals: Cesaire; Andre; Lincoln; Antoine; Francois; Augustin; Lucas; Zenon; Hypolite; August; Jean Baptiste; Francois; Gregoire; Joachim, Venus; Mary; Agathe; Valerie; Susine; Deby; Marie; Julie; Pauline; Victoire; Francine; Madeline; Zaire; Laurette	1833	Pointe Coupee Parish, Legal and Conventional Mortgage Book B, no. 538, 1833/04/24
Ratliff, Lourcy and Adam Bingaman	land and the following individuals: Georges; Landy; Richard; Billy; Milford; Moses; George, Abe, Alfred; Bob; Milford; Frank; Rod; Rachel; Dina; Mulatto Mary; Mary; Matilda, Short Rachel; Alice; Celia; Fanny; Maria; Cleany; Alice; Christine; Henrietta; Ann, Priscilla; Dick	1836	Pointe Coupee Parish, Legal and Conventional Mortgage Book C, no. 518, 1836/11/26
Robertson, Malinda	land and the following individuals: Sylvia and her children Sophia, Harriet, Ned, and Alfred, Ephraim; Robert	1835	Pointe Coupee Parish, Legal and Conventional Mortgage Book C, no. 280, 1835/05/22
Sholar, Ann and Asa Brown	land and the following individuals: Peter, George; Bob; Lucy; Dorcas and her son Charles, Eliza and her son Joe	1840-1845	Pointe Coupee Parish, Legal and Conventional Mortgage Book C, no. 1327, 1840/12/30, Legal and Conventional Mortgage Book D, no. 440, 1845/11/06
Taylor, William	the following individuals. Salomin; Baptiste; Mary; Audre; Daniel; Jesse or Dias; Francur, Adelle; Baptiste; Bernard; Flora; Fadonas; Arelina; Little Jenny; Lubin; Nancy; Tom; Harry; Betzy; Harry; Martin; unnamed individual; Jean; Phil and his wife, Fine (alias Fanny), Levy (alias Duval); Little Nancy; Lindon; Louis; Hanniah or Amia; Luckey; Suzanne; Fanny; Chisbe; Charles; Paul; Jeannette; Mary Jeanne; Pauline	1833	Pointe Coupee Parish, Legal and Conventional Mortgage Book B, 544, 1833/05/09

Owner	Mortgaged Collateral	Dates	Source
Trumbull, Mathilda A.	land and the following individuals: Big Tom (alias John), his wife Peggy, and their three children Beck, Patience, and Dick; Jack Collins, his wife Alsee (alias Alfa), and their children Paris, Amy, Adam, Dafney, Mathilda, and Patsy; Jacob and his wife Patty (alias Polly), and their children Boney, Rachel, Judy, and Daniel; Yellow Tom, his wife Jenny and their children Sam, William, and an unnamed boy; William, his wife Hannah and their children Judy and Lucinda; Old John; Isaac; Charles; Prince; Solomon; Anthony, his wife Hannah Sip, and their children Polly, Harry, John, Eveline; Old Ann; Mary; Jack; Joel; Thomas; Dan; Patsey; Mary; Green; James; Edmond, Prince; Tomas; Big John; Peggy; Robert; Louisa; Liss; Stephen	1835-1845	Pointe Coupee Parish, Legal and Conventional Mortgage Book C, p. 66 (No. 217); No. 428, 1835/03/30; Pointe Coupee Parish, Legal and Conventional Mortgage Book D, p. 335, 1845/03/29; Pointe Coupee Parish, Legal and Conventional Mortgage Book D, p. 348, 1845/04/09

St. James Parish

Champagne, Evariste	sugar plantation and the following individuals: Louis; Francois; Jean Pierre; Valsin; Justin; Marianne; and Charlotte	1833	St. James Parish, Mortgage, Book 13, p. 255, 1833/05/29
Huguet, Esteve	land and the following individuals: Pierre; Aristide	1841	St. James Parish, Mortgage, Book 19, p. 511, 1841/06/14
Roche, Pierre Felix	plantation and the following individuals: Louisa and her three children Alfred, Celestine, and Richard; Cicero, Jean Louis; Zabelle; Valery; Ophelia; John	1840	St. James Parish, Mortgage, Book 18, p. 442, 1840/03/28

Owner	Mortgaged Collateral	Dates	Source
St. Landry Parish			
Brownson, John	land and the following individuals: York; Kitty; Pat; Jim, his wife Harriet and her five children Elsy, Anthony, Phillis, Gilbert, and Delphine; Bill; Big Charles and his wife Sapho; William, his wife Ester, and their three children Andrew, Elizabeth, and Polly; Harry, his wife Sucky, and their five children Anna, Harry, Nancy, Eliza Jane, and Denis; Humphrey, his wife Maria, and their four children Betty, Hanna, Abigail, and Frank; John, his wife Mary Ann, and their four children Mary, Custers, Fanny, and unnamed individual; Antoine; Patrick, his wife Delphine, and their four children Alexander, Grace, Manuel, and Sarah; Providence; Demba and his wife Delia; Stephen, his wife Nancy, and their three children Stephen, Jane, and unnamed individual; Romeo; Pool; Euphrosine; Mises; Robert; Sam	1833	St. Landry Parish, Conveyance Book H-1, p.216, 1833/04/20
Campbell, Marsden	land and the following individuals: Andrew; Ben; Bookey; Daniel; Joe; John H. Frank, Mirgo; Ned; Scipio; Abram; Abbe; Charlotte; Fanny; Judy; Minerva; Nanny; Tom; Dick; William; James; Betty; Laura; Membo; Nancy; Dorinda; Resin; Silla; Hannah; Sally; Sida	1837	St. Landry Conveyance Book IJ-1, p. 103, 1837/04/27
St. Martin Parish			
Breaux, Alexandre	plantation and the following individuals: Louis; Jacques; Magdelaine; Marianne; Baptiste; Moise; Cresfort; Milly; Gre; John; Fae; unnamed infant	1833	St. Martin Parish, Conveyance Records vol 8, p. 165, no 7383, 1833/06/20
Davis, Robert J. and Caroline J	plantation and the following individuals: Bolen; Esam; George; Paresch; Nancy; Tabitha; Centha, Emilie; Fanny	1832-1833	St. Martin Parish, Conveyance Records vol 7, p. 274, no 7135, 1832/05/04; Conveyance Records vol 8, p. 120, no 7337, 1833/04/25
Guidry, Marguerite	plantation and the following individuals: Bajile; Andre; Guillaume; Francesque; Euken, Bill; James; Anna, Martin, Jose; Bun-aime; Calton	1833	St. Martin Parish, Conveyance Records vol 8, p. 129, no 7348, 1833/06/06
LeBlanc, Edward	plantation and the following individuals: Charles; Ransom; Schill; Marie Lauide; Ursin; Cary; Jane; Charles; Paul; John; Peter; Nally; Robert; Cilstin; Martin; Basil; Anne, Silvie; Harden	1832	St. Martin Parish, Conveyance Records vol 7, p. 325, no 7188, 1832/07/16
LeBlanc, Norbert	plantation and the following individuals: Wally; Martin; Celestin; Robert; Silvy	1842	St. Martin Parish, Conveyance Records vol 13, p. 328, no 10030, 1842/04/26
Marsh, Jonas	land and the following individuals: Peter; Becky; Cyrus; Gilbert; Kert; Adam; Abraham, Delphe; Isaac; Abraham; Pack; Sophy; Nancy; Nelson; illegible	1834	St. Martin Parish, Conveyance Records vol 9, p 83, no 7604, 1834/06/07

Owner	Mortgaged Collateral	Dates	Source
Miguez, Bernard	plantation and the following individuals: Oswald; Cilule; Betsey; Kily; Suzan	1832	St Martin Parish, Conveyance Records vol 7, p 264, no 7125, 1832/04/25
Rousseau, Jean Julien	plantation and the following individuals: David; Job; Elias; Peter; Adam; Charles; Phill; Henry; Auston; Samson; Eliman; Elee; Nancy and her unnamed daughter; Ceuya; Julie; Caroline and her unnamed daughter; Silvia and her unnamed son; Sally-Anne and her unnamed son; Gwen-Ann; Caroline	1833	St Martin Parish, Conveyance Records vol 8, p. 117, no 7335, 1833/04/24
Vincent, Charles	plantation and the following individuals: Victor; Julie; Jacob; Jacques; Jean Pierre; Fran, Victorie; Sabel	1832	St. Martin Parish, Conveyance Records vol 7, p. 335, no 7196, 1832/07/19
<u>St. Mary Parish</u>			
Baker, Joshua	the following individuals: John; Hetty; Cudgo; Irwvin; Susan; Willis; Anne; Jim; Jacob, Letty; Nancy; Lijah; unnamed individual; Shedrick; Lucy; Martha; Little Shederick; Johnson; unnamed infant; Buttle; Eveline; Jared; Charles; Nancy; Lucky; Sampson; Flore; Shederick; Lewis; Sally; Little Jack; Liddy; Lavinia; Little Steven, Ritta; Linna; George Diar; Lea; Ellen; George; Marguerite; Sam; Sarah; Elizabeth; Mathilda; Jim Pratt; Sally Pratt; Edmund; unnamed individual; Jeff; Frank; Rena; Charlotte; Rena; Joshua; Claiborne; Rhubin; Celly; Milly; Louisa; unnamed individual	1842	St Mary Parish, Mortgage Book 11, p. 50, 1842/06/04
Barabino, Stephen	land and the following individuals: Thomas; Elix; Isaac; Christopher; Robbins; Mansnitta; Maria, Clara, Henry; Felicity; Joseph; Coleman; Curdin; Jackson; Thomas; Philip; Fanchenetta	1832	St Mary Parish, Mortgage Book 5 p 323, 1832/05/01
Bernard, Raymond	land and the following individuals: James; Dick; Joe; Joe; Bartlet; Daniel; Edward; Sophie	1835	St. Mary Parish, Mortgage Book 7, p. 476, 1835/05/02
Bodin, Simon	plantation and the following individuals: Vilgence; Adeline	1838	St. Mary Parish, Mortgage Book 9, p. 200, 1838/06/09
Bowles, Thomas E	land and the following individuals: Bill; Kaye; John; Isaac; Jack; William; Rob; Jackson; Clifford; Lucy; Henson; Philes, Ephraim; Jane; Kestiah; Mary; Pherody; Polly, Lucy	1841	St Mary Parish, Mortgage Book 10, p. 293, 1841/04/13
Brashear	land and the following individuals: Matilda; Queeney; Augustus; Flora; Courtney; Harry Todd; Hannah; Clarissa, Sinclair; Ellen; Ben; Patrick; Milly; Jinny; Ann; Saunders; Horace; Maria; Eliza Johnson; Sabina; Camilla	1833-1843	St. Mary Parish, Mortgage Book 6, p. 332, 1833/06/24; Mortgage Book 11, p. 198, 1843/06/01

Owner	Mortgaged Collateral	Dates	Source
Carlin, Celestin	plantation and the following individuals: Polly; Voltaire; Julien; Christine; Adelaide; Victor; Hassin; unnamed individual; Jane; Feliciane; Washington; Clarissa; Ann; Henry; Moor	1838	St. Mary Parish, Mortgage Book 9, p. 227, 1838/07/06
Carlin, Helaire	plantation and the following individuals: William; Claiborne; Dick; Henry; David; Mary; Arceuil; Susanne; Sophy	1839	St. Mary Parish, Mortgage Book 1837, Vol. 9, p. 390, 1839/04/13
Charpentier, Joseph	land and the following individuals. James; Nick; Charles; Charlotte; Mary; Milly	1835	St. Mary Parish, Mortgage Book 7, p. 420, 1835/03/21
Cook, John A.	plantation and the following individuals: Peter; Manuel; Ephriam; Jem; Harry; Tom; John; Polly; Annah; Jeneya; Jilla; Sam; Alik; Ruben; Harriett; Penny; Betsey; Sarah	1837	St. Mary Parish, Mortgage Book 1832, vol. 6, p. 22, 1833/04/30, Mortgage Book 8, p. 476, 1837/06/09
Crawford, Henderson	land and the following individuals: Frank; Harry; Willis; Hannah; Charlotte; Bob; Prior; Sally; Dick; Betsey; Jim; Bill; Elizabeth	1834	St. Mary Parish, Mortgage Book 7, p. 300, 1834/09/19
Daigle, Louis	plantation and the following individuals: Francois and Rosalie	1833-1841	St. Mary Parish, Mortgage Book 7, p. 36, 1833/07/29; Mortgage Book 10, 380, 1841/07/29
Deutreuil Louis	plantation and the following individuals: Marie and her unnamed child	1832-1836	St. Mary Parish, Mortgage Book 6, 1832/07/14; Mortgage Book 8, p. 290, 1836/06/29
Elliott, Bryce	plantation and the following individuals: Big Bob; Major; John alias Eugene; Hannah; Ann; Abram; Malinda; Rosina	1839	St. Mary Parish, Mortgage Book 9, p. 474, 1839/07/03
Elliott, George and Bryce	plantation and the following individuals: Kit; Telly; William; Delay; John; Martha; Sarah, Isam; unnamed child, Matilda; Eliza; Betsey; Simon; Randall; Ann	1838	St. Mary Parish, Mortgage Book 9, p. 272, 1838/08/27
Ferguson, James	plantation and the following individuals. Jim; Armstrong; Oeasen; Harriet; Alfred	1833	St. Mary Parish, Mortgage Book 7, p. 40, 1833/07/30
Footte, Henry	land and the following individuals: Peter Caffery; Moses; Osaac; Ceasor; Bill; Washington; Henry; Allen; Sarah; Nancy, Julia; Rachel; Phoebe; June; Patsy; Minerva	1839	St. Mary Parish, Mortgage Book 9, p. 462, 1839/06/11
Frere, Joseph A.	land and the following individuals: Moses; Elijah; Lary; John; Jared; James; Charles; Butler, Philippe; Hubert; Auguste; Andre; Victor; Zenon; Big George; Little George; William; Jacques; James; Francis; Martha; Thirezes; Manette; Marine; Marionnette; Flore, Achilles; Sophy, Nancy; Rachel; Sense; Charlotte; Virginia; Charles; Betsey, Cecile Shedrick, Lucinda; Emilie; Celeste; Edmond; Clemence	1843	St. Mary Parish, Mortgage Book 11, p. 269, 1843/08/12

Owner	Mortgaged Collateral	Dates	Source
Fuselier, Gabriel L	land and the following individuals: Sam; Vinah; Moses; Samuel; Benjamin; Lewis; Hanna and her unnamed child; Joe, Nancy; Caroline; Joseph; Josephine; Nelson; Peggy; Tony; Christine; Nelson; Emilia; John; Janny; Johnson; Esop; Marius and Mary; Jim; Aline; Felix; Rhody; Dave; Guy; Henry; Bartlet; Reuben; Billy; Edward; Jim; Dick; Daniel; Zenon; Gary; Jenny; Old Mary	1843	St. Mary Parish, Mortgage Book 11, p. 248, 1843/06/24
Garret, Catherine	plantation and the following individuals: Bosor; Charles; Eliza; Martin; George; Louisa; Isam; Isaac; Gilbert; Mary; Ephriam; Betsey; Morris; Callin; Susan; Allan	1836	St. Mary Parish, Mortgage Book 8, p. 215, 1836/04/23
Garret, John	plantation and the following individuals: Lewis; Cage; Nelson; Bill; Peter; Harry; Lane; Nat; Sam; Joe; Littia; Loucas; Lavinia; Lucy; Betsey; Letitia; Caye; Sally; Bill; Lucinae; Laura; Charles; Henry; Lucy; Washington; Saul; Tamer; Natt; Nelson; Peter; Dave; Lucy; Jeff; Eliza; George; Hannah; Sam; Joe; Betsey; Gilbert	1832-1838	St. Mary Parish, Mortgage Book 5, p. 306, 1832/04/24; Mortgage Book 9, p. 186, 1838/05/23
Gerbeau, James	planation and the following individuals: Jim, Edmund, Joseph, George, Henriette, Rosette, Cilestin, Sam or Philip, Adelaide, Margaret, Francoise, Sukey, Phil	1833	St. Mary Parish, Mortgage Book 6, p. 289, 1833/06/10
Gerbeau, Joseph	land and the following: Charles; Jean; Peggy; Julie	1842	St. Mary Parish, Mortgage Book 10, p. 349, 1841/06/05
Grevenberg, Charles	plantation and the following individuals: Grand Sam; Gros Sam; Billy; Little Jim; Jackson; Willis; Jim, Arthur; Joseph; Lewis; Frank; Reuben; Jordan; Ben; Alexis	1833	St. Mary Parish, Mortgage Book 6, p. 250, 1833/05/18
Harding, Winthrop S.	land and the following individuals: Simon; Stephen; Wilks; Caleb; Major, Solomon, Carey; Captain; Toney; Emeline; Maria; Betsey; Violet; Mary; Peggy; Tony; Captain; Dick; Bob; Carry; Eliza; Abraham; Eleonora; Mahala; Mary; William; Anna; Annette; Washington; Doctor; Harriett; Simon; Emiline; Sally; Rhoda; Memory; Abigail; Franky; Delia; Sam; Reason; Penny; Anthony; Mary; Tom Major; Jack; Fanny; Yama; Jacob; Lidia; Margaret; Maria; Prescilla; Almira; Elvy; Viney; Violet; Betzy; Soloman; Manuel; Charity; Hannah; Joe; Daniel; John; Ismail, Leah; Nathan, Julius	1836-1841	St. Mary Parish, Mortgage Book 8, p. 187, 1836/04/07; Mortgage Book 10, p. 337, 1841/05/15

Owner	Mortgaged Collateral	Dates	Source
Haydel, George	plantation and the following individuals: Fanny and her unnamed child; William; Charles; Jordan, Pepe; Asan; George; Alexander; George; Aleck; David; Jim; Suzan and unnamed child; Bill; Sally; Washington; Perry; Henvre; Martin; Maria; John Louis; Rachel; Zenon; Bill; Joe; Baptiste; Augustin; Jim; Betty; Frank; Jesse; Linan; Jesmire; Billy; Gustave; Baptiste	1832-1834	St. Mary Parish, Mortgage Book 6, p. 59, 1832/07/11, Mortgage Book 7, p. 230, 1834/05/24
Heydell, Francoise	plantation and the following individuals: Marciss; Cilistrin; Vincent; Augustin; Laurel; Austin; Tenon; Marie Louisa and her unnamed children; Francois and her child Rosalie	1833	St. Mary Parish, Mortgage Book 6, p. 291, 1833/06/10
Jeanerett, John W. and Constant E. Gradless	plantation and the following individuals: Jacob; Jim; Ephrom; John; Jack; <i>Vinia</i> ; Celia and her unnamed child	1832	St. Mary Parish, Mortgage Book 6, p. 78, 1832/08/07
Lacy, John O. and P. A. Vandorn	plantation and the following individuals: Jefferson; Isaac; Hiram; Sidner; Bill; Dennis; King; Thomas; Oscar; Maria; Susan; Emeline; Maria; Jeanett; Harry; John; Saul; Betsy; Bisis; Jane	1833	St. Mary Parish, Mortgage Book 6, p. 217, 1833/04/30
Lacy, Susan	plantation and the following individuals: Elliot; John; Cuffy; Murray; George; Sivesha; Maria; Eliza	1833	St. Mary Parish, Mortgage Book 6, p. 260, 1833/05/24; Mortgage Book 7, p. 1, 1833/07/03
Louviere, Louis	land and the following individuals: Kesiah; Mary; unnamed individual	1840	St. Mary Parish, Mortgage Book 10, p. 170, 1840/08/15
Marsh, John C.	plantation and unnamed individuals	1832	St. Mary Parish, Mortgage Book 5, p. 318, 1832/05/16
Murphy, John B.	plantation and the following individuals: Jim; Solomon; Charles; Hlip; Charles; Stephen; Harry; Abraham; Little Sol; Washington; Jenny; Little Polly; Louise; Anny	1836-1837	St. Mary Parish, Mortgage Book 8, p. 210, 1836/04/16, p. 444, 1837/04/22
Nash, William J.	plantation and the following individuals: Nathan; Will; Burrel; Phil; Washington; Norris; Maria; Harriet, Nancy	1836	St. Mary Parish, Mortgage Book 8, p. 282, 1836/06/14
Parkerson, John	plantation and the following individuals: Betsey; Grace; George; Jackson; Sam; Mary	1832	St. Mary Parish, Mortgage Book 6, p. 53, 1832/07/11
Pecot, Charles	plantation and the following individuals: Bastien; George; Edmund; Celestin; Henry, Louisa; Eugene; Alsurdos; Aime, Raphael; Antonio; Suzanne and children Daniel; Meathilda, Sophy; Augustine; Clasico; Liso; Pasino and her children John, Flora, and Isabelle; Helen; Erbas and her son Prosper; Telesse with her child Adreinne; Adeline; Adelle, Philamisi; Marie; Francaise; Eliza; Irenne; Laurett; Climeice	1838	St. Mary Parish, Mortgage Book 9, p. 202, 1838/06/08

Owner	Mortgaged Collateral	Dates	Source
Pecot, Marie Rose	land and the following individuals: Henry; Pierre; Achilles; Jim; Charles; Ariane; Abram; Betsey; Dick; Joe; Jim; Sarah; Narcisses; Clementine; Caroline; Charlotte; Gabriel; Lanuile; Pierre; Adeline; Charlotte; Polidore; Victorin; Victor	1843	St. Mary Parish, Mortgage Book 11, p. 266, 1843/08/11
Porter, James	land and the following individuals: Washington; Violet; Guilford; Judy; Steamboat; Big Ben; London; Elias; Milas; Patsey; Cheney; Willis; Osborne	1844	St. Mary Parish, Mortgage Book 11, p. 503, 1844/12/21
Robert, Peter H	plantation and the following individuals Mary; Lige; George; Maria; Tom; Allen; Nancy; Rose; Mary; Jon; Milly, Tom; Horace; Allen; Frank; Issach; Nancy; Little Mary; Maria; Milly	1832-1833	St. Mary Parish, Mortgage Book 5, p. 314, 1832/05/03; Mortgage Book 6, p. 224, 1833/04/24; p. 225; 1833/05/01
Rome, Nicolas	plantation and the following individuals: Louis; Charles; Betsey; Maria	1832	St. Mary Parish, Mortgage Book 5 p. 331, 1832/05/07
Royster, George	plantation and the following individuals: Bob; Mike; Collin; Lucy; Robin; Charlotte; Milly; Wilson; Mary; Rebecca	1833	St. Mary Parish, Mortgage Book 11, p. 199, 1833/07/12
Sanders, Jarrad Y.	plantation and the following individuals: York; Sarah; Mathilda; Charles; Momra; Willy; Roselly; Amr; Posephinie	1832	St. Mary Parish, Mortgage Book 6, p. 65, 1832/07/23
Shewing, George	land and the following individuals: Reuben; Sarah; Cressey; Sam	1835	St. Mary Parish, Mortgage Book 7, p. 432, 1835/04/03
Smith, Boyd	the following individuals: Adam; Albert; Ned; Dick; James; Anderson; Abraham; Henry; Dick; Dinah; Harriet; Eliza; unnamed infant; Libella	1833-1845	St. Mary Parish, Mortgage Book 6, p. 298, 1833/06/14; Mortgage Book 10 p. 322, 1841/05/05
Smith, James	plantation and the following individuals: David; William; Isaac; Hector; Washington; Larry, Charlotte; Rachel; Porz; Cynthia; Jane; Betty; Phoebe; Henry; Ida, Jupiter; Frank; Romeo; Daniel; Michel; David; Lydia; Sarah; Bill; Mary; Sidney; Nanny; Massy; Lenis; Richard; Louis; Little Betty, Molly; Sam; Maria; Jerry; Milly; Jackson; Ellen; Jack; Joe; Jim	1833-1840	St. Mary Parish, Mortgage Book 6, p. 236, 1833/05/03; Mortgage Book 10 p. 118, 1840/05/15
Sparks, Daniel P.	plantation and the following individuals. Jack; Willam; Weston; Solomon; Ceasar; Simon; Sam; Adam; Molly; Rachel; Lucinda; Rhinah and her child Fanny; Mahrulia; Westerne; David; George; Solomon; Isaac; Jack; Molly; Rachel; Since	1839	St. Mary Parish, Mortgage Book 9, p. 396, 1839/04/19, p. 397, 1839/04/19
Sterling, William	plantation and the following individuals: Jacob; Tom; Ned; Peter; Frank; Washington; Little Tom; Jim; Rawley; Sarah; Hannah; Nancy; Fanny; Lucinda and three children Richard, Alex, and John; Maria and her children Elijah, Bob, and Effy; Augustin; Levin, Milly, Lucy	1853	St. Mary Parish, Mortgage Book 8, p. 229, 1853/5/13

Owner	Mortgaged Collateral	Dates	Source
Theall, James F.	land and the following individuals: Evans; Dick; Miles; Susan; Lincey; Jesse; Elsy; Ellen; Jo	1832	St. Mary Parish, Mortgage Book 5 p. 329, 1832/05/03
Vinson, Carroll	plantation and the following individuals: Lewis; Lydia; Larisa; Hosey	1838	St. Mary Parish, Mortgage Book 9, p. 168, 1838/04/18
Wilcoxon, Thomas	plantation and the following individuals: Prinius; Ned; Andrew	1835	St. Mary Parish, Mortgage Book 8, p. 64, 1835/08/26

Terrebonne Parish

Boutelou de St. Aubin, Charles the following individuals: Sam; Lenor; Davis; Rosette; Aggy and her two children Amos and Agathe 1841
Terrebonne Parish, Convenience Record Jan 8, 1841 - Apr. 2, 1845, p. 582, 1841/12/16

West Feliciana Parish

Atkins, James D. and Florann land and the following individuals: Lucy; Maria; Caroline; Charlotte; Harriet; Patsey; John; Henry; Luke; Lewis; Jim; Moses; Mills; Mary; Eveline; Milly; Sam; Bill; Dan; John; Miles; Margaret; Louis; Milley 1835-1841
West Feliciana Parish, Mortgage Book L, p. 257-259, 1841/03/02; West Feliciana Parish, Mortgage Book J, p. 402, 1835/07/09

Austin, William A. and Elizabeth land and the following individuals: Dave; Rachael; Silence; Milly and her unnamed daughter 1835
West Feliciana Parish, Mortgage Book J, p. 412, 1835/08/14

Barrow, Albert G. land and the following individuals: Winney; Mary; Nancy; Jane; Ben; Elizabeth; Delphine; Thom Coleman; Henry; Sylvia; Elizabeth; Nancy 1840
West Feliciana Parish, Mortgage Book L, p. 58, 1840/02/07

Barrow, Alexander plantation and the following individuals: Edmund, his wife Ginney, and children Lilina, Alexander, Hinderson, and Aronlien; George Hoat; Jane; Charles; Toby formerly Anthony, Susan and two children Rufus and Peter; Mary Jane and her three children Anaka, Nat, and Phillis; Richard; Gilbert; Henry; George; Harry Nearu; Harry Turpin, Bob Madry; Isaac Matthew; Little Bob; Rose; Sal; Abram; Charlotte; Lewis; John; Sarah; Abraham; Ritty; Mary; Ann; Julia; Amy; Mary; Rufus; Ben; Frank 1832
West Feliciana Parish, Mortgage Book H, p. 393, 1832/04/21; West Feliciana Parish, Mortgage Book H, p. 527, 1832/12/29

Barrow, Bennet H and Emily tract of land and the following individuals: Eliza; Celia; Dorcas; Edney; Grace; Phil; Hannah; Lizzy; Kiah; Lucy; Atean, Lewis; Levina; Ceutne; Hetty; Israel; Ralph, Lindy; Alfred, Betsey; Willey; Milley, Jack; Dennis; Cato; Esset; Nat; Sarah; Easter, Phil; Lucy, Candy; Margaret; Leah and her child Littleton; Levi; Easter; Adah; Jacob; Hannah; Jenny, Bartley, Jerry; Jim 1834-1844
West Feliciana Parish, Mortgage Book J, p. 209, 1834/02/07; West Feliciana Parish, Mortgage Book M, p. 431, 1844/02/03

Owner	Mortgaged Collateral	Dates	Source
Barrow, Robert James and Mary E. Craff	land and the following individuals: Tom; Elsey; Adeline; Isaac; Mary Hall; Amy; Lizzy, Charity; Elizabeth; Jenny; Lucinda; Patience; Yellow John; Henry; Harriet; Matilda; Peter; Andrew, Drud; Wilson; Maria; Juby; Mary; Tilla; Milly; Kate; Nimrod; John; Juba; Willy	1841	West Feliciana Parish, Mortgage Book L, p. 280-282, 1841/04/21;
Barrow, William Ruffin	the following individuals: Island Harry; Solomon; Tempa and her two unnamed children; Hampton Stokes; Carter Hampton; Bill O'Connor; Ned Carter; Sam O'Connor; Giles, Joshua; Aaron; Roden; Edd Long; Peter; Overton; Ben; Walter; Bill, Nat; Solomon, Booker; Dan, child of Adeline; Lot; Joe; Joshua; Island Ben; Harry; Sophia; Kathy; Biddy; Stella and her child Rumsey; Nancy; Annette and her child Eveline, Rachael; Ellen; Lettie; Darcus and her child Rachael; Jane; Sally Carey; Patty, Beckey; Adeline; Harriett and her child Elizabeth; Lucy; Susan; Anny; David; Fanny; Nelson; Luckey; Nanny; Frank; Sall; Lancaster; Fubal; Jephtha; Archer, Jim; Easter; Mahala; Nathan; Princess; Manerva; Rachel; Hasty; Kittey; Little Pleasant; Lewis; Harry; Temple; Cloe; Aggy; John; Charlotte; Jackson;	1840-1857	West Feliciana Parish, Conveyance Record K, p. 299, 1851/08/26, West Feliciana Parish, Conveyance Record K, p. 297, 1857/08/28; West Feliciana Parish, Mortgage Book M. 134, 1842/05/18; West Feliciana Parish, Mortgage Book L, p. 216, 1840/11/12
	William, Ted; Brister; Ely; Yellow Dick; Arthur; Daniel; Jim; Joshua; Sandy; Big George; Anderson, Arthur; Little Henry; John; Amos; Littleton; Bill; Jake; Jubiter; Simon; Hampson; Big Henry; Big Jackson; Big Kitty; Big Hannah; Hannah; Ann; Little Kitty; Eliza; Juby; Dorcas; Sarah; Susannah; Maria; Creary, Cloze; Jenny; Penny; Adeline; Little Mary; Minta; Nan; Lemee; Nancy Lee; Charity; Patsy; Dinah Lane; Judy		
Barton, Edward H and Eveline	land and the following individuals: Charles; Frank; Josias; Harriet	1832	West Feliciana Parish, Mortgage Book H. p. 419, 1832/04/27
Bergess, William and Elizabeth	land and the following individuals: Prosper and his wife Susan, and their child Eliza, Tempe; Ellen and her child Fanny; Tempe's child Matilda	1833	West Feliciana Parish, Mortgage Book J. p. 147, 1833/07/08
Binghamman, Ms Lorig	land and the following individuals: George Graves; Sandy; Richmond; Bill; Melford; Moses; Dick; George; Abe; Alfred; Bob; Milford; Frank; Rod; Rachel; Dianah, Matilda, Mary, Mulatto Mary; Short Rachel, Alice; Celia; Fanny; Mariah; Chany; Alice, Christeen; Henrietta; Ann; Priscilla	1832-1833	West Feliciana Parish, Mortgage Book H, p. 390, 1832/04/14, West Feliciana Parish, Mortgage Book J, p. 84, 1833/04/06
Blount, Levi	land, plantation on Bayou Sarah, and the following individuals: Tom; Harry; Jacob; Bill; Lewis; Tempy; Lucinda, Daine; Ann; Adeline; Reuben, Henry; Abner; Daniel; Anderson; Emily; Sarah; Matilda	1833	West Feliciana Parish, Mortgage Book J, p. 96, 1833/04/13
Boyle, William D. and Lucinda Jane	land and the following individuals: Henry; Isaac; Preston; Milly	1839	West Feliciana Parish, Mortgage Book K, p. 408, 1839/05/27

Owner	Mortgaged Collateral	Dates	Source
Bradford, David and Amanda	land and the following individuals: Bison; Elisha, his wife Nancy, and their children, Charity, Lubela, and Johan; Queen and her son John; Emma and her two children Harriet and Sampson	1837	West Feliciana Parish, Mortgage Book J, p. 584, 1837/02/08
Brown, Asa	plantation, land, and the following individuals: Jim; George; Harry; Charles; Adam; Little George; Henny; Dorcus; Caroline; Lucy; Bill; Eliza; L. Charles	1833-1843	West Feliciana Parish, Mortgage Book, p. 89, 1833/04/09; Pointe Coupee Parish, Legal and Conventional Mortgage Book C, 1711, 1839/03/11; West Feliciana Parish, conveyance Record H, p. 458, 1843/09/12
Burgess, William	land and the following individuals: Jack; Carolin; Harriet; Tom; Malvina; Lucy; Amy; Ellen; Fanny; Julie; Susan; Eliza; Ann; Louisa; Tempee; Matilda; Henderson; unnamed individual	1837	West Feliciana Parish, Mortgage Book J, p. 583, 1837/02/07
Canfield, Zackariah and Julia	land and the following individuals: Mary; David; Sarah	1839	West Feliciana Parish, Mortgage Book N, p. 296, 1839/02/27
Clark, Maria	land and the following individuals: Jim; Frank	1832	West Feliciana Parish, Mortgage Book H, p. 414, 1832/04/24
Cobb, Stephen C.	land and the following individuals: Roman; Lethy; Ann; Sally; Lethy Amis; George Washington; Allin; Henry; Frank; Peter; Adeline	1841	West Feliciana Parish, Mortgage Book L, p. 299, 1841/05/18
Croft, John and Susan	the following individuals: January; Cuase; Peter; April; Cuase; Sithe; Sithe; George; Isaac; Andrew; Jinny and her child Caroline; Rose; Lucy; Hester and her children Jerry, Edmund, illegible, and William; Winny and her children Joe and Hester; Young Rose; Mary; Anthony, Jim	1832	West Feliciana Parish Mortgage Book H, p. 406, 1832/04/23
Davis, Charles H. and Ann M.	land and the following individuals: Isaac; Sal or Sarah; Alice; Alex or Alexander; Sylvia; Dick; Harriet; Rachel; Sam; Kentuck-Isaac; Tom; Betsey; Caroline; Little Sal; Caroline, Minor, Ellin; Little Sal; Vine; Bill	1840	West Feliciana Parish, Mortgage Book L, p. 113; 1840/05/04
Davis, Jesse	plantation, land, and the following individuals: Birt; Major; Perry; Frank; Willard; Louisa; Matilda; Clansy	1833	West Feliciana Parish, Mortgage Book J, p. 40, 1833/02/27
Davis, Lewis F. J.	land and the following individuals: Eve and her two children Mincey and Jim; Fanny and unnamed child; Cato Virgil; Flora and her unnamed child	1839	West Feliciana Parish, Mortgage Book K, p. 275, 1839/01/16
Dawes, Salloman M and Ann	land and the following individuals: William, Nelly; John; Clara; Victor; Sylvia; Caroline; Prince, Betty	1833	West Feliciana Parish, Mortgage Book J, p. 121, 1833/05/11
Dawson, John B.	land, plantation, and the following individuals: Sam; Ishmael; Arch; William; Cato; Jane, Vine; Milley; Phillis; Charlotte; Adeline; Len; Lydia; Filler; Harriette; Charlotte, Allen; Cornelius, Virginia; Caroline; Martha; Eliza; Arch	1833	West Feliciana Parish, Mortgage Book J, p. 82, 1833/04/03

Owner	Mortgaged Collateral	Dates	Source
Doherty, Anthony and Marsa	plantation, land, and the following individuals: William; Dick or Yellow Dick; Jack; Milley, Ida, Long George; Abraham; Charles; Isaac; Robbin; Harry; Vine; Henry; Rose, Ginney; Easter, Hannah; Lewis; Christmas; Henry; Anthony; Samuel; Peter; Charles, Lean; Ann; Margaret; unnamed individuals; Levin; Margaret; Celia; Welloughty, Jan; Aurr; Margaret; Jack Goin; Dannis; Jack; Sophia; Adeline; Leah; Rachel; Ann; Kate, Stephen; Alfred; illegible; Couilla; Coth; Dicey; Neacy	1833	West Feliciana Parish, Mortgage Book J, p. 107, 1833/04/27; West Feliciana Parish, Mortgage Book, p. 156, 1833/07/26
Doherty, Charlotte	land and the following individuals: Anthony; Peggy; Delphe; Aaron; Margaret; Maria, Sylvia; Renold; Tell	1839	West Feliciana Parish, Mortgage Book K, p. 325, 1839/02/15
Doherty, Peter	the following individuals: Peter and his wife Adaline; Sam; Short George; Mike; Maria; Bet; Stephen; Willis; Ollive; Dice; Maria; Ellen; Phil; Long George; Thornton; Levin	1841	West Feliciana Parish, Conveyance Record G, p. 208, 1841/04/27; West Feliciana Parish, Mortgage Book K, p. 387, 1839/04/27,
Duir, Robert	land and the following individuals: Matt; Vine; Peter; Kitty; Nancy; Tom; Milley	1832-1842	West Feliciana Parish, Mortgage Book H, p. 386, 1832/04/19; West Feliciana Parish, Mortgage Book J., P. 125, 1833/05/18; West Feliciana Parish, Mortgage Book M, 111, 1842/04/11
Dupre, James R	land and the following individuals: Isaac; Otis; Anrster; Bob; Bob Oliver; Helen; Judy; Danferrey; Sarah and her child Margaret; Rena; Nancy; Charlotte; Ellis; Jim; Ann	1834	West Feliciana Parish, Mortgage Book J, p. 259, 1834/04/12
Edie, Charles M.	plantation and the following individuals: Sharper; Betsey and her son; Isaac; Jim; Mary Ann, Emmeline; Tom; Bill; Lucy and her son Peggy; Louden; Lucy; Eliza; Patsey; Sarah; George; Reuben; George; Polly; Ann; Anderson; Hannah	1848	West Feliciana Parish, Mortgage Book N, p. 453, 1848/05/25
Fair, James and Mary	plantation and the following individuals: Phileum and his wife Mary; Maria; Charlotte; Mary; Watty; Dick; Henry; Charles and his wife Mary; Eady; Grace and her child Martha; Abraham and his wife Sylvia and Abraham's children Stephen and Esther; Roderick and his wife Milly; Trilly and her child; Ginney; Tom; Dave; Rachael; Abraham; Jacob, Nancy; Jack; Billy; Phillis; Fountain; Jake; Sam	1835	West Feliciana Parish, Mortgage Book J, p. 310, 1835/01/22;
Farrar, Mary Ann	land and the following individuals: Esther and her children, Nace and Margaret; John, Manuel; Bob and his wife Sabra and their children, Tenp and Jince; Sam and his wife Betty and their children, Patience and Cato; Sylvia and her daughter Ann, Caroline; Martha, Maria; Little Bob; Sarah; Moses; William alias Banks	1836	West Feliciana Parish, Mortgage Book J, p. 492, 1836/03/12

Owner	Mortgaged Collateral	Dates	Source
Fort, Ann	land and individuals: Nace; John; Manure; Bob; Jane; Cato; Esther; Margaret; Sabra; Betsy, Sylvia; Jane (alias Fanur); Tempe; Jinny; Patience; Ann; Carolin; Martha; Simon; Dennis; Daniel; Bob; Sam; <i>Siddy</i> ; Mary; Esther; Fanny; Sisy; Ann; Ben, Washington; Phalaris; <i>Eiha</i> ; Judy; Dilsey; Josephine; <i>Clever</i> ; Judy; Isaac; Sarah; Essex; Jim; Harry; Rhody; John; Chloe; <i>Tuolage</i> ; <i>Mourmany</i> ; Nelson; Lucy; Andrew; Sylvia; infant; Josephine	1832	West Feliciana Parish, Mortgage Book H, p. 425-427, 1832/05/01
Fort, William	land and the following individuals: Edmond; Dick; Hank; Jake; Anthony; George; Moses; Jim; Tom; Lorenzo; Little Anthony; Beck; Nance; Charlotte; Rose; Susan; Ellen; Chancy; Anthony; Arthur; Jerry; Jacob; Edmond; Hackless; James; Andrew; Little George; Henry Dou; Little Harry; Kitty; Jane; Lucey; Silvey; Josephine; Julia; Nancy; Lacey; Betsey; Valentine; Phil; Charity; Tennessee; Jerry; Lady and her child Joe; Allen; Lucky; Thomas; Gran; Sally; Jackson; Halifax; Lucinda; Varny; Isaac, Monroe; Henry, Sam; Patty; Washington; Bytha; Jane Fisher; Josiah; Cesar, Jenny; and three unnamed	1832-1841	West Feliciana Parish, Mortgage Book H, p. 388, 1832/04/20; West Feliciana Parish, Mortgage Book J, p. 420, 1835/10/31, West Feliciana Parish, Mortgage Book L, p. 267-269, 1841/03/29
Gray, Josias	land and the following individuals: Hannah; Dave; John; Ned; Clara; Toby; William; Sophia and her child Delia; Sarah; Julia; Lodoiski; Flora; Miles	1834-1847	West Feliciana Parish, Mortgage Book J, p. 249, 1834/04/09; West Feliciana Parish, Mortgage Book, p. 517, 1836/05/07, West Baton Rouge Parish, Mortgage Book Q, p. 504, 1831/05/07, Mortgage Book S, p. 480, 1847/06/10
Guibert, Corelie B.	land and the following individuals: Stephen; David or Daniel; Theodore; Registe; Ned, Adelaide; Rosaline and her son Edmund; Louisa; Amy; Harriet; William; Fanny, Mary Ann and two children Annette and Celia	1842	West Feliciana Parish, Mortgage Book M, p. 78, 1842/01/18; West Feliciana Parish, Mortgage Book O, p. 116, 1851/06/26
Haile, Robert	land and individuals: Charles; George; Rouna; Matt; Harry; illeg. and her two children Tom and Jim; Hannah and her son Phillip; Priss and her unnamed child; Dice and her unnamed child	1836	West Feliciana Parish, Mortgage Book J, p. 448, 1836/01/01
Harbour, John A.	land and the following individuals: Aaron; Nicey and her child Rose; Sarah; Easter; Esthma; Jesse, Frederick; Anthony; Caff; Ann; Adeline; Sam; Arch, his wife Phillis, and their children Martha, Caroline, Eliza, Little Arch, Henry, Robert and an unnamed infant; Ishmael, his wife Jane and their children Len, Lydia, Matilda, Harriet, Little Charlotte, Ellen, Little Ishmael, and Rachael; Abner; Big Charlotte and her unnamed infant child; Vine and her children Allen; Cornelius; Virginia; Clara; and orphan Mary Jane	1834-1844	West Feliciana Parish, Mortgage Book J, p. 297, 1834/10/24; West Feliciana Parish, Mortgage Book L, p. 255, 1841/02/23; West Feliciana Parish, Mortgage Book M, p. 524, 1844/10/21

Owner	Mortgaged Collateral	Dates	Source
Hargadine, William	land and the following individuals: Charles; Isaac; Sam; Wellington; Delia; Judy and her child Oscar; Milley; Victore; Rinos; Aggy; Caroline and her two children Betsey and Lafayette. Rosetta; Julett	1834	West Feliciana Parish, Mortgage Book J, p. 258, 1834/04/12
Harvey, M A	land and the following individuals: Julia; Jack; Arey; Dancy; Nancey and her unnamed daughter, Ritta and her son Jim; Daniel	1839	West Feliciana Parish, Conveyance Record I, p. 144, 1839/03/25
Holmes, John	the following individuals: Albert; Edmond; Wilson; Robin; Harriet	1843-1853	West Feliciana Parish, Mortgage Book M, p. 409, 1843/09/20; West Feliciana Parish, Mortgage Book O, p. 358, 1853/06/29
Hosia, Thomas N	land and the following individuals: Hammond; Bill; Andrews; Betsey; Kittey; Joe; Alfred; America; Lucy, Ned, Maria; Lucinda	1834	West Feliciana Parish, Mortgage Book J, p. 265, 1834/04/12
Howell, Ebenezer	land and the following individuals: George; Harry Nearn; Harry Turpire; Ephraim; Isaac Matthews; Guinea Bob; Elijah; Esther; Rose and her two children Nullifier and Union; Sarah, Abraham; Charlotte; Lewis; Milley; Harriet and her two children Ann and Joe; Grace and her three children Anny and two unnamed children; Paul; Little Bob, John	1835	West Feliciana Parish, Mortgage Book J, p. 326, 1835/03/03
Jackson, Jesse K.	plantation and the following individuals: Sam; Carey; Eliza; Matilda; Mariah; Mary; Tom; John; Henry; Emily; Sally; Bob; Ben; Sandy; Bill; Bridget; Rhody; Sarah; Jane; James; Elijah	1834-1837	West Feliciana Parish, Mortgage Book J, p. 238, 1834/03/20; West Feliciana Parish, Mortgage Book J, p. 593, 1837/03/01
Jenkins, Sylvester B.	land and the following individuals: Louisa and Elvey	1844	West Feliciana Parish, Mortgage Book M, p. 428, 1844/02/03
Johnson, Charles G.	land and the following individuals: Henry; Bartlette; Tom; Charles; Jim; Peter; Joe; Nelson; Sam; Edmond; Ned, Tempe; Harriette; Jane; Lenese; Lucy; Old Lucy; Frank, Lucy; Gunny; Rayney; Susan; Clia; Francis; Betsey; Ellen; Rose; Maria; Lucinda, Nancy	1833	West Feliciana Parish, Mortgage Book J, p. 91, 1833/04/10
Joor, Emily	land and the following individuals: Rose; Charles; Ruthy; Fever; Nance; Elic; Tom; Buddy; Sally, Daniel; Peggy; Gabriel; Mary; Anthony; Linden; Rosette; Lucy; Selina; Ann; August; Lavinia; Lucky, Beck; Joe; Alex; Amy; Brister	1840	West Feliciana Parish, Mortgage Book L, p. 98, 1840/04/07
Leake, James and Mary; James and Ann C. Rucker	land and the following individuals: Dick; Tom; Kitty; George; Edward; Madeline; Casey; Jane, Elizabeth and infant Tom, Susey or Surry; Boston; Kitty; Charlotte; Isaac, Simon; Philip; Stephen, Sally and her two unnamed children; Rosan; Kelly	1839-1844	West Feliciana Parish, Mortgage Record K 398, 1839/05/07, West Feliciana Parish, Conveyance Record H, p. 515, 1844/02/03
Leet, George H	land and the following individuals: Mary; David; Sarah	1846	West Feliciana Parish, Mortgage Book N, p. 296, 1846/05/12

Owner	Mortgaged Collateral	Dates	Source
Marks, Francis and Mariah	land and the following individuals: Jilsey; Patsey; Marieh; Philip; unnamed	1835	West Feliciana Parish, Mortgage Book J, p. 404, 1835/07/10
Marshall, Brisbane	land and the following individuals: Abraham; Harriett; Jane	1833-1834	West Feliciana Parish, Mortgage Book J, p. 141, 1833/07/02, West Feliciana Parish, Mortgage Book J, p. 251, 1834/04/10
McCaleb, Samuel and Sarah	plantation, land, and the following individuals: Richard; John; Cagen; Sam; Sylvia; Lewis; Betsey; Washington; Reason; Susan; Margaret; Joshua and his wife Celia and her two children Nancy and Simon; Phillis; Nena and her child Grace; Lidia; Abel , Matilda; Hards; infant; Tom; Century and his wife Lavinia; Tilla; Harriet; Kitten and her son Lewis	1833-1841	West Feliciana Parish, Mortgage Book J, p. 88, 1833/04/08; West Feliciana Parish, Mortgage Book J, p. 302, 1834/11/27, West Feliciana Parish, Mortgage Book M, p. 72, 1841/12/27
McDermott, Charles C.	land and the following individuals: George; Mary Books; Joe; Bofonto; Franky; Davy; Elizabeth, Daniel; Henry, Edmond; John, Joe; Big Mary; Flora; Abel; Stephen; Eliza; Joe; Isaac; Violet; Louisa; Viney; Troy; Charles; Livia; Gabriel; Shadrock	1840	West Feliciana Parish, Mortgage Book L, p. 31, 1840/01/03
Muse, Daniel	land and the following individuals: Alick; Judah; Minerva; Margaret; illegible	1832	West Feliciana Parish, Mortgage Book H, p. 404, 1832/04/23
Paine, John	land and the following individuals: Randal; Henry; Eliza; Eliza (alias Phillis); Mary	1832	West Feliciana Parish, Mortgage Book H, p. 400, 1832/04/23
Percy, Robert D.	plantation, land, and the following individuals: Toby; Heba; George; David; Charles; Nancy; Jane; Parker; Lewis; Millis; Ephram; Katy; George; Nancy Bell; Jim; Esther; Henry; Rachael; Frank; Joe; Rose; Jenny	1836	West Feliciana Parish, Mortgage Book J p. 467, 1836/01/27
Perkins, John and Julietta; Henry and Mary Perkins	plantation, land, and the following individuals: Harry; Priscilla; Will; Hetty; Ann; Harriett; Jim; Morris; Hiram; Burrell; Spencer; Jordan; John Brown; John Wilson; Joe, Ester and her child Aggy; Eliza; Judy; Anna; Judy; Alsey and her child Alvira; Amy; Hivau; Lanford; John Gray; Samuel; Josiah; Stephen; Martha; Sophia; Lucinda; Miley	1833-1834	West Feliciana Parish, Mortgage Book J, p. 144, 1833/07/05; West Feliciana Parish, Mortgage Book J, p. 254, 1834/04/10
Perry, Hardy	plantation, land, and the following individuals: Henry; Edinborough; Lemmon; Caroline Cartwright; Jenny; Lucinda; Henry; Mary; Olivia; John; Clark; Amanda; Solomon, Hannah; Big Joe, Jim, Little Joe; Milly and her two children West and Lucretia; Melissa; Hillary; Jacob; Martha; George	1833-1842	West Feliciana Parish, Mortgage Book J, p. 104, 1833/04/25; West Feliciana Parish, Mortgage Book K, p. 256, 1838/12/14; West Feliciana Parish, Mortgage Book M, p. 179, 1842/06/10
Phillips, Uriah B and Edward	Catherine	1849	West Feliciana Parish, Conveyance Record I, p. 559, 1849/03/21

Owner	Mortgaged Collateral	Dates	Source
Pope, Martha	plantation and individuals: Goin; Mike; Mark; Stephen; Wellington; Sally; Harriet; Sally; George, Marie Goeur; Bob; Thornton; Phillis; Jacob; Molly	1832-1834	West Feliciana Parish, Mortgage Book H, p. 396, 1832/04/21; West Feliciana Parish, Mortgage Book J, p. 306, 1834/12/31
Randolph, Peter	land and the following individuals: Brutus; Nimrod; Robert; Hiram; Moses; Alfred, Frank; Katey, Harriet and her son John; Laura and her children Jesse and Belinda; Betsey and her child Rodolphus; Nancy and her child Nimrod; Little Harriet and her child Sarah; Tabby; Hannah; Eliza; Little Kattey, child of Hannah	1852	West Feliciana Parish, Mortgage Book O, p. 260, 1852/12/17
Ratliff, Ann	plantation and the following individuals: Glacous; York; Barret; Dick; Jim; Reuben; Milford, Ben; Phebe; Nan; Tina; Ginny; Nelly; Chancy; Brackston; Jackson; Carral; Burr, Hule; Matilda; Milly, Amy; Rosetta; Patsy; Eliza; Gertrude; Henrietta; Hetty; Rosathe, Susanna or Luretha; Josiah	1832	West Feliciana Parish, Mortgage Book H, p. 440, 1832/05/02
Ratliff, Cyrus	land and the following individuals. Henry; Ningo; Harriet	1836	West Feliciana Parish, Mortgage Book J, p. 516, 1836/05/05
Richardson, Wade and Charlotte	plantation, land, and the following individuals: Piere; Tener and her child; Sarah; Mott; Pegge; Dave; Edmond; Washington; Frank; Mary; Hosea; Bob; Henry; Jenette; Richard; Lucy; Jim; Nat; Elcey	1833-1841	West Feliciana Parish, Mortgage Book J, p. 111, 1833/04/30; West Feliciana Parish, Mortgage Book L, p. 244, 1841/02/07
Routh, Francis and Mary	land and the following individuals: Luckey; Ellen and her unnamed child; Mary Harbor; Nelson; Jane Harbor; Eveline; Richard; Polly; Cotton; Jane Ferry; Harry Johnson; Caroline; Jenny Odum and her unnamed child; Penine; Lydia; Alfred; Louisia; Beckey Binch and her unnamed child; Matilda; Lissia; Jenny Bich and her unnamed child; Stephen; Harry Cotton; Beckey Mils; Yom; Alfred; unnamed infant; Jenny Liddy, Lydia	1835	West Feliciana Parish, Mortgage Book J, p. 369, 1835/04/28
Simmons Anthony J. and Agnes	land and the following individuals: Malinda; Silas; Mordecai and his wife Fanny; Caroline, Eliza and her two daughters: Maria and Elizabeth; Jim	1836	West Feliciana Parish, Mortgage Book J, p. 464, 1836/01/29
Smith, Ira and Mary Ann	sugar plantation the following individuals: Rose; Wilson; Lyda; Causemell; Amos; Milley; Sylvia; Isaac; Sinah; Lewis; Purnel; Jinney; Priscilla; William; Marsha, Daniel; Jinney Tiddy; Lynda; Henry; Lyttleton; Harry; Prince; Pleasant; Sally; Mary Grace	1833	West Feliciana Parish, Mortgage Book J, p. 109, 1833/04/30
Spencer, Jace and Mary	land and the following individuals: Munday; Henry; Isaac; Dick; Bob; Tom; Jack; Elenor; Charlotte; Lydia; Sealey; Leah; Phillis; Violet; Issabella; Mariah; Silvey; Lucinda; Lucy, Beck; Bedy; Annis; Charles	1833	West Feliciana Parish, Mortgage Book J, p. 86, 1833/04/06; East Feliciana Parish, Mortgage Book C, p. 141, 1833/04/06

Owner	Mortgaged Collateral	Dates	Source
Stirling, Lewis	land and the following individuals: Sambo, his wife Ellin and her children: Black Dublin, Thomas, Susan, and Perry; Billey, his wife Silvia and their children: Dally, Harry, Nann, Martin, Magdalen, Celest, Billey, Walley, his wife Pender, and their children: Fortune, Nan, Patsey and Caroline; Penny and her children: Clarissa, Samson, Rachal, Munday; Clarissa's children Celia and Levi; Big Ben, his wife Delia, and their children Little Ben, Sam, and Hester; Sidney and her son Julius; Allin and his wife Miranda; Lige; Old Sam; Surry; Jim; Nan and her children Amy and Abia Philips; Prince; Jacob; Frank; Bartlett and his wife Charlotte; Anderson; Jancy; Sampson; Monday; John, his wife Clarisse, and their children Celia and Ginney; Dublin; his wife Rachel, and their children Polly, Clarisse, and Ellen; Big Ben, his wife Deliba, and her children Jack, Joe, and Wiley; Little Ben, his wife Nan, and her child Thisanna; Sam Brown; Little Charles and his wife Hester; Charles; Sambo; Ellen, Chester; Thomas; Susan; Jenny; Squire; Mike; Isaac; Josiah, his wife Fontaine and her children Charlotte and Rose; Waley; Cinda; Caroline; Old Charles; Julia Ann and her children Rosetta and Charles Boles; Necis; Old Nelly; Sam Jackson; Chamy; Muriata; Suckey and her children Eliza and Liddy; Liddy's children Joshua, Hannah, Charles, and Suckey; Nan and her child Robert; Sambo; Harry; Catey; Little George; Sophy; Alfred; Lucinda; Louisa; Barica; Sarah; Fanny; Adam; Rose; Nelly and her children Isabel, Barica, and Lucy; Wiley; Winson; Tennessee; Little Tennessee; Fortunore; Big Judy; Long George; Linder; Cecile; Primus; George, Lewis; Rosalle; Luk; Wilson; Eveline; Mariah; Sarah; Sarella; Baptiste; Joe; Mary; Clara; Liven; Maretta; Judy; Henrietta; Erven; Leven; Nelson; Clarinda; Spencer; Affy; Amanda; Jane; Beck; Rinah; Fortune; Yanco; Little Judy; Hannah; Rosabel, Josephine; Washington; Jack; Liddy; Franswaise; L. Charlotte; L. Hannah; Celia; Tempo; Wisley; Catherine; Frozene; Rimus; L. Joe	1833-1844	West Feliciana Parish, Mortgage Book J, p. 79, 1833/04/03, West Feliciana Parish, Mortgage Book M, p. 552, 1844/12/24, p. 558, 1844/12/30
Swift, Margaret	land and the following individuals. Dave; Tom; Henry; Milly; Hetty; Clara; Elsey; George; William; Bob; Hiram, Edgar; Letty	1840	West Feliciana Parish, Mortgage Book L, p. 59, 1840/02/07
Tenney, Henry	land and the following individuals: Bob; John; Charlotte and her child	1840	West Feliciana Parish, Mortgage Book L, p. 89, 1840/03/19
Turnbull, John	land and the following individuals: Little Jenny; Clarice; Harry; Tennessee Harry; Betsy; Suckey, Oliver; Harris	1843	West Feliciana Parish, Mortgage Book M, p. 322, 1843/04/24

Owner	Mortgaged Collateral	Dates	Source
Wade, William C and Olivia	land and the following individuals: Alexander; Lucy; Lenord; Wilson; James; Thomas; Austin; Louisa; Emily; Samuel; Martha; Jerry; Milly; Bob; Viney; Becky; Nelly; Evelina, William; Thomas; William; Hester; <i>illegible</i> ; Henry; Kitty; Bazel; Caroline; Clarissa; Nance; Nick; Henry; Henson; Jane; David; Ben; Kmbi; and two unnamed children	1840	West Feliciana Parish, Mortgage Book L, p. 70, 1840/02/28
Williams, James	plantation and the following individuals: Jim; John; August; Jim; Black Bill; Yellow Bill; Simon; Randal; Napoleon, Warner; Celia; Hannah; Frances; Winny; Hannah mother of other Hannah, Emeline	1832	West Feliciana Parish, Mortgage Book H., p. 411, 1832/04/20
Woods, Ezer E.	land and the following individuals: Sucky; George; Charlotte; Eliza; Wayne; Axis; Joe, Susan; Frank; Polly and her child John	1835	West Feliciana Parish, Mortgage Book J, p. 360, 1835/04/07
Young, Sarah	land and the following individuals: Gabriel; Joe; Luke; Simon; Sam; Dan; Henry; Frank; Alexander; <i>illegible</i> ; Charles; Nancy and her three children Judy, Matila, and Julian, Jinney; Ellen; Aggy; Mary; Fally; Rebecca; Sophy; Lucinda; Clary; Daphny; Betty, Dinah; Lydia; Anny and her two children Isaac and David; Lelina and her three children Julian; Rhym and Susan; Maria and her three children Peter, Louisa, and Hariette; Dann; Ryan, Lucy; Malissa; Maria; Celest; Old Rym; Sally	1832-1833	West Feliciana Parish, Mortgage Book H, p. 422, 1832/04/03; Mortgage Book J, p. 103, 1833/04/20

Bank of Kentucky (Lexington Branch)

Fayette County

Benton, Lloyd and Warren	property and the following individuals: John; Kitty	1840	Fayette County, Deed Book 17, p. 325
Clay, J B	property and the following individuals. Alfred; Levi; Lewis; Oliver	1844	Fayette County, Deed Book 22, p. 162; Deed Book 23, p. 558
Harrison, J O	property and the following individuals: Sam; Isham; Henry; Fanny; Mary and her unnamed child, Mathilda and her unnamed child; Sarah Jane	1840	Fayette County, Deed Book 18, p. 5
Morrison, R.	property and the following individuals: Peter; Harry; Peter; Jim; Aaron; Edmund; Reuben	1837-1838	Fayette County, Deed Book 14, p. 61; Deed Book 15, p. 212

Owner	Mortgaged Collateral	Dates	Source
Payne, Orlando F. Vance, William	property and the following individuals: Doctor; Dan; Sandford; Ned; John Lewis; Ellis; Edmund; Henry, George; Buck; Charles; William; Sally; Emily; Lucy; Polly; Susan; Winney; Pliney; Sarah; Julia Ann, Mary; Mary Ann; Jeff; Sidney; Jane property and the following individuals: Henry; Alfred; Ben; Ben; Harrison; John	1842 1841	Fayette County, Deed Book 20, p. 252 Fayette County, Deed Book 19, p. 141

MUFG UNION BANK,
N.A.

02019-9946

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT
AND AFFIDAVIT**

SECTION I -- GENERAL INFORMATION

A. Legal name of the Disclosing Party submitting this EDS. Include d/b/a/ if applicable:

MUFG Union Bank, N.A.

Check ONE of the following three boxes:

Indicate whether the Disclosing Party submitting this EDS is:

1. ☒ the Applicant

OR

2. ☐ a legal entity currently holding, or anticipated to hold within six months after City action on the contract, transaction or other undertaking to which this EDS pertains (referred to below as the "Matter"), a direct or indirect interest in excess of 7.5% in the Applicant. State the Applicant's legal name: _____

OR

3. ☐ a legal entity with a direct or indirect right of control of the Applicant (see Section II(B)(1)) State the legal name of the entity in which the Disclosing Party holds a right of control: _____

B. Business address of the Disclosing Party:

445 S. Figueroa St. 16th Floor

Los Angeles, CA 90071

C. Telephone: 213-236-4078 Fax: 213-236-5019 Email: gbell@us.mufg.jp

D. Name of contact person: Garrett Bell

E. Federal Employer Identification No. (if you have one): _____

F. Brief description of the Matter to which this EDS pertains. (Include project number and location of property, if applicable):

Response to Request for Proposal for Payment of Interest on the Monies of the City of Chicago and the Chicago Board of Education

G. Which City agency or department is requesting this EDS? City of Chicago Finance Department and the Chicago Board of Education

If the Matter is a contract being handled by the City's Department of Procurement Services, please complete the following:

Specification # _____ and Contract # _____

SECTION II -- DISCLOSURE OF OWNERSHIP INTERESTS

A. NATURE OF THE DISCLOSING PARTY

1. Indicate the nature of the Disclosing Party:

- | | |
|---|--|
| <input type="checkbox"/> Person | <input type="checkbox"/> Limited liability company |
| <input type="checkbox"/> Publicly registered business corporation | <input type="checkbox"/> Limited liability partnership |
| <input type="checkbox"/> Privately held business corporation | <input type="checkbox"/> Joint venture |
| <input type="checkbox"/> Sole proprietorship | <input type="checkbox"/> Not-for-profit corporation |
| <input type="checkbox"/> General partnership | (Is the not-for-profit corporation also a 501(c)(3))? |
| <input type="checkbox"/> Limited partnership | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| <input type="checkbox"/> Trust | <input checked="" type="checkbox"/> Other (please specify) |
| | National Association |

2. For legal entities, the state (or foreign country) of incorporation or organization, if applicable:

MUFG Union Bank, N.A. is a national banking organization formed under the laws of the United States. Please see Attachment 1 for the Certificate of Corporate Existence and Fiduciary Powers issued by the US Department of Treasury Office of the Comptroller of the Currency

3. For legal entities not organized in the State of Illinois: Has the organization registered to do business in the State of Illinois as a foreign entity?

☐ Yes ☒ No ☐ Organized in Illinois

B. IF THE DISCLOSING PARTY IS A LEGAL ENTITY:

1. List below the full names and titles, if applicable, of: (i) all executive officers and all directors of the entity; (ii) **for not-for-profit corporations**, all members, if any, which are legal entities (if there are no such members, write "no members which are legal entities"; (iii) **for trusts, estates or other similar entities**, the trustee, executor, administrator, or similarly situated party; (iv) **for general or limited partnerships, limited liability companies, limited liability partnerships or joint ventures**, each general partner, managing member, manager or any other person or legal entity that directly or indirectly controls the day-to-day management of the Applicant.

NOTE: Each legal entity listed below must submit an EDS on its own behalf.

Name	Title
<u>Stephen E. Cummings, President & CEO of MUFG Union Bank, N.A.</u>	

Please refer to Attachment 2 for a complete listing of our Executive Officers and Board of Directors

2. Please provide the following information concerning each person or legal entity having a direct or indirect, current or prospective (i.e. within 6 months after City action) beneficial interest (including ownership) in excess of 7.5% of the Applicant. Examples of such an interest include shares in a corporation, partnership interest in a partnership or joint venture, interest of a member or manager in a

limited liability company, or interest of a beneficiary of a trust, estate or other similar entity. If none, state "None."

NOTE: Each legal entity listed below may be required to submit an EDS on its own behalf.

Name	Business Address	Percentage Interest in the Applicant
MUFG Americas Holdings Corp	1251 Avenue of the Americas New York, NY 10020	100%

Note: This entity makes periodic filings with U.S. S.E.C. pursuant to the Securities Exchange Act of 1934 and therefore appears exempt from an EDS filing requirement per EDS Rule No. 1(i). See Attachment 3 for the latest S.E.C. Form 10-K for this entity

SECTION III -- INCOME OR COMPENSATION TO, OR OWNERSHIP BY, CITY ELECTED OFFICIALS

Has the Disclosing Party provided any income or compensation to any City elected official during the 12-month period preceding the date of this EDS? ☐ Yes ☒ No

Does the Disclosing Party reasonably expect to provide any income or compensation to any City elected official during the 12-month period following the date of this EDS? ☐ Yes ☒ No

If "yes" to either of the above, please identify below the name(s) of such City elected official(s) and describe such income or compensation:

Does any City elected official or, to the best of the Disclosing Party's knowledge after reasonable inquiry, any City elected official's spouse or domestic partner, have a financial interest (as defined in Chapter 2-156 of the Municipal Code of Chicago ("MCC")) in the Disclosing Party?

☐ Yes

☒ No

If "yes," please identify below the name(s) of such City elected official(s) and/or spouse(s)/domestic partner(s) and describe the financial interest(s).

SECTION IV -- DISCLOSURE OF SUBCONTRACTORS AND OTHER RETAINED PARTIES

The Disclosing Party must disclose the name and business address of each subcontractor, attorney, lobbyist (as defined in MCC Chapter 2-156), accountant, consultant and any other person or entity whom the Disclosing Party has retained or expects to retain in connection with the Matter, as well as the nature of the relationship, and the total amount of the fees paid or estimated to be paid. The Disclosing Party is not required to disclose employees who are paid solely through the Disclosing Party's regular payroll. If the Disclosing Party is uncertain whether a disclosure is required under this Section, the Disclosing Party must either ask the City whether disclosure is required or make the disclosure.

Name (indicate whether retained or anticipated to be retained)	Business Address	Relationship to Disclosing Party (subcontractor, attorney, lobbyist, etc.)	Fees (<u>indicate whether paid or estimated.</u>) NOTE: "hourly rate" or "t.b.d." is not an acceptable response.
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(Add sheets if necessary)

[X] Check here if the Disclosing Party has not retained, nor expects to retain, any such persons or entities.

SECTION V -- CERTIFICATIONS

A. COURT-ORDERED CHILD SUPPORT COMPLIANCE

Under MCC Section 2-92-415, substantial owners of business entities that contract with the City must remain in compliance with their child support obligations throughout the contract's term.

Has any person who directly or indirectly owns 10% or more of the Disclosing Party been declared in arrearage on any child support obligations by any Illinois court of competent jurisdiction?

[] Yes [] No [X] No person directly or indirectly owns 10% or more of the Disclosing Party.

If "Yes," has the person entered into a court-approved agreement for payment of all support owed and is the person in compliance with that agreement?

[] Yes [] No

B. FURTHER CERTIFICATIONS

1. [This paragraph 1 applies only if the Matter is a contract being handled by the City's Department of Procurement Services.] In the 5-year period preceding the date of this EDS, neither the Disclosing Party nor any Affiliated Entity [see definition in (5) below] has engaged, in connection with the performance of any public contract, the services of an integrity monitor, independent private sector inspector general, or integrity compliance consultant (i.e., an individual or entity with legal, auditing, investigative, or other similar skills, designated by a public agency to help the agency monitor the activity of specified agency vendors as well as help the vendors reform their business practices so they can be considered for agency contracts in the future, or continue with a contract in progress).

2. The Disclosing Party and its Affiliated Entities are not delinquent in the payment of any fine, fee, tax or other source of indebtedness owed to the City of Chicago, including, but not limited to, water and sewer charges, license fees, parking tickets, property taxes and sales taxes, nor is the Disclosing Party delinquent in the payment of any tax administered by the Illinois Department of Revenue.

3. The Disclosing Party and, if the Disclosing Party is a legal entity, all of those persons or entities identified in Section II(B)(1) of this EDS:

- a. are not presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from any transactions by any federal, state or local unit of government;
- b. have not, during the 5 years before the date of this EDS, been convicted of a criminal offense, adjudged guilty, or had a civil judgment rendered against them in connection with: obtaining, attempting to obtain, or performing a public (federal, state or local) transaction or contract under a public transaction; a violation of federal or state antitrust statutes; fraud; embezzlement; theft; forgery; bribery; falsification or destruction of records; making false statements; or receiving stolen property;
- c. are not presently indicted for, or criminally or civilly charged by, a governmental entity (federal, state or local) with committing any of the offenses set forth in subparagraph (b) above;
- d. have not, during the 5 years before the date of this EDS, had one or more public transactions (federal, state or local) terminated for cause or default; and
- e. have not, during the 5 years before the date of this EDS, been convicted, adjudged guilty, or found liable in a civil proceeding, or in any criminal or civil action, including actions concerning environmental violations, instituted by the City or by the federal government, any state, or any other unit of local government.

4. The Disclosing Party understands and shall comply with the applicable requirements of MCC Chapters 2-56 (Inspector General) and 2-156 (Governmental Ethics).

5. Certifications (5), (6) and (7) concern:

- the Disclosing Party;
- any "Contractor" (meaning any contractor or subcontractor used by the Disclosing Party in connection with the Matter, including but not limited to all persons or legal entities disclosed under Section IV, "Disclosure of Subcontractors and Other Retained Parties");
- any "Affiliated Entity" (meaning a person or entity that, directly or indirectly: controls the Disclosing Party, is controlled by the Disclosing Party, or is, with the Disclosing Party, under common control of another person or entity). Indicia of control include, without limitation: interlocking management or ownership; identity of interests among family members, shared facilities and equipment; common use of employees; or organization of a business entity following the ineligibility of a business entity to do business with federal or state or local government, including the City, using substantially the same management, ownership, or principals as the ineligible entity. With respect to Contractors, the term Affiliated Entity means a person or entity that directly or indirectly controls the Contractor, is controlled by it, or, with the Contractor, is under common control of another person or entity;
- any responsible official of the Disclosing Party, any Contractor or any Affiliated Entity or any other official, agent or employee of the Disclosing Party, any Contractor or any Affiliated Entity, acting pursuant to the direction or authorization of a responsible official of the Disclosing Party, any Contractor or any Affiliated Entity (collectively "Agents").

Neither the Disclosing Party, nor any Contractor, nor any Affiliated Entity of either the Disclosing Party or any Contractor, nor any Agents have, during the 5 years before the date of this EDS, or, with respect to a Contractor, an Affiliated Entity, or an Affiliated Entity of a Contractor during the 5 years before the date of such Contractor's or Affiliated Entity's contract or engagement in connection with the Matter:

- a. bribed or attempted to bribe, or been convicted or adjudged guilty of bribery or attempting to bribe, a public officer or employee of the City, the State of Illinois, or any agency of the federal government or of any state or local government in the United States of America, in that officer's or employee's official capacity;
- b. agreed or colluded with other bidders or prospective bidders, or been a party to any such agreement, or been convicted or adjudged guilty of agreement or collusion among bidders or prospective bidders, in restraint of freedom of competition by agreement to bid a fixed price or otherwise; or
- c. made an admission of such conduct described in subparagraph (a) or (b) above that is a matter of record, but have not been prosecuted for such conduct; or
- d. violated the provisions referenced in MCC Subsection 2-92-320(a)(4)(Contracts Requiring a Base Wage); (a)(5)(Debarment Regulations); or (a)(6)(Minimum Wage Ordinance).

6. Neither the Disclosing Party, nor any Affiliated Entity or Contractor, or any of their employees, officials, agents or partners, is barred from contracting with any unit of state or local government as a result of engaging in or being convicted of (1) bid-rigging in violation of 720 ILCS 5/33E-3; (2) bid-rotating in violation of 720 ILCS 5/33E-4; or (3) any similar offense of any state or of the United States of America that contains the same elements as the offense of bid-rigging or bid-rotating.

7. Neither the Disclosing Party nor any Affiliated Entity is listed on a Sanctions List maintained by the United States Department of Commerce, State, or Treasury, or any successor federal agency.

8. [FOR APPLICANT ONLY] (i) Neither the Applicant nor any "controlling person" [see MCC Chapter 1-23, Article I for applicability and defined terms] of the Applicant is currently indicted or charged with, or has admitted guilt of, or has ever been convicted of, or placed under supervision for, any criminal offense involving actual, attempted, or conspiracy to commit bribery, theft, fraud, forgery, perjury, dishonesty or deceit against an officer or employee of the City or any "sister agency"; and (ii) the Applicant understands and acknowledges that compliance with Article I is a continuing requirement for doing business with the City. NOTE: If MCC Chapter 1-23, Article I applies to the Applicant, that Article's permanent compliance timeframe supersedes 5-year compliance timeframes in this Section V.

9. [FOR APPLICANT ONLY] The Applicant and its Affiliated Entities will not use, nor permit their subcontractors to use, any facility listed as having an active exclusion by the U.S. EPA on the federal System for Award Management ("SAM").

10. [FOR APPLICANT ONLY] The Applicant will obtain from any contractors/subcontractors hired or to be hired in connection with the Matter certifications equal in form and substance to those in Certifications (2) and (9) above and will not, without the prior written consent of the City, use any such

contractor/subcontractor that does not provide such certifications or that the Applicant has reason to believe has not provided or cannot provide truthful certifications.

11. If the Disclosing Party is unable to certify to any of the above statements in this Part B (Further Certifications), the Disclosing Party must explain below:

NA

If the letters "NA," the word "None," or no response appears on the lines above, it will be conclusively presumed that the Disclosing Party certified to the above statements.

12. To the best of the Disclosing Party's knowledge after reasonable inquiry, the following is a complete list of all current employees of the Disclosing Party who were, at any time during the 12-month period preceding the date of this EDS, an employee, or elected or appointed official, of the City of Chicago (if none, indicate with "N/A" or "none").

N/A

13. To the best of the Disclosing Party's knowledge after reasonable inquiry, the following is a complete list of all gifts that the Disclosing Party has given or caused to be given, at any time during the 12-month period preceding the execution date of this EDS, to an employee, or elected or appointed official, of the City of Chicago. For purposes of this statement, a "gift" does not include: (i) anything made generally available to City employees or to the general public, or (ii) food or drink provided in the course of official City business and having a retail value of less than \$25 per recipient, or (iii) a political contribution otherwise duly reported as required by law (if none, indicate with "N/A" or "none"). As to any gift listed below, please also list the name of the City recipient.

N/A

C. CERTIFICATION OF STATUS AS FINANCIAL INSTITUTION

1. The Disclosing Party certifies that the Disclosing Party (check one)

☒ is ☐ is not

a "financial institution" as defined in MCC Section 2-32-455(b).

2. If the Disclosing Party IS a financial institution, then the Disclosing Party pledges:

"We are not and will not become a predatory lender as defined in MCC Chapter 2-32. We further pledge that none of our affiliates is, and none of them will become, a predatory lender as defined in MCC Chapter 2-32. We understand that becoming a predatory lender or becoming an affiliate of a predatory lender may result in the loss of the privilege of doing business with the City."

If the Disclosing Party is unable to make this pledge because it or any of its affiliates (as defined in MCC Section 2-32-455(b)) is a predatory lender within the meaning of MCC Chapter 2-32, explain here (attach additional pages if necessary):
N/A

If the letters "NA," the word "None," or no response appears on the lines above, it will be conclusively presumed that the Disclosing Party certified to the above statements.

D. CERTIFICATION REGARDING FINANCIAL INTEREST IN CITY BUSINESS

Any words or terms defined in MCC Chapter 2-156 have the same meanings if used in this Part D.

1. In accordance with MCC Section 2-156-110: To the best of the Disclosing Party's knowledge after reasonable inquiry, does any official or employee of the City have a financial interest in his or her own name or in the name of any other person or entity in the Matter?

☐ Yes

☒ No

NOTE: If you checked "Yes" to Item D(1), proceed to Items D(2) and D(3). If you checked "No" to Item D(1), skip Items D(2) and D(3) and proceed to Part E.

2. Unless sold pursuant to a process of competitive bidding, or otherwise permitted, no City elected official or employee shall have a financial interest in his or her own name or in the name of any other person or entity in the purchase of any property that (i) belongs to the City, or (ii) is sold for taxes or assessments, or (iii) is sold by virtue of legal process at the suit of the City (collectively, "City Property Sale"). Compensation for property taken pursuant to the City's eminent domain power does not constitute a financial interest within the meaning of this Part D.

Does the Matter involve a City Property Sale?

☐ Yes

☐ No

3. If you checked "Yes" to Item D(1), provide the names and business addresses of the City officials or employees having such financial interest and identify the nature of the financial interest:

Name

Business Address

Nature of Financial Interest

4. The Disclosing Party further certifies that no prohibited financial interest in the Matter will be acquired by any City official or employee.

E. CERTIFICATION REGARDING SLAVERY ERA BUSINESS

Please check either (1) or (2) below. If the Disclosing Party checks (2), the Disclosing Party must disclose below or in an attachment to this EDS all information required by (2). Failure to comply with these disclosure requirements may make any contract entered into with the City in connection with the Matter voidable by the City.

X 1. The Disclosing Party verifies that the Disclosing Party has searched any and all records of the Disclosing Party and any and all predecessor entities regarding records of investments or profits from slavery or slaveholder insurance policies during the slavery era (including insurance policies issued to slaveholders that provided coverage for damage to or injury or death of their slaves), and the Disclosing Party has found no such records.

2. The Disclosing Party verifies that, as a result of conducting the search in step (1) above, the Disclosing Party has found records of investments or profits from slavery or slaveholder insurance policies. The Disclosing Party verifies that the following constitutes full disclosure of all such records, including the names of any and all slaves or slaveholders described in those records:

SECTION VI -- CERTIFICATIONS FOR FEDERALLY FUNDED MATTERS

NOTE: If the Matter is federally funded, complete this Section VI. If the Matter is not federally funded, proceed to Section VII. For purposes of this Section VI, tax credits allocated by the City and proceeds of debt obligations of the City are not federal funding.

A. CERTIFICATION REGARDING LOBBYING

1. List below the names of all persons or entities registered under the federal Lobbying Disclosure Act of 1995, as amended, who have made lobbying contacts on behalf of the Disclosing Party with respect to the Matter: (Add sheets if necessary):

(If no explanation appears or begins on the lines above, or if the letters "NA" or if the word "None" appear, it will be conclusively presumed that the Disclosing Party means that NO persons or entities registered under the Lobbying Disclosure Act of 1995, as amended, have made lobbying contacts on behalf of the Disclosing Party with respect to the Matter.)

2. The Disclosing Party has not spent and will not expend any federally appropriated funds to pay any person or entity listed in paragraph A(1) above for his or her lobbying activities or to pay any person or entity to influence or attempt to influence an officer or employee of any agency, as defined by applicable federal law, a member of Congress, an officer or employee of Congress, or an employee

of a member of Congress, in connection with the award of any federally funded contract, making any federally funded grant or loan, entering into any cooperative agreement, or to extend, continue, renew, amend, or modify any federally funded contract, grant, loan, or cooperative agreement.

3. The Disclosing Party will submit an updated certification at the end of each calendar quarter in which there occurs any event that materially affects the accuracy of the statements and information set forth in paragraphs A(1) and A(2) above.

4. The Disclosing Party certifies that either: (i) it is not an organization described in section 501(c)(4) of the Internal Revenue Code of 1986; or (ii) it is an organization described in section 501(c)(4) of the Internal Revenue Code of 1986 but has not engaged and will not engage in "Lobbying Activities," as that term is defined in the Lobbying Disclosure Act of 1995, as amended.

5. If the Disclosing Party is the Applicant, the Disclosing Party must obtain certifications equal in form and substance to paragraphs A(1) through A(4) above from all subcontractors before it awards any subcontract and the Disclosing Party must maintain all such subcontractors' certifications for the duration of the Matter and must make such certifications promptly available to the City upon request.

B. CERTIFICATION REGARDING EQUAL EMPLOYMENT OPPORTUNITY

If the Matter is federally funded, federal regulations require the Applicant and all proposed subcontractors to submit the following information with their bids or in writing at the outset of negotiations.

Is the Disclosing Party the Applicant?

☐ Yes

☐ No

If "Yes," answer the three questions below:

1. Have you developed and do you have on file affirmative action programs pursuant to applicable federal regulations? (See 41 CFR Part 60-2.)

☐ Yes

☐ No

2. Have you filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance Programs, or the Equal Employment Opportunity Commission all reports due under the applicable filing requirements?

☐ Yes

☐ No

☐ Reports not required

3. Have you participated in any previous contracts or subcontracts subject to the equal opportunity clause?

☐ Yes

☐ No

If you checked "No" to question (1) or (2) above, please provide an explanation:

SECTION VII -- FURTHER ACKNOWLEDGMENTS AND CERTIFICATION

The Disclosing Party understands and agrees that:

A. The certifications, disclosures, and acknowledgments contained in this EDS will become part of any contract or other agreement between the Applicant and the City in connection with the Matter, whether procurement, City assistance, or other City action, and are material inducements to the City's execution of any contract or taking other action with respect to the Matter. The Disclosing Party understands that it must comply with all statutes, ordinances, and regulations on which this EDS is based.

B. The City's Governmental Ethics Ordinance, MCC Chapter 2-156, imposes certain duties and obligations on persons or entities seeking City contracts, work, business, or transactions. The full text of this ordinance and a training program is available on line at www.cityofchicago.org/Ethics, and may also be obtained from the City's Board of Ethics, 740 N. Sedgwick St., Suite 500, Chicago, IL 60610, (312) 744-9660. The Disclosing Party must comply fully with this ordinance.

C. If the City determines that any information provided in this EDS is false, incomplete or inaccurate, any contract or other agreement in connection with which it is submitted may be rescinded or be void or voidable, and the City may pursue any remedies under the contract or agreement (if not rescinded or void), at law, or in equity, including terminating the Disclosing Party's participation in the Matter and/or declining to allow the Disclosing Party to participate in other City transactions. Remedies at law for a false statement of material fact may include incarceration and an award to the City of treble damages.

D. It is the City's policy to make this document available to the public on its Internet site and/or upon request. Some or all of the information provided in, and appended to, this EDS may be made publicly available on the Internet, in response to a Freedom of Information Act request, or otherwise. By completing and signing this EDS, the Disclosing Party waives and releases any possible rights or claims which it may have against the City in connection with the public release of information contained in this EDS and also authorizes the City to verify the accuracy of any information submitted in this EDS.

E. The information provided in this EDS must be kept current. In the event of changes, the Disclosing Party must supplement this EDS up to the time the City takes action on the Matter. If the Matter is a contract being handled by the City's Department of Procurement Services, the Disclosing Party must update this EDS as the contract requires. **NOTE:** With respect to Matters subject to MCC Chapter 1-23, Article I (imposing **PERMANENT INELIGIBILITY** for certain specified offenses), the information provided herein regarding eligibility must be kept current for a longer period, as required by MCC Chapter 1-23 and Section 2-154-020.

CERTIFICATION

Under penalty of perjury, the person signing below: (1) warrants that he/she is authorized to execute this EDS, and all applicable Appendices, on behalf of the Disclosing Party, and (2) warrants that all certifications and statements contained in this EDS, and all applicable Appendices, are true, accurate and complete as of the date furnished to the City.

MUFG Union Bank, N.A.

(Print or type exact legal name of Disclosing Party)

By: 

(Sign here)

Garrett Bell

(Print or type name of person signing)

Managing Director

(Print or type title of person signing)

Signed and sworn to before me on (date) _____,

at _____ County, _____ (state).

Notary Public

Commission expires: _____

** Please see attached*

CALIFORNIA ALL-PURPOSE ACKNOWLEDGEMENT

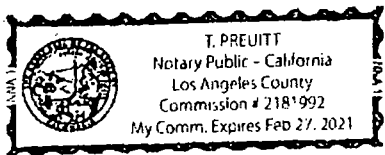
A Notary Public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California }
County of Los Angeles }

On November 6, 2019, before me, T. Preuitt, Notary Public,
personally appeared Garrett Bell

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) ~~is~~/are
subscribed to the within instrument and acknowledged to me that ~~he~~/she/they executed the same
in ~~his~~/her/their authorized capacity(ies), and that by ~~his~~/her/their signature(s) on the instrument
the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of State of California that the foregoing
paragraph is true and correct.



PLACE NOTARY SEAL ABOVE

WITNESS my hand and official seal.

SIGNATURE

Though the information below is not required by law, it may prove valuable to persons relying on the document
and could prevent fraudulent removal and reattachment of this form to another document.

Description of attached document

Title or type of document: _____

Document Date: _____ Number of Pages: _____

Signer(s) Other than Named Above: _____

JURAT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California

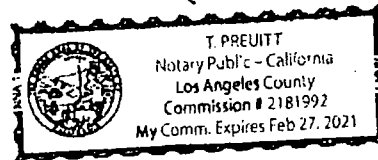
County of Los Angeles

Subscribed and sworn to (or affirmed) before me on this 6th day of November,
20 19 by Garrett Bell

proved to me on the basis of satisfactory evidence to be the person(s) who appeared before me.

Signature

(Seal)



OPTIONAL INFORMATION

DESCRIPTION OF THE ATTACHED DOCUMENT

(Title or description of attached document)

(Title or description of attached document continued)

Number of Pages _____ Document Date _____

Additional information

INSTRUCTIONS

The wording of all Jurats completed in California after January 1, 2015 must be in the form as set forth within this Jurat. There are no exceptions. If a Jurat to be completed does not follow this form, the notary must correct the verbiage by using a jurat stamp containing the correct wording or attaching a separate jurat form such as this one which does contain the proper wording. In addition, the notary must require an oath or affirmation from the document signer regarding the truthfulness of the contents of the document. The document must be signed AFTER the oath or affirmation. If the document was previously signed, it must be re-signed in front of the notary public during the jurat process.

- State and county information must be the state and county where the document signer(s) personally appeared before the notary public.
- Date of notarization must be the date the signer(s) personally appeared which must also be the same date the jurat process is completed.
- Print the name(s) of the document signer(s) who personally appear at the time of notarization.
- Signature of the notary public must match the signature on file with the office of the county clerk.
- The notary seal impression must be clear and photographically reproducible. Impression must not cover text or lines. If seal impression smudges, re-seal if a sufficient area permits, otherwise complete a different jurat form.
 - ❖ Additional Information is not required but could help to ensure this jurat is not misused or attached to a different document
 - ❖ Indicate title or type of attached document, number of pages and date.
- Securely attach this document to the signed document with a staple.

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
APPENDIX A**

**FAMILIAL RELATIONSHIPS WITH ELECTED CITY OFFICIALS
AND DEPARTMENT HEADS**

This Appendix is to be completed only by (a) the Applicant, and (b) any legal entity which has a direct ownership interest in the Applicant exceeding 7.5%. It is not to be completed by any legal entity which has only an indirect ownership interest in the Applicant.

Under MCC Section 2-154-015, the Disclosing Party must disclose whether such Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof currently has a "familial relationship" with any elected city official or department head. A "familial relationship" exists if, as of the date this EDS is signed, the Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof is related to the mayor, any alderman, the city clerk, the city treasurer or any city department head as spouse or domestic partner or as any of the following, whether by blood or adoption: parent, child, brother or sister, aunt or uncle, niece or nephew, grandparent, grandchild, father-in-law, mother-in-law, son-in-law, daughter-in-law, stepfather or stepmother, stepson or stepdaughter, stepbrother or stepsister or half-brother or half-sister.

"Applicable Party" means (1) all executive officers of the Disclosing Party listed in Section II.B.1.a., if the Disclosing Party is a corporation; all partners of the Disclosing Party, if the Disclosing Party is a general partnership; all general partners and limited partners of the Disclosing Party, if the Disclosing Party is a limited partnership; all managers, managing members and members of the Disclosing Party, if the Disclosing Party is a limited liability company; (2) all principal officers of the Disclosing Party; and (3) any person having more than a 7.5% ownership interest in the Disclosing Party. "Principal officers" means the president, chief operating officer, executive director, chief financial officer, treasurer or secretary of a legal entity or any person exercising similar authority.

Does the Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof currently have a "familial relationship" with an elected city official or department head?

☐ Yes

☒ No

If yes, please identify below (1) the name and title of such person, (2) the name of the legal entity to which such person is connected; (3) the name and title of the elected city official or department head to whom such person has a familial relationship, and (4) the precise nature of such familial relationship.

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
APPENDIX B**

BUILDING CODE SCOFFLAW/PROBLEM LANDLORD CERTIFICATION

This Appendix is to be completed only by (a) the Applicant, and (b) any legal entity which has a direct ownership interest in the Applicant exceeding 7.5% (an "Owner"). It is not to be completed by any legal entity which has only an indirect ownership interest in the Applicant.

1. Pursuant to MCC Section 2-154-010, is the Applicant or any Owner identified as a building code scofflaw or problem landlord pursuant to MCC Section 2-92-416?

☐ Yes

☒ No

2. If the Applicant is a legal entity publicly traded on any exchange, is any officer or director of the Applicant identified as a building code scofflaw or problem landlord pursuant to MCC Section 2-92-416?

☐ Yes

☒ No

☐ The Applicant is not publicly traded on any exchange.

3. If yes to (1) or (2) above, please identify below the name of each person or legal entity identified as a building code scofflaw or problem landlord and the address of each building or buildings to which the pertinent code violations apply.

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
APPENDIX C**

PROHIBITION ON WAGE & SALARY HISTORY SCREENING - CERTIFICATION

This Appendix is to be completed only by an Applicant that is completing this EDS as a “contractor” as defined in MCC Section 2-92-385. That section, which should be consulted (www.amlegal.com), generally covers a party to any agreement pursuant to which they: (i) receive City of Chicago funds in consideration for services, work or goods provided (including for legal or other professional services), or (ii) pay the City money for a license, grant or concession allowing them to conduct a business on City premises.

On behalf of an Applicant that is a contractor pursuant to MCC Section 2-92-385, I hereby certify that the Applicant is in compliance with MCC Section 2-92-385(b)(1) and (2), which prohibit: (i) screening job applicants based on their wage or salary history, or (ii) seeking job applicants’ wage or salary history from current or former employers. I also certify that the Applicant has adopted a policy that includes those prohibitions.

☒ Yes

☐ No

☐ N/A – I am not an Applicant that is a “contractor” as defined in MCC Section 2-92-385.

This certification shall serve as the affidavit required by MCC Section 2-92-385(c)(1).

If you checked “no” to the above, please explain.

FIRMWIDE

PLEASE POPULATE THE HIGHLIGHTED PORTIONS ONLY

Firm Name:	MUFG Union Bank, N.A.
Primary Representative:	Garrett Bell
Primary Representative Email and Telephone:	gbell@us.mufg.jp / 213-236-
Headquarters Address:	445 South Figueroa Street 16th Floor, Los Angeles, CA 90071
Chicago Public Finance Office Address:	227 W Monroe Street, Chicago, IL 60606
Total Number of Employees:	13,000+
Number of Employees in Illinois:	118
Number of Employees in Chicago:	99
Capital Position:	
Minority Designation:	Not a small business/not minority owned

Job Categories	6,740					6,545					
	Male					Female					
Overall Totals	White (Not Hispanic)	Black (Not Hispanic)	Hispanic	Asian	Native American	White (Not Hispanic)	Black (Not Hispanic)	Hispanic	Asian	Native American	
Officials and Managers	6,205	2,050	135	360	1,176	20	1,146	160	381	765	12
Professionals	3,865	913	108	301	651	12	676	166	373	658	7
Technicians	25	3	1	9	3	1	3	1	3	1	0
Sales Workers	352	102	7	53	46	1	67	3	20	53	0
Office and Clerical	2,832	218	70	318	173	5	534	165	799	539	11
Craft Workers (Skilled)	0	0	0	0	0	0	0	0	0	0	0
Operatives (Semi-Skilled)	0	0	0	0	0	0	0	0	0	0	0
Laborers	0	0	0	0	0	0	0	0	0	0	0
Service Workers	6	1	1	2	0	0	1	0	1	0	0
Total	13,285	3,287	322	1,043	2,049	39	2,427	495	1,577	2,016	30

Male	Female	Total
51%	49%	100%

Job Categories	Overall Totals	White (Not Hispanic)	Black (Not Hispanic)	Hispanic	Asian	Native American
Officials and Managers	47%	24%	2%	6%	15%	0%
Professionals	29%	12%	2%	5%	10%	0%
Technicians	0%	0%	0%	0%	0%	0%
Sales Workers	3%	1%	0%	1%	1%	0%
Office and Clerical	21%	6%	2%	8%	5%	0%
Craft Workers (Skilled)	0%	0%	0%	0%	0%	0%
Operatives (Semi-Skilled)	0%	0%	0%	0%	0%	0%
Laborers	0%	0%	0%	0%	0%	0%
Service Workers	0%	0%	0%	0%	0%	0%
Total	100%	43%	6%	20%	31%	1%

Board of Directors

Masato Miyachi
Co-Chief Executive of the Global Business Unit for MUFG Bank, Ltd, with oversight of the Americas region, and of the Europe, Middle East, and Africa (EMEA) region. He is also Chairman of the Board of Directors for MUFG Americas Holdings Corporation (MUAH) and MUFG Union Bank, N.A. He most recently served as Deputy Regional Executive for the Americas for MUAH, which includes MUFG Union Bank N.A., MUFG Securities Americas Inc., and MUFG Fund Services (USA) LLC. Appointed to the New York-based position in May 2016, he assisted in the oversight of the combined U.S. operations of MUFG. Mr. Miyachi was also responsible for MUFG's operations in Canada and Latin America. Previously, he was CEO for EMEA at BTMU, MUFG's core banking unit.
Robin Bienfait
Ms. Bienfait is the CEO of Emnovate, an executive advisory firm delivering enterprise-class services to large global companies. Prior to founding her own firm, Ms. Bienfait was Executive Vice President and Chief Enterprise Innovation Officer at Samsung Electronics from 2014 to 2016. She previously held a number of executive positions at Blackberry from 2007 to 2014, including: Chief Information Officer, Chief Technology Officer for Software and Chief Information Security Officer. Prior to her career at Blackberry, Ms. Bienfait spent 23 years at AT&T in a range of roles, including: Senior Vice President, Worldwide Network Operations, Network Security and Network Disaster Recovery and Chief Compliance Officer. Ms. Bienfait is Chairman of the board of directors for Global Aviation and a member of the board of directors at the Georgia Institute of Technology. She earned a B.S. in Engineering from Central Missouri State University and a M.S. in Technology Management from the Georgia Institute of Technology.
Stephen Cummings
Steve Cummings is President & CEO of MUFG Americas Holdings Corporation (MUAH), which includes MUFG Union Bank N.A., MUFG Securities Americas Inc., and MUFG Fund Services (USA) LLC. He was the first American to serve as President & CEO of MUFG Union Bank, N.A., having been named to that position in May 2015. Also as CEO for the Americas of Mitsubishi UFJ Financial Group, Inc. and MUFG Bank, Ltd, Mr. Cummings has oversight of control functions in Latin America, Canada, and the United States. He is also a Managing Executive Officer of MUFG Bank, Ltd, and the first non-Japanese to serve in such a capacity in this global company of more than 100,000 employees. He is on the Board of Directors of MUAH and MUFG Union Bank, N.A., and is based in the company's New York headquarters.
Michael Fraizer
Mr. Fraizer is a Senior Advisor of Blue Heron Capital. He also serves as an advisor to and investor in early stage operating and investment companies. Previously, his 32 year corporate career included serving as Chairman and Chief Executive Officer of Genworth Financial, Inc. for 8 years after 24 years with GE where he held a number of senior positions which included: Senior Vice President of GE and Director of GE Capital, President and CEO of GE Financial Assurance, President of GE Capital Commercial Real Estate Financing & Services, President and Representative Director of GE Japan and a number of other financial and business development positions. Mr. Fraizer also serves as a board member of Grange Insurance, Richmond Performing Arts CenterStage and the VCU Real Estate Foundation. Mr. Fraizer earned a B.A. in political science from Carleton College.

Mohan S. Gyani
Mr. Gyani is the former Vice Chairman of Mobileum, Inc. and previously served as the Chairman and Chief Executive Officer of the company. He is also the former President and Chief Executive Officer of AT&T Wireless Services. Mr. Gyani also serves on the board of directors of Digital Turbine, Inc. and Synchronoss Technologies, Inc. He earned a B.A. in finance and business administration and an MBA from San Francisco State University.
Ann F. Jaedicke
Ms. Jaedicke is a former Managing Director of Promontory Financial Group, a leading strategy, risk management and regulatory compliance consulting firm. Prior to joining Promontory Financial Group, she was Deputy Comptroller for Compliance Policy at the Office of the Comptroller of the Currency (OCC), where she spent 33 years in a number of senior roles. Throughout her career, Ms. Jaedicke served as chair or member of several OCC and Federal Financial Institutions Examination Council (FFIEC) regulatory committees. She earned a B.B.A. in accounting from Texas A&M University.
Suneel Kamalani*
Mr. Kamalani is a senior banking executive with over 30 years of experience running global markets and investment banking businesses. He served as Co-CEO of Markets and President of Global Banking and Markets at The Royal Bank of Scotland. He was appointed to the RBS Group Executive Committee with responsibility for 118,000 staff in 39 countries. Prior to joining RBS in 2010, Mr. Kamalani spent 22 years in senior management roles at UBS Investment Bank, rising to the position of Chief Operating Officer and member of the UBS Group Managing Board. Over two decades, he led Debt Capital Markets, Fixed Income and Investment Banking businesses in the U.S., Europe and Asia. Mr. Kamalani began his investment banking career at Bankers Trust in New York, which is now part of Deutsche Bank. He has a B.A. in economics from Northwestern University, and served as a Senior Advanced Leadership Fellow at Harvard University. Mr. Kamalani is also a member of the Board of Directors of MUFG Securities Americas Inc.
*Mr. Kamalani serves only on the Board of Directors of MUFG Americas Holdings Corporation.
Kazuo Koshi
Kazuo “Kaz” Koshi is Managing Executive Officer and serves in multiple distinct positions for Mitsubishi UFJ Financial Group (MUFG), and for MUFG Bank, Ltd., its commercial banking subsidiary. Since May 2017, as Deputy Regional Executive for the Americas, he has served as the second most-senior executive of the Americas operations for MUFG and MUFG Bank. In July 2019, he was named Executive in Charge of Latin America and Canadian Regions, MUFG Bank Ltd. He is also deputy executive in charge of the Global Financial Crimes Compliance Division.
Mr. Koshi serves on the Board of Directors of MUFG Americas Holding Corporation and MUFG Union Bank, N.A. He is based in New York, frequently traveling to Tokyo and throughout the Americas.
Mr. Koshi has more than 30 years of experience with MUFG, including the legacy organization, and in recent years has been continuously engaged in the formulation and execution of Americas strategy. He has accrued 19 years of work experience in the U.S. since 1995, assigned to managerial positions on the West and East Coasts, on both the business and support sides.
A native of Japan, Mr. Koshi earned a bachelor’s degree from the University of Tokyo’s Faculty of Engineering in 1985, and an MBA from the Wharton School, University of Pennsylvania, in 1990.

<p style="text-align: center;">Toby S. Myerson</p> <p>Mr. Myerson, our lead outside director, is Chairman and CEO of Longsight Strategic Advisors, LLC. Qualified as an attorney at law in New York and California, Mr. Myerson has held top management positions in a career spanning four decades, most recently as Partner and as Co-Chair of Global Mergers and Acquisitions at Paul, Weiss, Rifkind, Wharton & Garrison LLP until 2017. Mr. Myerson also serves on the Board of Directors of Mitsubishi UFJ Financial Group, Inc. He is a member of the advisory board of the Harvard Law School Program on Corporate Governance, a member of the board of directors of the Japan Society, a member of the Council on Foreign Relations and he participates in the World Economic Forum. Mr. Myerson earned a B.A. from Yale University and a J.D. from Harvard University.</p>
<p style="text-align: center;">Barbara L. Rambo</p> <p>Ms. Rambo is Chief Executive Officer of Taconic Management Services, a management consulting and services company. Prior to joining Taconic Management Services, Ms. Rambo held various executive and management positions, including CEO of Nietech Corp, a payments technology company and CEO of OpenClose, a mortgage services technology company. Ms. Rambo began her career in banking at Bank of America, where she worked for 25 years, most recently as Group Executive Vice President and Head of National Commercial Banking which included Investment Banking and the top 25 retail branches, and before as Head of U.S. Corporate Banking based in New York. She is a director of PG&E Corporation (chair of the Finance Committee). Previously she was Board Chair of West Marine Corp and a director of International Rectifier Corp. and Gymboree Corp. Ms. Rambo earned a B.A. in international affairs from the College of William and Mary and an MBA in Finance from New York University.</p>
<p style="text-align: center;">Muneakit Tokunari</p> <p>Muneaki "Aki" Tokunari is the Group CFO and an Executive Committee Member of MUFG. He also serves as a Director of Mitsubishi UFJ Americas Holdings and MUFG Union Bank in the U.S. Aki joined Mitsubishi in 1982 where he started his career in the area of international finance, engaging in aircraft finance in London in the 1980s. In 1992, he became a coverage banker for large Japanese corporations in Tokyo. In the late 90s, Aki was assigned to work on restructuring the bank in light of Japan's severe economic environment. In 2004, he worked as part of the task force that oversaw the merger with UFJ Holdings to establish the Mitsubishi UFJ Financial Group (MUFG).</p> <p>During the financial crisis of 2008/09, he spearheaded a series of public offerings totaling 1,400 billion yen in order to strengthen MUFG's capital base and enable its strategic investment of \$9 billion into Morgan Stanley. After 2010, he took the lead in the global expansion of asset management and investor services businesses at the trust bank subsidiary. In 2015, he was appointed to the position of Group CFO.</p> <p>Institutional Investor selected him as the best CFO in the Japanese banking sector in 2017 and 2018. He also serves as a Director for the Japan Investor Relations Association. Aki earned a B.A. in political science from Keio University and completed the Advanced Management Program at the Wharton School.</p>
<p style="text-align: center;">Kazuta Uchida</p> <p>Mr. Uchida is an Advisor to MUFG Bank, Ltd. and Chairman of Morgan Stanley MUFG Securities Co., Ltd. Since joining Mitsubishi Bank in 1985, he has assumed various senior positions, including Chief Economist, General Manager of the Treasury and Investment Division, and Chief Executive of the Global Markets Unit. He is a leading expert in Japanese financial markets and a member of the Japanese official delegation of the diplomatic corps for ASEAN and European countries.</p>

Dean A. Yoost

Mr. Yoost is a board member of both MUFG Union Bank and Pacific Life Insurance Company. He is also one of three members of the advisory board of American Honda Finance Corporation. He previously served as a board member of two NYSE-listed companies.

He is a founder and serves as the chairman of the Corporate Directors Roundtable of Orange County. He also is a board member of the National Association of Corporate Directors in Southern California. Additionally, he is a trustee and a member of the executive committee of the University of California Irvine's Foundation.

Mr. Yoost retired as a partner after 33 years with PricewaterhouseCoopers, wherein he held numerous client service and firm leadership positions. During this period, he lived and worked in Tokyo and Beijing for 16 years serving the needs of global clients and establishing and building the firm's businesses. He was elected as a director for four years to the 18-partner global oversight board of PwC International Limited, the top governing body of the global network of firms. At his retirement, Mr. Yoost was the firm's managing partner in Orange County, California, and the regional leader of its advisory services practice. Mr. Yoost is the author of a book entitled *A Director's Voyage Through Risk Management* published by The Risk Management Association. He is co-authoring a second book entitled *Navigating Information Technology in the Boardroom* to be published later this year also by The RMA. He also has authored and co-authored over 75 articles and editorials published in *The RMA Journal*, *Asian Wall Street Journal*, *NACD Directorship*, *Directors and Boards*, *Journal of International Taxation*, *European Business Forum* and other business publications.

Executive Management:

<p><u>Stephen Cummings</u> Chief Executive Officer For the Americas, Mitsubishi UFJ Financial Group, Inc. and MUFG Bank, Ltd. President & CEO, MUFG Americas Holdings Corporation and MUFG Unión Bank, N.A.</p>	<p><u>Daisuke Bito</u> Head of Japanese Corporate Banking for the Americas</p>
<p><u>Ranjana Clark</u> Head of Global Transaction Banking, Head of Transaction Banking Americas, and Bay Area President</p>	<p><u>Michael F. Coyne</u> General Counsel</p>
<p><u>Kevin Cronin</u> Head of Corporate & Investment Banking – North America Executive Officer MUFG Americas Holding Corporation and MUFG Union Bank, N.A.</p>	<p><u>Donna Dellosso</u> Chief Risk Officer for the Americas</p>
<p><u>Denise DeMaio</u> Chief Audit Executive and Executive Officer of MUFG Bank</p>	<p><u>Christ Higgins</u> Chief Information and Operations Officer</p>
<p><u>Masatoshi Komoriya</u> Chief of Staff</p>	<p><u>Kazuo Koshi</u> Managing Executive Officer & Deputy Regional Executive for the Americas Mitsubishi UFJ Financial Group, Inc. Managing Executive Officer & Deputy Regional Executive for the Americas Executive in Charge of Latin America and Canadian Regions MUFG Bank, Ltd</p>
<p><u>Bill Mansfield</u> Head of Global Markets in the Americas</p>	<p><u>Mike Thom</u> Chief Corporate Administrative Officer</p>
<p><u>Amy C. Ward</u> Chief Human Resources Officer for the Americas</p>	<p><u>Amy C. Ward</u> Chief Human Resources Officer for the Americas</p>
<p><u>Johannes Worsoe</u> Chief Financial Officer</p>	

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**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
FORM 10-K**

(Mark One)

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2018

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from _____ to _____

Commission file number 1-15081

MUFG Americas Holdings Corporation

(Exact name of registrant as specified in its charter)

Delaware

(State of Incorporation)

(I.R.S. Employer Identification No.)

1251 Avenue of the Americas, New York, NY

(Address of principal executive offices)

(Zip Code)

Registrant's telephone number, including area code: (212) 782-5911

Securities registered pursuant to Section 12(b) of the Act:

None

(Title of each class)

Not applicable

(Name of each exchange on which registered)

Securities registered pursuant to Section 12(g) of the Act: Common Stock, par value \$1.00 per share

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☐ No ☒Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ☐ No ☒Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☐ No ☒Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☒

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated
filer ☐Accelerated filer ☐Non-accelerated filer ☒
(Do not check if a
smaller reporting company)Smaller reporting
company ☐Emerging growth company ☐If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act ☐Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes ☐ No ☒

Aggregate market value of voting and non-voting common equity held by non-affiliates of the registrant: Not applicable; all of the voting stock of the registrant is owned by its parent, MUFG Bank, Ltd. and its ultimate parent, Mitsubishi UFJ Financial Group, Inc.

As of January 31, 2019, the number of shares outstanding of the registrant's Common Stock was 131,935,124.

DOCUMENTS INCORPORATED BY REFERENCE

None.

THE REGISTRANT MEETS THE CONDITIONS SET FORTH IN GENERAL INSTRUCTION (I) (1) (a) AND (b) OF FORM 10-K AND IS THEREFORE FILING THIS FORM WITH THE REDUCED DISCLOSURE FORMAT.

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The following acronyms and abbreviations are used throughout this report, particularly in Part I, Item 1. "Business," Item 1A. "Risk Factors," Part II, Item 7. "Management's Discussion and Analysis of Financial Condition and Results of Operations," Item 7A. "Quantitative and Qualitative Disclosures About Market Risk" and Item 8. "Financial Statements and Supplementary Data."

ACR	Americas Credit Review
ADR	American depositary receipt
Agency Securities	Securities guaranteed by a U.S. government agency
ALCO	Asset Liability Management Committee
ALM	Asset Liability Management
AMT	Alternative minimum tax
AOCI	Accumulated other comprehensive income
ARC	Americas Risk Committee
ASU	Accounting standards update
BCBS	Basel Committee on Banking Supervision
BHC	U.S. Bank Holding Company
BHCA	Bank Holding Company Act
CCAR	Comprehensive Capital Analysis and Review
CCPA	California Consumer Privacy Act of 2018
CD	Certificate of deposit
CECL	Current expected credit loss
CFPB	Consumer Financial Protection Bureau
CLO	Collateralized loan obligation
CMBS	Commercial mortgage-backed securities
COSO	Committee of Sponsoring Organizations of the Treadway Commission
CRA	Community Reinvestment Act
CRO	Chief Risk Officer
Dodd-Frank Act	Dodd-Frank Wall Street Reform and Consumer Protection Act
ECA	Executive Committee for the Americas
EGRRCPA	Economic Growth, Regulatory Relief and Consumer Protection Act
ESBP	Executive Supplemental Benefit Plan
Exchange Act	U.S. Securities Exchange Act of 1934
FASB	Financial Accounting Standards Board
FBO	Foreign banking organization
FDIA	Federal Deposit Insurance Act
FDIC	Federal Deposit Insurance Corporation
Federal Reserve	Board of Governors of the Federal Reserve System
FHLB	Federal Home Loan Bank
FICO	Fair Isaac Corporation
GAAP	Accounting principles generally accepted in the United States of America
GLBA	Gramm-Leach-Bliley Act
GSE	Government-sponsored enterprise
GSIB	Global systemically important banks
HQLA	High quality liquid assets
HRA Plan	MUFG Union Bank, N.A. Retiree Health Reimbursement Plan
IAA	Internal Audit for the Americas
IHC	Intermediate Holding Company
LCR	Liquidity Coverage Ratio

Table of Contents**Glossary of Defined Terms (Continued)**

LIBOR	London Inter-bank Offered Rate
LIHC	Low income housing credit
LLC	Limited liability corporation
LTV	Loan-to-value
MBS	Mortgage-backed securities
MRM	Market Risk Management
MRMC	Market Risk Management Committee
MUAH	MUFG Americas Holdings Corporation
MUAH Plan	MUFG Americas Holdings Corporation Stock Bonus Plan
MUB	MUFG Union Bank, N.A.
MUFG	Mitsubishi UFJ Financial Group, Inc.
MUSA	MUFG Securities Americas Inc.
NAV	Net asset value
n/a	Not available
nm	Not meaningful
NY DFS	New York State Department of Financial Services
OCC	Office of the Comptroller of the Currency
OCI	Other comprehensive income
OFAC	U.S. Treasury's Office of Foreign Assets Control
OREO	Other real estate owned
ORMD	Operational Risk Management Department
PCAOB	Public Company Accounting Oversight Board
RMBS	Residential mortgage-backed securities
S&P	Standard & Poor's Ratings Services
SEC	Securities and Exchange Commission
TCJA	Tax Cuts and Jobs Act
TDR	Troubled debt restructuring
TLAC	Total Loss Absorbing Capacity
U.S. Basel III Rules	Basel III capitalization rules of the Basel Committee on Banking Supervision
VaR	Value-at-risk
VIE	Variable interest entity
Volcker Rule	Section 619 of the Dodd-Frank Act

Table of Contents**NOTE REGARDING FORWARD-LOOKING STATEMENTS**

This report includes forward-looking statements, which include expectations for our operations and business and our assumptions for those expectations. Do not rely unduly on forward-looking statements. Actual results might differ significantly compared to our expectations. See Part I, Item 1A. "Risk Factors," and the other risks described in this report for factors to be considered when reading any forward-looking statements in this filing.

Forward-looking statements are subject to the "safe harbor" created by section 27A of the Securities Act of 1933, as amended, and section 21E of the Securities Exchange Act of 1934, as amended. We may make forward-looking statements in our SEC filings, press releases, news articles and when we are speaking on behalf of MUFG Americas Holdings Corporation and its subsidiaries. Forward-looking statements can be identified by the fact that they do not relate strictly to historical or current facts. Often, they include the words "believe," "expect," "target," "anticipate," "intend," "plan," "seek," "estimate," "potential," "project," "forecast," "outlook," words of similar meaning, or future or conditional verbs such as "will," "would," "should," "could," "might," or "may." These forward-looking statements are intended to provide investors with additional information with which they may assess our future potential. All of these forward-looking statements are based on assumptions about an uncertain future and are based on information known to our management at the date of these statements. We do not undertake to update forward-looking statements to reflect facts, circumstances, assumptions or events that occur after the date any forward-looking statements are made.

In this document and other reports to the SEC, for example, we make forward-looking statements, which discuss our expectations about:

- Our business objectives, strategies and initiatives, organizational structure, business growth, competitive position and prospects, and the effect of competition on our business and strategies
- Our assessment of significant factors and developments that have affected or may affect our results
- Our assessment of economic conditions and trends, economic and credit cycles and their impact on our business
- The economic outlook for the U.S. in general, West Coast states and global economies
- The impact of changes in interest rates resulting from changes in Federal Reserve policy or for other reasons, our strategy to manage our interest rate risk profile and other market risks, our outlook for short-term and long-term interest rates and their effect on our net interest margin, our investment portfolio, our balance sheet composition, our borrowers' ability to service their loans and residential mortgage loans and refinancings
- Pending and recent legislative and regulatory actions, and future legislative and regulatory developments, including the effects of legislation and other governmental measures, including the monetary policies of the Federal Reserve introduced in response to the financial crisis, and the ensuing recession affecting the banking system, financial markets and the U.S. economy, the Dodd-Frank Act, the EGRRCPA, changes to the deposit insurance assessment policies of the FDIC, the effect on and application of foreign and other laws and regulations to our business and operations, and anticipated fees, costs or other impacts on our business and operations as a result of these developments
- Our strategies and expectations regarding capital levels and liquidity, our funding base, deposits, long-term debt, issuance of additional notes under the Bank's unsecured bank note program, our expectations regarding the capital, liquidity and enhanced prudential standards adopted by the U.S. bank regulators as a result of or under the Dodd-Frank Act and the BCBS capital and liquidity standards including the Federal banking agencies' TLAC regulation, and other recently adopted and proposed regulations by the U.S. federal banking agencies, and the effect of the foregoing on our business and expectations regarding compliance
- Regulatory and compliance controls and processes and their impact on our business, including our operating costs and revenues

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- The costs and effects of legal actions, investigations, regulatory actions, criminal proceedings or similar matters, our anticipated litigation strategies, our assessment of the timing and ultimate outcome of legal actions, or adverse facts and developments related thereto
- Our allowance for credit losses, including the conditions we consider in determining the unallocated allowance and our portfolio credit quality, probability of default and credit migration trends, and severity of loss upon default
- Loan portfolio composition and risk rating trends, residential loan delinquency rates compared to the industry average, portfolio credit quality, our strategy regarding TDRs, and our intent to sell or hold loans we originate
- Our intent to sell or hold, and the likelihood that we would be required to sell, or expectations regarding recovery of the amortized cost basis of, various investment securities
- Our hedging strategies, positions, expectations regarding reclassifications of gains or losses on hedging instruments into earnings; and the sensitivity of our net income to various factors, including customer behavior relating to mortgage prepayments and deposit repricing
- Expected rates of return, maturities, yields, loss exposure, growth rates, pension plan strategies, contributions and benefit payments, forecasted balance sheet activity and projected results
- Tax rates and taxes, the possible effect of changes in taxable profits of the U.S. operations of MUFG on our state tax obligations and of expected tax credits or benefits
- Critical accounting policies and estimates, the impact or anticipated impact of recent accounting pronouncements, guidance or changes in accounting principles and future recognition of impairments for the fair value of assets, including goodwill, financial instruments, intangible assets and other assets
- Decisions to downsize, sell or close units, dissolve subsidiaries, expand our branch network, pursue acquisitions, purchase banking facilities and equipment, realign our business model or otherwise restructure, reorganize or change our business mix, or the transfer to MUAH by MUFG of its interests in U.S. subsidiaries, and their timing and impact on our business
- Our expectations regarding the impact of acquisitions on our business and results of operations
- The impact of changes in our credit ratings including methodology changes adopted by rating agencies
- *Maintenance of casualty and liability insurance coverage appropriate for our operations*
- The relationship between our business and that of MUFG Bank, Ltd. and MUFG, the impact of their credit ratings, operations or prospects on our credit ratings and actions that may or may not be taken by MUFG Bank, Ltd. and MUFG
- Threats to the banking sector and our business due to cyber-security issues and attacks on financial institutions and other businesses, such as large retailers, and regulatory expectations relating to cyber-security
- Our understanding that MUFG Bank, Ltd. will continue to limit its participation in transactions with Iranian entities and individuals to certain types of transactions
- The objectives and effects on operations of our business integration initiative and its near term effect on our balance sheet, earnings and capital ratios
- The effect of a possible return of the California drought on its economy and related governmental actions and the potential consequences of recent California wildfires or other natural disasters
- Descriptions of assumptions underlying or relating to any of the foregoing

Readers of this document should not rely unduly on any forward-looking statements, which reflect only our management's belief as of the date of this report. There are numerous risks and uncertainties that could cause actual outcomes and results to differ materially from those discussed in our forward-looking statements. Many of these factors are beyond our ability to control or predict and could have a material adverse effect on our financial condition, results of operations or prospects. Such risks and uncertainties include, but are not limited

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to, those described or referred to in Part I, Item 1. "Business" under the captions "Competition" and "Supervision and Regulation", Item 1A. "Risk Factors" and Part II, Item 7. "Management's Discussion and Analysis of Financial Condition and Results of Operations" in this Form 10-K and in our other reports to the SEC.

Any factor described in this report or in our other reports could by itself, or together with one or more other factors, adversely affect our business, prospects, results of operations or financial condition.

PART I**ITEM 1. BUSINESS****General**

We are a financial holding company, bank holding company and intermediate holding company whose principal subsidiaries are MUFG Union Bank, N.A. (MUB or the Bank) and MUSA. We are owned by MUFG Bank, Ltd. and MUFG. MUFG Bank, Ltd. is a wholly-owned subsidiary of MUFG. As used in this Form 10-K, terms such as "the Company," "we," "us" and "our" refer to MUFG Americas Holdings Corporation (MUAH), one or more of its consolidated subsidiaries, or to all of them together.

We provide a wide range of financial services to consumers, small businesses, middle-market companies and major corporations, both nationally and internationally. The Company also provides various business, banking, financial, administrative and support services, and facilities for MUFG Bank, Ltd. in connection with the operation and administration of MUFG Bank, Ltd.'s business in the U.S. (including MUFG Bank, Ltd.'s U.S. branches). The Bank and MUFG Bank, Ltd. are parties to a master services agreement whereby the Bank earns fee income in exchange for these services.

The Company has four reportable segments: Regional Bank, U.S. Wholesale & Investment Banking, Transaction Banking and MUSA. We service U.S. Wholesale & Investment Banking, certain Transaction Banking, and MUSA customers through the MUFG brand and serve Regional Bank and Transaction Banking customers through the Union Bank brand. The Company's leadership team is bicoastal with Regional Bank and Transaction Banking leaders on the West Coast while U.S. Wholesale & Investment Banking and MUSA leaders are based in New York City. The corporate headquarters (principal executive office) for MUB, MUSA and MUAH is in New York City. MUB's main banking office is in San Francisco. The Company had consolidated assets of \$168.1 billion at December 31, 2018.

On July 1, 2016, MUFG designated MUAH as its U.S. Intermediate Holding Company and transferred substantially all its U.S. subsidiaries to the IHC in accordance with the requirements of the U.S. Federal Reserve Board's final rules for Enhanced Prudential Standards. MUFG's remaining U.S. subsidiaries were transferred to MUAH on July 1, 2017. The remaining subsidiaries transferred have been included in MUAH's financial results on a prospective basis. The Company issued 11,258,882 shares to MUFG Bank, Ltd. and MUFG in exchange for the transferred subsidiaries. For additional information regarding related party transactions, refer to Note 21 of our Consolidated Financial Statements in Part II, Item 8. "Financial Statements and Supplementary Data" of this Form 10-K.

All reports that we file or furnish electronically with the SEC, including the Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, and current reports on Form 8-K, as well as any amendments to those reports, are accessible at no cost at www.unionbank.com as soon as reasonably practicable after we electronically file such reports with, or furnish them to, the SEC. These filings are also accessible on the SEC's website at www.sec.gov.

Lines of Business

Our operations are organized into four reportable segments: Regional Bank, U.S. Wholesale & Investment Banking, Transaction Banking and MUFG Securities Americas. These segments and their financial information are described more fully in Note 22 to our Consolidated Financial Statements included in this Form 10-K.

Employees

At December 31, 2018, we had approximately 13,250 full-time equivalent employees.

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Competition

Banking is a highly competitive business. We compete actively for loan, deposit, and other financial services business both nationally and internationally. Our competitors include a large number of state and national banks, thrift institutions, credit unions, finance companies, mortgage banks and major foreign-affiliated or foreign banks, as well as many financial and nonfinancial firms that offer services similar to those offered by us, including many large securities firms, financial services subsidiaries of commercial and manufacturing companies and marketplace lenders. Many of these competitors enjoy fewer regulatory restraints and some may have lower cost structures. Some of our competitors are community or regional banks that have strong local market positions, while others include large financial institutions that have substantial capital, technology and marketing resources.

The financial services industry is also becoming more competitive as further technological advances enable more companies to provide financial services. These technological advances increasingly allow parties to complete financial transactions electronically and may diminish the importance of depository institutions and other financial intermediaries.

Current federal law has made it easier for out-of-state banks to enter and compete in the states in which we operate. Competition in our principal markets may further intensify as a result of the Dodd-Frank Act which, among other things, permits out-of-state de novo branching by national banks, state banks, and foreign banks from other states.

The primary factors in competing for business include pricing, convenience of office locations and other delivery methods, range of products offered, customer relationships, and level of services offered.

Supervision and Regulation

BHCs, banks and securities broker-dealers are extensively regulated under federal and state law. This regulation is intended primarily for the safety and soundness of banks, the protection of bank depositors, brokerage and other customers, the Federal Deposit Insurance Fund, the Securities Investors Protection Fund and the U.S. banking and financial services system as a whole, and not for the benefit of investors in securities issued by a BHC or bank. Set forth below is a summary description of significant laws and regulations and other legal authorities that relate to our operations and those of our subsidiaries, including MUB and MUSA. This summary description of applicable legal authorities is not complete and is qualified by reference to such legal authorities and does not address every legal authority. Financial statutes, regulations and policies are continually under review by Congress and state legislatures and federal and state regulatory agencies, and a change in them, including changes in how they are interpreted, implemented or applied in a specific instance, could have a material effect on our business and operations.

Principal Federal Banking Laws

BHCA and the GLBA. The Company, MUFG and MUFG Bank, Ltd. are subject to regulation under the BHCA, which subjects us to Federal Reserve reporting, supervision and examination and other requirements. Generally, the BHCA restricts our ability to invest in non-banking entities, and we may not acquire more than five percent of the voting shares of any domestic bank without the prior approval of the Federal Reserve. Our activities are limited, with some exceptions, to the business of banking, managing or controlling banks, and other activities that the Federal Reserve deems to be so closely related to banking as to be a proper incident thereto.

The GLBA allows "financial holding companies" to offer banking, insurance, securities and other financial products. Among other things, the GLBA provides a framework for BHCs to engage in new financial activities under certain conditions. MUAH, MUFG Bank, Ltd. and MUFG are financial holding companies under the BHCA. A financial holding company is authorized to engage in activities beyond those permissible for a BHC that are deemed to be financial in nature or incidental to such financial activity as well as certain specified non-banking activities deemed to be closely related to banking. In order to maintain its status as a financial holding company, a BHC must continue to meet certain standards established by the Federal Reserve. Those standards require that a financial holding company exceed the minimum standards applicable to BHCs that have not elected to become financial holding companies. These higher standards include meeting the "well capitalized" and "well managed" standards for financial holding companies as defined in the regulations of the Federal Reserve. The Federal Reserve has the authority to limit the ability of a financial holding company (or any of its affiliates) to

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conduct otherwise permissible activities if the financial holding company or any of its depository institution subsidiaries ceases to meet these standards. If the deficiencies are not corrected, the Federal Reserve may require that the financial holding company either terminate any activity that is not permissible for a BHC or divest control of a deficient depository institution subsidiary. Failure to comply can also result in the assessment of civil money penalties against the financial holding company. In addition, a financial holding company must ensure that its U.S. banking subsidiaries meet certain minimum standards under the Community Reinvestment Act of 1977.

National Bank Act. MUB, our principal U.S. banking subsidiary, is chartered under and subject to the National Bank Act which, together with the regulations of the OCC, governs many aspects of the corporate activities and banking operations of national banks, including the powers and duties of national banks, the payment of dividends on capital stock, conduct of loan, investment and fiduciary activities, minimum capital ratios, the opening and closing of branches, the acquisition of other banking entities or financial companies and many other matters.

Principal Federal Banking Regulatory Agencies

Federal Reserve. As a BHC and financial holding company, we are subject to the extensive regulation, supervision and examination authority of the Federal Reserve. The Federal Reserve also has extensive enforcement authority over all BHCs. Such authority includes the power to assess civil monetary penalties against any BHC violating any provision of the BHCA or any regulation or order of the Federal Reserve under the BHCA. The Federal Reserve also has the power to order termination of activities or ownership of non-bank subsidiaries of the holding company if it determines there is reasonable cause to believe that the activities or ownership of the non-bank subsidiaries constitutes a serious risk to the financial safety, soundness or stability of banks owned by the BHC. Willful violations of the BHCA or regulations or orders of the Federal Reserve can also result in criminal penalties for the BHC and any individuals participating in such conduct.

Comptroller of the Currency. MUB, as a national banking association, is subject to broad regulation and oversight of all its operations by the OCC, its primary federal banking regulator, and also by the Federal Reserve and the FDIC. MUB is required to file periodic reports with the OCC and is subject to ongoing supervision and examination by the OCC.

The OCC has extensive enforcement authority over national banks. If, during an examination of a bank or otherwise, the OCC determines that the financial condition, capital resources, asset quality, earnings prospects, management, liquidity, interest rate sensitivity, or other aspects of the bank's operations are unsatisfactory or that the bank or its management is violating or has violated any laws or regulations, various remedies are available to the OCC, including the power to enjoin "unsafe or unsound" practices, to require affirmative action to correct any conditions resulting from any violation or practice, to issue an administrative order that can be judicially enforced to increase capital, to restrict the growth of the bank, to assess civil monetary penalties, to remove officers and directors and/or ultimately to terminate the bank's charter. The OCC also has broad authority to address bank activity it deems to constitute an unsafe or unsound practice.

The OCC has adopted guidelines that establish minimum standards for the design and implementation of a risk governance framework for large national banks with average total consolidated assets of \$50 billion or more, such as MUB. The guidelines establish specific risk management-related roles and responsibilities for three designated functions: a bank's "front line" public-facing business; independent risk management; and internal audit.

The OCC has also provided additional guidance to national banks for assessing and managing risks associated with third-party relationships, including any business relationship between a bank and another entity, by contract or otherwise. The guidance includes regulatory expectations for planning, due diligence, third-party selection, contract negotiation and ongoing monitoring of third-party relationships that banks should consider when outsourcing bank functions. The guidance could have an impact on MUB's selection of vendors to which it outsources certain functions and on MUB's contract negotiations, particularly with respect to representations and warranties and indemnification by the vendors it may select.

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In November 2017, MUFG Bank, Ltd. applied to the OCC to convert its state-licensed branches and agencies in the U.S. to federal branches and agencies; the OCC approved the conversion applications and issued federal licenses to such branches and agencies in November 2017. For additional information, see "MUFG Bank, Ltd.'s and Mitsubishi UFJ Financial Group's credit ratings and financial or regulatory condition could adversely affect our operations" in Part I, Item 1A. "Risk Factors" in this Report on Form 10-K.

Consumer Financial Protection Bureau. The CFPB has direct supervision and examination authority over banks with more than \$10 billion in assets, including MUB. The CFPB's responsibilities include implementing and enforcing federal consumer financial protection laws, reviewing the business practices of financial services providers for legal compliance, monitoring the marketplace for transparency on behalf of consumers and responding to complaints and questions from consumers about consumer financial products and services. The Dodd-Frank Act added prohibitions on unfair, deceptive or abusive acts and practices to the scope of consumer protection regulations overseen and enforced by the CFPB. In various public pronouncements and enforcement actions, the CFPB has focused on a variety of practices it deems to be unfair, deceptive or abusive, including the following: credit-card add-on products, including billing of consumers for credit-monitoring services without prior consent; failing to accept or timely post payments; failure to honor loan modifications after the loan servicing is transferred; various debt collection practices, including sending foreclosure notices to borrowers who were current on their loans; and various practices relating to debts owed by service members, such as threatening to contact the members' commanding officers about loan arrears or burying the contractual authorization for this practice in the lending contract. The CFPB has also focused on automobile dealer discretionary interest rate markups and on holding banks and other purchasers of such contracts responsible for unlawful disparities in markups charged by dealers to borrowers of different races or ethnicities. The CFPB also has finalized rules that impact many aspects of residential mortgage loans and lending practices, including a requirement that banks develop and implement procedures to ensure compliance with a borrower's "reasonable ability to repay" test, make new or revised disclosures and revise policies and procedures for originating and servicing residential mortgage loans. Various pronouncements from recently appointed and other CFPB officers and recent CFPB actions have suggested it is undertaking a review of, and changes to, its past methods and practices, which could give rise to additional operational, regulatory and other risks.

Financial Stability Oversight Council. The Financial Stability Oversight Council (consisting of the Secretary of the Treasury, heads of the federal banking regulatory agencies and the SEC, and certain other officials) provides oversight of all risks created within the U.S. economy from the activities of financial services companies and supports enhanced prudential regulation. It also has the authority to recommend stricter standards for the largest, most interconnected financial services and other firms. Where it determines that certain practices or activities pose a threat to financial stability, it may make recommendations to the primary financial regulatory agencies for new or heightened regulatory standards. The Financial Stability Oversight Council must determine which BHCs and non-bank financial companies pose risks to U.S. financial stability, and subject those companies to the supervision and regulation of the Federal Reserve. BHCs over \$50 billion in consolidated assets are considered to be "large interconnected bank holding companies" and automatically designated as "systemically significant." The Company falls within this category, and therefore, is subject to heightened prudential standards including enhanced capital, leverage, and liquidity standards, as well as credit exposure reporting, concentration limits, stress testing and resolution plan requirements.

Dodd-Frank Act and Related Regulations

The Dodd-Frank Act, enacted in 2010, has resulted in sweeping changes to the U.S. financial system. Many provisions of the law have been implemented by rules and regulations of the federal banking agencies but, as discussed below, certain provisions of the law are yet to be implemented and therefore the full scope and impact of the law on banking institutions generally, and specifically on our business cannot, be fully determined at this time. The Dodd-Frank Act also provides authority to the FDIC to serve as receiver in the liquidation of systemically important non-bank financial companies, including BHCs. Liquidation proceedings for such companies will be funded by borrowings from the U.S. Treasury and risk-based assessments on covered financial companies. In circumstances where there is a shortfall after assessments on creditors of a failed company, there may be assessments on BHCs with consolidated assets of \$50 billion or more, such as the Company.

President Trump signed into law the Economic Growth, Regulatory Relief and Consumer Protection Act (the "EGRRCPA"), which amended various provisions of the Dodd-Frank Act as well as other federal banking

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statutes on May 24, 2018. Among other things, the EGRRCPA raised the threshold for designation as a systemically important financial institution from \$50 billion to \$250 billion in assets, removed BHCs with less than \$100 billion in assets from the application of enhanced prudential standards and eliminated the applicability of enhanced prudential standards to BHCs with between \$100 billion and \$250 billion in assets 18 months after enactment unless the Federal Reserve by order or rule determines to apply enhanced prudential standards to any such institution. The Federal Reserve is authorized to establish by order or rule tailored enhanced prudential standards, including periodic stress tests and liquidity requirements, for BHCs with between \$100 billion and \$250 billion in assets and is required to tailor the application of enhanced prudential standards to BHCs of any size based on certain factors, including capital structure, riskiness, complexity, financial activities, size and other risk related factors that the Federal Reserve deems appropriate. With respect to foreign banking organizations ("FBOs"), the EGRRCPA states it does not affect the continued applicability of enhanced prudential standards to FBOs with global assets equal to or greater than \$100 billion or limit the authority of the Federal Reserve to impose enhanced prudential standards requirements with respect to, or tailor the regulation of, an FBO with total assets equal to or greater than \$100 billion, including the requirement that it establish an IHC. Because MUFG, as an FBO, has total assets in excess of \$100 billion, the Company expects that it will remain subject to the Federal Reserve's enhanced prudential standards rules even though various domestic BHCs with a size comparable to MUAH will be relieved from compliance with such rules.

As required by the Dodd-Frank Act, the Federal Reserve adopted rules regarding stress testing requirements for large BHCs such as the Company. The OCC also adopted similar rules for large national banks such as MUB. The stress testing rules govern the timing and type of stress testing activities required of large BHCs and banks as well as rules governing testing controls, oversight and disclosure requirements. The stress testing rules limit the ability of a BHC to make capital distributions to the extent that its actual capital issuances are less than the amount indicated in its capital plan, measured on a quarterly basis.

As required by the Dodd-Frank Act, the Federal Reserve adopted final rules regarding enhanced prudential standards for both large U.S. BHCs, such as the Company, and FBOs operating in the U.S., such as MUFG Bank, Ltd. These integrated rules include the Federal Reserve's resolution plan, capital plan and stress testing rules, as well as a final rule regarding enhanced prudential standards. (The resolution, capital plan and stress testing rules are discussed below in this section.) The final enhanced prudential standards rule addresses a diverse array of regulatory subjects, each of which is highly complex. In some instances, the rule implements new financial regulatory requirements and in other instances it overlaps other regulatory reforms already in existence (such as the Basel III capital and liquidity reforms and stress testing requirements discussed elsewhere in this report). For large domestic BHCs, such as the Company, and FBOs operating in the U.S., such as MUFG Bank, Ltd., the final enhanced prudential standards rule formalizes governance and oversight processes with respect to various prudential standards already in place through the Federal Reserve's other rule-makings, as described in this section, but also imposed certain additional requirements such as an internal liquidity stress testing regime (intended to be complementary to the Federal Reserve's liquidity coverage ratio proposal discussed below) and maintenance of a related liquidity buffer.

In March 2016, the Federal Reserve re-proposed its single counterparty credit limit rule. The re-proposed rule would impose a general limit on the credit exposure to an unaffiliated counterparty of a U.S. or foreign bank holding company with \$50 billion or more in total consolidated assets and any IHC to a maximum of 25% of such company's total capital. A stricter credit exposure limit of 25% of Tier 1 Capital is applied to such a company which has \$250 billion or more in total consolidated assets or \$10 billion or more in on-balance sheet foreign exposure. The strictest restrictions would apply to such a BHC which is classified as a globally systemic important banking organization. For such companies, a credit exposure limit to unaffiliated major counterparties (with assets of \$500 billion or more) of 15% of Tier 1 Capital would be applied in addition to application of an aggregate net credit exposure limit to other counterparties of 25% of Tier 1 capital.

The final enhanced prudential standards rules relating to FBOs are similar in various respects to those adopted for large domestic BHCs, such as enhanced requirements relating to risk management, including liquidity risk management and capital adequacy and liquidity stress testing. However, the final FBO rules differ in various respects from the domestic BHC rules. For example, a large FBO must certify to the Federal Reserve that it meets capital adequacy standards established by its home country supervisor that are consistent with the BCBS framework. If the FBO does not satisfy such requirements, the Federal Reserve may impose requirements, conditions or restrictions on its U.S. activities.

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In addition, the final FBO rules require that an FBO with \$50 billion or more of non-branch assets in the U.S. (such as MUFG Bank, Ltd.) operate in the U.S. through an IHC structure. The FBO is required to hold its interest in any U.S. subsidiary through the IHC, which will be its top-tier U.S. subsidiary. U.S. branches of FBOs, such as those of MUFG Bank, Ltd., are excluded from this requirement. The final FBO standards had a July 1, 2016 initial compliance date and generally deferred application of a specified IHC leverage ratio until 2018. MUAH became the IHC for the U.S. operations of MUFG and MUFG Bank, Ltd. on July 1, 2016.

Additionally, in December 2016, the Federal Reserve finalized rules imposing new TLAC requirements on GSIBs with operations in the U.S., such as MUFG. The Company, which serves as MUFG's designated IHC in the U.S., will be required to maintain a minimum amount of total loss-absorbing capacity, which must be met with a combination of Tier 1 regulatory capital and long-term debt. Due to MUFG's single point of entry resolution approach, the Company will be subject to a minimum level of internal TLAC, which must be issued either to a foreign company that controls the Company (in this case MUFG Bank, Ltd. or MUFG) or to another directly or indirectly wholly-owned foreign subsidiary of MUFG. TLAC Tier 1 regulatory capital is intended to absorb ongoing losses, while the conversion of TLAC eligible long-term debt into common equity is intended to recapitalize the Company prior to any bankruptcy or insolvency proceedings. The Company became subject to these new rules on January 1, 2019. During the fourth quarter of 2018, the Company restructured existing debt issued to MUFG Bank, Ltd. and replaced a portion of its externally-placed debt with the issuance of internal TLAC-eligible debt issued to MUFG Bank, Ltd. in order to comply with the new rules.

Under the Dodd-Frank Act and Federal Reserve regulations, a BHC is required to serve as a source of financial and managerial strength to its subsidiary banks and may not conduct its operations in an unsafe or unsound manner. Under these requirements, a BHC may be required to contribute additional capital to an undercapitalized subsidiary bank. However, this additional capital may be required at times when the BHC may not have the resources to provide such support, or may not be inclined to provide such support under the then existing circumstances.

The federal financial regulatory agencies adopted final rules implementing Section 619 of the Dodd-Frank Act, commonly known as the Volcker Rule. The final rule generally prohibits banking entities from engaging in short-term proprietary trading of securities, derivatives, commodity futures and associated options for their own account. The final rule provides exemptions for certain activities, including certain types of market making, underwriting, hedging of specific, identifiable risks of individual or aggregated positions and trading in U.S. government, agency, state and municipal obligations. These exemptions are limited if they involve a material conflict of interest, a material exposure to high-risk assets or trading strategies or a threat to the institution's safety and soundness or to that of the U.S. financial system. The rules also exempt trading for customers in a fiduciary capacity or in riskless principal trades, subject to certain requirements.

The Volcker Rule also prohibits banking entities from owning or sponsoring hedge funds and private equity funds (covered funds), subject to certain exclusions. MUB sold the vast majority of its non-conforming private equity fund interests after the Volcker Rule was proposed.

The Volcker Rule also provides compliance requirements generally requiring banking entities to establish an internal compliance program reasonably designed to ensure and monitor compliance with the final rules. As a larger banking entity, the Company was required to establish a more detailed compliance program.

Although we have incurred increased compliance costs as a result of the Volcker Rule, we do not anticipate a material adverse impact to our financial results as revenue from prohibited proprietary trading and covered fund investment activities does not contribute significantly to our financial results.

The Dodd-Frank Act also changed the existing standard for the federal preemption of state consumer financial laws to allow a court or the OCC to preempt a state consumer financial law only if it discriminates against national banks, prevents or significantly interferes with the exercise by the national bank of its powers or the state law is preempted by another federal law. This change was intended to allow greater regulation of national banks under state law and may result in increased consumer protection requirements being imposed on national banks. The Dodd-Frank Act also eliminated the extension of federal preemption under the National Bank Act to operating subsidiaries of national banks negating certain OCC regulations and court decisions. The Act also authorized state law enforcement authorities to bring lawsuits under state law against national banks, thus

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subjecting national banks to varying and potentially conflicting interpretation of law by state attorneys general and state agencies. This could result in increased compliance costs for national banks. The Act also required the OCC to make preemption determinations on particular state consumer financial laws on a case-by-case basis, rather than making preemption determinations on broad categories of laws.

Regulatory Capital and Liquidity Standards

The federal banking regulatory agencies have adopted risk-based capital standards under which a banking organization's capital is compared to the risks associated with assets reflected on its balance sheet as well as its off-balance sheet exposures, such as letters of credit.

Regulatory Capital Rules. The Federal Reserve and the other U.S. federal banking agencies have adopted final rules to implement the Basel III capitalization rules of the BCBS for banking organizations located in the United States (U.S. Basel III Rules). The U.S. Basel III Rules replace the U.S. federal banking agencies' general risk-based capital rules, advanced approaches rule, market-risk rule, and leverage rules, in accordance with certain transition provisions. In December 2014, MUAH received approval from the Federal Reserve to opt-out of the advanced approaches rules for holding companies. MUAH became subject to the U.S. Basel III Rules on January 1, 2015, with certain provisions subject to a phase-in period. MUB previously opted-in to the advanced approaches risk-based capital rules, and therefore was required to comply with the U.S. Basel III Rules beginning on January 1, 2014. However, effective September 30, 2017, the OCC approved MUB's request to opt-out of the U.S. Basel III Rules advanced approaches, including MUB's one-time permanent election to exclude certain components of AOCI from its regulatory capital calculations. The U.S. Basel III Rules generally establish more restrictive capital definitions, create additional categories and higher risk-weightings for certain asset classes and off-balance sheet exposures, and higher leverage ratios and capital conservation buffers that are added to the minimum capital requirements and must be satisfied for banking organizations to avoid becoming subject to certain limitations on dividends and discretionary bonus payments to executive officers. The U.S. Basel III Rules also implement higher minimum capital requirements.

The U.S. Basel III Rules also provide for various adjustments and deductions to the definitions of regulatory capital that became fully effective on December 31, 2017. Under these rules, in order to avoid limitations on capital distributions, including dividend payments and certain discretionary bonus payments to executive officers, a banking organization must hold a capital conservation buffer above its minimum risk-based capital requirements (equal to 2.50% of its total risk-weighted assets). The capital conservation buffer is designed to absorb losses during periods of economic stress. The implementation of the capital conservation buffer began on January 1, 2016, at the 0.625% level and is being implemented on a phased-in basis over a four-year period (increasing by that amount on each subsequent January 1, until it reached the 2.5% standard on January 1, 2019).

In January 2014, the BCBS issued an updated version of its leverage ratio and disclosure guidance (the "Basel III leverage ratio"). The BCBS guidance continues to set a minimum Basel III leverage ratio of 3%. In April 2016, the BCBS proposed, among other things, that for purposes of calculating the denominator of the leverage ratio, off-balance sheet exposures of banks to securitization transactions should be treated the same as such exposures are treated under the BCBS revisions to its securitization framework for risk-based capital. The BCBS further amended the leverage ratio, among other revisions to its Basel III capital framework, in December 2017 ("Basel IV"). The Basel IV revisions refine the definition of the leverage ratio "exposure measure" (the Basel III term for total non-risk-weighted assets), and introduce a leverage ratio buffer applicable to GSIBs, requiring GSIBs to maintain a higher leverage ratio. Beginning January 1, 2022, the updates to the leverage ratio will be implemented and the BCBS leverage ratio buffer will apply to GSIBs.

Prompt Corrective Action. Under the OCC's prompt corrective action regulations (established pursuant to Section 38 of the Federal Deposit Insurance Act), a bank is assigned to one of five capital categories ranging from "well-capitalized" to "critically under-capitalized." Institutions that are "under-capitalized" or lower are subject to increasingly more restrictive mandatory supervisory corrective actions. At each successively lower capital category, an insured bank is subject to increased restrictions on its operations. Failure to meet regulatory capital guidelines can result in a bank being required to raise additional capital. An "under-capitalized" bank must develop a capital restoration plan and its parent holding company must generally guarantee the bank's compliance

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with the plan. The OCC has amended its prompt corrective action regulations to reflect the changes made to the regulatory capital requirements by the U.S. Basel III Rules.

For additional information regarding the regulatory capital positions of MUAH and MUB, see "Management's Discussion and Analysis of Financial Condition and Results of Operations - Capital Management" in Part II, Item 7 of this Report on Form 10-K and Note 18 to our Consolidated Financial Statements in this Report on Form 10-K.

Comprehensive Capital Analysis and Review Program. MUAH is subject to regulatory requirements to develop and maintain a capital plan which must be reviewed and approved by its Board of Directors (or designated subcommittee thereof); however, MUAH was granted regulatory administrative relief in 2019 and is not required to submit its capital plan to the Federal Reserve or participate in the 2019 Comprehensive Capital Analysis and Review (CCAR 2019) process. The Company remains subject to future cycles of the Federal Reserve's CCAR program. CCAR evaluates capital planning processes and assesses capital adequacy levels under various scenarios to determine if BHCs would have sufficient capital to continue operations throughout times of economic and financial market stress. Depending on the circumstances, failure to attain a non-objection of a BHC's CCAR plan from the Federal Reserve could have a variety of adverse consequences for the institution, including a requirement to augment capital, restrain growth or other adverse consequences. The Federal Reserve's capital plan and stress testing rules for bank holding companies provide that the Federal Reserve may not object to a capital plan on the basis of qualitative deficiencies in the BHC's capital planning process if the BHC has total consolidated assets of at least \$50 billion but less than \$250 billion, nonbank assets of less than \$75 billion and is not controlling a U.S. global systemically important bank (large but noncomplex firms). Under these rules, such bank holding companies' capital planning processes will be evaluated during the Federal Reserve's regular ongoing supervisory activities.

Liquidity Coverage Ratio. The U.S. banking agencies adopted a rule implementing a standardized quantitative liquidity requirement generally consistent with the LCR standard, which was included in the Basel III framework of the BCBS. This LCR rule is designed to ensure that covered banking organizations maintain an adequate level of cash and HQLA, such as central bank reserves and government and corporate debt, to meet estimated net liquidity needs in a short-term stress scenario using specified liquidity inflow and outflow assumptions (that produce net cash outflow). An institution's LCR is the amount of its HQLA, as defined and calculated in accordance with the reductions and limitations in the rules, divided by its net cash outflow, with the quotient expressed as a percentage. While the LCR standard generally applies to all internationally active banking organizations with \$250 billion or more in total consolidated assets or \$10 billion or more in on-balance sheet foreign exposures, the rule also applies a less stringent, modified LCR to BHCs that are not internationally active, and have more than \$50 billion in total assets (such as the Company). Under the LCR rule, financial institutions must maintain an LCR equal to at least 100% based on the entity's total projected net cash outflows over the next 30 calendar days, effectively using net cash outflow assumptions equal to 70% of the outflow assumptions prescribed for internationally active banking organizations. The Company is in compliance with the requirements of the modified LCR standard. Under the LCR rule, commencing in 2019, the Company and other bank holding companies subject to the rule will be required to make periodic public disclosure on their websites of quantitative and qualitative aspects of their LCR within 60 days after calendar year-end (45 days for quarterly filings).

Other Federal Laws and Regulations Affecting Banks

There are additional requirements and restrictions in the laws of the U.S. and states in which MUB and its subsidiaries conduct operations. The consumer lending and other banking activities of MUB are subject to extensive regulation under various state laws as well as the federal laws discussed above. Furthermore, due to MUFG Bank, Ltd.'s controlling ownership of the Company, regulatory requirements adopted or enforced by the Government of Japan may have an impact on the activities and investments of the Company in the future.

Deposit Insurance. Customer deposits maintained by MUB are insured up to statutory limits (currently \$250,000 per depositor, subject to certain exceptions) by the FDIC and, accordingly, are subject to deposit insurance assessments. Deposit insurance assessment rates are subject to change by the FDIC and can be impacted by the overall economy and the stability of the banking industry as a whole.

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As required by the Dodd-Frank Act, the FDIC adopted a comprehensive, long-range restoration plan for the deposit insurance fund to increase the fund's reserves relative to total insured deposits in the U.S. The ultimate effect on our business of legislative, regulatory and economic developments on the deposit insurance fund cannot be predicted with certainty.

The FDIA provides that, in the event of the liquidation or other resolution of an insured depository institution, the claims of its depositors (including claims by the FDIC as subrogee of insured depositors) and certain claims for administrative expenses of the FDIC as receiver would be afforded a priority over other general unsecured claims against such an institution. If an insured depository institution fails, claims of insured and uninsured depositors and the FDIC will be placed ahead of unsecured, non-deposit creditors, in order of priority of payment.

If any insured depository institution becomes insolvent and the FDIC is appointed its conservator or receiver, the FDIC may, in most cases, disaffirm or repudiate any contract to which such institution is a party if the FDIC determines that performance of the contract would be burdensome and that disaffirmance or repudiation of the contract would promote the orderly administration of the institution's affairs. In addition, the FDIC as conservator or receiver may enforce most contracts entered into by the institution notwithstanding any provision providing for termination, default, acceleration or exercise of rights upon or solely by reason of insolvency of the institution, appointment of a conservator or receiver for the institution, or exercise of rights or powers by a conservator or receiver for the institution.

Under provisions of the FDIA, an FDIC-insured bank under common control with another FDIC-insured bank is generally liable for any loss incurred or reasonably expected to be incurred, by the FDIC upon the actual or reasonably likely failure of such other bank. Thus, MUB could incur liability to the FDIC under these provisions in the event of failure of another bank controlled by the Company or MUFG. This liability would be subordinated to deposit liabilities and certain other senior liabilities. At present, neither the Company nor MUFG have such other bank subsidiaries.

Pursuant to the Dodd-Frank Act and related regulations, BHCs and insured depository institutions with \$50 billion or more in assets are required to develop and annually file with the bank regulators resolution plans or so-called "living wills" to facilitate the FDIC's ability to liquidate such banks in a prompt and orderly fashion upon a failure. If the bank regulators determine that the resolution plan is not credible or would not facilitate the orderly resolution of the institution, they may require the institution to submit a revised resolution plan that addresses the deficiencies identified by the regulators. If the regulators determine that the revised plan remains deficient, they may decide to subject the institution to more stringent capital, leverage, or liquidity requirements or restrictions on growth, activities or operations and may impose other sanctions.

In September of 2016, the OCC adopted guidelines establishing standards for recovery planning by national banks with total consolidated assets of \$50 billion or more, such as MUB. The guidelines require such larger banks to undertake recovery planning to be able to respond quickly to and recover from the financial effects of severe stress on the bank. The recovery plan should identify triggers that reflect the bank's particular vulnerabilities and identify a wide range of credible options that the bank could undertake to preserve or restore financial strength and viability and provide that the bank will notify the OCC of any significant breach of a trigger and actions taken or to be taken in response. Banks with total assets of more than \$100 billion but less than \$750 billion, such as MUB, were required to comply with these new requirements on or before January 1, 2018. MUB is in compliance with these requirements. The OCC is empowered to order enforcement of the guidelines and may assess civil money penalties against and require other actions of banks which fail to meet these standards.

Community Reinvestment Act. MUB is subject to the CRA. The CRA generally requires the federal banking agencies to evaluate the record of a financial institution in meeting the needs of local communities, including low- and moderate-income neighborhoods. In addition to substantial penalties and corrective measures that may be required for a violation of certain fair lending laws, the federal banking agencies may take compliance with such laws and the CRA into account when regulating and supervising other activities and in evaluating whether to approve applications for permission to engage in new activities or to acquire other banks or companies or de novo branching. An unsatisfactory CRA rating may be the basis for denying the application.

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Fair Lending and Other Related Laws. MUB is subject to the Equal Credit Opportunity Act of 1974 and the implementing regulations thereunder. The statute requires financial institutions and other firms engaged in the extension of credit to make credit equally available to all creditworthy customers and makes it unlawful for any creditor to discriminate against any applicant with respect to any aspect of a credit transaction: (1) on the basis of race, color, religion, national origin, sex or marital status, or age (provided the applicant has the capacity to contract); (2) because all or part of the applicant's income derives from any public assistance program; or (3) because the applicant has in good faith exercised any right under the Consumer Credit Protection Act. In addition, a creditor may not make any oral or written statement, in advertising or otherwise, to customers or prospective customers that would discourage on a prohibited basis, an application for credit.

MUB is also subject to the Federal Housing Act, which makes discrimination in home lending illegal, as well as the Americans with Disabilities Act, which requires banks to reasonably accommodate individuals with disabilities.

Banks are periodically examined for compliance with these fair lending laws and other related laws. The banking regulators are required to refer matters relating to these fair lending laws to the Department of Justice for possible investigation and further appropriate action under civil penalty statutes whenever the regulator has reason to believe that a creditor has engaged in a pattern or practice of conduct that may violate these laws.

Bank Secrecy Act and Office of Foreign Assets Control Regulations. The banking industry is subject to extensive regulatory controls and processes under the Bank Secrecy Act and related anti-money laundering laws. Under the USA PATRIOT Act, federal banking regulators must consider the effectiveness of a financial institution's anti-money laundering program prior to approving an application for a merger, acquisition or other activities requiring regulatory approval. The U.S. also imposes economic sanctions that affect transactions with designated foreign countries, nationals and others. These rules are administered by OFAC. Included among OFAC restrictions are limitations or prohibitions on engaging in financial transactions involving a sanctioned country, entity or person and prohibitions on transfers of blocked property and bank deposits subject to U.S. jurisdiction. Failure to comply with these requirements may adversely affect the Company's ability to obtain regulatory approvals for future initiatives requiring regulatory approval, including acquisitions and additionally could result in substantial monetary fines, penalties and other sanctions.

Affiliate Transactions. MUB and its affiliates are subject to certain restrictions under the Federal Reserve Act and related regulations, including restrictions on loans by MUB to, and other transactions with, its affiliates (including requirements that such transactions with MUB be collateralized and on arm's-length terms). Dividends payable by MUB to MUAH are subject to restrictions under a formula imposed by the OCC unless express approval is given by the OCC to exceed these limitations.

Customer Information Security. The federal bank regulatory agencies have adopted guidelines for safeguarding confidential, personal customer information. The guidelines require each financial institution to create, implement and maintain a comprehensive written information security program designed to ensure the security and confidentiality of customer information, protect against any anticipated threats or hazards to the security or integrity of such information and protect against unauthorized access to or use of such information that could result in substantial harm or inconvenience to any customer. MUB has adopted a customer information security program. In addition, each agency has published its standards and expectations for banks to protect their own data, information technology and other assets and operations from unauthorized intrusion and vulnerability to malicious cyber-attack to the greatest degree possible.

Privacy. The GLBA requires financial institutions to implement policies and procedures regarding the disclosure of nonpublic personal information about consumers to non-affiliated third parties. In general, the statute requires explanations to consumers on policies and procedures regarding the disclosure of such nonpublic personal information, and, except as otherwise required by law, prohibits disclosing such information except as provided in the banks' policies and procedures and applicable law. MUB implemented its privacy policy, which provides that all of its existing and new customers will be notified of MUB's privacy policies. Federal financial regulators have issued regulations under the Fair and Accurate Credit Transactions Act, which increased the length of the waiting period, after privacy disclosures are provided to new customers, before information can be shared among affiliated companies for the purpose of cross-marketing products and services between those

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affiliated companies. Certain state laws and regulations designed to protect the privacy and security of customer information also apply to us and our other subsidiaries.

Overdraft and Interchange Fees; Interest on Demand Deposits. Regulation E restricts a bank's ability to charge overdraft services and fees. The rule prohibits financial institutions from charging fees for paying overdrafts on ATM and one-time debit card transactions, unless a consumer consents, or opts in, to an overdraft service for those types of transactions. The Dodd-Frank Act's "Durbin Amendment" also required the Federal Reserve to establish standards for interchange fees that are "reasonable and proportional" to the cost of processing the debit card transaction and imposes other requirements on card networks.

Regulation of MUSA

MUSA is a registered broker-dealer with the SEC and is a member of the Financial Industry Regulatory Authority (FINRA). MUSA is also registered with the Municipal Securities Rulemaking Board (MSRB) as a broker-dealer. MUSA was previously a Futures Commission Merchant and a member of the National Futures Association. However, it effectively deregistered in 2017.

Much of the regulation of broker-dealers has been delegated to self-regulatory organizations such as the FINRA of which MUSA is a member. The principal purpose of regulating broker-dealers is the protection of clients and the securities markets. The regulations cover many aspects of the securities business, including, among other things, sales and trading practices, publication of research, margin lending, uses and safekeeping of clients' funds and securities, capital adequacy, recordkeeping and reporting, fee arrangements, disclosure to clients, fiduciary duties owed to advisory clients, and the conduct of directors, officers and employees.

MUSA is subject to Rule 15c3-1 under the Securities Exchange Act of 1934 (the Uniform Net Capital Rule), Rule 15c3-3 (Customer Protection) and related SRO requirements. The Uniform Net Capital Rule specifies minimum capital requirements that are intended to ensure the general financial soundness and liquidity of broker-dealers. The Customer Protection Rule provides requirements for customer cash reserves and the custody of customer securities.

The Uniform Net Capital Rule prohibits a broker-dealer subsidiary from paying cash dividends, or making unsecured advances or loans to its parent company or repaying subordinated loans to its parent company if such payment would result in a net capital amount of less than 5% of aggregate debit balances or less than 120% of its minimum dollar requirement of \$1,000,000.

In addition to the net capital requirements as a self-clearing broker-dealer, MUSA is subject to cash deposit and collateral requirements with clearing houses, such as the Depository Trust & Clearing Corporation, Options Clearing Corporation and Fixed Income Clearing Corporation, which may fluctuate significantly from time to time based upon the nature and size of clients' trading activity and market volatility.

Future Legislation or Regulatory Initiatives

The economic and political environment of the past several years has led to a number of proposed legislative, governmental and regulatory initiatives, at both the federal and state levels, certain of which are described above, that may significantly impact our industry. These and other initiatives could significantly change the competitive and operating environment in which we and our subsidiaries operate. We cannot predict whether these or any other proposals will be enacted or the ultimate impact of any such initiatives on our operations, competitive situation, financial condition or results of operations.

In October 2018, the Federal Reserve invited comments on a framework that would more closely match regulations for large banking organizations with their risk profiles. Firms in the lowest risk category - generally most domestic firms with assets of between \$100 billion and \$250 billion would no longer be subject to standardized liquidity requirements but would be subject to firm-developed liquidity tests and reduced stress testing requirements. Firms with \$250 billion or more in assets that are not GSIBs would be subject to reduced standardized liquidity requirements depending on their risk profile and would be subject to stress testing but on an extended cycle. Under the Federal Reserve's proposal, GSIBs, such as MUFG, would not see any change in their capital or liquidity requirements. The Federal Reserve advised that it expects to issue a separate tailoring

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proposal for foreign banks in the future. Whether and to what extent, MUAH and MUB may be affected by these initiatives cannot be predicted at this time.

Disclosure of Iranian Activities under Section 13(r) of the Securities Exchange Act of 1934

We are disclosing the following information pursuant to Section 13(r) of the Securities Exchange Act of 1934 (Exchange Act), which requires an issuer to disclose whether it or any of its affiliates knowingly engaged in certain activities, transactions or dealings relating to Iran or with natural persons or entities designated by the U.S. government under specified Executive Orders. The scope of activities that must be reported includes activities not prohibited by U.S. law and conducted outside the United States in compliance with applicable local law. Because we are indirectly wholly-owned by MUFG, a Japanese corporation, our disclosure includes activities, transactions or dealings conducted outside the United States by non-U.S. affiliates of MUFG which are not controlled by us. We have requested that MUFG provide us a description of reportable activity under Section 13(r) and have received the following information:

During the fiscal year ended December 31, 2018, a non-U.S. subsidiary of MUFG engaged in business activities with entities in, or affiliated with, Iran, including counterparties owned or controlled by the Iranian government. Specifically, MUFG's non-U.S. banking subsidiary, MUFG Bank, Ltd., issued letters of credit and guarantees and provided remittance and other settlement services mainly in connection with customer transactions related to the purchase and exportation of Iranian crude oil to Japan, and in some cases, in connection with other petroleum-related transactions with Iran by its customers. These transactions did not involve U.S. dollars nor clearing services of U.S. banks for the settlement of payments. For the fiscal year ended December 31, 2018, the aggregate interest and fee income relating to these transactions was less than ¥100 million, representing less than 0.005 percent of MUFG's total interest and fee income. Some of these transactions were conducted through the use of non-U.S. dollar correspondent accounts and other similar settlement accounts maintained with MUFG Bank, Ltd. outside the United States by Iranian financial institutions and other entities in, or affiliated with, Iran. In addition to such accounts, MUFG Bank, Ltd. receives deposits in Japan from, and provides settlement services in Japan to, fewer than 10 Iranian government-related entities and fewer than 100 Iranian government-related individuals such as Iranian diplomats, and maintains settlement accounts outside the United States for certain other financial institutions specified in Executive Order 13382, which settlement accounts were frozen in accordance with applicable laws and regulations. For the fiscal year ended December 31, 2018, the average aggregate balance of deposits held in these accounts represented less than 0.1 percent of the average balance of MUFG's total deposits. The fee income from the transactions attributable to these account holders was less than ¥18 million, representing less than 0.005 percent of MUFG's total fee income. Although there was no outstanding balance as of December 31, 2018, MUFG Bank, Ltd. had, during the fiscal year ended December 31, 2018, loans that were arranged prior to changes in applicable laws and regulations to borrowers in, or affiliated with, Iran, including entities owned by the Iranian government. For the fiscal year ended December 31, 2018, the agent fee income relating to these loan transactions was less than ¥20 million, representing less than 0.005 percent of MUFG's total interest and fee income.

We understand that MUFG Bank, Ltd. recognizes that following the withdrawal in May 2018 by the United States from the Joint Comprehensive Plan of Action, the United States has imposed secondary sanctions against non-U.S. persons who engage in or facilitate a broad range of transactions and activities involving Iran. We understand that MUFG Bank, Ltd. will take the recent sanctions related developments into account and monitor any future transactions relating to Iran in order to comply with applicable U.S. and Japanese regulations as well as U.S., Japanese and other international sanctions.

Financial Information

See our Consolidated Financial Statements beginning on page 76 of this Form 10-K for financial information about MUAH and its subsidiaries.

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ITEM 1A. RISK FACTORS

The following discussion sets forth material risk factors that could affect our financial condition and operations:

Industry Factors

U.S. and global economic experiences of a serious recession, a slow economic recovery, persistent financial market volatility, and significant U.S. and global consumer and business economic deterioration have presented challenges for the banking and financial services industry and for MUAH. In the U.S., the government response included a variety of measures which has allowed U.S. economic activity to improve in recent years but there can be no assurance that this progress will continue or will not reverse. The U.S. government continues to face significant fiscal and budgetary challenges which, if not resolved, may further exacerbate adverse U.S. economic conditions. These challenges may be intensified over time as a result of the federal tax legislation signed into law in December of 2017 if federal budget deficits were to increase and Congress and the Administration cannot effectively work to address them.

In the past decade, adverse financial and economic developments impacted U.S. and global economies and financial markets and presented challenges for the banking and financial services industry and for MUAH. These developments included a general recession both globally and in the U.S. followed by a slow economic recovery accompanied by unprecedented volatility in the financial markets.

In response, various significant economic and monetary stimulus measures were implemented by the U.S. government. The Federal Reserve pursued a highly accommodative monetary policy aimed at keeping interest rates at historically low levels although the Federal Reserve has modified certain aspects of this policy by gradually increasing short-term interest rates and reducing its balance sheet. U.S. economic activity has significantly improved, but there can be no assurance that this progress will continue or will not reverse.

The challenges to the level of economic activity in the U.S., and also to the banking industry, have also been exacerbated at times since the recession by extensive political disagreements regarding the statutory debt limit on U.S. federal government obligations and measures to address the substantial federal deficits and the federal budget. These political developments led to a downgrade from "AAA" to "AA+" by one credit rating agency of the long-term sovereign credit rating of United States debt, although other credit rating agencies did not take such action. Although concerns about U.S. sovereign debt may have lessened, there can be no assurance that the current political disagreements regarding the federal budget will be resolved between the Trump Administration and the newly-elected Congress with the Democrats controlling the House of Representatives, or that such disagreements will not occur again in the future. Any such future disagreements, if not resolved, could result in further downgrades by the rating agencies with respect to the obligations of the U.S. federal government. Any such further downgrades could increase over time the U.S. federal government's cost of borrowing which may worsen its fiscal challenges, as well as generate upward pressure on interest rates generally in the U.S. which could, in turn, have adverse consequences for borrowers and the level of business activity. Any such developments could also have adverse consequences for the securities repurchase business conducted by MUSA, which relies upon both the credit quality of bonds issued by the U.S. federal government and the smooth functioning of the markets using such bonds as collateral. It is also possible that the federal government's fiscal and budgetary challenges could be intensified over time as a result of the federal tax legislation signed into law in December of 2017 if the reductions in tax rates along with greater government spending result in increased federal budget deficits.

Difficult market conditions have adversely affected the U.S. banking industry

The resulting economic pressure on consumers and lack of confidence in the financial markets since the 2008 recession adversely affected our business, financial condition and results of operations for several years after the recession. Although the economic conditions in our markets, including California in particular and in the U.S. in general, have significantly improved in recent years, there can be no assurance that these conditions will continue to improve, especially given the fact that the U.S. economic expansion is becoming extended in its duration. In addition, turbulent political and economic conditions in foreign countries and trade policy differences with major U.S. trading partners may negatively impact the U.S. financial markets and economy in general. If these conditions worsen market conditions could be adversely affected. In particular, we may face the following risks in connection with these events:

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- Our ability to assess the creditworthiness of our customers and counterparties may be impaired if the methods and approaches we use to select, manage, and underwrite our customers and counterparties become less predictive of future behaviors.
- We may not be able to accurately estimate credit exposure losses because the process we use to estimate these losses requires difficult, subjective, and complex judgments which may not be amenable to precise estimates, including forecasts of economic conditions and how these economic predictions might impair the ability of our borrowers to repay their loans.
- Our ability to borrow from other financial institutions on favorable terms or at all could be adversely affected by further disruptions in the capital markets or other events, including actions by rating agencies and deteriorating investor expectations.
- Downgrades in the credit ratings of major U.S. or foreign banks or other financial difficulties affecting such major banks could have adverse consequences for the financial markets generally, including possible negative effects on the available sources of market liquidity and increased pricing pressures in such markets which, in turn, could make it more difficult or expensive for banks generally and for us in particular to access such markets to satisfy liquidity needs.
- Significant fluctuations in the prices of equity and fixed income securities could adversely impact the revenues of our broker-dealer and asset management and trust businesses. MUSA is exposed to the price risk of such securities where it holds inventory to meet expected customer demand. MUSA's debt capital markets fee income would also be detrimentally impacted from sustained periods of fixed income price volatility. MUB's fee income may also decline since its asset management and trust business fees are primarily based upon the values of assets it manages and declines in the values of those assets proportionately reduce the amount of its fees charged.
- Competition in our industry could intensify as a result of the increasing consolidation of financial services companies and increasing competition from less regulated nonbank financial services companies many of whom are using new technologies to deliver their services. For additional information, see "Substantial competition could adversely affect us" in Part I, Item 1A. "Risk Factors" in this Form 10-K.
- We may incur goodwill impairment losses in future periods. See "Management's Discussion and Analysis of Financial Condition and Results of Operations - Critical Accounting Estimates - Goodwill Impairment Analysis" in Part II, Item 7. and Note 5 to our Consolidated Financial Statements included in this Form 10-K.
- In November 2018, the U.S., Mexico and Canada came to an agreement to replace North American Free Trade Agreement (NAFTA) with the United States-Mexico-Canada Agreement (USMCA), although NAFTA will remain in force until the USMCA is ratified by all of its members. The effect of such agreement and future proposals on international trade between the U.S. and other countries and on the level of economic activity in the U.S., as well as possible volatility in the financial markets generally, cannot be predicted.

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The effects of changes or increases in, or supervisory enforcement of, banking, securities, competition or other laws and regulations or governmental fiscal, monetary, or tax policies could adversely affect us or make strategic planning more difficult

We are subject to significant banking and federal and state securities regulation and supervision, which is primarily for the benefit and protection of our depositors and other customers and the Federal Deposit Insurance Fund and the banking system as a whole and less so for the benefit of investors in our securities. In the past, our business has been materially affected by these regulations. This can be expected to continue in the future. Laws, regulations or policies, including accounting standards and interpretations, currently affecting us and our subsidiaries may change over time. Regulatory authorities may also change their interpretation of, and intensify their examination of compliance with, these statutes and regulations. Therefore, our business may be adversely affected by changes in laws, regulations, policies or interpretations or regulatory approaches to compliance and enforcement, as well as by supervisory action or criminal proceedings taken as a result of perceived noncompliance, which could result in the imposition of significant penalties or fines. Changes in laws and regulations may also increase our expenses by imposing additional supervision, fees, taxes or restrictions on our operations. Compliance with laws and regulations, especially new laws and regulations, increases our operating expenses and may require additional management time and attention. To the extent state and local laws and regulations are not preempted by federal laws or regulations, our regulatory compliance could become more challenging.

The Dodd-Frank Act was enacted in 2010 in response to the financial crisis that culminated in the severe economic disruptions during and after 2008. The Dodd-Frank Act, among other things, established the CFPB with broad powers to regulate consumer financial products such as credit cards and mortgages, established the Financial Stability Oversight Council comprised of the heads of various regulatory agencies, led to new capital requirements from U.S. federal banking agencies, placed new limits on electronic debit card interchange fees, and required the SEC and national stock exchanges to adopt significant new corporate governance and executive compensation reforms. While the CFPB's regulatory powers have not changed under the current Administration, the number of publicly announced enforcement actions it has chosen to pursue has significantly declined.

This important legislation has affected U.S. financial institutions, including MUAH and MUB, in many ways, some of which have increased, or may increase in the future, the cost of doing business and present other challenges to the financial services industry. For additional information regarding the impact on our business of the Dodd-Frank Act and related regulations, see "Supervision and Regulation – Principal Federal Banking Laws - Dodd-Frank Act and Related Regulations" in Part I, Item 1. "Business" in this Form 10-K.

Following the 2008 financial crisis, the Federal Reserve and the other U.S. federal banking agencies adopted final rules making significant changes to the U.S. regulatory capital framework for U.S. banking organizations. For additional information, see "Supervision and Regulation – Regulatory Capital and Liquidity Standards" in Part I, Item 1. "Business" and "Regulatory Capital" in Part II, Item 7. "Management's Discussion and Analysis of Financial Condition and Results of Operations" in this Form 10-K.

President Trump signed into law the Economic Growth, Regulatory Relief and Consumer Protection Act (the "EGRRCPA") which amended various provisions of the Dodd-Frank Act as well as other federal banking statutes on May 24, 2018 as described more fully in "Supervision and Regulation – Dodd Frank Act and Related Regulations" in Part I, Item 1. "Business" in this Form 10-K.

The need to maintain more and higher quality capital and greater liquidity under applicable bank regulatory agency rules could limit the Company's lending and other business activities and its ability to expand, either organically or through acquisitions. It could also result in the Company taking steps to increase its capital or being limited in its ability to pay dividends or otherwise return capital to its shareholders, or selling or refraining from acquiring assets. In addition, the regulatory liquidity standards could limit the Company's ability to invest in longer-term or less liquid assets even if more desirable from a balance sheet management perspective.

The capital rules of the U.S. federal banking agencies as well as the various other regulations referred to herein, along with other regulations which may be adopted in the future, may also generally increase our cost of doing business or lead us to stop, reduce or modify our products and services.

Proposals to reform the housing finance market in the U.S. could also significantly affect our business. These proposals, among other things, include reducing or eliminating over time the role of the GSEs (Fannie Mae and Freddie Mac) in guaranteeing mortgages and providing funding for mortgage loans, as well as the

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implementation of reforms relating to borrowers, lenders, and investors in the mortgage market, including reducing the maximum size of a loan that the GSEs can guarantee, phasing in a minimum down payment requirement for borrowers, improving underwriting standards, and increasing accountability and transparency in the securitization process. While the specific nature of these reforms and their impact on the financial services industry in general, and on MUB in particular, is uncertain at this time, such reforms, if enacted, are likely to have a substantial impact on the mortgage market and could potentially reduce our income from mortgage originations by increasing mortgage costs and/or lowering originations. The GSE reforms could also reduce real estate prices, which could reduce the value of collateral securing outstanding mortgage loans. This reduction of collateral value could negatively impact the value or perceived collectability of these mortgage loans and cause an increase in our allowance for loan losses. Such reforms may also include changes to the Federal Home Loan Bank System, which could adversely affect a significant source of funding for lending activities by the banking industry, including the Bank. These reforms may also result in higher interest rates on residential mortgage loans, thereby reducing demand, which could have an adverse impact on the Bank's residential mortgage lending business. In addition, any impact of such changes upon the credit quality of GSE's and therefore upon agency MBS securities held by MUAH could result in material reductions in valuations, as well as adverse impacts upon MUSA's agency MBS trading business.

Several cities in the United States (including New York, Los Angeles, San Diego, San Francisco, San Jose and Seattle) have adopted responsible banking ordinances and other cities are considering the adoption of similar ordinances. These ordinances generally require banks that hold city government deposits to provide detailed accounts of their lending practices in low-income communities, as well as their participation in foreclosure prevention and home loan principal reduction programs. Performance under these ordinances is used as a basis for awarding the city's financial services contracts. The adoption of these ordinances by municipalities for which the Bank is a provider of cash management or other banking services could result in increased regulatory and compliance costs and other operational costs and expenses, making this business less desirable to the Bank and potentially resulting in reduced opportunities for the Bank to provide these services. In August of 2015, New York City's ordinance was found to be invalid because it was pre-empted by federal and state banking laws and that case was dismissed. Whether and to what extent other responsible banking ordinances will be challenged and invalidated cannot be predicted.

As a result of supervisory actions against Wells Fargo Bank, N.A. involving customer abuses in the banks' retail branch network, which may have arisen at least in part from incentive compensation arrangements related to cross-selling of products and services, the OCC conducted a horizontal examination of various U.S. banks including MUB to which they issued requests for information about their sales practices and incentive compensation programs. The increased regulatory focus on these subjects could lead to additional regulations and compliance costs which could impact the retail banking industry in the U.S.

International laws, regulations and policies affecting us, our subsidiaries and the business we conduct may change over time and affect our business opportunities and competitiveness in these jurisdictions. Due to our ownership by MUFG and MUFG Bank, Ltd., laws, regulations, policies, fines and other supervisory actions adopted or enforced by the Government of Japan, the Federal Reserve and other regulators may adversely affect our activities and investments and those of our subsidiaries in the future.

We maintain systems and procedures designed to comply with applicable laws and regulations. Some legal and regulatory frameworks provide for the imposition of criminal or civil penalties (which can be substantial) for noncompliance. In some cases, liability may attach even if the noncompliance was inadvertent or unintentional and even if reasonably designed compliance systems and procedures were in place at the time. There may be other negative consequences from a finding of noncompliance, including restrictions on certain activities and damage to our reputation. Legal or regulatory compliance failure may also adversely affect our ability to obtain regulatory approvals for future strategic initiatives. Furthermore, failure to take necessary corrective action or the discovery of other violations of laws in the process of implementing any corrective measures could result in further regulatory enforcement action.

Our business is affected significantly by the fiscal and monetary policies of the U.S. federal government and its agencies. We are particularly affected by the policies of the Federal Reserve, which regulates the supply of money and credit in the U.S. Under the Dodd-Frank Act and a long-standing policy of the Federal Reserve, a BHC is expected to act as a source of financial and managerial strength for its subsidiary banks. As a result of that policy, we may be required to commit financial and other resources to our subsidiary bank in circumstances where we might not otherwise do so. Among the instruments of monetary policy available to the Federal Reserve

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are (a) conducting open market operations in U.S. Government securities, (b) changing the discount rates on borrowings by depository institutions and the federal funds rate, and (c) imposing or changing reserve requirements against certain deposits accepted by banks and borrowings by banks and their affiliates. These methods are used in varying degrees and combinations to directly affect the availability of bank loans and deposits, as well as the interest rates charged on loans and paid on deposits. In the fall of 2017, the Federal Reserve began the process of reducing its \$4.5 trillion balance sheet by ceasing reinvestment of principal on the maturing U.S. bonds that it holds. The impact of the Federal Reserve's unwinding of its "quantitative easing" program on the U.S. economy and financial markets cannot be predicted with certainty; however, this change in the Federal Reserve's monetary policy could result in increased interest rates, changes in customer deposit behavior, and volatility in the financial markets. During 2018, the Federal Reserve gradually increased the target range for the federal funds rate, with the range standing at 2-1/4 to 2-1/2 percent at the end of 2018. The policies of the Federal Reserve can be expected to have a material effect on our business, prospects, results of operations and financial condition.

Refer to "Supervision and Regulation" in Part I, Item 1. "Business" in this Form 10-K for discussion of certain additional existing and proposed laws and regulations that may affect our business.

Increased regulation of the financial services industry has required and can be expected to continue to require significant investments in technology, personnel or other resources. Our competitors may be subject to different or reduced regulation due to their asset size or types of products offered and may also be able to more efficiently utilize resources to comply with regulations and to more efficiently absorb increased regulatory compliance costs into their cost structures.

The December 2017 reform of the U.S. tax laws that included a substantial reduction in corporate and personal tax rates also changed the tax laws relevant to our business. While such reform has had and could continue to have positive effects on corporate profitability which could benefit the Company and its customers, there could be other potential adverse consequences such as a decrease in the value of tax credits on certain investments we may make. There could also be possible adverse consequences for the economy and the business climate, such as a large increase in the federal deficits and increasing interest rates generally, including for the federal government's borrowing costs. The potential long-run impact of these possible developments remains uncertain. For additional information regarding the possible effects of these changes on our business, see "The changes in the U.S. tax laws, the majority of which were effective January 1, 2018, will impact our business and results of operations in a variety of ways, some of which are expected to be positive and others which may be negative" in Part I, Item 1A. "Risk Factors" in this Form 10-K.

Higher credit losses could require us to increase our allowance for credit losses resulting in a charge to earnings

When we loan money or commit to loan money, we incur credit risk or the risk of losses if our borrowers do not repay their loans. We reserve for credit losses by establishing an allowance through a charge to earnings. The amount of this allowance is based on our assessment of credit losses inherent in our loan portfolio and our unfunded credit commitments. The process for determining the amount of the allowance is critical to our financial results and condition. It requires difficult, subjective and complex judgments about the future impact of current economic conditions that might impair the ability of our borrowers to repay their loans.

We might underestimate the credit losses inherent in our loan portfolio and have credit losses in excess of the amount reserved. Or, we might increase the allowance because of changing economic conditions, which we believe have caused losses to be sustained in our portfolio. For example, in a rising interest rate environment, borrowers with adjustable rate loans could see their payments increase. In the absence of offsetting factors such as increased economic activity and higher wages, this rate increase could reduce our borrowers' ability to repay their loans, resulting in our increasing the allowance. We might also increase the allowance because of the occurrence of events previously unexpected. Any increase in our credit allowance would result in a charge to earnings.

Table of Contents*The need to account for assets at market prices may adversely affect our results of operations*

We report certain assets, including securities, at fair value. Generally, for assets that are reported at fair value, we use quoted market prices or valuation models that utilize market data inputs and assumptions to estimate that value. Because generally accepted accounting principles in the U.S. require fair value measurements to reflect appropriate adjustments for risks related to liquidity and the use of unobservable assumptions, we may recognize unrealized losses even if we believe that the asset in question presents minimal credit risk. During periods of adverse conditions in the capital markets, we may be required to recognize other-than-temporary impairments with respect to securities in our investment portfolio and such conditions could also result in mark-to-market losses in our trading portfolios at MUSA. Alternatively, decreases in interest rates could result in an acceleration of loan prepayments that could adversely affect our profitability.

Fluctuations in interest rates on loans could adversely affect our business

Significant increases in market interest rates on loans or other fixed income investments, or the perception that an increase may occur, could adversely affect our current loan and investment portfolios and ability to originate new loans and our ability to grow. Any such increases in interest rates could also diminish the flow of corporate debt offerings in the securities markets generally and this could adversely impact the investment banking business of MUSA which is dependent on the sales of debt securities issued by its customers. Conversely, decreases in interest rates could result in an acceleration of loan prepayments. An increase in market interest rates could also adversely affect the ability of our floating-rate borrowers to meet their higher payment obligations. If this occurred, it could cause an increase in nonperforming assets and charge-offs, which could adversely affect our business.

Fluctuations in interest rates on deposits or other funding sources could adversely affect our net interest margin

Changes in market interest rates on deposits or other funding sources, including changes in the relationship between short-term and long-term market interest rates or between different interest rate indices, can impact, and has in past years impacted, our net interest margin (that is, the difference between the interest rates we charge on interest earning assets, such as loans, and the interest rates we pay on interest-bearing liabilities, such as deposits or other borrowings). This impact could result in a decrease in our interest income relative to interest expense. Increases in interest rates may also adversely impact the value of our investment securities portfolio and the trading portfolio of MUSA and could also adversely impact loan performance by making it more difficult for borrowers with adjustable rate loans to service their debts. For several years after the 2008 recession, the Federal Reserve's highly accommodative monetary policies (including a very low federal funds rate and substantial purchases of long-term U.S. Treasury and agency securities) placed downward pressure on the net interest margins of U.S. banks, including MUB. The Federal Reserve has continued to gradually raise interest rates from late 2016 through 2018 and gradually reduce its historically high \$4.5 trillion balance sheet. The impact of these measures on the U.S. economy and financial markets cannot be predicted with certainty at this time. For additional information, see "The effects of changes or increases in, or supervisory enforcement of, banking, securities, competition or other laws and regulations or governmental fiscal, monetary, or tax policies could adversely affect us or make strategic planning more difficult" above in this Risk Factors section. For additional information, see Part I, Item 1. "Business - Supervision and Regulation - Principal Federal Banking Regulatory Agencies" in this Form 10-K.

Our deposit customers may pursue alternatives to bank deposits or seek higher yielding deposits, which may increase our funding costs and adversely affect our liquidity position

Checking and savings account balances and other forms of deposits can decrease when our deposit customers perceive alternative investments, such as the stock market, other non-depository investments or higher yielding deposits, as providing superior expected returns. Technology and other changes have made it more convenient for bank customers to transfer funds into alternative investments or other deposit accounts, including products offered by other financial institutions or non-bank service providers. Future increases in short-term interest rates could increase such transfers of deposits to higher yielding deposits or other investments either with us or with other providers. In addition, our level of deposits may be affected by a lack of consumer confidence in financial institutions, which has caused fewer depositors to be willing to maintain deposits that are not fully insured by the FDIC. Depositors may withdraw certain deposits from MUB and place them in other institutions or invest uninsured funds in investments perceived as being more secure, such as securities issued

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by the U.S. Treasury. These consumer preferences may force us to pay higher interest rates or reduce fees to retain certain deposits and may constrain liquidity as we seek to meet funding needs caused by reduced deposit levels.

As interest rates rise from the historically low levels of recent years, our deposits may not be as stable or as interest rate insensitive as similar deposits may have been in the past and, if the recovery of the U.S. economy continues, some existing or prospective deposit customers of banks generally, including MUB, may be inclined to pursue other investment alternatives.

Efforts and initiatives we undertake to retain and increase deposits, including deposit pricing, can increase our costs. When bank customers move money out of bank deposits in favor of alternative investments or into higher yielding deposits, we can lose a relatively inexpensive source of funds, increasing our funding cost. As our assets grow, we may face increasing pressure to seek new deposits through expanded channels from new customers at unfavorable pricing, further increasing our costs.

Substantial competition could adversely affect us

Banking is a highly competitive business. We compete actively for loan, deposit, and other financial services business in the West Coast states as well as nationally and internationally. Our competitors include a large number of state and national banks, thrift institutions, credit unions, finance companies, mortgage banks and major foreign-affiliated or foreign banks, as well as many nonbank financial and nonfinancial firms that offer services similar to those offered by us, including many large securities firms and financial services subsidiaries of commercial and manufacturing companies. Some of our competitors are insurance companies or community or regional banks that have strong local market positions. While we are part of MUFG, one of the largest global financial institutions, MUAH, MUB and MUSA are separate entities from their parent and other affiliates, and our competition includes a number of large financial institutions and securities firms operating in our U.S. markets that have substantial capital, technology and marketing resources, which may be well in excess of ours. Competition in our industry may further intensify as a result of the recent and increasing level of consolidation of financial services companies, particularly in our principal markets resulting from various economic and market conditions. Larger financial institutions may have greater access to capital at a lower cost than ours, which may adversely affect our ability to compete effectively. In addition, some of our current commercial banking customers may seek alternative banking sources if they develop credit needs larger than we may be able to accommodate. Many of our non-bank competitors are not subject to the same extensive regulations that govern our activities and may have greater flexibility in competing for business. Additionally, technology has lowered barriers to entry and made it possible for non-banks to offer products and services traditionally provided by banks, such as automatic transfer and payment systems. We also experience competition, especially for deposits, from internet-based banking institutions and other financial companies, which do not always have a physical presence in our market footprint and have grown rapidly in recent years. Competition in our principal markets may further intensify as a result of provisions of the Dodd-Frank Act which permit the establishment of new branches in states other than their home state by national banks, state banks and foreign banks to the same extent as banks located in the other states.

There are an increasing number of non-bank competitors providing financial services

Technology and other changes increasingly allow parties to complete financial transactions electronically, and in many cases, without banks. For example, consumers can pay bills and transfer funds over the internet and by telephone without banks. In addition, so-called "marketplace lenders" have been expanding their market share of consumer, mortgage and small business loans. Many non-bank financial service providers have lower overhead costs and are subject to fewer regulatory constraints and burdens. If consumers and small businesses do not use banks for their borrowings or to complete their financial transactions, we could potentially lose interest and fee income, deposits and income generated from those deposits and other financial transactions.

Changes in accounting standards could materially impact our financial statements

From time to time, the FASB and the SEC change the financial accounting and reporting standards that govern the preparation of our financial statements or new interpretations of existing standards emerge as standard industry practice. These changes can be difficult to predict and can materially impact how we record and report our financial condition and results of operations. In some cases, we could be required to apply a new or revised standard retrospectively, resulting in our restating prior period financial statements.

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The continuing war on terrorism, overseas military conflicts, unrest and political developments in other countries and the U.S. could adversely affect U.S. and global economic conditions

Acts or threats of terrorism and actions taken by the U.S. or other governments as a result of such acts or threats and other international hostilities, as well as political unrest in various regions, including the Middle East, may result in a disruption of U.S. and global economic and financial conditions and increases in energy costs and could adversely affect business, economic and financial conditions in the U.S. and globally and in our principal markets. In addition, continuing global tensions may result in new and enhanced U.S. economic sanctions against other governments or entities which may increase our compliance costs under the regulations of OFAC and other federal or state agencies. Although we have not experienced an adverse impact on our business from the British vote to exit the European Union (known as "Brexit"), potential changes in the European Union may have negative consequences to the global and U.S. economies and to our customers.

The Far East, including the Korean peninsula, China and Japan, continues to be subject to political tensions and potential volatility. In the event these conditions were to worsen, there could be material adverse economic consequences for the region, including for Japan, where our parents, MUFG and MUFG Bank, Ltd., have a substantial portion of their assets and business. If MUFG Bank, Ltd.'s business were to sustain seriously adverse conditions from such circumstances, this could result in an adverse impact on the ability of MUFG and MUFG Bank, Ltd. to support MUAH's business in the U.S.

Company Factors

Adverse economic factors affecting certain industries we serve could adversely affect our business

We provide financing to businesses in a number of industries that may be particularly vulnerable to industry-specific economic factors that can adversely impact the performance of our commercial real estate and commercial and industrial credit portfolios. The commercial real estate industry in the U.S., and in California in particular, was adversely impacted by the post-2008 recessionary environment and lack of liquidity in the financial markets. The home building and mortgage industries in California also were especially adversely impacted by the deterioration in residential real estate markets. Our commercial and industrial credit portfolio, and the communications and media industry, the retail industry, and the energy industry in particular, were also adversely impacted by recessionary market conditions and other emerging developments that are disruptive to their customary business models. Volatility in fuel prices and energy costs could adversely affect businesses in several of these industries, while a prolonged slump in oil, natural gas and coal prices could have adverse consequences for some of our borrowers in the energy sector. Poor economic conditions and financial access for commercial real estate developers and homebuilders could adversely affect property values, resulting in higher nonperforming assets and charge-offs in this sector. MUSA provides financing through repurchase transactions to mortgage real estate investment trusts (REITs) collateralized by U.S. agency-backed mortgages held by such trusts. MUSA also has established a trading business in U.S. agency mortgage-backed securities. A down-turn in the real estate sector in the U.S. could adversely impact the creditworthiness of these mortgage REITs, and could adversely impact MUSA's business and results of operation. Conditions remain uncertain in various industries and could produce elevated levels of charge-offs.

Starting in 2018, federal tax legislation imposes various new limits on the ability of taxpayers to deduct on their federal income tax returns the interest they pay on residential mortgage loans, as well as their state and local property taxes. These changes could have negative consequences for residential market values which could, in turn, have adverse impacts on MUB's existing residential mortgage loan portfolio and on the volume of newly-originated residential mortgage loans in the future.

A significant portion of our loan portfolio is related to residential real estate, especially in California. Increases in residential mortgage loan interest rates could have an adverse effect on our operations by depressing new mortgage loan originations, and could negatively impact our title and escrow deposit levels. California markets have experienced a strong recovery in home prices since the post-2008 housing market crisis; however, home price growth has begun to moderate and some fundamentals of the housing market have remained soft through the recovery. A renewed downturn could have an adverse effect on our operations and the quality of our real estate loan portfolio. These factors could adversely impact the quality of our residential construction and residential mortgage portfolios in various ways, including by decreasing the value of the collateral for our mortgage loans. These factors could also negatively affect the economy in general and thereby our overall loan portfolio.

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Changes to the operating framework or functioning of the market in mortgage securities sponsored by the GSE's could also have an adverse impact on our exposure to mortgage-backed assets in both our banking and securities businesses.

Industry-specific risks are beyond our control and could adversely affect our loan portfolio, potentially resulting in an increase in nonperforming loans or charge-offs and a slowing of growth or reduction in our loan portfolio.

Adverse California economic conditions could adversely affect our business

At times in past years, economic conditions in California have been subject to various challenges, including significant deterioration in the residential real estate sector and the California state government's budgetary and fiscal difficulties. While California home prices and the California economy in general have experienced a recovery in recent years, there can be no assurance that the recovery will continue. Recent growth in home prices in some California markets may be unsustainable relative to market fundamentals and home price declines may occur.

In addition, the State of California has experienced budget shortfalls or deficits that have led to protracted negotiations between the Governor and the State Legislature over how to address the budget gap. The California electorate approved in the November 2012 general elections certain increases in the rate of income taxation in California and California's budgetary situation has improved considerably (with a budget surplus being forecast for the coming year by the nonpartisan legislative analyst). However, there can be no assurance that the state's fiscal and budgetary challenges will not recur. Also, municipalities and other governmental units within California have experienced budgetary difficulties and several California municipalities have filed for protection under the Bankruptcy Code. As a result, concerns also have arisen regarding the outlook for the governmental obligations of California municipalities and other governmental units.

A substantial majority of our assets, deposits and interest and fee income is generated in California. As a result, poor economic conditions in California may cause us to incur losses associated with higher default rates and decreased collateral values in our loan portfolio. If the budgetary and fiscal difficulties of the California state government and California municipalities and other governmental units were to recur or economic conditions in California decline, we expect that our level of problem assets could increase and our prospects for growth could be impaired. For approximately the past six years, California experienced various episodes of severe drought conditions. While rainfall levels have improved, there can be no assurance that the drought will not return with consequent difficulties for the California economy, particularly in the agricultural sector. The long-run impact of this and other measures in response to the drought on the California economy cannot be predicted.

Wildfires occurred in a number of California counties where the Bank has branches and does business during 2017 and 2018. The fires resulted in numerous fatalities and injuries and substantial property damage to homes, businesses and infrastructure in several communities. California and other Western states where the Bank does business have been the subject of other major wildfires or natural disasters, including mudslides, flooding and seismic events. It can be expected that these events will continue to occur from time to time in the areas served by the Bank, and these natural disasters may adversely affect the Bank's business and that of its customers.

Our stockholder votes are controlled by MUFG Bank, Ltd. and Mitsubishi UFJ Financial Group, Inc.

MUFG Bank, Ltd., a wholly-owned subsidiary of MUFG, and MUFG own all of the outstanding shares of our common stock. As a result, MUFG Bank, Ltd. and MUFG can elect all of our directors and can control the vote on all matters, including: approval of mergers or other business combinations; a sale of all or substantially all of our assets; issuance of any additional common stock or other equity or debt securities; incurring debt other than in the ordinary course of business; the selection and tenure of our Chief Executive Officer; payment of dividends with respect to our common stock or other equity securities; and other matters that might be favorable to MUFG Bank, Ltd. or MUFG.

A majority of our directors are independent of MUFG and MUFG Bank, Ltd. and are not officers or employees of MUAH or any of our affiliates, including MUFG or MUFG Bank, Ltd. However, because of MUFG's and MUFG Bank, Ltd.'s control over the election of our directors, they could at any time change the composition of our Board of Directors so that the Board would not have a majority of independent directors.

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MUFG Bank, Ltd.'s and Mitsubishi UFJ Financial Group's credit ratings and financial or regulatory condition could adversely affect our operations

A substantial part of our operations have been historically funded independently of MUFG Bank, Ltd. and MUFG and we believe our business is not necessarily closely related to the business or outlook of MUFG Bank, Ltd. or MUFG. However, the Federal Reserve finalized rules imposing new TLAC requirements on GSIBs with operations in the U.S. such as MUFG, in December 2016. As a result, although we make an effort to diversify our sources of liquidity, we will be required to maintain a minimum of TLAC-eligible debt because of our affiliation with MUFG Bank, Ltd. If MUFG Bank, Ltd. and MUFG's credit ratings, financial condition or business prospects were to decline, this could adversely affect our credit rating or harm our reputation or perceived creditworthiness. For additional information, see Part II, Item 7. "Management's Discussion and Analysis of Financial Condition and Results of Operations - Risk Management - Liquidity Risk Management" in this Form 10-K.

MUFG Bank, Ltd. and MUFG are also subject to regulatory oversight, review and supervisory action (which can include fines or penalties) by Japanese, U.S. and other regulatory authorities. Our business operations and expansion plans could be negatively affected by regulatory concerns or supervisory action any such authority might take against MUFG Bank, Ltd. or MUFG. For example, in connection with its annual Bank Secrecy Act and Anti-Money Laundering (BSA/AML) and Office of Foreign Assets Control (OFAC) examination of MUFG Bank, Ltd.'s U.S. based branches, the OCC recently imposed a public enforcement action upon MUFG Bank Ltd.'s New York, Los Angeles, and Chicago branches. The enforcement action relates to the BSA/AML portion of the examination, is in the form of a consent order and requires MUFG Bank Ltd. and its U.S. branches to implement various remedial measures to address the deficiencies found in the examination, including the adoption of a comprehensive action plan satisfactory to the OCC, implementation of measures to ensure effective compliance management and qualified staffing, the adoption of comprehensive BSA/AML risk assessment policies and procedures and other remedial actions. MUB is not a party to the consent order.

Similarly, in June 2013, MUFG Bank, Ltd. entered into a consent agreement with the NY DFS (its former NY regulator) under which it made a civil monetary payment of \$250 million to resolve issues relating to the clearing of certain U.S. dollar payments that were routed through its New York branch office from 2002 to 2007. In November 2014, MUFG Bank, Ltd. entered into another consent agreement with the NY DFS under which it made a civil monetary payment of \$315 million to resolve issues relating to instructions given to PricewaterhouseCoopers LLP and the disclosures made to the NY DFS in connection with MUFG Bank, Ltd.'s 2007 and 2008 voluntary investigation of MUFG Bank, Ltd.'s U.S. dollar clearing activity associated with countries or parties subject to U.S. economic sanctions. Under the terms of this agreement with the NY DFS, MUFG Bank, Ltd. agreed to take certain additional remedial actions. These remediation efforts are ongoing.

In November, 2017, MUFG Bank, Ltd. applied to the OCC to convert its state-licensed branches and agencies in the U.S. to federal branches and agencies and the OCC approved those conversion applications. As a result, these branches and agencies are now supervised by the OCC and are no longer supervised by state regulatory authorities. As a condition of the OCC's approval of the conversion applications, the OCC required MUFG Bank, Ltd.'s primary New York branch to enter into a consent order with the OCC that supersedes and contains nearly identical substantive requirements as the 2013 and 2014 NY DFS consent agreements. MUFG Bank, Ltd.'s remediation efforts under the OCC consent order are ongoing. The OCC and MUFG Bank, Ltd. have established an ongoing regulatory relationship and the nature of that relationship will continue to evolve over time.

The NY DFS alleges that it continues to have the authority to bring an enforcement action against MUFG Bank, Ltd. based on events that occurred prior to the conversion of the licenses. Those issues are the subject of a litigation filed on November 8, 2017 captioned *The Bank of Tokyo-Mitsubishi UFJ, Ltd. v. Maria Vullo*, 17-cv-08691-SHS, which is currently pending in the United States District Court for the Southern District of New York.

MUFG Bank, Ltd. has received requests and subpoenas for information from government agencies in some jurisdictions, including the United States, Europe and Asia, which are or were conducting investigations into past submissions made by panel members, including MUFG Bank, Ltd., to the bodies that set various interbank offered rates. MUFG Bank, Ltd. is cooperating with these investigations and has completed all internal investigations. MUB is not a member of any of these panels or involved in any such investigations. In addition, MUFG Bank, Ltd. and other panel members have been named as defendants in a number of civil lawsuits, including putative class actions, in the United States relating to similar matters including the trading of financial

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instruments, the prices of which can be affected by interbank offered rates. MUFG Bank, Ltd. has also been named as a defendant in a number of civil lawsuits, including putative class actions, in the United States and Canada alleging foreign exchange market misconduct. While certain of these lawsuits have been settled without any admission of wrongdoing and there have been various procedural and potentially substantive developments in other pending cases, it is currently not possible for us to predict the scope and ultimate outcome of these investigations or lawsuits, including any possible effect on us as an affiliate of MUFG.

Potential conflicts of interest with MUFG Bank, Ltd. could adversely affect us

The views of MUFG Bank, Ltd. and MUFG regarding customer relationships, possible new businesses, strategies, acquisitions, divestitures or other initiatives, including compliance and risk management processes, may differ from ours. This may prevent, delay or hinder us from pursuing individual initiatives or cause us to incur additional costs and subject us to additional oversight. Our securities broker-dealer subsidiary, MUSA, receives a significant portion of its investment banking business from referrals from MUFG Bank, Ltd. and MUFG and their affiliated entities. If such referrals were to diminish, this could have a materially adverse impact on the business of MUSA.

Also, as part of MUFG Bank, Ltd.'s risk management processes, MUFG Bank, Ltd. manages global credit and other types of exposures and concentrations on an aggregate basis, including exposures and concentrations at MUAH or its subsidiaries. Therefore, at certain levels or in certain circumstances, our ability to approve certain credits or other banking transactions and categories of customers is subject to the concurrence of MUFG Bank, Ltd. We may wish to extend credit or furnish other banking services to the same customers as MUFG Bank, Ltd. Our ability to do so may be limited for various reasons, including MUFG Bank, Ltd.'s aggregate exposure and marketing policies.

Since MUB, MUSA, MUAH and MUFG Bank, Ltd. all compete in U.S. banking or investment banking markets, ownership interests in MUFG's common stock held by certain of our directors or officers, or services provided by those individuals as a director or officer or other employee of MUFG Bank, Ltd., could create or appear to create potential conflicts of interest. In addition, a number of the executive officers of MUAH and MUB also serve as executive officers of MUFG Bank, Ltd.'s U.S. branch operations, which could increase or appear to increase the risks of potential conflicts of interests with MUFG and MUFG Bank, Ltd. While the corporate governance policies adopted by MUAH, MUB, MUSA, MUFG and MUFG Bank, Ltd. address such potential conflicts of interest, there can be no assurance that these policies will prevent conflicts of interest which may have an adverse impact on our business.

Restrictions on dividends and other distributions could limit amounts payable to us

As a holding company, a portion of our cash flow may come from dividends our bank and non-bank subsidiaries pay to us. Various statutory provisions restrict the amount of dividends our subsidiaries can pay to us without prior regulatory approval. Our securities broker-dealer subsidiary, MUSA, is also subject to regulatory net capital rules which limit its ability to pay dividends. In addition, if any of our subsidiaries were to liquidate, that subsidiary's creditors will be entitled to receive distributions from the assets of that subsidiary to satisfy their claims against it before we, as a holder of an equity interest in the subsidiary, will be entitled to receive any of the assets of the subsidiary.

Risks associated with potential acquisitions, divestitures, integrations or restructurings may adversely affect us

We have in the past sought, and may in the future seek, to expand our business by acquiring other businesses which we believe will enhance our business. We cannot predict the frequency, size or timing of our acquisitions, as this will depend on the availability of otherwise suitable prospective target opportunities at valuation levels we find attractive and the competition for such opportunities from other parties. There can be no assurance that our acquisitions will have the anticipated positive results, including results related to: the total cost of integration; the retention of key personnel; the time required to complete the integration; the amount of longer-term cost savings; continued growth; or the overall performance of the acquired company or combined entity. We also may encounter difficulties in obtaining required regulatory approvals due to operational limitations, regulatory restrictions on our own activities, or other reasons. Unexpected contingent liabilities can arise from the businesses we acquire. Acquisitions may also lead us to enter geographic and product markets in which we have limited or no direct experience. Further, the asset quality or other financial characteristics of a business

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or assets we may acquire may deteriorate after an acquisition closes, which could result in impairment or other expenses and charges which would reduce our operating results.

Integration of an acquired business can be complex and costly; if we are not able to integrate successfully past or future acquisitions, there is a risk that results of operations could be adversely affected

Effective July 1, 2016, MUAH became the IHC for MUFG Bank, Ltd.'s operations in the U.S. (other than its branches, agencies and other offices) and became subject to enhanced risk management and governance standards. These enhanced prudential standards, as well as the addition of the securities business of MUSA and other businesses to the Company, could pose additional challenges for our risk management and governance oversight functions. Acquisition of the IHC role could increase our risk management challenges in light of the new customer relationships and lines of business, structural and operational changes, and enhanced governance and risk management standards to which we are subject, among other reasons.

In addition, we continue to evaluate the performance of all of our businesses and may sell or restructure one or more of them. Any divestitures or restructurings may result in significant expenses and write-offs, including those related to goodwill and other intangible assets, which could have a material adverse effect on our business, results of operations and financial condition and may involve additional risks, including difficulties in obtaining any required regulatory approvals, the diversion of management's attention from other business concerns, the disruption of our business and the potential loss of key employees.

We may not be successful in addressing these or any other significant risks encountered in connection with any acquisition, divestiture, integration or restructuring we might make.

Privacy restrictions could adversely affect our business

Our business model relies, in part, upon cross-marketing the products and services offered by us and our subsidiaries to our customers. Laws that restrict our ability to share information about customers between our affiliated companies could adversely affect our business, results of operations and financial condition. For additional discussion, see "Supervision and Regulation" in Part I, Item 1. in this Form 10-K.

Our business could suffer if we fail to attract, develop, retain and successfully integrate skilled personnel

Our success depends, in large part, on our ability to attract, develop and retain key personnel, including executives. Any of our current employees, including our senior management, may terminate their employment with us at any time. Competition for qualified personnel in our industry can be intense. We may not be successful in attracting, developing and retaining sufficient qualified personnel. We may also incur increased expenses and be required to divert the attention of other senior executives to recruit replacements for the loss of any key or other personnel.

From time to time, we experience turnover among members of management, often due to retirement or rotation to other assignments within the MUFG group. We must successfully integrate any new management personnel that we bring into the organization in order to achieve our operating objectives as new management becomes familiar with our business.

The challenging operating environment and current operational initiatives may strain our available resources

There are an increasing number of matters in addition to our core operations which require our attention and resources. These matters include implementation of our technology enhancement and replacement projects, adoption of the U.S. Basel III and other enhanced capital and liquidity guidelines, including the reforms to the Basel III agreement on bank capital standards finalized by the BCBS in December 2017 ("Basel IV") but not yet applied by the U.S. federal banking agencies, various strategic initiatives, an uncertain economic environment, a challenging regulatory environment, including the effects of the Dodd-Frank Act and regulations adopted thereunder, and integration of new employees, including key members of management. Our ability to execute our core operations and to implement other important initiatives may be adversely affected if our resources are insufficient or if we are unable to allocate available resources effectively.

Also, our ability to constrain or reduce operating expense levels may be limited by the costs of increasing regulatory requirements and expectations.

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Significant legal or regulatory proceedings could subject us to substantial uninsured liabilities

We are from time to time subject to claims and proceedings related to our present or previous operations including claims by customers, our current or former employees and our contractual counterparties. These claims, which could include supervisory or enforcement actions by bank regulatory and other authorities, or criminal proceedings by prosecutorial authorities, could involve demands for large monetary amounts, including civil money penalties or fines imposed by government authorities, and significant defense costs. To mitigate the cost of some of these claims, we may maintain insurance coverage in amounts and with deductibles that we believe are appropriate for our operations. However, our insurance coverage does not cover any civil money penalties or fines imposed by government authorities and may not cover all other claims that have been or might be brought against us or continue to be available to us at a reasonable cost. As a result, we may be exposed to substantial uninsured liabilities which could adversely affect our business, prospects, results of operations and financial condition. In the past several years, federal and state regulators have announced regulatory enforcement actions against a number of large BHCs and banks arising from deficiencies in processes, procedures and controls involving anti-money laundering measures and compliance with the economic sanctions that affect transactions with designated foreign countries, nationals and others as provided for in the regulations of the OFAC of the U.S. Treasury Department. These actions evidence an intensification of U.S. federal and state governments' expectations for compliance with these regulatory frameworks on the part of banks operating in the U.S., including MUB, and may result in increased compliance costs and increased risks of regulatory sanctions.

During 2017 and 2018, the Trump Administration appointed new leadership in key positions at the Federal Reserve, OCC, FDIC and CFPB. Whether and to what extent these leadership changes will result in new regulatory initiatives and policies, or modifications of existing regulations and policies which may impact our business in the U.S. cannot be predicted at this time.

The changes in the U.S. tax laws, the majority of which were effective January 1, 2018, will impact our business and results of operations in a variety of ways, some of which are expected to be positive and others which may be negative

On December 22, 2017, President Trump signed into law the Tax Cuts and Jobs Act enacting sweeping changes to the U.S. tax laws effective January 1, 2018. These changes can be expected to impact our business and results of operations in a variety of ways, some of which are expected to be positive and others which may be negative. Among changes which are expected to affect MUAH and its subsidiaries are the following.

- A reduction in the federal corporate tax rate to 21 percent from 35 percent, effective January 1, 2018. In general, we expect that this will result in a net reduction in annual income tax expense; however, our ability to currently utilize tax credits may be constrained by the lower tax rate. For example, we have invested in low-income housing and alternative energy investments that generate tax benefits and credits. The reduction of income tax expense reduces our ability to currently realize the tax credits generated by these investments.
- A new incremental base erosion and anti-abuse tax ("BEAT") which is intended to tax certain outbound deductible payments made to related foreign affiliates. To the extent that the taxpayer's deductible payments to foreign affiliates exceed a specified threshold, the taxpayer will be subject to the BEAT minimum tax calculation. This minimum tax could apply to payments we make to our parent or other affiliates both within and outside of the U.S. We are presently analyzing the possible impact of this new tax on payments we may make to our affiliates.

We are continuing to monitor the full impact of these changes in the tax law on our tax positions which may not be fully known until interpretive guidance is issued by the IRS.

For additional information regarding the possible effects of the new federal tax laws on our business, see "The effects of changes or increases in, or supervisory enforcement of, banking, securities, competition, or other laws and regulations or governmental fiscal, monetary or tax policies could adversely affect us or make strategic planning more difficult" and "Adverse economic factors affecting certain industries we serve could adversely affect our business" above in this Risk Factors section.

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Our effective tax rates and our future results can also be affected by our participation for state income tax purposes as a member of MUFG's unitary group in the U.S. and by other factors

Under a tax election we have made, we are required to file our California franchise tax returns as a member of a unitary group that includes MUFG's U.S. operations, including its U.S. branches and other affiliates. Increases or decreases in the taxable profits of MUFG's U.S. operations could increase or decrease our effective tax rate for California state income tax purposes. We review MUFG's financial information on a quarterly basis to determine the rate at which to recognize our California income taxes. However, all of the information relevant to determining the effective California tax rate may not be available until after the end of the period to which the tax relates, primarily due to MUFG's March 31 fiscal year-end. Our California effective tax rate can change during the calendar year or between calendar years as additional information becomes available. We could be subject to penalties and interest if we understate our tax obligations. Our effective tax rates for both federal and state income tax purposes also could be affected by valuation changes in our deferred tax assets and liabilities, changes in tax laws or their interpretations and by the outcomes of examinations of our income tax returns by tax authorities.

Our credit ratings are important in order to maintain liquidity

Major credit rating agencies regularly evaluate and provide credit ratings of the securities of MUAH and the securities and deposits of MUB and also provide entity ratings for MUAH, MUB and MUSA. Their ratings of our long-term and short-term debt obligations and of our deposits and our entity ratings are based on a number of factors including our financial strength, ability to generate earnings, and other factors, some of which are not entirely within our control, such as conditions affecting the financial services industry and the economy. In light of the continually evolving conditions in the financial services industry, the financial markets and the economy, changes to credit rating methodologies and the ongoing assessment of our current and expected satisfaction of various rating criteria, no assurance can be given that we will maintain our current ratings. If our long-term or short-term credit ratings suffer substantial downgrades, particularly if lowered below investment grade, such downgrades could adversely affect access to liquidity and could significantly increase our cost of funds (especially our wholesale funding), trigger additional collateral or funding requirements and decrease the number of commercial depositors, investors and counterparties willing or permitted to lend to us, thereby curtailing our business operations and reducing our ability to generate income. For additional information, see "Management's Discussion and Analysis of Financial Condition and Results of Operations - Risk Management - Liquidity Risk Management" in Part II, Item 7. of this Form 10-K.

Certain of our derivative instruments contain provisions that require us to maintain a specified credit rating. If our credit rating were to fall below the specified rating, the counterparties to these derivative instruments could terminate the contract and demand immediate payment or demand immediate and ongoing full overnight collateralization for those derivative instruments in net liability positions.

Adverse changes in the credit ratings, operations or prospects of our parent companies, MUFG Bank, Ltd. and MUFG, could also adversely impact our credit ratings. For additional information, refer to the discussion above under the caption "MUFG Bank Ltd.'s and Mitsubishi UFJ Financial Group's credit ratings and financial or regulatory condition could adversely affect our operations."

We rely on third parties for important products and services

Third-party vendors provide key components of our business infrastructure such as internet connections, network access and mutual fund distribution and, although we monitor their performance, we do not control their actions. Among other services provided by these vendors, third-party vendors have played and will continue to play a key role in the implementation of our technology enhancement and replacement projects. The federal banking agencies have issued enhanced guidance and are examining with increasing scrutiny financial institutions' diligence conducted on and oversight of their third-party vendors. Any problems caused by these third parties, including those as a result of their not providing us their services for any reason or their performing their services poorly or failing to meet legal and regulatory requirements, could adversely affect our ability to deliver products and services to our customers, implement our technology enhancement and replacement projects or otherwise conduct our business and also could result in disputes with such vendors over their performance of their services to us, as well as adverse regulatory consequences for us. Replacing these third-party vendors on economically feasible terms may not always be possible or within our control and could also entail significant delay and expense.

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We are subject to a wide array of operational risks, including, but not limited to, cyber-security risks

We are subject to many types of operational risks throughout our organization. Operational risk is the risk to our financial position and resilience arising from inadequate or failed internal processes or systems, human errors or misconduct, or adverse external events, that do not fall into the market risk or credit risk categories described in "Management's Discussion and Analysis of Financial Condition and Results of Operations - Risk Management" in Part II, Item 7. of this Form 10-K. Operational risk includes execution risk related to operational initiatives, such as implementation of our technology enhancement and replacement projects, including a project to enhance our data collection and analysis capabilities for regulatory and financial reporting purposes; increased reliance on internally developed models for risk and finance management and compliance, including models associated with regulatory capital requirements; risks from cyber-security breaches or attacks; the risk of fraud or theft by employees, customers or outsiders; unauthorized transactions by employees or operational errors, including clerical or record-keeping errors or those resulting from faulty or disabled computer or telecommunications systems; and operational risks related to use of third party service providers. A discussion of risks associated with regulatory compliance appears above under the caption "The effects of changes or increases in, or supervisory enforcement of, banking, securities, competition or other laws and regulations or governmental fiscal, monetary, or tax policies could adversely affect us or make strategic planning more difficult."

Our operations rely on the secure processing, storage, transmission and reporting of personal, confidential and other sensitive information or data in our computer systems, networks and business applications. Although we take protective measures, our computer systems may be vulnerable to breaches, unauthorized access, misuse, computer viruses or other malicious code and other events that could have significant negative consequences to us. Such events could result in interruptions or malfunctions in our operations or our customers' operations; interception, misuse or mishandling of personal, confidential or proprietary information and data; or processing of unauthorized transactions or loss of funds. These events could result in litigation and financial losses that are either not insured against or not fully covered by our insurance and regulatory consequences or reputational harm, any of which could harm our competitive position, operating results and financial condition. These types of incidents can remain undetected for extended periods of time, thereby increasing the associated risks. We may also be required to expend significant resources to modify our protective measures or to investigate and remediate vulnerabilities or exposures arising from cyber-security risks. We may also be required to expend significant resources to cover costs imposed on us as a result of breaches of bank card information occurring at retail merchants and other businesses.

We depend on the continued efficacy of our data management and governance policies, technical systems, operational infrastructure, relationships with third parties and our employees in our day-to-day and ongoing operations. Our dependence upon automated systems to record and process transactions may further increase the risk that technical system flaws or employee tampering or manipulation of those systems will result in losses that are difficult to detect or data which are not reliable. We are also exposed to the risk that, notwithstanding our data management and governance policies, data in our system may become corrupted, inaccurate or out-of-date, any of which can impair the integrity of our decision-making processes. With regard to the physical infrastructure that supports our operations, we have taken measures to implement backup systems and other safeguards, but our ability to conduct business may be adversely affected by any disruption to that infrastructure, including disruptions from natural disasters or other causes. Failures in our internal control or operational systems, security breaches or service interruptions, or those of our third-party service providers could impair our ability to operate our business and result in potential liability to customers, reputational damage and regulatory intervention, any of which could harm our operating results and financial condition. Although we carefully review the risk management standards and processes of our important third party service providers, there can be no assurance that the risk management efforts of our providers will be successful in preventing all cyber incidents.

MUB, and reportedly other financial institutions, have been the target of various denial-of-service or other cyber-attacks (including attempts to inject malicious code and viruses into computer systems) as part of what appears to be a coordinated effort to disrupt the operations of financial institutions and potentially test their cyber-security in advance of future and more advanced cyber-attacks. The potential for denial-of-service and other attacks require substantial resources to defend and may affect customer satisfaction and behavior. To date we have not experienced any material losses relating to cyber-attacks or other information security breaches, but there can be no assurance that we will not suffer such losses or information security breaches in the future.

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While we have a variety of cyber-security measures in place, the consequences to our business of such attacks cannot be predicted with any certainty.

In addition, there have been increasing efforts on the part of third parties to breach data security at financial institutions as well as at other types of companies, such as large retailers, or with respect to financial transactions, including through the use of social engineering schemes such as "phishing." The ability of our customers to bank remotely, including online and through mobile devices, requires secure transmissions of confidential information and increases the risk of data security breaches which would expose us to financial claims by customers or others and which could adversely affect our reputation. Even if cyber-attacks and similar tactics are not directed specifically at MUB or our third-party service providers, such attacks on other large financial institutions could disrupt the overall functioning of the financial system and undermine consumer confidence in banks generally, to the detriment of other financial institutions, including MUB. For additional information regarding our obligations to provide for the security of our customers' data, see "Supervision and Regulation - Other Federal Laws and Regulations Affecting Banks - Customer Information Security" in this Form 10-K.

Under the applicable Federal regulatory guidance, financial institutions should design multiple layers of security controls to establish lines of defense and to ensure that their risk management processes also address the risk posed by compromised customer credentials, including security measures to reliably authenticate the identity of customers accessing internet-based services of the financial institution. In addition, the financial institution's management is expected to maintain sufficient business continuity planning processes to ensure the rapid recovery, resumption and maintenance of the institution's operations after a cyber-attack involving destructive or other malware. A financial institution is also expected to develop appropriate processes to enable recovery of data and business operations and address rebuilding network capabilities and restoring data if the institution or its critical service providers fall victim to this type of cyber-attack. A financial institution which fails to observe this regulatory guidance could be subject to various regulatory sanctions, including financial penalties.

The Federal bank regulators have also issued a cyber-security assessment tool, the output of which can assist a financial institution's senior management and board of directors in assessing the institution's cyber-security risk and preparedness. The first part of the assessment tool generates an inherent risk profile, which assists management in determining an institution's level of cyber-security risk. The second part of the assessment tool evaluates cyber-security maturity, which is designed to help management assess whether their controls provide the desired level of preparedness. The Federal bank regulators utilize the assessment tool as part of their examination process when evaluating financial institutions' cyber-security preparedness in information technology and safety and soundness examinations and inspections. Failure to effectively utilize this tool could result in regulatory criticism. Significant resources may be required to adequately implement the tool and address any assessment concerns regarding preparedness. Management performs an annual cyber-security assessment using this tool to facilitate the identification and remediation of any concerns regarding our cyber-security preparedness.

We may also be subject to disruptions of our operating systems arising from other events that are wholly or partially beyond our control, such as outages related to electrical, internet or telecommunications or other key supporting third party service providers, natural disasters (such as major seismic events), terrorist attacks or unexpected difficulties with the implementation of our technology enhancement and replacement projects, which may give rise to disruption of service to customers and to financial loss or liability in ways which cannot be predicted with any certainty. Our business recovery plan may not work as intended or may not prevent significant interruptions of our operations.

Negative public opinion could damage our reputation and adversely impact our business and revenues

As a financial institution, our business and revenues are subject to risks associated with negative public opinion. The reputation of the financial services industry in general has been damaged as a result of the financial crisis and other matters affecting the financial services industry, including mortgage foreclosure issues. Negative public opinion about us could result from our actual or alleged conduct in any number of activities, including our lending practices, the failure of any product or service we provide to meet our customers' expectations or applicable regulatory requirements, governmental enforcement actions, corporate governance deficiencies, business acquisitions, use of social media, cyber-security breaches or from actions taken by regulators and community organizations in response to those activities. We fund our operations, in substantial part, independently of MUFG Bank, Ltd. and MUFG and believe our business is not necessarily closely related to the

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global business or outlook of MUFG Bank, Ltd. or MUFG. However, negative public opinion could also result from regulatory concerns or supervisory or other governmental actions in the U.S. or Japan with respect to MUB, MUSA, MUFG Bank, Ltd. or MUFG. Negative public opinion can adversely affect our ability to keep, attract and retain lending, deposit and other customers and employees and can expose us to claims and litigation and regulatory actions and increased liquidity risk. Actual or alleged misconduct by one of our businesses can result in negative public opinion about our other businesses.

Our framework for managing risks may not be effective in mitigating risk and loss to the Company

Our risk management framework is made up of various processes and strategies to manage our risk exposure. Types of risk to which we are subject include liquidity risk, credit risk, market and investment risk, interest rate risk, operational risk (including, but not limited to, information and model risk), legal risk, compliance risk, reputation risk, fiduciary risk, counterparty risk and strategic risk (including risks to our financial position and resilience arising from adverse business decisions or poorly implemented decisions or lack of responsiveness to industry changes and the operating environment), among others. Our framework to manage risk, including the framework's underlying assumptions, such as our modeling methodologies, may not be effective under all conditions and circumstances. In the banking industry's complex and rapidly evolving operating environment, certain risks, especially operational risk and strategic risk, can present significant challenges to our risk management framework. If our risk management framework proves ineffective, we could suffer unexpected losses and our business, financial condition, results of operations or prospects could be materially adversely affected and there also could be consequent adverse regulatory implications in any such event.

Our disclosure controls and procedures may not prevent or detect all errors or acts of fraud

All of our issued and outstanding shares of common stock are owned by MUFG and MUFG Bank, Ltd. As such, we are not required to file periodic reports with the SEC pursuant to the Exchange Act; however, we have elected to voluntarily register our common stock under the Exchange Act and, for so long as we maintain that registration in effect, we will be required to continue to file such periodic reports with the SEC in accordance with a reduced disclosure format permitted for certain wholly-owned subsidiaries.

Our disclosure controls and procedures are designed to provide reasonable assurance that information required to be disclosed by us in reports we file or submit under the Exchange Act is accumulated and communicated to management and recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms. Any disclosure controls and procedures or internal controls and procedures, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met.

These inherent limitations include the realities that judgments in decision-making can be faulty and that breakdowns can occur because of a simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people or by an unauthorized override of the controls. Accordingly, because of the inherent limitations in our control system, misstatements due to error or fraud may occur and not be detected.

We may take actions to maintain client satisfaction that may result in losses or adversely affect our earnings

We may find it necessary to take actions or incur expenses in order to maintain client satisfaction even though we are not legally required to do so. The risk that we will need to take such actions and incur the resulting losses or reductions in earnings is greater in periods when financial markets and the broader economy are performing poorly or are particularly volatile. As a result, such actions may adversely affect our business, financial condition, results of operations or prospects, perhaps materially.

We may be adversely affected by the poor condition of other financial institutions

As a result of trading, clearing or other relationships, we have exposure to many different counterparties and routinely execute transactions with counterparties in the financial services industry, including commercial banks, brokers, dealers and investment banks. Many of these transactions expose us to credit risk in the event of a default by such a counterparty. In addition, our credit risk may be exacerbated when the collateral we hold cannot be readily liquidated or can only be liquidated at prices not sufficient to recover the full amount of the

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credit or derivative exposure owed to us. Any such losses could have a material adverse effect on our business, results of operations, financial condition or prospects.

Our financial results depend on management's selection of accounting methods and certain assumptions and estimates

Our accounting policies and methods are fundamental to how we record and report our financial condition and results of operations. Our management must exercise judgment in selecting and applying many of these accounting policies and methods so they comply with GAAP and reflect management's judgment of the most appropriate manner to report our financial condition and results of operations. In some cases, management must select the accounting policy or method to apply from two or more alternatives, any of which may be reasonable under the circumstances, yet may result in our reporting materially different results than would have been reported under a different alternative.

Certain accounting policies are critical to presenting our financial condition and results. They require management to make difficult, subjective or complex judgments about matters that are uncertain. Materially different amounts could be reported under different conditions or using different assumptions or estimates. These critical accounting policies include allowance for credit losses, valuation of financial instruments, transfer pricing, pension obligations, goodwill impairment analysis and income taxes. Because of the uncertainty of estimates involved in deciding these matters, we may be required to do one or more of the following: significantly increase or decrease the allowance for credit losses; sustain loan losses that are significantly different than the reserve provided; recognize significant impairment on goodwill; or significantly increase or decrease our accrued tax liability. Any one or more of these actions could adversely affect our business, results of operations and financial condition.

The California Consumer Privacy Act of 2018 or other such laws could result in increased operating expenses as well as additional exposure to the risk of litigation by or on behalf of customers

In June of 2018, the Governor of California signed into law The California Consumer Privacy Act of 2018 (the "CCPA"). This new law becomes effective on January 1, 2020 and provides consumers with expansive rights and control over their personal information which is obtained by or shared with "covered businesses" (which includes MUB and most other banking institutions subject to California law). The CCPA will give consumers the right to request disclosure of information collected about them and whether that information has been sold or shared with others, the right to request deletion of personal information subject to certain exceptions, the right to opt out of the sale of the consumer's personal information and the right not to be discriminated against because of choices regarding the consumer's personal information.

The CCPA provides for certain monetary penalties and for its enforcement by the California Attorney General or consumers whose rights under the law are not observed. It also provides for damages as well as injunctive or declaratory relief if there has been unauthorized access, theft or disclosure of personal information due to failure to implement reasonable security procedures. The CCPA contains several exemptions, including a provision to the effect that the CCPA does not apply where the information is collected, processed, sold or disclosed pursuant to the GLBA if the GLBA is in conflict with the CCPA. The impact of the CCPA on the business of MUB is yet to be determined, but it could result in increased operating expenses as well as additional exposure to the risk of litigation by or on behalf of consumers. It is possible that other states where we have customers could enact similar laws. For additional information, see "Supervision and Regulation – Other Federal Laws and Regulations Affecting Banks – Privacy" in Part I, Item 1. "Business" in this Form 10-K.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

MUAH's headquarters is located at 1251 Avenue of the Americas, in New York, New York. The Company leases approximately 362,000 square feet of building space at this location. The Company also owns or leases significant administrative or operational facilities in the San Francisco, Los Angeles, New York and Phoenix areas and owns or leases 352 branches, primarily located in California.

Table of Contents**ITEM 3. LEGAL PROCEEDINGS**

We are subject to various pending and threatened legal actions that arise in the normal course of business. We maintain liabilities for losses from legal actions that are recorded when they are determined to be both probable in their occurrence and can be reasonably estimated. In addition, we believe the disposition of all claims currently pending, including potential losses from claims that may exceed the liabilities recorded, and claims for loss contingencies that are considered reasonably possible to occur, will not have a material effect, either individually or in the aggregate, on our consolidated financial condition, operating results or liquidity.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

PART II**ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES**

On November 4, 2008, the Company became a wholly-owned subsidiary of MUFG Bank, Ltd. and the Company's common stock was delisted from the New York Stock Exchange. All of the Company's issued and outstanding shares of common stock are now held by MUFG Bank, Ltd. and MUFG, and there is presently no established public trading market for the Company's common stock.

As described in Item 8.01 of Form 8-K filed December 14, 2018, on December 12, 2018, MUAH repurchased for cash an aggregate of 15,654,589 shares of its outstanding common stock from MUFG and MUFG Bank, Ltd. (765,245 shares from MUFG and 14,889,344 shares from MUFG Bank, Ltd.) at a per share price of \$159.42, for an aggregate purchase price of approximately \$2.5 billion. This share repurchase was partially funded by a \$1.7 billion dividend from MUFG Union Bank, N.A., MUAH's principal banking subsidiary, and paid to MUAH on December 12, 2018.

ITEM 6. SELECTED FINANCIAL DATA

The information called for by this item has been omitted pursuant to General Instruction I(2) of Form 10-K.

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Item 7. to this Form 10-K begins on page 43 of this report.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Item 7A. to this Form 10-K begins on page 67 of this report.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

Item 8. to this Form 10-K begins on page 76 of this report.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

ITEM 9A. CONTROLS AND PROCEDURES

Disclosure Controls and Procedures. As of the end of the period covered by this report, an evaluation was carried out under the supervision and with the participation of the Company's management, including its Chief Executive Officer and its Chief Financial Officer, of the effectiveness of its disclosure controls and procedures (as defined in Rule 13a-15(e) under the Securities Exchange Act of 1934). Based on that evaluation, the Chief

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Executive Officer and the Chief Financial Officer concluded that these disclosure controls and procedures were effective.

Internal Control Over Financial Reporting. Management's Report on Internal Control Over Financial Reporting is presented on page 156. The Report of Independent Registered Public Accounting Firm is presented on page 158. During the quarter ended December 31, 2018, there were no changes in our internal controls over financial reporting that materially affected, or are reasonably likely to materially affect, our internal controls over financial reporting.

ITEM 9B. OTHER INFORMATION

None.

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Certain information called for by this item has been omitted pursuant to General Instruction I(2) of Form 10-K.

Code of Ethics

We have adopted a Code of Ethics applicable to senior financial officers, including our Chief Executive Officer, Chief Financial Officer and Controller & Chief Accounting Officer. A copy of this Code of Ethics is posted on our website. To the extent required by SEC rules, we intend to disclose promptly any amendment to, or waiver from any provision of, the Code of Ethics applicable to senior financial officers on our website. Our website address is www.unionbank.com.

ITEM 11. EXECUTIVE COMPENSATION

The information called for by this item has been omitted pursuant to General Instruction I(2) of Form 10-K.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The information called for by this item has been omitted pursuant to General Instruction I(2) of Form 10-K.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The information called for by this item has been omitted pursuant to General Instruction I(2) of Form 10-K.

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ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

Audit Fees

The following is a description of the fees billed to MUAH by Deloitte & Touche LLP for 2018 and 2017. All fees were pre-approved by our Audit & Finance Committee.

(Dollars in thousands)	2018	2017
Audit Fees ⁽¹⁾	\$ 8,365	\$ 8,162
Audit-Related Fees ⁽²⁾	2,561	2,391
Tax Fees ⁽³⁾	698	1,187
Total	<u>\$ 11,624</u>	<u>\$ 11,740</u>

- (1) Audit fees relate to services rendered in connection with the annual audit of MUAH's consolidated financial statements, quarterly reviews of financial statements included in MUAH's quarterly reports on Form 10-Q, fees for consultation on new accounting and reporting requirements and SEC registration statement services, and the attestation assessment related to the effectiveness of MUAH's financial reporting controls, as required by Section 404 of the Sarbanes-Oxley Act.
- (2) Audit-related fees consist of assurance and other such services that are reasonably related to the performance of the audit or review of MUAH's financial statements and are not included in Audit Fees. Amounts include fees for services provided in connection with service auditors reports and audits of employee benefit plans and SSAE18 reviews. 2018 includes the implementation of new accounting standards (CECL & leasing), as well as work related to SSAE18 scope changes.
- (3) Tax fees include fees for tax compliance, advice and planning services. Fees related to tax compliance and preparation for 2018 and 2017 were \$209,000 and \$346,000, respectively. For 2018 and 2017, fees related to tax advice and planning were \$489,000 and \$341,000, respectively.

The Audit & Finance Committee also considered whether the provision of the services other than audit services is compatible with maintaining Deloitte & Touche LLP's independence. All of the services described above were approved by the Audit & Finance Committee in accordance with the following policy.

Pre-approval of Services by Deloitte & Touche LLP

The Audit & Finance Committee has adopted a policy for pre-approval of audit and permitted non-audit services by Deloitte & Touche LLP. The Audit & Finance Committee will periodically consider and, if appropriate, approve, the provision of audit services by its independent registered public accounting firm and consider and, if appropriate, pre-approve, the provision of certain defined audit and non-audit services. The policy provides that:

- the pre-approval request must be detailed as to the particular services to be provided;
- the pre-approval may not result in a delegation of the Audit & Finance Committee's responsibilities to the management of MUAH; and
- the pre-approved services must be commenced within twelve months of the Audit & Finance Committee's pre-approval decision.

Any proposed engagement may be presented to the Audit & Finance Committee for consideration at its next regular meeting or, if earlier consideration is required, to the Audit & Finance Committee Chair. The Chair reports any specific approval of services at the Audit & Finance Committee's next regular meeting. The Audit & Finance Committee regularly reviews summary reports detailing all services being provided by its independent registered public accounting firm.

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PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a)(1) Financial Statements

Our Consolidated Financial Statements, Management's Report on Internal Control Over Financial Reporting and Reports of Independent Registered Public Accounting Firm are set forth beginning on page 76 of this Form 10-K.

(a)(2) Financial Statement Schedules

All schedules to our Consolidated Financial Statements are omitted because of the absence of the conditions under which they are required or because the required information is included in our Consolidated Financial Statements or accompanying notes.

(a)(3) Exhibits

A list of exhibits to this Form 10-K is set forth on the Exhibit Index immediately preceding such exhibits and is incorporated into this item by reference.

ITEM 16. FORM 10-K SUMMARY

Not applicable.

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MUFG Americas Holdings Corporation and Subsidiaries

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MUFG Americas Holdings Corporation and Subsidiaries

Management's Discussion and Analysis of Financial Condition and Results of Operations

This report includes forward-looking statements, which include expectations for our operations and business, and our assumptions for those expectations. Do not rely unduly on forward-looking statements. Actual results might differ significantly from our expectations. Please also refer to "Note Regarding Forward-Looking Statements" and Part I, Item 1A. "Risk Factors" in this Form 10-K for a discussion of some factors that may cause results to differ from our expectations.

The following discussion and analysis of our consolidated financial position and results of our operations for the years ended December 31, 2018, 2017 and 2016 should be read together with our Consolidated Financial Statements and the Notes to Consolidated Financial Statements included in this Form 10-K. Averages, as presented in the following tables, are substantially all based upon daily average balances.

As used in this Form 10-K, terms such as "the Company," "we," "us" and "our" refer to MUFG Americas Holdings Corporation (MUAH), one or more of its consolidated subsidiaries, or to all of them together. As permitted by General Instruction I(2) of Form 10-K, we have abbreviated Management's Discussion and Analysis into a management's narrative analysis of the results of operations.

MUFG Americas Holdings Corporation and Subsidiaries
Consolidated Financial Highlights

(Dollars in millions)	For the Years Ended December 31,		
	2018	2017	2016
Results of operations:			
Net interest income	\$ 3,307	\$ 3,204	\$ 3,053
Noninterest income	2,177	2,010	2,225
Total revenue	5,484	5,214	5,278
Noninterest expense	4,277	3,984	3,782
Pre-tax, pre-provision income ⁽¹⁾	1,207	1,230	1,496
(Reversal of) provision for credit losses	106	(103)	155
Income before income taxes and including noncontrolling interests	1,101	1,333	1,341
Income tax expense	52	299	419
Net income including noncontrolling interests	1,049	1,034	922
Deduct: Net loss from noncontrolling interests	24	43	68
Net income attributable to MUAH	\$ 1,073	\$ 1,077	\$ 990
Balance sheet (period average):			
Total assets	\$ 160,529	\$ 152,544	\$ 150,901
Total securities	27,395	26,315	23,625
Securities borrowed or purchased under resale agreements	20,486	20,901	24,546
Total loans held for investment	82,746	78,770	80,174
Earning assets	147,136	139,389	138,335
Total deposits	86,478	86,395	84,626
Securities loaned or sold under repurchase agreements	26,906	26,291	26,631
MUAH stockholders' equity	18,400	17,926	17,003
Performance ratios:			
Return on average assets ⁽²⁾	0.67%	0.71%	0.66%
Return on average MUAH stockholders' equity ⁽²⁾	5.83	6.01	5.82
Return on average MUAH tangible common equity ⁽²⁾⁽³⁾	7.35	7.57	7.39
Efficiency ratio ⁽⁴⁾	77.98	76.42	71.65
Adjusted efficiency ratio ⁽⁵⁾	72.47	n/a	n/a
Net interest margin ⁽²⁾⁽⁶⁾	2.26	2.33	2.23
Net loans charged-off to average total loans held for investment ⁽⁷⁾	0.10	0.13	0.30

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MUFG Americas Holdings Corporation and Subsidiaries
Consolidated Financial Highlights (Continued)

	As of December 31,		
	2018	2017	2016
Balance sheet (end of period):			
Total assets	\$ 168,100	\$ 154,550	\$ 148,144
Total securities	27,215	27,448	24,478
Securities borrowed or purchased under resale agreements	22,368	20,894	19,747
Total loans held for investment	86,507	80,014	77,551
Nonperforming assets	422	466	692
Total deposits	90,979	84,787	86,947
Securities loaned or sold under repurchase agreements	27,285	26,437	24,616
Long-term debt	17,918	12,162	11,410
MUAH stockholders' equity	16,508	18,255	17,233
Credit ratios:			
Allowance for loan losses to total loans held for investment ⁽⁷⁾	0.55%	0.59%	0.82%
Allowance for loan losses to nonaccrual loans ⁽⁷⁾	112.50	102.37	92.69
Allowance for credit losses to total loans held for investment ⁽⁸⁾	0.71	0.75	1.03
Allowance for credit losses to nonaccrual loans ⁽⁸⁾	145.61	128.75	116.20
Nonperforming assets to total loans held for investment and OREO	0.49	0.58	0.89
Nonperforming assets to total assets	0.25	0.30	0.47
Nonaccrual loans to total loans held for investment	0.49	0.58	0.89
Capital ratios:			
Regulatory ⁽⁹⁾:			
Common Equity Tier 1 risk-based capital ratio	13.96%	16.31%	14.77%
Tier 1 risk-based capital ratio	13.96	16.31	14.77
Total risk-based capital ratio	14.60	17.76	16.45
Tier 1 leverage ratio	8.77	10.06	9.92
Other:			
Tangible common equity ratio ⁽¹⁰⁾	7.89%	9.73%	9.58%
Common Equity Tier 1 risk-based capital ratio (U.S. Basel III standardized approach, fully phased-in) ⁽¹¹⁾	13.96	16.27	14.73

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MUFG Americas Holdings Corporation and Subsidiaries
Consolidated Financial Highlights (Continued)

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- (1) Pre-tax, pre-provision income is total revenue less noninterest expense. Management believes that this is a useful financial measure because it enables investors and others to assess the Company's ability to generate capital to cover credit losses through a credit cycle.
 - (2) Annualized
 - (3) Return on tangible common equity, a non-GAAP financial measure, is net income excluding intangible asset amortization divided by average tangible common equity. Management believes that this ratio provides useful supplemental information regarding the Company's business results. The methodology for determining tangible common equity may differ among companies. Please refer to Part II, Item 7 "Management's Discussion and Analysis of Financial Condition and Results of Operations - Non-GAAP Financial Measures" in this Form 10-K for further information.
 - (4) The efficiency ratio is total noninterest expense as a percentage of total revenue (net interest income and noninterest income).
 - (5) The adjusted efficiency ratio, a non-GAAP financial measure, is adjusted noninterest expense (noninterest expense excluding costs associated with services provided to MUFG Bank, Ltd. branches in the U.S.) as a percentage of adjusted total revenue (net interest income and noninterest income excluding fees from affiliates for services provided to MUFG Bank, Ltd.'s branches in the U.S. and the impact of the TCJA). Management believes adjusting the efficiency ratio for the fees and costs associated with services provided to MUFG Bank, Ltd. branches in the U.S. enhances the comparability of MUFG's efficiency ratio when compared with other financial institutions. Management believes adjusting revenue for the impact of the TCJA enhances comparability between periods. Adjusted efficiency ratios for the years ended December 31, 2017 and 2016 are not presented because the Company began identifying all costs associated with services provided to MUFG Bank, Ltd. branches in the U.S. in the third quarter of 2017. Previously, the Company was only able to identify a portion of the costs associated with services provided to MUFG Bank, Ltd. branches in the U.S. Please refer to Part II, Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations - Non-GAAP Financial Measures" in this Form 10-K for further information.
 - (6) Yields, interest income and net interest margin are presented on a taxable-equivalent basis using the federal statutory tax rates of 21% and 35% for 2018 and 2017, respectively.
 - (7) The allowance for loan losses ratios are calculated using the allowance for loan losses as a percentage of end of period total loans held for investment or total nonaccrual loans, as appropriate.
 - (8) The allowance for credit losses ratios include the allowances for loan losses and for losses on unfunded credit commitments as a percentage of end of period total loans held for investment or total nonaccrual loans, as appropriate.
 - (9) These capital ratios are calculated in accordance with the transition guidelines set forth in the U.S. federal banking agencies' final U.S. Basel III regulatory capital rules.
 - (10) The tangible common equity ratio, a non-GAAP financial measure, is calculated as tangible common equity divided by tangible assets. The methodology for determining tangible common equity may differ among companies. The tangible common equity ratio facilitates the understanding of the Company's capital structure and is used to assess and compare the quality and composition of the Company's capital structure to other financial institutions. Please refer to Part II, Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations - Capital Management" in this Form 10-K for further information.
 - (11) Common Equity Tier 1 risk-based capital (standardized, fully phased-in basis) is a non-GAAP financial measure that is used by investors, analysts and bank regulatory agencies to assess the capital position of financial services companies as if the transition provisions of the U.S. Basel III rules were fully phased in for the periods in which the ratio is disclosed. Management reviews this ratio, which excludes components of accumulated other comprehensive loss, along with other measures of capital as part of its financial analyses and has included this non-GAAP information because of current interest in such information by market participants. Refer to Part II, Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations - Capital Management" in this Form 10-K for further information.
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Introduction

We are a financial holding company, bank holding company and intermediate holding company whose principal subsidiaries are MUFG Union Bank, N.A. (MUB or the Bank) and MUSA. We are owned by MUFG Bank, Ltd. and MUFG. MUFG Bank, Ltd. is a wholly-owned subsidiary of MUFG.

We provide a wide range of financial services to consumers, small businesses, middle-market companies and major corporations, both nationally and internationally. The Company also provides various business, banking, financial, administrative and support services, and facilities for MUFG Bank, Ltd. in connection with the operation and administration of MUFG Bank, Ltd.'s business in the U.S. (including MUFG Bank, Ltd.'s U.S. branches). The Bank and MUFG Bank, Ltd. are party to a master services agreement whereby the Bank earns fee income in exchange for services and facilities provided. The Company has four reportable segments: Regional Bank, U.S. Wholesale & Investment Banking, Transaction Banking and MUSA. See Note 22 to our Consolidated Financial Statements included in this Form 10-K for more information about our reportable segments.

On July 1, 2016, MUFG designated MUAH as its U.S. Intermediate Holding Company and transferred substantially all its U.S. subsidiaries to the IHC in accordance with the requirements of the Federal Reserve's final rules for Enhanced Prudential Standards. MUFG's remaining U.S. subsidiaries were transferred to MUAH on July 1, 2017.

Executive Overview

We are providing you with an overview of what we believe are the most significant factors and developments that affected our 2018 results and that could influence our future results. Further detailed information can be found elsewhere in this Form 10-K. In addition, you should carefully read this entire document and any other reports that we refer to in this Form 10-K for more detailed information to assist your understanding of trends, events and uncertainties that impact us.

Our sources of revenue are net interest income and noninterest income (collectively "total revenue"). Net interest income is generated predominantly from interest earned from loans, investment securities, securities borrowed or purchased under resale agreements, trading account assets and other interest-earning assets, less interest incurred on deposits and borrowings, securities loaned or sold under repurchase agreements and other interest-bearing liabilities. The primary sources of noninterest income are revenues from investment banking and syndication fees, service charges on deposit accounts, trust and investment management fees, trading account activities, credit facility fees, and fees from affiliates. Changes in interest rates, credit quality, economic trends and the capital markets are primary factors that affect our revenue sources. In 2018, revenue was comprised of 60% net interest income and 40% noninterest income. A summary of our financial results is discussed below.

Our primary sources of liquidity are core deposits, securities and wholesale funding. Core deposits exclude brokered deposits, foreign time deposits, domestic time deposits greater than \$250,000, and certain other deposits not considered to be core customer relationships. Wholesale funding includes unsecured funds raised from MUFG Bank, Ltd. and affiliates, interbank and other sources, both domestic and international, funding secured by certain assets, or by borrowing from the FHLB. We evaluate and monitor the stability and reliability of our various funding sources to help ensure that we have sufficient liquidity when adverse situations arise.

Performance Highlights

Net income attributable to MUAH was \$1.1 billion in 2018, a decrease of \$4 million from 2017, which was primarily due to a higher provision for credit losses, higher salaries and benefits expense and losses on certain renewable energy investments of \$164 million as a result of the TCJA. These decreases in net income were offset by higher net interest income from an increase in earning assets, higher fees from affiliates, and lower tax expense as a result of the TCJA.

The provision for credit losses was \$106 million in 2018 compared with a reversal of \$103 million in 2017. The current period provision for credit losses was primarily due to the impact of specific reserves for credit losses on impaired loans. The reversal of provision for credit losses in 2017 reflected general improvement in portfolio credit quality and composition.

Table of Contents*Capital Ratios*

The Company's capital ratios continued to exceed all well-capitalized and minimum regulatory thresholds for BHCs, as applicable. The U.S. Basel III Common Equity Tier 1, Tier 1 and Total risk-based capital ratios were 13.96%, 13.96% and 14.60%, respectively, at December 31, 2018. The Tier 1 leverage ratio was 8.77% at December 31, 2018. The Company's risk-based capital ratios decreased during 2018 driven primarily by a \$2.5 billion share repurchase in December 2018, partially offset by net income earned during the year.

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Financial Performance

Net Interest Income

The following table shows the major components of net interest income and net interest margin.

(Dollars in millions)	For the Years Ended								
	December 31, 2018			December 31, 2017			December 31, 2016		
	Average Balance	Interest Income/Expense ⁽¹⁾	Average Yield/Rate ⁽¹⁾⁽²⁾	Average Balance	Interest Income/Expense ⁽¹⁾	Average Yield/Rate ⁽¹⁾⁽²⁾	Average Balance	Interest Income/Expense ⁽¹⁾	Average Yield/Rate ⁽¹⁾⁽²⁾
Assets									
Loans held for investment ⁽³⁾									
Commercial and industrial	\$ 23,667	\$ 989	4.18%	\$ 24,786	\$ 699	3.63%	\$ 29,329	\$ 999	3.41%
Commercial mortgage	14,704	614	4.18	14,304	581	4.06	14,939	577	3.86
Construction	1,656	80	4.86	1,957	85	4.35	2,234	86	3.82
Lease financing	1,437	62	4.31	1,749	41	2.37	1,855	62	3.36
Residential mortgage	37,311	1,311	3.51	32,584	1,102	3.38	28,327	942	3.32
Home equity and other consumer loans	3,971	258	6.49	3,390	199	5.86	3,490	181	5.19
Total loans held for investment	82,746	3,314	4.01	78,770	2,907	3.69	80,174	2,847	3.55
Securities	27,395	677	2.47	26,315	588	2.23	23,825	503	2.13
Securities borrowed or purchased under resale agreements	20,486	652	3.18	20,901	347	1.66	24,546	196	0.80
Interest bearing deposits in banks	4,009	80	1.99	3,172	39	1.24	3,020	16	0.53
Federal funds sold	5	—	2.79	2	—	1.58	16	—	0.56
Trading account assets	12,026	415	3.45	9,668	326	3.37	6,538	172	2.63
Other earning assets	469	10	2.13	561	11	1.84	416	11	2.66
Total earning assets	147,136	5,148	3.50	139,389	4,218	3.03	138,335	3,745	2.71
Allowance for loan losses	(467)			(571)			(766)		
Cash and due from banks	1,811			1,868			1,857		
Premises and equipment, net	614			603			615		
Other assets ⁽⁴⁾	11,435			11,255			10,860		
Total assets	\$ 160,529			\$ 152,544			\$ 150,901		
Liabilities									
Interest bearing deposits									
Transaction and money market accounts	\$ 36,883	\$ 238	0.65%	\$ 39,165	\$ 153	0.39%	\$ 38,273	\$ 116	0.30%
Savings	9,120	65	0.71	7,683	24	0.31	5,802	3	0.05
Time	7,588	138	1.81	5,430	64	1.18	6,921	75	1.09
Total interest bearing deposits	53,591	441	0.82	52,278	241	0.46	50,996	194	0.38
Commercial paper and other short-term borrowings	8,700	168	1.93	5,047	58	1.15	5,204	32	0.62
Securities loaned or sold under repurchase agreements	26,906	734	2.73	26,291	353	1.34	26,631	140	0.52
Long-term debt	14,062	365	2.59	11,290	250	2.21	11,904	240	2.01
Total borrowed funds	49,668	1,267	2.55	42,628	661	1.55	43,739	412	0.94
Trading account liabilities	3,736	110	2.94	2,997	73	2.45	2,662	57	2.13
Total interest bearing liabilities	106,995	1,818	1.70	97,903	975	1.00	97,397	663	0.68
Noninterest bearing deposits	32,887			34,117			33,630		
Other liabilities ⁽⁵⁾	2,157			2,467			2,694		
Total liabilities	142,039			134,487			133,721		
Equity									
MUAF stockholders' equity	18,400			17,926			17,003		
Noncontrolling interests	90			131			177		
Total equity	18,490			18,057			17,180		

Total liabilities and equity	<u>\$ 160,529</u>		<u>\$ 152,544</u>		<u>\$ 150,901</u>	
Net interest income/spread (taxable-equivalent basis)	3,330	1.80%	3,243	2.03%	3,082	2.03%
Impact of noninterest bearing deposits		0.40		0.26		0.17
Impact of other noninterest bearing sources		0.06		0.04		0.03
Net interest margin		2.26		2.33		2.23
Less: taxable-equivalent adjustment	<u>23</u>		<u>39</u>		<u>29</u>	
Net interest income	<u>\$ 3,307</u>		<u>\$ 3,204</u>		<u>\$ 3,053</u>	

- (1) Yields, interest income and net interest margin are presented on a taxable-equivalent basis using the federal statutory tax rates of 21% for 2018 and 35% for 2017 and 2016.
- (2) Annualized
- (3) Average balances of loans held for investment include nonaccrual loans. The amortized portion of net loan origination fees (costs) is included in interest income on loans, representing an adjustment to the yield.
- (4) Other assets include noninterest bearing trading account assets.
- (5) Other liabilities include noninterest bearing trading account liabilities.

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Net interest income increased during 2018 compared with 2017 due to an increase in earning assets, partially offset by a decline in the net interest margin. Earning assets increased substantially due to increases in residential mortgages and trading assets, partially offset by a decrease in commercial loan balances. The net interest margin decreased seven basis points due primarily to an increase in funding costs resulting from an increase in borrowed funds and a flatter yield curve, partially offset by the favorable effect of noninterest bearing deposits in a rising rate environment.

Analysis of Changes in Net Interest Income

The following table shows the changes in the components of net interest income on a taxable-equivalent basis for 2018, 2017 and 2016. The changes in net interest income between periods have been reflected as attributable to either volume or rate changes. For purposes of this table, changes that are not solely due to volume or rate are allocated to these categories in proportion to the absolute dollar amounts of the changes in average volume and average rate. Net loan fees of \$4 million, \$7 million and \$29 million for the years ended 2018, 2017 and 2016, respectively, are included in this table.

(Dollars in millions)	For the Years Ended December 31,					
	2018 versus 2017			2017 versus 2016		
	Increase (Decrease) due to change in			Increase (Decrease) due to change in		
	Average Volume	Average Rate	Net Change	Average Volume	Average Rate	Net Change
Changes in Interest Income ⁽¹⁾						
Loans held for investment:						
Commercial and industrial	\$ (42)	\$ 132	\$ 90	\$ (162)	\$ 62	\$ (100)
Commercial mortgage	16	17	33	(25)	29	4
Construction	(14)	9	(5)	(12)	11	(1)
Lease financing	(8)	29	21	(4)	(17)	(21)
Residential mortgage	166	43	209	143	17	160
Home equity and other consumer loans	36	23	59	(5)	23	18
Total loans held for investment			407			60
Securities	25	64	89	60	25	85
Securities borrowed or purchased under resale agreements	(7)	312	305	(33)	184	151
Interest bearing deposits in banks	12	29	41	1	22	23
Federal funds sold	—	—	—	—	—	—
Trading account assets	81	8	89	97	57	154
Other earning assets	(3)	2	(1)	3	(3)	—
Total earning assets			930			473
Changes in Interest Expense						
Interest bearing deposits:						
Transaction and money market accounts	(10)	95	85	3	34	37
Savings	5	36	41	1	20	21
Time	31	43	74	(17)	6	(11)
Total interest bearing deposits			200			47
Commercial paper and other short-term borrowings	57	53	110	(1)	27	26
Securities loaned or sold under repurchase agreements	8	373	381	(2)	215	213
Long-term debt	67	48	115	(13)	23	10
Total borrowed funds			606			249
Trading account liabilities	20	17	37	7	9	16
Total interest bearing liabilities			843			312
Changes in net interest income			\$ 87			\$ 161

(1) Interest income is presented on a taxable-equivalent basis using the federal statutory tax rates of 21% for 2018 and 35% for 2017 and 2016

Table of Contents*Noninterest Income and Noninterest Expense*

The following tables display our noninterest income and noninterest expense for the years ended December 31, 2018, 2017 and 2016.

Noninterest Income

(Dollars in millions)				Increase (Decrease)			
				Years Ended December 31,			
	Years Ended December 31,			2018 versus 2017		2017 versus 2016	
	2018	2017	2016	Amount	Percent	Amount	Percent
Service charges on deposit accounts	\$ 179	\$ 188	\$ 192	\$ (9)	(5)%	\$ (4)	(2)%
Trust and investment management fees	118	121	120	(3)	(2)	1	1
Trading account activities	(24)	(5)	105	(19)	380	(110)	(105)
Securities gains, net	8	17	69	(9)	(53)	(52)	(75)
Credit facility fees	90	98	108	(8)	(8)	(10)	(9)
Brokerage commissions and fees	73	69	64	4	6	5	8
Card processing fees, net	50	47	39	3	6	8	21
Investment banking and syndication fees	355	369	312	(14)	(4)	57	18
Fees from affiliates	1,213	866	957	347	40	(91)	(10)
Other, net	115	240	259	(125)	(52)	(19)	(7)
Total noninterest income	<u>\$ 2,177</u>	<u>\$ 2,010</u>	<u>\$ 2,225</u>	<u>\$ 167</u>	<u>8 %</u>	<u>\$ (215)</u>	<u>(10)%</u>

Noninterest income increased during 2018 compared with 2017 largely due to an increase in fees from affiliates as well as fund administration fees from entities transferred to the Company on July 1, 2017 (included in other, net). These increases were offset by the Company's share of losses on certain renewable energy investments of \$164 million recorded in the first quarter of 2018 as a result of the TCJA (included in other, net). The increase in fees from affiliates during 2018 was due to higher fees earned under the master services agreement with MUFG Bank, Ltd. and a change in presentation of certain expenses beginning January 1, 2018, as a result of adopting ASU 2016-08, Principal versus Agent Considerations. During 2018, expenses of \$189 million were presented as noninterest expense, rather than a reduction of fees from affiliates as they were presented through December 31, 2017.

Table of Contents*Noninterest Expense*

(Dollars in millions)				Increase (Decrease)			
				Years Ended December 31,			
	Years Ended December 31,			2018 versus 2017		2017 versus 2016	
	2018	2017	2016	Amount	Percent	Amount	Percent
Salaries and employee benefits	\$ 2,616	\$ 2,495	\$ 2,439	\$ 121	5 %	\$ 56	2 %
Net occupancy and equipment	367	357	325	10	3	32	10
Professional and outside services	487	439	369	48	11	70	19
Software	287	192	154	95	49	38	25
Regulatory assessments	85	52	72	3	4	10	14
Intangible asset amortization	26	30	28	(4)	(13)	2	7
Other	409	389	395	20	5	(6)	(2)
Total noninterest expense	<u>\$ 4,277</u>	<u>\$ 3,984</u>	<u>\$ 3,782</u>	<u>\$ 293</u>	<u>7 %</u>	<u>\$ 202</u>	<u>5 %</u>

The increase in noninterest expense during 2018 compared with 2017 was largely driven by higher salaries and employee benefits expense, professional and outside services expense and software expense. The increase in salaries and employee benefits expense included the impact of higher headcount from entities transferred to the Company on July 1, 2017, increased services provided to MUFG Bank, Ltd. under the master services agreement, and technology-oriented initiatives to transform certain systems and processes. The increases in professional and outside services and software expenses were largely due to the change in presentation of certain expenses beginning January 1, 2018, as a result of adopting ASU 2016-08, Principal versus Agent Considerations, as discussed in Noninterest Income above. Excluding this change in presentation, professional and outside services expense decreased due to a decrease in compliance initiatives, partially offset by higher expenses related to the transformation initiatives, and software expense increased as a result of increased investment in software to support various business activities.

Table of Contents*Income Tax Expense*

(Dollars in millions)	Years Ended December 31,		
	2018	2017	2016
Income before income taxes and including noncontrolling interests	\$ 1,101	\$ 1,333	\$ 1,341
Income tax expense	52	299	419
Effective tax rate	5%	22%	31%

Income tax expense and the effective tax rate include both federal and state income taxes. In 2018, income tax expense was \$52 million with an effective tax rate of 5%, compared with \$299 million and an effective tax rate of 22% in 2017. Income tax expense and the effective tax rate were lower in 2018 compared to 2017 primarily due to the TCJA. Income tax expense in 2018 also included an adjustment to certain prior period state income taxes during the first quarter of 2018 and income tax expense in 2017 included a one-time tax benefit as a result of the enactment of the TCJA. Excluding those adjustments, the effective tax rates for 2018 and 2017 would have been 10% and 30%, respectively.

For additional information regarding income tax expense, including a reconciliation between the effective tax rate and the statutory tax rate and changes in unrecognized tax benefits, see Note 17 to our Consolidated Financial Statements included in this Form 10-K.

Balance Sheet Analysis**Securities**

Our securities portfolio is primarily used for liquidity and interest rate risk management purposes, to invest cash resulting from excess liquidity, and to a lesser extent, to support our business development objectives. We strive to maximize total return while managing this objective within appropriate risk parameters. Securities available for sale are substantially comprised of U.S. Treasury securities, U.S. government-sponsored agency securities, RMBSs, CMBs, Cash Flow CLOs, and direct bank purchase bonds. Direct bank purchase bonds are instruments that are issued in bond form, accounted for as securities, but underwritten as loans with features that are typically found in commercial loans, and are subject to national bank regulatory lending authority standards. These instruments typically are not issued in bearer form, nor are they registered with the SEC or the Depository Trust Company. Additionally, these instruments generally contain certain transferability restrictions and are not assigned external credit ratings. Securities held to maturity consist of U.S. Treasury securities, U.S. government-sponsored agency securities and U.S. government-sponsored agency RMBSs and CMBs.

The amortized cost, gross unrealized gains, gross unrealized losses and fair values of securities, and securities pledged as collateral, are detailed in Note 2 to our Consolidated Financial Statements in this Form 10-K.

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The following tables show the remaining contractual maturities and expected yields of the securities based upon amortized cost at December 31, 2018. Actual maturities may differ from contractual maturities because borrowers may have the right to prepay obligations with or without prepayment penalties.

Securities Available for Sale

December 31, 2018										
(Dollars in millions)	Maturities									
	One Year or Less		Over One Year Through Five Years		Over Five Years Through Ten Years		Over Ten Years		Total Amortized Cost	
	Amount	Yield	Amount	Yield	Amount	Yield	Amount	Yield	Amount	Yield
Asset Liability Management securities										
U.S. Treasury	\$ —	—%	\$ 1,340	1.53%	\$ 2,232	1.96%	\$ —	—%	\$ 3,572	1.80%
Residential mortgage-backed securities:										
U.S. government agency and government-sponsored agencies	—	—	215	1.24	1,358	2.22	6,595	2.80	8,168	2.66
Privately issued	—	—	—	—	—	—	887	3.45	887	3.45
Privately issued - commercial mortgage-backed securities	—	—	25	3.74	44	3.19	1,110	3.51	1,179	3.51
Collateralized loan obligations	—	—	1	4.16	355	3.43	1,136	3.46	1,492	3.45
Other	1	3.54	3	7.48	—	—	—	—	4	7.06
Asset Liability Management securities	1	3.54	1,584	1.54	3,989	2.20	9,728	3.01	15,302	2.65
Other debt securities:										
Direct bank purchase bonds	26	2.26	419	3.26	618	3.29	127	4.00	1,190	3.33
Other	3	8.34	166	3.93	—	—	19	4.85	188	4.09
Total securities available for sale	\$ 30	2.90%	\$ 2,169	2.06%	\$ 4,607	2.34%	\$ 9,874	3.03%	\$ 16,680	2.71%

Securities Held to Maturity

December 31, 2018										
(Dollars in millions)	Maturities									
	One Year or Less		Over One Year Through Five Years		Over Five Years Through Ten Years		Over Ten Years		Total Amortized Cost	
	Amount	Yield	Amount	Yield	Amount	Yield	Amount	Yield	Amount	Yield
U.S. Treasury	\$ 519	1.97%	\$ 9	8.62%	\$ —	—%	\$ —	—%	\$ 528	2.09%
U.S. government-sponsored agencies	—	—	—	—	722	3.61	—	—	722	3.61
U.S. government agency and government-sponsored agencies - residential mortgage-backed securities	—	—	—	—	1,018	2.33	7,284	2.62	8,302	2.59
U.S. government agency and government-sponsored agencies - commercial mortgage-backed securities	46	1.65	814	2.19	—	—	626	2.04	1,486	2.11
Total securities held to maturity	\$ 565	1.95%	\$ 823	2.26%	\$ 1,740	2.86%	\$ 7,910	2.58%	\$ 11,038	2.57%

Table of Contents**Loans Held for Investment**

The following table shows loans held for investment outstanding by loan type at the end of each period presented.

(Dollars in millions)	December 31,				
	2018	2017	2016	2015	2014
Loans held for investment:					
Commercial and industrial	\$ 24,919	\$ 23,281	\$ 25,379	\$ 30,257	\$ 28,114
Commercial mortgage	15,354	14,320	14,625	14,030	14,235
Construction	1,613	1,775	2,283	2,297	1,808
Lease financing	1,249	1,533	1,819	1,911	2,027
Total commercial portfolio	43,135	40,909	44,106	48,495	46,184
Residential mortgage	38,439	35,643	29,922	27,459	29,128
Home equity and other consumer loans	4,933	3,462	3,523	3,303	3,190
Total consumer portfolio	43,372	39,105	33,445	30,762	32,318
Total loans held for investment	\$ 86,507	\$ 80,014	\$ 77,551	\$ 79,257	\$ 78,502

Loans held for investment increased from December 31, 2017 to December 31, 2018 due to growth in the residential mortgage portfolio.

Loan Maturities

The following table presents our commercial and industrial loans and construction loans held for investment by contractual maturity.

(Dollars in millions)	December 31, 2018			
	One Year or Less	Over One Year Through Five Years	Over Five Years	Total
Selected loan maturities:				
Commercial and industrial	\$ 4,747	\$ 17,089	\$ 3,083	\$ 24,919
Construction	887	719	7	1,613
Total	\$ 5,634	\$ 17,808	\$ 3,090	\$ 26,532
Total fixed rate loans due after one year				\$ 699
Total variable rate loans due after one year				20,199
Total due after one year				\$ 20,898

Cross-Border Outstandings

Our cross-border outstandings reflect certain economic and political risks that differ from or are greater than those reflected in domestic outstandings. These risks include, but are not limited to, exchange rate fluctuations and restrictions on the transfer of funds. Our total cross-border outstandings for Japan exceeded one percent of total assets at December 31, 2018, December 31, 2017 and December 31, 2016 and were \$3.0 billion, \$4.4 billion and \$3.1 billion, respectively. Our total cross-border outstandings for Cayman Islands exceeded one percent of total assets at December 31, 2018 and were \$2.4 billion. These cross-border outstandings are based on category and legal residence of ultimate risk and are largely comprised of securities financing arrangements and commercial loans.

Table of Contents**Deposits**

The table below presents our deposits as of December 31, 2018 and 2017

(Dollars in millions)	December 31, 2018	December 31, 2017	Increase (Decrease)	
			Amount	Percent
Interest checking	\$ 3,598	\$ 5,209	\$ (1,611)	(31)%
Money market	34,373	33,245	1,128	3
Total interest bearing transaction and money market accounts	37,971	38,454	(483)	(1)
Savings	9,515	8,426	1,089	13
Time	11,739	5,305	6,434	121
Total interest bearing deposits	59,225	52,185	7,040	13
Noninterest bearing deposits	31,754	32,602	(848)	(3)
Total deposits	\$ 90,979	\$ 84,787	\$ 6,192	7 %

Total deposits increased \$6.2 billion from December 31, 2017 substantially due to an increase in time deposits. The increase in time deposits was primarily related to Consumer Banking and PurePoint Financial, the direct banking division of the Bank.

The following table presents domestic time deposits of \$100,000 and over by maturity.

(Dollars in millions)	December 31, 2018
Three months or less	\$ 1,768
Over three months through six months	678
Over six months through twelve months	1,658
Over twelve months	3,091
Total domestic time deposits of \$100,000 and over	\$ 7,195

* We offer CDs and other time deposits of \$100,000 and over at market rates of interest. A large portion of these deposits are held by customers, both public and private.

Securities Financing Arrangements

The Company enters into securities purchased under agreements to resell, securities sold under agreements to repurchase, and securities borrowing and lending transactions to facilitate customer match-book activity, cover short positions and to fund the Company's trading inventory. These balances are almost entirely attributable to MUSA. See Note 8 to our Consolidated Financial Statements in this Form 10-K for more information.

Securities borrowed or purchased under resale agreements were \$22.4 billion and \$20.9 billion at December 31, 2018 and December 31, 2017, respectively. The following table provides certain information about securities loaned or sold under repurchase agreements.

(Dollars in millions)	December 31, 2018	December 31, 2017
Balance at period end	\$ 27,285	\$ 26,437
Weighted average interest rate at period end	2.79%	1.59%
Maximum outstanding at any month end	\$ 27,884	\$ 28,474
Average balance during the year	\$ 26,906	\$ 26,291
Weighted average interest rate during the year	2.73%	1.34%

Table of Contents**Capital Management***Capital Adequacy and Capital Management*

A strong capital position is essential to the Company's business strategy. The Company has established a Capital Management Policy, which sets forth, among other things, the principles and guidelines used for capital planning, issuance, usage and distributions, including internal capital goals; the quantitative and qualitative guidelines for dividends and stock repurchases; and the strategies for addressing potential capital shortfalls. The Capital Management Policy sets forth the enterprise-wide capital objectives, which include requirements to maintain capital adequate for the Company's material risks, to maintain access to funding to meet obligations to creditors and counterparties, to provide for effective support of organic growth, and to consider the quality and efficiency of various capital forms while maintaining a strong capital position. Capital is generated principally from the retention of earnings and from capital contributions received from MUFG Bank, Ltd. and MUFG.

Regulatory Capital

Both MUAH and MUB are subject to various capital adequacy regulations issued by the U.S. federal banking agencies, including requirements to file an annual capital plan and to maintain minimum regulatory capital ratios. As of December 31, 2018, management believes the capital ratios of MUAH and MUB met all regulatory requirements of "well-capitalized" institutions.

The Company timely filed its annual capital plan under the Federal Reserve's CCAR program in April 2018. CCAR evaluates capital planning processes and assesses capital adequacy levels under various scenarios to determine if BHCs would have sufficient capital to continue operations throughout times of economic and financial market stress. The Company's 2018 CCAR submission encompassed a range of expected and stressed economic and financial market scenarios, and included an assessment of expected sources and uses of capital over a prescribed planning horizon, a description of all capital actions within that time frame, and a discussion of any proposed business plan changes that are likely to have a material impact on capital adequacy. In June 2018, the Company received notice that the Federal Reserve did not object to the Company's capital plan. In accordance with regulatory requirements, the Company subsequently disclosed the results of its annual company-run Dodd-Frank Act stress test. In October 2018, the Company submitted its mid-cycle Dodd-Frank Act Stress Test results to the Federal Reserve and subsequently disclosed the results of those stress tests. MUAH remains subject to regulatory requirements to develop and maintain a capital plan which must be reviewed and approved by its Board of Directors (or designated subcommittee thereof); however, MUAH was granted regulatory administrative relief in 2019 and is not required to submit its capital plan to the Federal Reserve or participate in the 2019 Comprehensive Capital Analysis and Review (CCAR 2019) process.

MUAH and MUB are required to maintain minimum capital ratios under the standardized approach in accordance with the BCBS capital guidelines for U.S. banking organizations issued by the U.S. federal banking agencies (U.S. Basel III Rules). Among other requirements, the U.S. Basel III Rules require a minimum Common Equity Tier 1 capital ratio of 4.5% and a capital conservation buffer of 2.5% (for a total minimum Common Equity Tier 1 capital ratio of 7.0%); and a Tier 1 leverage ratio of 4%.

As required under U.S. Basel III Rules, the 2.5% capital conservation buffer is being implemented on a phased-in basis in equal increments of 0.625% per year over a four-year period that commenced on January 1, 2016. MUAH and MUB would satisfy the minimum capital requirements including the capital conservation buffer on a fully phased-in basis if those requirements were effective as of December 31, 2018.

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The following tables summarize the calculation of MUAH's risk-based capital ratios in accordance with the U.S. Basel III rules as of December 31, 2018 and December 31, 2017.

MUFG Americas Holdings Corporation

(Dollars in millions)	U.S. Basel III	
	December 31, 2018	December 31, 2017
Capital Components		
Common Equity Tier 1 capital	\$ 14,256	\$ 15,708
Tier 1 capital	\$ 14,256	\$ 15,708
Tier 2 capital	648	1,398
Total risk-based capital	\$ 14,904	\$ 17,106
Risk-weighted assets	\$ 102,088	\$ 96,330
Average total assets for leverage capital purposes	\$ 162,550	\$ 156,126

(Dollars in millions)	U.S. Basel III				Minimum Capital Requirement with Capital Conservation Buffer ⁽¹⁾	
	December 31, 2018		December 31, 2017		December 31, 2018	
	Amount	Ratio	Amount	Ratio	Amount	Ratio
Capital Ratios						
Common Equity Tier 1 capital (to risk-weighted assets)	\$ 14,256	13.96%	\$ 15,708	16.31%	≥ \$ 6,508	6.375%
Tier 1 capital (to risk-weighted assets)	14,256	13.96	15,708	16.31	≥ 8,039	7.875
Total capital (to risk-weighted assets)	14,904	14.60	17,106	17.76	≥ 10,081	9.875
Tier 1 leverage ⁽²⁾	14,256	8.77	15,708	10.06	≥ 6,502	4.000

(1) Beginning January 1, 2018, the minimum capital requirement includes a capital conservation buffer of 1.875%

(2) Tier 1 capital divided by quarterly average assets (excluding certain disallowed assets, primarily goodwill and other intangibles)

During the fourth quarter of 2018, the Company repaid \$300 million of subordinated debt due to MUFG Bank, Ltd. contributing to the decline in Tier 2 capital. The decrease in the Company's risk-based capital and leverage ratios was driven primarily by a \$2.5 billion share repurchase from its parent companies in December 2018, partially offset by net income earned during the year.

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The following tables summarize the calculation of MUB's risk-based capital ratios in accordance with the transition guidelines set forth in the U.S. Basel III rules as of December 31, 2018 and December 31, 2017.

MUFG Union Bank, N.A.

(Dollars in millions)	U.S. Basel III	
	December 31, 2018	December 31, 2017
Capital Components		
Common Equity Tier 1 capital	\$ 13,316	\$ 14,028
Tier 1 capital	\$ 13,316	\$ 14,028
Tier 2 capital	589	1,307
Total risk-based capital	\$ 13,905	\$ 15,335
Risk-weighted assets	\$ 92,170	\$ 86,730
Average total assets for leverage capital purposes	\$ 125,461	\$ 119,052

	U.S. Basel III				Minimum Capital Requirement with Capital Conservation Buffer ⁽¹⁾		To Be Well-Capitalized Under Prompt Corrective Action Provisions	
(Dollars In millions)	December 31, 2018		December 31, 2017		December 31, 2018			
Capital Ratios	Amount	Ratio	Amount	Ratio	Amount	Ratio	Amount	Ratio
Common Equity Tier 1 capital (to risk-weighted assets)	\$ 13,316	14.45%	\$ 14,028	16.17%	≥ \$ 5,876	6.375%	≥ \$ 5,991	6.5%
Tier 1 capital (to risk-weighted assets)	13,316	14.45	14,028	16.17	≥ 7,258	7.875	≥ 7,374	8.0
Total capital (to risk-weighted assets)	13,905	15.09	15,335	17.68	≥ 9,102	9.875	≥ 9,217	10.0
Tier 1 leverage ⁽²⁾	13,316	10.61	14,028	11.78	≥ 5,018	4.000	≥ 6,273	5.0

(1) Beginning January 1, 2018, the minimum capital requirement includes a capital conservation buffer of 1.875%

(2) Tier 1 capital divided by quarterly average assets (excluding certain disallowed assets, primarily goodwill and other intangibles)

During the second quarter of 2018, MUB repaid \$750 million of subordinated debt due to MUFG Bank, Ltd. resulting in the decline in Tier 2 capital. In December 2018, MUB paid a \$1.7 billion dividend to MUAH resulting in a decrease in MUB's risk-based capital and leverage ratios.

In addition to capital ratios determined in accordance with regulatory requirements, we consider the tangible common equity ratio when evaluating capital utilization and adequacy. This capital ratio is monitored by management, and presented below, to further facilitate the understanding of our capital structure and for use in assessing and comparing the quality and composition of the Company's capital structure to other financial institutions. This ratio is not codified within GAAP or federal banking regulations in effect at December 31, 2018. Therefore, it is considered a non-GAAP financial measure. Our tangible common equity ratio calculation method may differ from those used by other financial services companies.

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The following table summarizes the calculation of the Company's tangible common equity ratio as of December 31, 2018 and 2017:

(Dollars in millions)	December 31, 2018	December 31, 2017
Total MUAH stockholders' equity	\$ 16,508	\$ 18,255
Goodwill	(3,301)	(3,301)
Intangible assets, except mortgage servicing rights	(285)	(313)
Deferred tax liabilities related to goodwill and intangible assets	57	55
Tangible common equity (a)	\$ 12,979	\$ 14,696
Total assets	\$ 168,100	\$ 154,550
Goodwill	(3,301)	(3,301)
Intangible assets, except mortgage servicing rights	(285)	(313)
Deferred tax liabilities related to goodwill and intangible assets	57	55
Tangible assets (b)	\$ 164,571	\$ 150,991
Tangible common equity ratio (a)/(b)	7.89%	9.73%

The Company's fully phased-in Common Equity Tier 1 capital ratio calculated under the U.S. Basel III standardized approach at December 31, 2018 and December 31, 2017 was estimated to be 13.96% and 16.27%, respectively. Management believes that the Company would satisfy all capital adequacy requirements under the U.S. Basel III rules on a fully phased-in basis if those requirements had been effective at both December 31, 2018 and December 31, 2017.

The following table summarizes the calculation of the Company's fully phased-in Common Equity Tier 1 capital to total risk-weighted assets ratio under the U.S. Basel III standardized approach as of December 31, 2018 and 2017:

Common Equity Tier 1 capital under U.S. Basel III (standardized approach; fully phased-in)

(Dollars in millions)	December 31, 2018 (Estimated)	December 31, 2017 (Estimated)
Common Equity Tier 1 capital under U.S. Basel III (transitional)	\$ 14,256	\$ 15,708
Other	—	(51)
Common Equity Tier 1 capital estimated under U.S. Basel III (standardized approach; fully phased-in) (a)	\$ 14,256	\$ 15,657
Risk-weighted assets, estimated under U.S. Basel III (standardized; transitional)	\$ 102,088	\$ 96,330
Adjustments	—	(107)
Total risk-weighted assets, estimated under U.S. Basel III (standardized approach; fully phased-in) (b)	\$ 102,088	\$ 96,223
Common Equity Tier 1 capital to total risk-weighted assets estimated under U.S. Basel III (standardized approach; fully phased-in) ⁽¹⁾ (a)/(b)	13.96%	16.27%

(1) Common Equity Tier 1 risk-based capital (standardized, fully phased-in basis) is a non-GAAP financial measure that is used by investors, analysts and bank regulatory agencies to assess the capital position of financial services companies as if the transition provisions of the U.S. Basel III rules were fully phased-in for the period in which the ratio is disclosed. Management reviews this ratio, which excludes components of accumulated other comprehensive loss, along with other measures of capital as part of its financial analyses and has included this non-GAAP information, and the corresponding reconciliation from Common Equity Tier 1 capital (calculated according to the transition provisions under U.S. Basel III rules) because of current interest in such information by market participants.

For additional information regarding our regulatory capital requirements, see "Supervision and Regulation-Regulatory Capital and Liquidity Standards" in Part I, Item 1. of this Form 10-K.

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Risk Management

All financial institutions must manage and control a variety of business risks that can significantly affect their financial condition and performance. Some of the key risks that the Company must manage include credit, market, liquidity, operational, interest rate, compliance, reputation and strategic risks. The Board, directly or through its appropriate committees, provides oversight and approves our various risk management policies. Management has established a risk management structure that is designed to provide a comprehensive approach for identifying, measuring, monitoring, controlling and reporting on the significant risks faced by the Company. A summary of the Company's risk management structure and framework is set forth below.

Risk Management Structure

Board Committees

Risk Committee

The Risk Committee of the Board of Directors is broadly responsible for oversight of (1) risk management, (2) compliance with legal and regulatory requirements, and (3) the credit, operational and other material risks to which the Company may be exposed. The Risk Committee is responsible for risk management oversight in the key areas outlined below, and has the authority to direct corrective and remedial actions.

The Risk Committee generally oversees the Company's risk management and the enterprise level risk appetite frameworks and establishes guidelines for reporting and escalating risk issues.

The Risk Committee provides oversight of management's control over the following risk categories: credit, market, interest rate, liquidity, operational (including modeling and information), compliance, reputation and strategic risks. The Risk Committee also reviews and assesses risks from the viewpoint of protecting the overall safety and soundness of the Company.

Human Capital Committee

The Human Capital Committee oversees the Company's compensation and risk review processes in line with competitive market practice and regulatory guidance associated with responsible risk management practices. The Human Capital Committee reviews the CRO's risk assessment of the Company's annual incentive compensation plan to assure that it is consistent with the Company's stated risk appetite and regulatory guidance.

Audit & Finance Committee

The Audit & Finance Committee of the Board of Directors is responsible for oversight of liquidity and interest rate risk. The Audit & Finance Committee also oversees IAA and ACR, both of which provide the Audit & Finance Committee with independent assessments of risk.

Management Committees

The ECA provides direction on major corporate policies including strategic, financial, risk management, infrastructure, regulatory and governance policies. The ECA has established and delegated authority to the ARC whose responsibilities include reviewing risk management policies and overseeing the risk management framework and all risks on an integrated basis. The ARC oversees areas of risk with and through its sub-committees, including: Credit Risk Committee; Market Risk Management Committee; Liquidity Risk and Interest Rate Risk Committee; Compliance Risk Committee; Information Risk Committee; Reputation Risk Committee; Operational Risk Management Committee; and Third Party Risk Management Committee.

Table of Contents**Americas Risk Management Group**

Appointed by the Board of Directors, the Company's CRO is responsible for managing the ARM function which consists of individuals with specialized knowledge to identify, measure, monitor, control and report on the significant risks faced by MUAH and its subsidiaries.

ARM is responsible for maintaining all risk-related policies and procedures, identifying Company-level risks, monitoring emerging risks, and aggregating reporting for review by management, management committees and the Board Risk Committee. ARM is expected to support management's execution of the strategic objectives and overarching goal of maintaining the safety and soundness of the Company and its compliance with U.S. laws, regulations and supervisory guidance.

The following paragraphs discuss the Company's risk management framework relating to credit, market, interest rate, liquidity, and operational risks.

Credit Risk Management

One of our principal business activities is the extension of credit to individuals and businesses. Our policies and the applicable laws and regulations governing the extension of credit require risk analysis, including an extensive evaluation of the purpose of the request and the borrower's ability and willingness to repay as scheduled. Our process also includes ongoing portfolio and credit management through portfolio diversification, lending limit constraints, credit review and approval policies, and extensive internal monitoring.

Credit risk is defined as the risk to earnings or capital arising from an obligor's failure to meet the financial terms of any contract with the Company in accordance with agreed upon terms. We manage and control credit risk through diversification of the portfolio, including by type of loan, industry concentration, dollar limits on multiple loans to the same borrower, geographic distribution and type of borrower.

In analyzing our loan portfolios, we apply specific monitoring policies and procedures that are tailored according to the risk profile and other characteristics of the loans within the portfolios. Our residential, consumer and certain small commercial loans are homogeneous in nature and are, in general, individually insignificant in terms of size or potential risk of loss. Accordingly, we review these portfolios by analyzing their performance as a pool of loans. In contrast, our monitoring process for larger commercial and industrial, construction, commercial mortgage, lease, and foreign loan portfolios includes a periodic review of individual loans. Loans that are performing, but have shown some signs of weakness, are subjected to more stringent reporting and oversight.

We have a Credit Risk Committee, chaired by the head of the Credit Strategies Group and composed of the Chief Credit Officers responsible for our loan portfolio segments and other executive and senior officers, that establishes our overall risk appetite, portfolio concentration limits, and credit risk rating methodology. This committee is supported by the Credit Policy Sub-Committee, composed of Group Senior Credit Officers that have responsibility for establishing credit policy, credit underwriting criteria, and other risk management controls. Credit Administration, under the direction of the Chief Credit Officers and their designated Group Senior Credit Officers, are responsible for administering the credit approval process and related policies. Policies require an evaluation of credit requests and ongoing reviews of existing credits in order to verify that we know with whom we are doing business, that the purpose of the credit is acceptable, and that the borrower is able and willing to repay as agreed. Furthermore, policies require prompt identification and quantification of asset quality deterioration or potential loss.

ACR, which reports to the Audit & Finance Committee of the Board of Directors, provides both the Board and executive management with an independent assessment of the effectiveness of the credit management process. ACR routinely reviews the accuracy and timeliness of risk ratings assigned to individual borrowers with the goal of ensuring that the business unit credit risk identification process is functioning properly. This group also assesses compliance with credit policies and underwriting standards at the business unit level. Additionally, ACR reviews changes to credit policies, practices and underwriting guidelines. ACR summarizes its significant findings on a regular basis and provides recommendations for corrective action when credit management or control deficiencies are identified.

Table of Contents**Allowance for Credit Losses***Allowance Policy and Methodology*

We maintain an allowance for credit losses (defined as both the allowance for loan losses and the allowance for losses on unfunded credit commitments) to absorb losses inherent in the loan portfolio as well as for unfunded credit commitments. The allowance for credit losses is based on our quarterly assessments of the probable estimated losses inherent in the loan portfolio and unfunded credit commitments. Our methodology for measuring the appropriate level of the allowance relies on several key elements, which include the allowance for loans collectively evaluated for impairment, the allowance for loans individually evaluated for impairment, the unallocated allowance and the allowance for losses on unfunded credit commitments. We develop and document our allowance methodology at the portfolio segment level. Our loan portfolio consists of a commercial portfolio segment and a consumer portfolio segment. Understanding our policies on the allowance for credit losses is fundamental to understanding our consolidated financial condition and consolidated results of operations.

For the commercial portfolio segment, the allowance for loans collectively evaluated for impairment is calculated by utilizing a dual factor internal risk rating system that encompasses both the probability that a credit facility may ultimately default (i.e. probability of default) and an estimate of the severity of the loss that would be realized upon such default (i.e. the loss-given default) and applying these risk ratings to outstanding loans and most unused commitments. The probability of default and loss-given default may be adjusted for qualitative or environmental factors that, in management's judgment, are likely to cause estimated credit losses associated with the existing portfolio to differ from the historical probability of default and loss-given default. While our assessments of these factors are reviewed quarterly with our senior credit officers and executive management, the actual impact from any of these conditions may differ significantly from the estimates used.

For the consumer portfolio segment, loans are generally pooled by product type with similar risk characteristics. We estimate the allowance for loans collectively evaluated for impairment based on forecasted losses, which represent our best estimate of inherent loss.

In addition to the methodologies described above, the allowance for loans collectively evaluated for impairment also includes attributions for certain sectors within the commercial and consumer portfolio segments to account for probable losses that are currently not reflected in the risk ratings or forecasted losses. Segment attributions are calculated based on migration scenarios for the commercial portfolio and specific attributes applicable to the consumer portfolio. Segment considerations are revised periodically as portfolio and credit environment conditions change.

A specific allowance is established for loans that we individually evaluate and determine to be impaired. We individually evaluate for impairment larger nonaccruing commercial and industrial, construction, and commercial mortgage loans. Residential mortgage and consumer loans are not individually evaluated for impairment unless they represent TDRs. The amount of the reserve is based on the present value of expected future cash flows discounted at the loan's effective interest rate, the loan's observable market price, or the fair value of the collateral if the loan is collateral dependent. A loan is collateral dependent if repayment of the loan is expected to be provided solely by the underlying collateral and there are no other reliable sources of repayment.

The unallocated allowance is composed of attributions that are intended to capture probable losses from adverse changes in credit migration and other inherent losses that are not currently reflected in the allowance for loan losses that are ascribed to our portfolio segments. These attributions may be ascribed to portfolio segments in future periods when the loss attributions become more evident.

For additional information on the allowance for credit losses, see the "Critical Accounting Estimates—Allowance for Credit Losses" section within "Management's Discussion and Analysis of Financial Condition and Results of Operations" in Part II, Item 7. and Note 1 to our Consolidated Financial Statements included in this Form 10-K.

Table of Contents*Allowance and Related Provision for Credit Losses*

The allowance for loan losses was \$474 million at December 31, 2018 compared with \$476 million at December 31, 2017. Our ratio of allowance for loan losses to total loans held for investment was 0.55% as of December 31, 2018 and 0.59% as of December 31, 2017. The provision for loan losses during the year ended December 31, 2018 was \$84 million primarily due to the impact of specific reserves for certain impaired loans. The unallocated allowance for loan losses totaled \$5 million at December 31, 2018, compared with \$30 million at December 31, 2017. This decrease resulted from refinements to the methodology used to measure credit risk ascribed to the commercial loan portfolio segment, which previously had been estimated within the unallocated allowance for loan losses. Net loans charged off to average total loans held for investment decreased to 0.1% for the year ended December 31, 2018 compared with 0.13% for the year ended December 31, 2017.

Nonaccrual loans were \$421 million at December 31, 2018 compared with \$465 million at December 31, 2017. The decrease in nonaccrual loans outstanding during 2018 was primarily driven by paydowns, payoffs, charge-offs and loans returned to accrual, largely offset by new nonaccrual loans. Our ratio of nonaccrual loans to total loans held for investment decreased to 0.49% at December 31, 2018 from 0.58% at December 31, 2017. Our ratio of allowance for loan losses to nonaccrual loans increased to 112.5% at December 31, 2018 from 102.37% at December 31, 2017. Criticized credits in the commercial segment were \$1.3 billion at December 31, 2018 and \$1.6 billion at December 31, 2017. Criticized credits are those that have regulatory risk ratings of special mention, substandard or doubtful; classified credits are those that have regulatory risk ratings of substandard or doubtful. Special mention credits are potentially weak, as the borrower has begun to exhibit deteriorating trends, which, if not corrected, may jeopardize repayment of the loan and result in further downgrade. Substandard credits have well-defined weaknesses, which, if not corrected, could jeopardize the full satisfaction of the debt. A credit classified as doubtful has critical weaknesses that make full collection improbable on the basis of currently existing facts and conditions.

The following table reflects the related allowance for loan losses allocated to a loan category at year-end for the indicated years and the percentage of the allocation to the year-end loan balance of that loan category, as set forth in the "Loans Held for Investment" table.

(Dollars in millions)	December 31,									
	2018		2017		2016		2015		2014	
Commercial and industrial	\$ 275	1.10%	\$ 265	1.14%	\$ 440	1.72%	\$ 542	1.79%	\$ 354	1.25%
Commercial mortgage	56	0.37	67	0.47	83	0.57	89	0.64	99	0.71
Construction	10	0.63	11	0.61	15	0.66	14	0.59	9	0.50
Lease financing	18	1.46	17	1.15	18	0.99	9	0.48	9	0.45
Total commercial portfolio	359	0.83	360	0.88	556	1.25	654	1.35	471	1.02
Residential	33	0.09	32	0.09	36	0.12	31	0.11	38	0.13
Home equity and other consumer loans	77	1.56	54	1.55	47	1.35	18	0.56	11	0.35
Total consumer portfolio	110	0.25	86	0.22	83	0.25	49	0.16	49	0.15
Total allocated allowance	469	0.54	446	0.56	639	0.82	703	0.89	520	0.66
Unallocated	5		30		—		20		20	
Total allowance for loan losses	<u>\$ 474</u>	<u>0.55%</u>	<u>\$ 476</u>	<u>0.59%</u>	<u>\$ 639</u>	<u>0.82%</u>	<u>\$ 723</u>	<u>0.91%</u>	<u>\$ 540</u>	<u>0.69%</u>

Table of Contents*Change in the Allowance for Loan Losses*

The following table sets forth a reconciliation of changes in our allowance for loan losses.

(Dollars in millions)	December 31,				
	2018	2017	2016	2015	2014
Allowance for loan losses, beginning of period	\$ 476	\$ 639	\$ 723	\$ 540	\$ 569
(Reversal of) provision for loan losses	84	(65)	158	213	(14)
Other	—	2	2	(2)	(3)
Loans charged-off:					
Commercial and industrial	(43)	(107)	(146)	(27)	(35)
Commercial and industrial - transfer to held for sale	(35)	(8)	(113)	—	—
Commercial mortgage	(1)	(1)	—	(5)	(4)
Construction	—	—	—	(7)	—
Total commercial portfolio	(79)	(116)	(259)	(39)	(39)
Residential mortgage	2	4	3	(2)	(3)
Home equity and other consumer loans	(43)	(43)	(15)	(7)	(8)
Total consumer portfolio	(41)	(39)	(12)	(9)	(11)
Total loans charged-off	(120)	(155)	(271)	(48)	(50)
Recoveries of loans previously charged-off:					
Commercial and industrial	26	49	19	17	28
Commercial mortgage	1	1	5	1	3
Construction	—	—	—	—	3
Total commercial portfolio	27	50	24	18	34
Home equity and other consumer loans	7	5	3	2	4
Total consumer portfolio	7	5	3	2	4
Total recoveries of loans previously charged-off	34	55	27	20	38
Net loans recovered (charged-off)	(86)	(100)	(244)	(28)	(12)
Ending balance of allowance for loan losses	474	476	639	723	540
Allowance for losses on unfunded credit commitments	139	123	162	165	152
Total allowance for credit losses	\$ 613	\$ 599	\$ 801	\$ 888	\$ 692

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Nonperforming assets consist of nonaccrual loans and OREO. Nonaccrual loans are those for which management has discontinued accrual of interest because there exists significant uncertainty as to the full and timely collection of either principal or interest, or such loans have become contractually past due 90 days with respect to principal or interest. OREO includes property where the Bank acquired title through foreclosure or "deed in lieu" of foreclosure. For a more detailed discussion of the accounting for nonaccrual loans, see Note 1. to our Consolidated Financial Statements included in this Form 10-K.

The following table sets forth the components of nonperforming assets and TDRs:

(Dollars in millions)	December 31,				
	2018	2017	2016	2015	2014
Nonaccrual loans:					
Commercial and industrial	\$ 269	\$ 319	\$ 458	\$ 284	\$ 56
Commercial mortgage	12	20	31	37	40
Total commercial portfolio	281	339	489	321	96
Residential mortgage	121	104	171	190	231
Home equity and other consumer loans	19	22	29	41	48
Total consumer portfolio	140	126	200	231	279
Total nonaccrual loans	421	465	689	552	375
OREO	1	1	3	21	36
Total nonperforming assets	\$ 422	\$ 466	\$ 692	\$ 573	\$ 411
Troubled debt restructurings:					
Accruing	\$ 299	\$ 348	\$ 215	\$ 413	\$ 283
Nonaccruing (included in total nonaccrual loans above)	136	229	384	409	184
Total troubled debt restructurings	\$ 435	\$ 577	\$ 599	\$ 822	\$ 467

Total nonperforming assets as of December 31, 2018 were \$422 million, or 0.25% of total assets, compared with \$466 million, or 0.30% of total assets, at December 31, 2017. The decrease in nonperforming assets of \$44 million from December 31, 2017 to December 31, 2018 was driven primarily by paydowns, payoffs, charge-offs and loans returned to accrual, largely offset by new nonaccrual loans.

Troubled Debt Restructurings

TDRs are loans where we have granted a concession to a borrower as a result of the borrower experiencing financial difficulty and, consequently, we receive less than the current market-based compensation for loans with similar risk characteristics. Such loans are reviewed for impairment either individually or in pools with similar risk characteristics. Our loss mitigation strategies are designed to minimize economic loss and, at times, may result in changes to the original terms, including interest rate changes, maturity extensions, forbearance, principal paydowns, covenant waivers or changes, payment deferrals, or some combination thereof. We evaluate whether these changes to the terms and conditions of our loans meet the TDR criteria after considering the specific situation of the borrower and all relevant facts and circumstances related to the modification. For our consumer portfolio segment, TDRs are typically initially placed on nonaccrual and a minimum of six consecutive months of sustained performance is required before returning to accrual status. For our commercial portfolio segment, we generally determine accrual status for TDRs by performing an individual assessment of each loan, which may include, among other factors, borrower performance under previous loan terms.

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The following table provides a summary of TDRs by loan type, including nonaccrual loans and loans that have been returned to accrual status, as of December 31, 2018 and 2017. See Note 3 to our Consolidated Financial Statements in this Form 10-K for more information.

(Dollars in millions)	December 31,		As a percentage of Ending Loan Balances	
	2018	2017	December 31,	2017
Commercial and industrial	\$ 109	\$ 202	0.42%	0.87%
Commercial mortgage	46	7	0.30	0.05
Construction	63	128	3.91	7.21
Total commercial portfolio	218	337	0.51	0.82
Residential mortgage	196	215	0.51	0.60
Home equity and other consumer loans	21	25	0.43	0.72
Total consumer portfolio	217	240	0.50	0.61
Total restructured loans	\$ 435	\$ 577	0.50%	0.72%

Loans 90 Days or More Past Due and Still Accruing

Loans held for investment 90 days or more past due and still accruing totaled \$23 million and \$12 million at December 31, 2018 and 2017, respectively.

Concentration of Risk

Commercial and industrial loans are extended principally to corporations, middle-market businesses and small businesses and are originated primarily through our commercial banking offices. Our commercial and industrial portfolio is comprised primarily of the following industry sectors: finance and insurance, manufacturing, power and utilities, real estate and leasing, and wholesale trade. No individual industry sector exceeded 10% of our total loans held for investment at either December 31, 2018 or December 31, 2017.

Construction and commercial mortgage loans are secured by deeds of trust or mortgages. Construction loans are extended primarily to commercial property developers and to residential builders. At December 31, 2018, 54% of the Company's construction loan portfolio was concentrated in California, 24% to borrowers in New York and 7% to borrowers in Texas. The commercial mortgage loan portfolio consists of loans secured by commercial income properties. At December 31, 2018, 65% of the Company's commercial mortgage loans were made to borrowers located in California, 6% to borrowers in Washington, and 5% to borrowers in New York.

Residential mortgage loans are originated and secured by one-to-four family residential properties, through our multi-channel network, including branches, private bankers, mortgage brokers, telephone services, and web-based and mobile internet banking applications. We do not have a program for originating or purchasing subprime loan products and we hold the majority of the loans we originate.

At December 31, 2018, payment terms on 36% of our residential mortgage loans required a monthly payment that covers the full amount of interest due, but did not reduce the principal balance. At origination these interest-only loans had strong credit profiles and had weighted average LTV ratios of approximately 65%. The remainder of the portfolio consisted of regularly amortizing loans.

Home equity loans are originated principally through our branch network and Private Banking offices. Approximately 26% and 29% of these home equity loans and lines were supported by first liens on residential properties at both December 31, 2018 and December 31, 2017, respectively. To manage risk associated with lending commitments, we review all equity-secured lines annually for creditworthiness and may reduce or freeze limits, to the extent permitted by laws and regulations. Other consumer loans consist primarily of unsecured loans originated by marketplace lenders. The Company manages risk associated with these loans by establishing lending criteria similar to other consumer loans originated by the Company. See Note 3 to our Consolidated Financial Statements included in this Form 10-K for additional information on refreshed FICO scores and

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refreshed LTV ratios for our residential mortgage and home equity and other consumer loans at December 31, 2018 and December 31, 2017.

Interest Foregone

If interest that was due on the recorded balances of all nonaccrual and restructured loans (including loans that were, but are no longer, on nonaccrual) had been accrued under their original terms, we would have recognized an additional \$37 million of interest income in 2018. For loans that were on nonaccrual status during 2018 and accounted for as cash basis nonaccrual loans, we recognized interest income of \$24 million in 2018.

Market Risk Management

The objective of market risk management is to mitigate any adverse impact on earnings and capital arising from changes in interest rates and other market variables. Market risk management supports our broad objective of enhancing shareholder value, which encompasses the achievement of stable earnings growth while promoting capital stability over time. Market risk is defined as the risk of loss arising from an adverse change in the market value of financial instruments caused by fluctuations in market prices or rates. The primary market risk to which we are exposed is interest rate risk. Interest rate risk arises from instruments, positions and transactions entered into for purposes other than trading and for trading. Other than trading interest rate risk arises from loans, securities, deposits, borrowings, securities purchased under agreements to resell, securities sold under agreements to repurchase, securities borrowing and lending transactions, and derivative instruments. Trading interest rate risk primarily arises from trading activities at MUAH's broker-dealer subsidiary, MUSA, and derivative contracts MUB enters into as a financial intermediary for customers.

Market Risk Governance

The MRM Policy, adopted by the Risk Committee of the Board of Directors, governs the Company's management and oversight of market risk. The MRM Policy establishes the Company's risk tolerance by outlining standards for measuring market risk, creates Board-level limits for specific market risks, and establishes MRMC responsibilities and oversight of market risk activities.

ARC, composed of selected senior officers of the Company, supports the MRM Policy setting process by striving to ensure that the Company has an effective process to identify, monitor, measure and manage market risk as required by the MRM Policy. ARC provides oversight of the risk management framework and reviews and discusses market risk management reports and trends. MRMC approves the trading policies that govern the Company's activities. ALCO is responsible for the approval of specific interest rate risk management programs, including those related to interest rate hedging, investment securities and wholesale funding of MUAH, along with approval of capital policies.

The Treasurer is primarily responsible for the implementation of interest rate risk management strategies approved by ALCO and for operational management of market risk, as defined above, through funding, investment and derivative hedging activities. The MRM unit is responsible for monitoring market risk and functions independently of all operating and management units and subsidiaries.

The Company has separate and distinct methods for managing the market risk associated with our asset and liability management activities and our trading activities, as described below.

Interest Rate Risk Management

ALCO monitors interest rate risk from ALM activities on a monthly basis through a variety of modeling techniques that are used to quantify the sensitivity of net interest income to changes in interest rates. Our net interest income sensitivity analysis typically involves a simulation in which we estimate the net interest income impact of gradual parallel shifts in the yield curve of up 200 basis points and down 100 basis points over a 12-month horizon using a forecasted balance sheet.

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The table below presents the estimated increase (decrease) in the Company's net interest income given a gradual parallel shift in the yield curve up 200 basis points and down 100 basis points over a 12-month horizon.

(Dollars in millions)	December 31, 2018	December 31, 2017
Effect on net interest income		
Increase 200 basis points	\$ 149.7	\$ 100.2
as a percentage of base case net interest income	4.59 %	3.21 %
Decrease 100 basis points	\$ (102.4)	\$ (75.7)
as a percentage of base case net interest income	(3.14)%	(2.42)%

An increase in rates increases net interest income. During 2018, the Company's asset sensitive profile increased due to changes in balance sheet composition, changes in the ALM derivatives portfolio and forecasted balance sheet activity over the next twelve months. During the second quarter of 2018, the Company terminated receive fixed swap contracts used to hedge floating rate commercial loans given expectations of rising rates, which contributed to an increase in the Company's asset sensitivity.

MUSA's securities borrowed or purchased under resale agreements and securities loaned or sold under repurchase agreements are included in the Company's net interest income sensitivity analysis. However, due to the short-term nature of these interest-bearing assets and liabilities, the Company also monitors net interest income sensitivity excluding these balances. Excluding the impact of MUSA, the Company would have a slightly greater asset sensitive risk profile at December 31, 2018.

We believe that our simulation provides management with a comprehensive view of the sensitivity of net interest income to changes in interest rates over the measurement horizon. However, as with any financial model, the underlying assumptions are inherently uncertain and subject to refinement. In particular, two significant models used in interest rate risk measurement address residential mortgage prepayment speeds and non-maturity deposit rate and balance behaviors. The mortgage prepayment model is periodically calibrated to reflect changes in customer behavior. Model performance may be adversely affected by rapid changes in interest rates, home prices and the credit environment. The deposit model uses the Company's historical deposit pricing to forecast future deposit pricing in its scenarios. Management's response to future rate scenarios may deviate from historical responses and actual results may differ from those derived in the simulation analysis due to unexpected market events, unanticipated changes in customer behavior, market interest rates, product pricing, and investment, funding and hedging activities.

For additional information on the Company's ALM securities portfolio and derivative instruments used in our ALM hedging strategies, see the "Balance Sheet Analysis—Securities" section within "Management's Discussion and Analysis of Financial Condition and Results of Operations" in Part II, Item 7. and Note 2 and Note 12 to our Consolidated Financial Statements included in this Form 10-K.

Trading Activities

Trading activities consist primarily of activities at MUAH's broker-dealer subsidiary, MUSA, and derivative contracts MUB enters into as a financial intermediary for customers. MUSA transacts as principal and agent for a variety of securities and exchange traded derivatives. By acting as a financial intermediary, MUB is able to provide our customers with access to a range of products from the securities, foreign exchange and derivatives markets. We generally take offsetting positions to mitigate our exposure to market risk.

The Company monitors market risk from trading activities by utilizing a combination of position limits, VaR, and stop-loss limits, applied at an aggregated level and to various sub-components within those limits. Positions are controlled and reported both in notional and VaR terms. Our calculation of VaR estimates how high the loss in fair value might be, at a 99% confidence level, due to an adverse shift in market prices over a period of ten business days. VaR at the trading activity level is managed within the maximum limit of \$38 million established by Board policy for total trading positions. The VaR model incorporates assumptions on key parameters, including holding period and historical volatility.

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The following table sets forth the average, high and low 10-day 99% confidence level VaR for our trading activities for the years ended December 31, 2018 and 2017:

(Dollars in millions)	December 31, 2018			December 31, 2017		
	Average VaR	High VaR	Low VaR	Average VaR	High VaR	Low VaR
Interest rate	\$ 12.5	\$ 15.3	\$ 9.1	\$ 11.4	\$ 15.2	\$ 8.5
Debt securities	6.8	12.1	2.5	4.4	6.6	1.9
Equity securities	0.8	1.3	0.3	0.7	2.1	0.3
Foreign exchange	0.3	1.2	—	0.5	1.2	0.3
Commodity and other	—	—	—	—	0.1	—
Portfolio diversification	(9.7)	(13.1)	(5.5)	(8.4)	(12.5)	(5.5)
Total	\$ 10.7	\$ 16.8	\$ 6.4	\$ 8.6	\$ 12.7	\$ 5.5

Consistent with our business strategy of focusing on the sale of capital markets products to customers, we manage our trading risk exposures at relatively low levels. Our foreign exchange business continues to derive the majority of its revenue from customer-related transactions. For additional information on the Company's trading account assets and liabilities and trading derivatives, see Note 11 and Note 12 to our Consolidated Financial Statements included in this Form 10-K.

Liquidity Risk Management

Liquidity risk is the risk that an institution's financial condition or overall safety and soundness is adversely affected by an inability, or perceived inability, to meet its contractual, including contingent, obligations. The objective of liquidity risk management is to maintain a sufficient amount of liquidity and diversity of funding sources to allow an institution to meet obligations in both stable and adverse conditions.

The management of liquidity risk is governed by MUAH ALM and Liquidity Risk Management Policies. The MUAH ALM Policy is under the oversight of ALCO, which oversees first line liquidity risk management activities conducted by Treasury. Treasury formulates the funding, liquidity and contingency planning strategies for the Company, the Bank and MUSA, and is responsible for identifying, managing and reporting on liquidity risk. The Liquidity Risk Management Policies for the Company, the Bank and MUSA are under the oversight of the ARC and the Risk Committee of the Board. MRM conducts independent oversight and governance of liquidity risk management activities to establish sound policies and effective risk and independent monitoring controls. We are also subject to a Contingency Funding Plan framework that identifies actions to be taken to help ensure adequate liquidity if an event should occur that disrupts or adversely affects the normal funding activities of the Company, the Bank or MUSA.

Liquidity risk is managed using a total balance sheet perspective that analyzes all sources and uses of liquidity including loans, investments, deposits and borrowings, as well as off-balance sheet exposures. Although we make an effort to diversify our sources of liquidity, as discussed below, we are required to maintain a minimum amount of TLAC-eligible debt due to affiliates beginning January 1, 2019. Various tools are used to measure and monitor liquidity, including forecasting of the sources and uses of cash flows over multiple time horizons and stress testing of the forecasts under various scenarios. Stress testing, which incorporates both institution-specific, and systemic market scenarios, as well as a combination scenario that adversely affects the Company's liquidity position and profile, facilitates the identification of appropriate remedial measures to help ensure that the Company maintains adequate liquidity in adverse conditions. Such measures may include extending the maturity profile of liabilities, optimizing liability levels through pricing strategies, adding new funding sources, altering dependency on certain funding sources, adjusting asset growth and financing or selling assets.

In December 2016, the Federal Reserve finalized rules imposing new TLAC requirements on GSIBs with operations in the U.S., such as MUFG. The final rule includes an Internal TLAC requirement which sets a minimum amount of loss-absorbing instruments, which must be issued by the Company to MUFG or MUFG Bank, Ltd. (or another wholly-owned non-U.S. subsidiary of MUFG) due to MUFG's single point of entry resolution approach. These loss absorbing instruments are comprised of Tier 1 regulatory capital and long-term debt. TLAC

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Tier 1 regulatory capital is designed to absorb ongoing losses, while the conversion of TLAC-eligible long-term debt into common equity of the Company is intended to recapitalize the Company prior to any bankruptcy or insolvency proceedings. During the fourth quarter of 2018, the Company restructured existing debt issued to MUFG Bank, Ltd. and replaced a portion of its externally-placed debt with the issuance of internal TLAC-eligible debt issued to MUFG Bank, Ltd. in order to comply with the new rules. See "Supervision and Regulation-Dodd-Frank Act and Related Regulations" in Part I, Item 1. in this Form 10-K.

We maintain a substantial level of available liquidity in the form of on-balance sheet and off-balance sheet funding sources. Sources of liquidity include cash at the Federal Reserve, unencumbered liquid securities, and capacity to borrow on a secured basis at the FHLB of San Francisco and the Federal Reserve Bank's Discount Window. Total unpledged securities were \$24.0 billion at December 31, 2018. Our primary funding sources are customer deposits, secured FHLB advances, and unsecured short-term and long-term debt. Total deposits increased \$6.2 billion from \$84.8 billion at December 31, 2017 to \$91.0 billion at December 31, 2018. As of December 31, 2018, the Bank had \$16.9 billion of borrowings outstanding with the FHLB of San Francisco, and the Bank had a remaining unused borrowing capacity from the FHLB of San Francisco of \$15.8 billion. The Bank maintains a \$12 billion unsecured bank note program. Available funding under the bank note program was \$5.9 billion at December 31, 2018. We do not have any firm commitments in place to sell additional notes under this program.

In addition to managing liquidity risk on a consolidated basis and at each of the major subsidiaries (the Bank and MUSA), we assess and monitor liquidity at the parent company (MUAH) and the other non-bank subsidiaries. The parent company maintains sufficient liquidity to meet expected obligations, without access to the wholesale funding markets or dividends from subsidiaries, for at least 20 months. As of December 31, 2018, the parent company's liquidity exceeded 20 months.

MUAH and its subsidiaries may borrow on a long-term basis from MUFG Bank, Ltd. and affiliates. As of December 31, 2018, the Company had total long-term debt issued to MUFG Bank, Ltd. and affiliates of \$7.3 billion.

The Company's total wholesale funding at December 31, 2018 included \$17.6 billion of long-term debt (excluding nonrecourse debt) and \$9.3 billion of short-term debt. For additional information regarding our outstanding debt, refer to Note 9 and Note 10 to our Consolidated Financial Statements included in this Form 10-K. We evaluate and monitor the stability and reliability of our various funding sources to help ensure that we have sufficient liquidity in adverse circumstances.

Our costs and ability to raise funds in the capital markets are influenced by our credit ratings. In April 2018, Standard & Poor's revised the outlook on MUAH, MUB and MUSA to positive from stable following a similar revision to MUFG's outlook. The change in MUFG's outlook is a result of Standard & Poor's revising the outlook on the long-term sovereign rating of Japan to positive from stable. The following table provides our credit ratings as of December 31, 2018:

		MUFG Union Bank, N.A.		MUFG Securities Americas Inc.	MUFG Americas Holdings Corporation
		Deposits	Senior Debt	Senior Debt	Senior Debt
Standard & Poor's	Long-term	–	A	A	A-
	Short-term	–	A-1	A-1	A-2
Moody's	Long-term	Aa2	A2	–	A2
	Short-term	P-1	P-1	–	–
Fitch	Long-term	A+	A	A	A
	Short-term	F1	F1	F1	F1

For further information, including information about rating agency assessments, see "MUFG Bank, Ltd.'s and Mitsubishi UFJ Financial Group's credit ratings and financial or regulatory condition could adversely affect our operations" and "Our credit ratings are important in order to maintain liquidity" in Part I, Item 1A. "Risk Factors" in this Form 10-K.

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The OCC, the Federal Reserve and the FDIC jointly adopted a final rule to implement a standardized quantitative liquidity requirement generally consistent with the LCR standards established by the BCBS. The LCR rule is designed to ensure that covered banking organizations maintain an adequate level of cash and HQLA, such as central bank reserves and government and corporate debt, to meet estimated net liquidity needs in a short-term stress scenario using liquidity inflow and outflow assumptions provided in the rule (net cash outflow). At December 31, 2018, the Company was in compliance with the LCR requirements.

For further information regarding this rule, see "Supervision and Regulation—Regulatory Capital and Liquidity Standards—Liquidity Coverage Ratio" in Part I, Item 1. of this Form 10-K and *"The effects of changes or increases in, or supervisory enforcement of, banking, securities, competition or other laws and regulations or governmental fiscal, monetary, or tax policies could adversely affect us or make strategic planning more difficult"* in Part I, Item 1A. "Risk Factors" of this Form 10-K.

Operational Risk Management

Operational risk is defined as the potential that events will have an adverse effect on current or projected financial condition arising from inadequate or failed internal processes or systems, human errors or misconduct, or adverse external events. This includes legal risk, but excludes strategic and reputation risk. In particular, information security is a significant operational risk element for the Company, and includes the risk of losses resulting from cyber-attacks or other related cyber incidents. See *"We are subject to a wide array of operational risks, including, but not limited to, cyber-security risks"* in Part I, Item 1A. "Risk Factors" of this Form 10-K. Operational risk is mitigated through a system of internal controls that are designed to keep these risks at appropriate levels.

Our operational risk management framework was designed to meet industry and regulatory standards. The Operational Risk Management Policies and Procedures establish the core governing principles for operational risk management and provide the framework to identify, assess, measure, manage, monitor, and report on operational risks in a consistent manner across the enterprise.

The Company has established an independent ORMD under the CRO. The operational risk framework provides requirements for the business lines to better manage their operational risk. ORMD and the operational risk management framework are overseen by the Operational Risk Management Committee.

Operational risk is managed through a combination of first and second line of defense functions. The first line of defense is comprised of business line management supported by business unit risk managers. ORMD provides oversight, guidance, tools and support to the business units in assessing and monitoring their operational risk, as well as validation and effective challenge of their operational risk assessments. Specifically, ORMD evaluates and challenges the risk and control self-assessments prepared by the business units and assures their operational risk profiles are within established guidelines and tolerances. ORMD is supported for specific categories of operational risk by second line of defense subject matter experts. In addition, ORMD monitors business units to ensure mitigating activities are identified where needed and appropriately addressed.

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MUAH's consolidated financial statements are prepared in accordance with GAAP, which includes management estimates and judgments. The financial information contained within our statements is, to a significant extent, financial information that is based on estimates used to measure the financial effects of transactions and events that have already occurred. A variety of factors could affect the ultimate value that is obtained either when earning income, recognizing an expense, recovering an asset or relieving a liability. For example, we use discount factors and other assumptions to measure certain assets and liabilities. A change in the discount factor or other important assumptions could significantly increase or decrease the reported amounts of those assets and liabilities and result in either a beneficial or an adverse impact to our financial results. As discussed in "Allowance for Credit Losses" in Part II, Item 7. "Management's Discussion and Analysis of Financial Condition and Results of Operations" in this Form 10-K, we estimate probability of default and the loss severity associated with the default (i.e. the loss-given default) to estimate the credit losses inherent in our loan and lease portfolios held for investment and certain off-balance sheet commitments on the balance sheet date. Actual losses could differ significantly from our loss estimates. Other significant estimates that we use include the valuation of certain derivatives and securities, the assumptions used in measuring our transfer pricing revenue, pension obligations, goodwill impairment, and assumptions regarding our effective tax rates.

Management has reviewed and approved these critical accounting policies and has discussed these policies with the Audit & Finance Committee.

Understanding our accounting policies is fundamental to understanding our consolidated financial condition and consolidated results of operations. Accordingly, both our critical accounting estimates and our significant accounting policies are discussed in Note 1 to our Consolidated Financial Statements included in this Form 10-K. Our most critical accounting policies include the allowance for credit losses, valuation of financial instruments, hedge accounting, transfer pricing revenue, pension obligations, goodwill impairment analysis and income taxes.

Allowance for Credit Losses

The allowance for credit losses, which consists of the allowances for loan losses and losses on unfunded credit commitments, is an estimate of the losses that are inherent in our loan portfolio as well as for certain unfunded credit commitments such as unfunded loan commitments, standby letters of credit, and commercial lines of credit that are not for sale. Our allowance for credit losses has four components: the allowance for loans collectively evaluated for impairment, the allowance for loans individually evaluated for impairment, the unallocated allowance, and the allowance for losses on unfunded credit commitments which is included in other liabilities. Each of these components is determined based upon estimates that are inherently subjective and our actual losses incurred could differ significantly from those estimates. For the commercial portfolio segment, the allowance for loans collectively evaluated for impairment is calculated by utilizing a dual factor internal risk rating system that encompasses both the probability that a credit facility may ultimately default (i.e. probability of default) and an estimate of the severity of the loss that would be realized upon such default (i.e. the loss-given default) and applying these risk ratings to outstanding loans and most unused commitments. The probability of default and loss-given default may be adjusted for qualitative or environmental factors that, in management's judgment, are likely to cause estimated credit losses associated with the existing portfolio to differ from the historical probability of default and loss-given default. For loans that are homogeneous in nature, such as in our consumer portfolio segment, we estimate the allowance based on forecasted losses based on incurred loss events. The allowance for loans collectively evaluated for impairment also includes attributions for certain sectors within the commercial and consumer portfolio segments to account for probable losses that are currently not reflected in the probability of default and loss-given default. Segment attributions are calculated based on migration scenarios for the commercial portfolio and specific attributes applicable to the consumer portfolio. The unallocated allowance is composed of attributions that are intended to capture probable losses from adverse changes in credit migration and other inherent losses that are not currently reflected in the allowance for loan losses that are ascribed to our portfolio segments. Our allowance for losses on unfunded credit commitments is measured in approximately the same manner as the allowance for loan losses but includes an estimate of expected utilization based upon historical data. For further information regarding our allowance for loan losses, see "Allowance for Loan Losses" in Note 1 and Note 3 to our Consolidated Financial Statements in this Form 10-K.

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Valuation of Financial Instruments

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability (i.e., an exit price) in an orderly transaction between willing market participants at the measurement date. In determining fair value, we utilize valuation techniques that maximize the use of observable inputs and minimize the use of unobservable inputs. Observable inputs reflect market-derived or market-based information obtained from independent sources (e.g., yield curves, foreign exchange rates, implied volatilities and credit spreads), while unobservable inputs reflect our own view of the assumptions that would be considered by market participants. Valuation adjustments may be made to ensure that certain financial instruments are recorded at fair value. These adjustments include amounts that reflect counterparty credit risk and our own credit risk in determining the fair value of our trading account liabilities and certain other liabilities.

Based on the observability of the inputs used in the valuation, we classify our financial assets and liabilities measured and disclosed at fair value within the three-level hierarchy (i.e., Level 1, Level 2 and Level 3) defined in GAAP. This hierarchy ranks the quality and reliability of the information used to determine fair values with Level 1 deemed most reliable and Level 3 having at least one significant unobservable input. The degree of management judgment required in measuring fair value increases with the higher level of measurement within the three-level hierarchy.

The following table reflects financial instruments measured at fair value on a recurring basis as of December 31, 2018 and December 31, 2017.

(Dollars in millions)	December 31, 2018		December 31, 2017	
	Fair Value	Percentage of Total	Fair Value	Percentage of Total
Financial Instruments recorded at fair value on a recurring basis				
Assets:				
Level 1	\$ 155	— %	\$ 212	1 %
Level 2	26,404	95	26,789	95
Level 3	1,621	6	1,803	6
Netting Adjustment ⁽¹⁾	(354)	(1)	(607)	(2)
Total	<u>\$ 27,826</u>	<u>100 %</u>	<u>\$ 28,197</u>	<u>100 %</u>
As a percentage of total Company assets		<u>17 %</u>		<u>18 %</u>
Liabilities:				
Level 1	\$ 125	3 %	\$ 46	1 %
Level 2	4,214	102	4,036	109
Level 3	131	3	257	7
Netting Adjustment ⁽¹⁾	(322)	(8)	(620)	(17)
Total	<u>\$ 4,148</u>	<u>100 %</u>	<u>\$ 3,719</u>	<u>100 %</u>
As a percentage of total Company liabilities		<u>3 %</u>		<u>3 %</u>

(1) Amounts represent the impact of legally enforceable master netting agreements between the same counterparties that allow the Company to net settle all contracts.

For detailed information on our measurement of fair value of financial instruments and our related valuation methodologies, see Note 11 to our Consolidated Financial Statements included in this Form 10-K.

Transfer Pricing

Employees of the Company perform management and support services to MUFG Bank, Ltd. in connection with the operation and administration of MUFG Bank, Ltd.'s businesses in the Americas. In consideration for the services provided, MUFG Bank, Ltd. pays the Company fees under a master services agreement, which reflects arm's length market-based pricing for those services. The Company recognizes transfer pricing revenue when delivery (performance) has occurred or services have been rendered. Management applies a facts and circumstances evaluation to determine the most appropriate method to calculate an arm's length market-based price for services performed by the Company for MUFG Bank, Ltd. and other non-consolidated MUFG affiliates.

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Pension Obligations

Our pension obligations and related assets of our defined retirement benefit plan are presented in Note 15 to our Consolidated Financial Statements included in this Form 10-K. Plan assets consist primarily of marketable equity and debt instruments. Plan obligations and the annual benefit expense are estimated by management utilizing actuarially based data and key assumptions. Key assumptions in measuring the plan obligations and determining the pension benefit expense are the discount rate, the rate of compensation increases, and the estimated future return on plan assets. Our discount rate is calculated using a yield curve based on Aa3 or better rated bonds. This yield curve is matched to the anticipated timing of the actuarially determined estimated pension benefit payments to determine the weighted average discount rate. Compensation increase assumptions are based upon historical experience and anticipated future management actions. Asset returns are based upon the anticipated average rate of earnings expected on the invested funds of the plan.

Goodwill Impairment Analysis

We allocate our goodwill to reporting units and review for impairment at least annually, and whenever events or changes in circumstances indicate the carrying amount may not be recoverable. Goodwill is assessed for impairment at the reporting unit level either qualitatively or quantitatively. If the elected qualitative assessment results indicate that it is more likely than not that the fair value of a reporting unit is less than its carrying amount, then the quantitative impairment test is required. Various valuation methodologies are applied to carry out the first step of the quantitative impairment test by comparing the fair value of the reporting unit to its carrying amount, including goodwill. If the fair value of the reporting unit is less than its carrying amount, a second step is required to measure the amount of impairment by comparing the implied fair value of the goodwill assigned to the reporting unit with the carrying amount of that goodwill.

Management applies significant judgment when estimating the fair value of its reporting units. This judgment includes developing cash flow projections, selecting appropriate discount rates, incorporating general economic and market conditions, identifying relevant market comparables, and selecting an appropriate control premium. Imprecision in estimating these factors can affect the estimated fair value of the reporting units.

The Company continuously monitors inputs used when performing its annual goodwill impairment such as the cash flow projections discussed above. When a disruption in the Company's business, unexpected significant declines in operating results, or significant trends become apparent that may negatively affect those projections, the Company may have to assess the need to perform the first step of the quantitative impairment test to conclude whether the fair value of the reporting unit is still above its carrying amount.

Income Taxes

MUAH and its subsidiaries are subject to the income tax laws of the U.S., its states, and municipalities and laws of the other jurisdictions in which we conduct business. Our income tax expense consists of two components; current and deferred. Current income tax expense approximates taxes to be paid or refunded for the current period and includes income tax expense for our uncertain tax positions. Uncertain tax positions that meet the "more likely than not" recognition threshold are measured to determine the amount of benefit to recognize. Positions are measured as the largest amount of benefit that management believes has a greater than 50% likelihood of realization upon settlement. Deferred income tax expense results from changes in deferred income tax assets and liabilities between periods, where the deferred tax assets and liabilities are based on the tax effects of the differences between the financial accounting and tax basis of assets and liabilities. Deferred tax assets are recognized subject to management's judgment that realization is "more likely than not" based upon all available positive and negative evidence. Foreign taxes paid are generally applied as a credit to reduce income taxes payable.

The income tax laws of the jurisdictions in which we operate are complex and subject to differing interpretations. In establishing a provision for income tax expense, we make judgments and interpretations about the application of these complex laws and the result is by its nature an estimate. We are routinely subject to audits from tax authorities. To the extent the tax authorities disagree with our conclusions and depending on the final resolution of those disagreements, our effective tax rate may be materially affected in the period of final settlement. We also make estimates about when future certain items will affect taxable income in the jurisdictions in which we conduct business.

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We currently have a valid water's-edge election to include the U.S. operations of MUFG with MUAH and its subsidiaries' in our combined California tax return. We analyze the alternative California worldwide tax liability annually to determine whether to revoke or retain this voluntary tax election. As a water's-edge filer, the taxable profits of MUFG's U.S. operations impact our state effective tax rate. Some affiliates included in our California tax return are fiscal year taxpayers. The inclusion of calendar and fiscal year taxpayers in the same combined return impacts the timing of financial data used in determining our state tax rates. We review MUFG's U.S. operations quarterly to determine the appropriate rate at which to recognize our California and other state tax expense.

For further information on our income taxes, see Note 17 to our Consolidated Financial Statements included in this Form 10-K.

Non-GAAP Financial Measures

The following table shows the calculation of return on average MUAH tangible common equity for the years ended December 31, 2018, 2017 and 2016. Management believes that this ratio provides useful supplemental information regarding the Company's business results.

(Dollars in millions)	For the Years Ended December 31,		
	2018	2017	2016
Net income attributable to MUAH	\$ 1,073	\$ 1,077	\$ 990
Add: intangible asset amortization, net of tax	19	18	17
Net income attributable to MUAH, excluding intangible asset amortization (a)	\$ 1,092	\$ 1,095	\$ 1,007
Average MUAH stockholders' equity	\$ 18,400	\$ 17,926	\$ 17,003
Less: Goodwill	3,301	3,263	3,225
Less: Intangible assets, except mortgage servicing rights	299	269	196
Less: Deferred tax liabilities related to goodwill and intangible assets	(57)	(72)	(47)
Average MUAH tangible common equity (b)	\$ 14,857	\$ 14,466	\$ 13,629
Return on average MUAH tangible common equity (a)/(b)	7.35%	7.57%	7.39%

The following table shows the calculation of the adjusted efficiency ratio for the year ended December 31, 2018. Management believes adjusting the efficiency ratio for the fees and costs associated with services provided to MUFG Bank, Ltd. branches in the U.S. enhances the comparability of MUAH's efficiency ratio when compared with other financial institutions. Management believes adjusting revenue for the impact of the TCJA enhances comparability between periods. Adjusted efficiency ratios for the years ended December 31, 2017 and 2016 are not presented because the Company began identifying all costs associated with services provided to MUFG Bank, Ltd. branches in the U.S. in the third quarter of 2017. Previously, the Company was only able to identify a portion of the costs associated with services provided to MUFG Bank, Ltd. branches in the U.S.

(Dollars in millions)	For the Year Ended December 31, 2018
Noninterest expense (a)	\$ 4,277
Less: Costs associated with services provided to MUFG Bank, Ltd. branches in the U.S.	1,001
Noninterest expense, as adjusted (b)	\$ 3,276
Total revenue (c)	\$ 5,484
Less: Fees from affiliates for services provided to MUFG Bank, Ltd.'s branches in the U.S.	1,128
Less: Impact of the TCJA	(164)
Total revenue, as adjusted (d)	\$ 4,520
Efficiency ratio (a)/(c)	77.98%
Adjusted efficiency ratio (b)/(d)	72.47%

Table of Contents**Financial Statements and Supplementary Data****MUFG Americas Holdings Corporation and Subsidiaries
Consolidated Statements of Income**

(Dollars in millions)	For the Years Ended December 31,		
	2018	2017	2016
Interest Income			
Loans	\$ 3,303	\$ 2,892	\$ 2,839
Securities	665	564	483
Securities borrowed or purchased under resale agreements	652	347	195
Trading assets	415	326	172
Other	90	50	27
Total interest income	5,125	4,179	3,716
Interest Expense			
Deposits	441	241	194
Commercial paper and other short-term borrowings	168	58	32
Long-term debt	365	250	240
Securities loaned or sold under repurchase agreements	734	353	140
Trading liabilities	110	73	57
Total interest expense	1,818	975	663
Net Interest Income	3,307	3,204	3,053
(Reversal of) provision for credit losses	106	(103)	155
Net interest income after (reversal of) provision for credit losses	3,201	3,307	2,898
Noninterest Income			
Service charges on deposit accounts	179	188	192
Trust and investment management fees	118	121	120
Trading account activities	(24)	(5)	105
Securities gains, net	8	17	69
Credit facility fees	90	98	108
Brokerage commissions and fees	73	69	64
Card processing fees, net	50	47	39
Investment banking and syndication fees	355	369	312
Fees from affiliates	1,213	866	957
Other, net	115	240	259
Total noninterest income	2,177	2,010	2,225
Noninterest Expense			
Salaries and employee benefits	2,616	2,495	2,439
Net occupancy and equipment	367	357	325
Professional and outside services	487	439	369
Software	287	192	154
Regulatory assessments	85	82	72
Intangible asset amortization	26	30	28
Other	409	389	395
Total noninterest expense	4,277	3,984	3,782
Income before income taxes and including noncontrolling interests	1,101	1,333	1,341
Income tax expense	52	299	419
Net Income Including Noncontrolling Interests	1,049	1,034	922
Deduct: Net loss from noncontrolling interests	24	43	68
Net Income Attributable to MUAH	\$ 1,073	\$ 1,077	\$ 990

See accompanying Notes to Consolidated Financial Statements.

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MUFG Americas Holdings Corporation and Subsidiaries
Consolidated Statements of Comprehensive Income

(Dollars in millions)	For the Years Ended December 31,		
	2018	2017	2016
Net Income Attributable to MUAH	\$ 1,073	\$ 1,077	\$ 990
Other Comprehensive Income (Loss), Net of Tax:			
Net change in unrealized gains (losses) on cash flow hedges	(46)	(66)	(115)
Net change in unrealized gains (losses) on investment securities	(140)	16	(56)
Foreign currency translation adjustment	(2)	7	2
Pension and other postretirement benefit adjustments	(130)	95	23
Other	(1)	—	—
Total other comprehensive income (loss)	(319)	52	(146)
Comprehensive Income (Loss) Attributable to MUAH	754	1,129	844
Comprehensive income (loss) from noncontrolling interests	(24)	(43)	(68)
Total Comprehensive Income (Loss)	\$ 730	\$ 1,086	\$ 776

See accompanying Notes to Consolidated Financial Statements.

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MUFG Americas Holdings Corporation and Subsidiaries
Consolidated Balance Sheets

<u>(Dollars in millions except per share amount)</u>	<u>December 31, 2018</u>	<u>December 31, 2017</u>
Assets		
Cash and due from banks	\$ 2,061	\$ 2,057
Interest bearing deposits in banks	6,289	1,335
Total cash and cash equivalents	8,350	3,392
Securities borrowed or purchased under resale agreements	22,368	20,894
Trading account assets (includes \$1,239 at December 31, 2018 and \$1,001 at December 31, 2017 pledged as collateral that may be repledged)	11,213	10,567
Securities available for sale (includes \$75 at December 31, 2018 and \$163 at December 31, 2017 pledged as collateral that may be repledged)	16,314	17,563
Securities held to maturity (fair value \$10,720 at December 31, 2018 and \$9,799 at December 31, 2017)	10,901	9,885
Loans held for investment	86,507	80,014
Allowance for loan losses	(474)	(476)
Loans held for investment, net	86,033	79,538
Goodwill	3,301	3,301
Other assets	9,620	9,410
Total assets	\$ 168,100	\$ 154,550
Liabilities		
Deposits:		
Noninterest bearing	\$ 31,754	\$ 32,602
Interest bearing	59,225	52,185
Total deposits	90,979	84,787
Securities loaned or sold under repurchase agreements	27,285	26,437
Commercial paper and other short-term borrowings	9,263	7,066
Long-term debt	17,918	12,162
Trading account liabilities	4,027	3,600
Other liabilities	2,048	2,143
Total liabilities	151,520	136,195
Commitments, contingencies and guarantees—See Note 20		
Equity		
MUAH stockholders' equity:		
Preferred stock:		
Authorized 5,000,000 shares; no shares issued or outstanding	—	—
Common stock, par value \$1 per share:		
Authorized 1,700,000,000 shares, 131,935,124 shares issued and outstanding as of December 31, 2018 and authorized 300,000,000 shares, 147,589,713 shares issued and outstanding as of December 31, 2017	132	148
Additional paid-in capital	8,176	8,197
Retained earnings	9,524	10,936
Accumulated other comprehensive loss	(1,324)	(1,026)
Total MUAH stockholders' equity	16,508	18,255
Noncontrolling interests	72	100
Total equity	16,580	18,355
Total liabilities and equity	\$ 168,100	\$ 154,550

See accompanying Notes to Consolidated Financial Statements.

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MUFG Americas Holdings Corporation and Subsidiaries
Consolidated Statements of Changes in Stockholders' Equity

	MUAH Stockholders' Equity					
(Dollars in millions)	Common Stock	Additional Paid-in Capital	Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Noncontrolling Interests	Total Equity
BALANCE DECEMBER 31, 2015	\$ 144	\$ 7,868	\$ 9,116	\$ (750)	\$ 215	\$ 16,593
Net income (loss)	—	—	990	—	(68)	922
Other comprehensive income (loss), net of tax	—	—	—	(146)	—	(146)
Compensation—restricted stock units	—	13	(3)	—	—	10
Other	—	3	(2)	—	6	7
Net change	—	16	985	(146)	(62)	793
BALANCE DECEMBER 31, 2016	\$ 144	\$ 7,884	\$ 10,101	\$ (896)	\$ 153	\$ 17,386
Net income (loss)	—	—	1,077	—	(43)	1,034
Other comprehensive income (loss), net of tax	—	—	—	52	—	52
Compensation—restricted stock units	—	(8)	(2)	—	—	(10)
Issuance of common stock ⁽¹⁾	3	321	78	—	—	402
Dividends	—	—	(500)	—	—	(500)
TCJA reclassification	—	—	182	(182)	—	—
Other	1	—	—	—	(10)	(9)
Net change	4	313	835	(130)	(53)	969
BALANCE DECEMBER 31, 2017	\$ 148	\$ 8,197	\$ 10,936	\$ (1,026)	\$ 100	\$ 18,355
Net income (loss)	—	—	1,073	—	(24)	1,049
Other comprehensive income (loss), net of tax	—	—	—	(319)	—	(319)
Compensation—restricted stock units	—	—	(5)	—	—	(5)
Share repurchase	(16)	—	(2,480)	—	—	(2,496)
Other	—	(21)	—	21	(4)	(4)
Net change	(16)	(21)	(1,412)	(298)	(28)	(1,775)
BALANCE DECEMBER 31, 2018	\$ 132	\$ 8,176	\$ 9,524	\$ (1,324)	\$ 72	\$ 16,580

(1) For additional information on the issuance of common stock, refer to Note 21.

See accompanying Notes to Consolidated Financial Statements.

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MUFG Americas Holdings Corporation and Subsidiaries
Consolidated Statements of Cash Flows

(Dollars in millions)	For the Years Ended December 31,		
	2018	2017	2016
Cash Flows from Operating Activities			
Net income including noncontrolling interests	\$ 1,049	\$ 1,034	\$ 922
Adjustments to reconcile net income to net cash provided by (used in) operating activities:			
(Reversal of) provision for credit losses	106	(103)	155
Depreciation, amortization and accretion, net	411	331	325
Stock-based compensation—restricted stock units	77	66	67
Deferred income taxes	(242)	25	79
Net gains on sales of securities	(8)	(17)	(69)
Net decrease (increase) in securities borrowed or purchased under resale agreements	(1,474)	(1,147)	11,325
Net increase (decrease) in securities loaned or sold under repurchase agreements	848	1,821	(4,525)
Net decrease (increase) in trading account assets	(646)	(1,625)	(5,208)
Net decrease (increase) in other assets	170	414	(875)
Net increase (decrease) in trading account liabilities	427	695	(807)
Net increase (decrease) in other liabilities	103	(137)	(98)
Loans originated for sale	(2,339)	(813)	(1,358)
Net proceeds from sale of loans originated for sale	1,626	697	1,332
Pension and other benefits adjustment	(50)	(169)	(147)
Other, net	(18)	11	15
Total adjustments	(1,009)	49	211
Net cash provided by (used in) operating activities	40	1,083	1,133
Cash Flows from Investing Activities:			
Proceeds from sales of securities available for sale	1,505	2,460	4,842
Proceeds from paydowns and maturities of securities available for sale	2,822	2,809	2,171
Purchases of securities available for sale	(5,643)	(8,912)	(6,666)
Proceeds from paydowns and maturities of securities held to maturity	1,682	1,782	2,257
Purchases of securities held to maturity	(772)	(1,360)	(2,447)
Proceeds from sales of loans	770	926	1,526
Net decrease (increase) in loans	(6,785)	(2,947)	(519)
Purchases of other investments	(262)	(378)	(717)
Other, net	(57)	(60)	148
Net cash provided by (used in) investing activities	(6,740)	(5,680)	595
Cash Flows from Financing Activities:			
Net increase (decrease) in deposits	6,184	(2,003)	2,606
Net increase (decrease) in commercial paper and other short-term borrowings	2,198	4,709	(1,065)
Proceeds from issuance of long-term debt	15,458	5,027	795
Repayment of long-term debt	(9,655)	(4,801)	(3,082)
Dividends paid	—	(500)	—
Share repurchase	(2,496)	—	—
Other, net	(115)	(71)	6
Change in noncontrolling interests	(4)	(10)	6
Net cash provided by (used in) financing activities	11,570	2,291	(734)
Net change in cash and cash equivalents	4,870	(2,306)	994
Cash, cash equivalents and restricted cash at beginning of period	3,528	5,834	4,840
Cash, cash equivalents and restricted cash at end of period	\$ 8,398	\$ 3,528	\$ 5,834
Cash Paid During the Period For:			
Interest	\$ 1,761	\$ 919	\$ 626
Income taxes, net	116	178	159

Supplemental Schedule of Noncash Investing and Financing Activities:

Net transfer of loans held for investment to loans held for sale	\$ 44	\$ 776	\$ 1,976
Securities available for sale transferred to securities held to maturity	2,006	--	---
Transfer of assets and liabilities from MUFG Bank, Ltd. and MUFG (1)			
Carrying amount of assets acquired	—	1,003	--
Carrying amount of liabilities assumed	---	601	---

Reconciliation of Cash, Cash Equivalents and Restricted Cash:

Cash and cash equivalents	\$ 8,350	\$ 3,392	\$ 5,753
Restricted cash included in other assets	48	136	81
Total cash, cash equivalents and restricted cash per consolidated statement of cash flows	<u>\$ 8,398</u>	<u>\$ 3,528</u>	<u>\$ 5,834</u>

(1) For additional information on the transfer of assets and liabilities from MUFG Bank, Ltd., refer to Note 21 to these Consolidated Financial Statements.

See accompanying Notes to Consolidated Financial Statements.

Table of Contents**Notes to Consolidated Financial Statements****Note 1—Summary of Significant Accounting Policies and Nature of Operations*****Introduction***

MUFG Americas Holdings Corporation (MUAH) is a financial holding company, bank holding company and intermediate holding company whose principal subsidiaries are MUFG Union Bank, N.A. (MUB or the Bank) and MUFG Securities Americas Inc. (MUSA). MUAH is owned by MUFG Bank, Ltd. and MUFG. MUFG Bank, Ltd. is a wholly-owned subsidiary of MUFG. As used in these Consolidated Financial Statements, terms such as "the Company," "we," "us" and "our" refer to MUFG Americas Holdings Corporation (MUAH), one or more of its consolidated subsidiaries, or to all of them together.

MUAH provides a wide range of financial services to consumers, small businesses, middle-market companies and major corporations nationally and internationally. The Company also provides various business, banking, financial, administrative and support services, and facilities for MUFG Bank, Ltd. (formerly The Bank of Tokyo-Mitsubishi UFJ, Ltd.) in connection with the operation and administration of MUFG Bank, Ltd.'s business in the U.S. (including MUFG Bank, Ltd.'s U.S. branches).

On July 1, 2016, in accordance with the requirements of the U.S. Federal Reserve Board's final rules for Enhanced Prudential Standards, the Company was designated the U.S. Intermediate Holding Company (IHC) of its ultimate parent, MUFG. The IHC formation resulted in the transfer of interests in substantially all of MUFG's U.S. subsidiaries to MUAH. The Company issued 7,991,449 shares to MUFG Bank, Ltd. and MUFG in exchange for the transferred subsidiaries. These subsidiaries included MUSA, a registered broker-dealer, and various other non-bank subsidiaries. The assets received and liabilities assumed were transferred at their carrying amounts, and all prior periods have been revised to include the results of these transferred subsidiaries. MUFG's remaining U.S. subsidiaries were transferred to MUAH on July 1, 2017. The Company issued 3,267,433 shares to MUFG Bank, Ltd. and MUFG in exchange for these transferred subsidiaries and their financial results have been included in MUAH's financial results prospectively beginning July 1, 2017.

Principles of Consolidation and Basis of Financial Statement Presentation

The consolidated financial statements include the accounts of the Company and other entities in which the Company has a controlling financial interest. The Company determines whether it has a controlling financial interest in an entity by first evaluating whether the entity is a voting interest entity or a VIE. The primary beneficiary of a VIE is the entity that has the power to direct the activities of the VIE that most significantly impact the VIE's economic performance and has the obligation to absorb losses or receive benefits from the VIE that could potentially be significant to the VIE. Results of operations from VIEs are included from the dates that the Company became the primary beneficiary. All intercompany transactions and balances with consolidated entities are eliminated in consolidation.

The Company accounts for equity investments over which it exerts significant influence using the equity method of accounting. Non-marketable equity investments where the Company does not exert significant influence are accounted for at cost or using the proportional amortization method. Investments accounted for under the equity method, proportional amortization method, and cost method are included in other assets.

The accounting and reporting policies of the Company conform to accounting principles generally accepted in the United States of America (GAAP). The policies that materially affect the determination of financial position, results of operations and cash flows are summarized below.

The preparation of financial statements in conformity with GAAP also requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expense during the reporting period. Although such estimates contemplate current conditions and management's expectations of how they may change in the future, it is reasonably possible that actual results could differ significantly from those estimates. This could materially affect the Company's results of operations and financial condition in the near term. Critical estimates made by management in the preparation of the Company's financial statements include, but are not limited to, the allowance for credit losses (Note 3), goodwill impairment (Note 5), fair value of financial instruments (Note 11), pension accounting (Note 15), income taxes (Note 17), and transfer pricing (Note 21).

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Table of Contents**Note 1—Summary of Significant Accounting Policies and Nature of Operations (Continued)*****Cash and Cash Equivalents***

Cash and cash equivalents include cash and due from banks, interest bearing deposits in banks, and federal funds sold.

Securities Borrowed or Purchased under Agreements to Resell and Securities Loaned or Sold under Agreements to Repurchase

Securities borrowed and securities loaned transactions do not qualify for sale accounting and therefore are not recognized on the transferee's balance sheet. Securities borrowed and securities loaned represent the amount of cash collateral advanced or received, respectively. The Company monitors the market value of the borrowed and loaned securities on a daily basis, with additional collateral obtained or refunded as necessary. Accrued interest associated with securities borrowed and securities loaned is included in other assets and other liabilities, respectively. Interest associated with securities borrowed and securities loaned is recorded as interest income and interest expense, respectively.

Securities purchased under agreements to resell ("reverse repurchase agreements") and securities sold under agreements to repurchase ("repurchase agreements") do not qualify for sale accounting and therefore are not recognized on the transferee's balance sheet. Transactions involving these agreements are accounted for as collateralized financings. These agreements are recorded at the amounts at which the securities were acquired or sold and are carried at amortized cost. The Company generally obtains possession of collateral with a market value equal to or in excess of the principal amount financed under reverse repurchase agreements. Collateral is valued daily, and the Company may require counterparties to deposit additional collateral or return collateral pledged, when appropriate. Accrued interest associated with reverse repurchase agreements and repurchase agreements is included in other assets and other liabilities, respectively. Interest associated with reverse repurchase agreements and repurchase agreements is recorded as interest income and interest expense, respectively. The Company generally enters into reverse repurchase and repurchase agreements under legally enforceable master repurchase agreements that give the Company, in the event of counterparty default, the right to liquidate securities held and offset receivables and payables with the same counterparty. The Company offsets reverse repurchase and repurchase agreements with the same counterparty where they have a legally enforceable master netting agreement and the transactions have the same maturity date.

Trading Account Assets and Liabilities

Trading account assets and liabilities are recorded at fair value and include certain securities and derivatives. Securities are classified as trading when management acquires them with the intent to hold for short periods, primarily at MUAH's broker-dealer subsidiary, MUSA, or as an accommodation to customers. Substantially all of the securities have a high degree of liquidity and a readily determinable fair value. Interest on securities classified as trading is included in interest income, and realized gains and losses from sale and unrealized fair value adjustments are recognized in noninterest income. Trading securities that are pledged under an agreement to repurchase and which may be sold or repledged under that agreement are separately identified as pledged as collateral.

Derivatives included in trading account assets and liabilities are entered into for trading purposes or as an accommodation to customers. Contracts primarily include interest rate swaps and options, commodity swaps and options, and foreign exchange contracts. The Company nets derivative assets and liabilities, and the related cash collateral receivables and payables, when a legally enforceable master netting arrangement exists between the Company and the derivative counterparty. Changes in fair values and realized income or expense for trading asset and liability derivatives are included in noninterest income.

Securities

Securities are classified based on management's intent and are recorded on the consolidated balance sheet as of the trade date, when acquired in a regular-way trade. Debt securities for which management has both the positive intent and ability to hold to maturity are classified as held to maturity and are carried at amortized cost. Debt securities with readily determinable fair values that are not classified as trading assets or held to maturity are classified as available for sale and are carried at fair value, with the unrealized gains or losses reported net of taxes as a component of AOCI in stockholders' equity until realized.

Table of Contents**Note 1—Summary of Significant Accounting Policies and Nature of Operations (Continued)**

Interest income on debt securities classified as either available for sale or held to maturity includes the amortization of premiums and the accretion of discounts using a method that produces a level yield and is included in interest income on securities.

Realized gains and losses on the sale of available for sale securities are included in noninterest income. The specific identification method is used to calculate realized gains and losses on sales.

Securities available for sale that are pledged under an agreement to repurchase and which may be sold or repledged under that agreement are separately identified as pledged as collateral.

Debt securities available for sale and debt securities held to maturity are subject to impairment testing when a security's fair value is lower than its amortized cost. Debt securities with unrealized losses are considered other-than-temporarily impaired if we intend to sell the debt security, if it is more likely than not that we will be required to sell the security before recovery of its amortized cost basis, or if we do not expect to recover the entire amortized cost basis of the security. If we intend to sell the security, or if it is more likely than not that we will be required to sell the security before recovery, an other-than-temporary impairment write-down is recognized in earnings equal to the entire difference between the amortized cost basis and fair value of the debt security. However, even if we do not expect to sell a debt security we must evaluate the expected cash flows to be received and determine if a credit loss exists. In the event of a credit loss, only the amount of impairment associated with the credit loss is recognized in income. Amounts related to factors other than credit losses are recorded in other comprehensive income. For further information on our other-than-temporary impairment analysis, see Note 2 to our Consolidated Financial Statements in this Form 10-K.

Loans Held for Investment, Other Acquired Loans, Loans Held for Sale and Leases

Loans held for investment are reported at the principal amounts outstanding, net of charge-offs, unamortized nonrefundable loan fees, direct loan origination costs, and purchase premiums and discounts. Where loans are held for investment, the net basis adjustment excluding charge-offs on the loan is generally recognized in interest income on an effective yield basis over the contractual loan term.

Nonaccrual loans are those for which management has discontinued accrual of interest because there exists significant uncertainty as to the full and timely collection of either principal or interest. Loans are generally placed on nonaccrual when such loans have become contractually past due 90 days with respect to principal or interest. Past due status is determined based on the contractual terms of the loan and the number of payment cycles since the last payment date. Interest accruals are continued past 90 days for certain small business loans and consumer installment loans, which are charged off at 120 days. For the commercial loan portfolio segment, interest accruals are also continued for loans that are both well-secured and in the process of collection.

When a loan is placed on nonaccrual status, all previously accrued but uncollected interest is reversed against current period interest income. When full collection of the outstanding principal balance is in doubt, subsequent payments received are first applied to unpaid principal and then to uncollected interest. A loan may be returned to accrual status at such time as the loan is brought fully current as to both principal and interest, and such loan is considered to be fully collectible on a timely basis. The Company's policy also allows management to continue the recognition of interest income on certain loans placed on nonaccrual status. This portion of the nonaccrual portfolio is referred to as "Cash Basis Nonaccrual" under which the accrual of interest is suspended and interest income is recognized only when collected. This policy applies to consumer portfolio segment loans and commercial portfolio segment loans that are well-secured and in management's judgment are considered to be fully collectible but the timely collection of payments is in doubt.

A TDR is a restructuring of a loan in which the creditor, for economic or legal reasons related to the borrower's financial difficulties, grants a concession to the borrower that it would not otherwise consider. A loan subject to such a restructuring is accounted for as a TDR. A TDR typically involves a modification of terms such as a reduction of the interest rate below the current market rate for a loan with similar risk characteristics or extending the maturity date of the loan without corresponding compensation or additional support. The Company measures impairment of a TDR using the methodology described for individually impaired loans (see "Allowance for Loan Losses" below). For the consumer portfolio segment, TDRs are initially placed on nonaccrual and typically, a minimum of six consecutive months of sustained performance is required before returning to accrual status. For the commercial portfolio segment, the Company generally

determines accrual status for TDRs by

Table of Contents**Note 1—Summary of Significant Accounting Policies and Nature of Operations (Continued)**

performing an individual assessment of each loan, which may include, among other factors, demonstrated performance by the borrower under the previous terms.

Except for certain transactions between entities under common control, loans acquired in a transfer, including business combinations, are recorded at fair value at the acquisition date, factoring in credit losses expected to be incurred over the life of the loan.

Loans held for sale, which are recorded in other assets, are carried at the lower of cost or fair value and measured on an individual basis for commercial loans and on an aggregate basis for residential mortgage loans. Changes in fair value are recognized in other noninterest income. Nonrefundable fees, direct loan origination costs, and purchase premiums and discounts related to loans held for sale are deferred and recognized as a component of the gain or loss on sale. Contractual interest earned on loans held for sale is recognized in interest income.

As lessor, the Company primarily offers two types of leases to customers: 1) direct financing leases where the assets leased are acquired without additional financing from other sources, and 2) leveraged leases where a substantial portion of the financing is provided by debt with no recourse to the Company. Direct financing leases and leveraged leases are recorded based on the amount of minimum lease payments receivable, unguaranteed residual value accruing to the benefit of the lessor, unamortized initial direct costs, and are reduced for any unearned income. Leveraged leases are recorded net of any nonrecourse debt.

Allowance for Loan Losses

The Company maintains an allowance for loan losses to absorb losses inherent in the loan portfolio. The allowance is based on ongoing, quarterly assessments of the probable estimated losses inherent in the loan portfolio. The allowance is increased by the provision for loan losses, which is charged against current period operating results and decreased by the amount of charge-offs, net of recoveries. The Company's methodology for assessing the appropriateness of the allowance consists of several key elements, which include the allowance for loans collectively evaluated for impairment, the allowance for loans individually evaluated for impairment, and the unallocated allowance. Management estimates probable losses inherent in the portfolio based on a loss emergence period. The loss emergence period is the estimated average period of time between a material adverse event that affects the creditworthiness of a borrower and the subsequent recognition of a loss. Updates of the loss emergence period are performed when significant events cause management to reexamine data. Management develops and documents its systematic methodology for determining the allowance for loan losses by first dividing its portfolio into segments—the commercial segment and consumer segment. The Company further divides the portfolio segments into classes based on initial measurement attributes, risk characteristics or its method of monitoring and assessing credit risk. The classes for the Company include commercial and industrial, commercial mortgage, construction, residential mortgage, and home equity and other consumer loans. While the Company's methodology attributes portions of the allowance to specific portfolio segments, the entire allowance is available to absorb credit losses inherent in the total loan portfolio.

For the commercial portfolio segment, the allowance for loans collectively evaluated for impairment is calculated by utilizing a dual factor internal risk rating system that encompasses both the probability that a credit facility may ultimately default (i.e. probability of default) and an estimate of the severity of the loss that would be realized upon such default (i.e. the loss-given default) and applying these risk ratings to outstanding loans and most unused commitments. The probability of default and loss-given default may be adjusted for qualitative or environmental factors that, in management's judgment, are likely to cause estimated credit losses associated with the existing portfolio to differ from the historical probability of default and loss-given default. The Company refined its methodology for estimating the allowance for commercial loans collectively evaluated for impairment and the allowance for losses on unfunded credit commitments during the first quarter of 2018. Previously the Company derived the allowance for these loans by assigning a loss factor based on an internal risk rating that estimated the probability that a credit facility may ultimately default (i.e. probability of default) rather than a dual factor internal risk rating system that encompasses both the probability of default and an estimate of the severity of the loss that would be realized upon such default (i.e. the loss-given default). During the second quarter of 2018, the Company implemented refinements to the qualitative considerations used in our reserve methodology.

For the consumer portfolio segment, loans are generally pooled by product type with similar risk characteristics. The Company estimates the allowance for loans collectively evaluated for impairment based on forecasted losses.

Table of Contents**Note 1—Summary of Significant Accounting Policies and Nature of Operations (Continued)**

The allowance for loans collectively evaluated for impairment also includes attributions for certain sectors within the commercial and consumer portfolio segments to account for probable losses based on incurred loss events that are currently not reflected in the probability of default and loss-given default. Segment attributions are calculated based on migration scenarios for the commercial portfolio and specific attributes applicable to the consumer portfolio. Segment considerations are revised periodically as portfolio and environmental conditions change.

The Company individually evaluates for impairment larger nonaccruing loans within the commercial portfolio. Residential mortgage and consumer loans are not individually evaluated for impairment unless they represent TDRs. Loans are considered impaired when the evaluation of current information regarding the borrower's financial condition, loan collateral, and cash flows indicates that the Company will be unable to collect all amounts due according to the contractual terms of the loan agreement, including interest payments. The amount of impairment is measured using the present value of expected future cash flows discounted at the loan's effective rate, the loan's observable market price, or the fair value of the collateral, if the loan is collateral dependent.

The unallocated allowance is composed of attributions that are intended to capture probable losses from adverse changes in credit migration and other inherent losses that are not currently reflected in the allowance for loan losses that are ascribed to our portfolio segments.

Significant risk characteristics considered in estimating the allowance for credit losses include the following:

- Commercial and industrial—industry specific economic trends and individual borrower financial condition
- Construction and commercial mortgage loans—type of property (i.e., residential, commercial, industrial), geographic concentrations, and risks and individual borrower financial condition
- Residential mortgage and consumer—historical and expected future charge-offs, borrower's credit, property collateral, and loan characteristics

Loans are charged-off in whole or in part when they are considered to be uncollectible. Loans in the commercial loan portfolio segment are generally considered uncollectible based on an evaluation of borrower financial condition as well as the value of any collateral. Loans in the consumer portfolio segment are generally considered uncollectible based on past due status or the execution of certain TDR modifications such as discharge through Chapter 7 bankruptcy and the value of any collateral. Recoveries of amounts previously charged off are recorded as a recovery to the allowance for loan losses.

Allowance for Losses on Unfunded Credit Commitments

The Company maintains an allowance for losses on unfunded credit commitments to absorb losses inherent in those commitments upon funding. The Company's methodology for assessing the appropriateness of this allowance is the same as that used for the allowance for loan losses (see "Allowance for Loan Losses" above) and incorporates an assumption based upon historical experience of likely utilization of the commitment. The allowance for losses on unfunded credit commitments is classified as other liabilities and the change in this allowance is recognized in the provision for credit losses. Losses on unfunded credit commitments are identified when exposures committed to customers facing difficulty are drawn upon, and subsequently result in charge-offs.

Goodwill and Identifiable Intangible Assets

Intangible assets represent purchased assets that lack physical substance and can be separately distinguished from goodwill because of contractual or other legal rights or because the asset is capable of being sold, exchanged, or licensed. Intangible assets are recorded at fair value at the date of acquisition.

Intangible assets that have indefinite lives are tested for impairment at least annually, and more frequently in certain circumstances. Intangible assets that have finite lives, which include core deposit intangibles, customer relationships, non-compete agreements and trade names, are amortized either using the straight-line method or a method that patterns the consumption of the economic benefit. Intangible assets are amortized over their

Table of Contents**Note 1—Summary of Significant Accounting Policies and Nature of Operations (Continued)**

estimated periods of benefit, which range from three to forty years. The Company periodically evaluates the recoverability of intangible assets and takes into account events or circumstances that warrant revised estimates of useful lives or that indicate impairment exists.

Goodwill is assessed for impairment at least annually at the reporting unit level either qualitatively or quantitatively. If the elected qualitative assessment results indicate that it is more likely than not that the fair value of a reporting unit is less than its carrying amount, then the quantitative impairment test is required. Various valuation methodologies are applied to carry out the first step of the quantitative impairment test by comparing the fair value of the reporting unit to its carrying amount, including goodwill. If the fair value of the reporting unit is less than its carrying amount, a second step is required to measure the amount of impairment by comparing the implied fair value of the goodwill assigned to the reporting unit with the carrying amount of that goodwill. Goodwill impairment is recognized through noninterest expense as a direct write down to its carrying amount and subsequent reversals of goodwill impairment are prohibited.

Other Investments

The Company invests in limited liability partnerships and other entities operating qualified affordable housing projects. These LIHC investments provide tax benefits to investors in the form of tax deductions from operating losses and tax credits. The LIHC investments are initially recorded at cost, and are subsequently accounted for under the proportional amortization method, when such requirements are met to apply that methodology. Under the proportional amortization method, the Company amortizes the initial investment in proportion to the tax credits and other tax benefits allocated to the Company, with amortization recognized in the statement of income as a component of income tax expense. When the requirements are not met to apply the proportional amortization method, the investment is accounted for under the equity method of accounting with equity method losses recorded in noninterest expense. LIHC investments are reviewed periodically for impairment.

The Company also invests in limited liability entities and trusts that operate renewable energy projects, either directly or indirectly. Tax credits, taxable income and distributions associated with these renewable energy projects may be allocated to investors according to the terms of the partnership agreements. These investments are accounted for under the equity method and are reviewed periodically for impairment, considering projected operating results and realizability of tax credits. For those projects where economic benefits are not allocated based on pro rata ownership percentage, the Company accounts for its investments using the hypothetical liquidation at book value ("HLBV") method. Under the HLBV method, the Company determines its share of an investee's earnings by comparing the amount it would hypothetically receive at each balance sheet reporting date under the liquidation provisions of the partnership agreements, assuming the investee's net assets were liquidated at amounts determined in accordance with GAAP and distributed to the Company, after taking capital transactions during the period into account.

Derivative Instruments Used in Hedging Relationships

The Company enters into a variety of derivative contracts as a means of managing the Company's interest rate exposure and designates such derivatives under qualifying hedge relationships. All such derivative instruments are recorded at fair value and are included in other assets or other liabilities. The Company offsets derivative assets and liabilities, and the related cash collateral receivables and payables, when a legally enforceable master netting arrangement exists between the Company and the derivative counterparty.

At hedge inception, the Company designates a derivative instrument as a hedge of the fair value of a recognized asset or liability (i.e., fair value hedge), or a hedge of the variability in the expected future cash flows associated with either an existing recognized asset or liability or a probable forecasted transaction (i.e., cash flow hedge).

Where hedge accounting is applied at hedge inception, the Company formally documents its risk management objective and strategy for undertaking the hedge, which includes identification of the hedging instrument, the hedged item or transaction, the nature of the risk being hedged, and how the hedge's effectiveness will be assessed prospectively and retrospectively. Both at the inception of the hedge and on an ongoing basis, the hedging instrument must be highly effective in offsetting changes in fair values or cash flows of the hedged item in order to qualify for hedge accounting.

Table of Contents**Note 1—Summary of Significant Accounting Policies and Nature of Operations (Continued)**

For fair value hedges, any ineffectiveness is recognized in noninterest expense in the period in which it arises. For cash flow hedges, only ineffectiveness resulting from over-hedging is recorded in earnings as an adjustment to noninterest expense, with other changes in the fair value of the derivative instrument recognized in other comprehensive income. For cash flow hedges of interest rate risk, the amount in other comprehensive income is subsequently reclassified to net interest income in the period in which the cash flow from the hedged item is recognized in earnings. If a derivative instrument is no longer determined to be highly effective as a designated hedge, hedge accounting is discontinued and subsequent fair value adjustments of the derivative instrument are recorded in earnings.

Transfers of Financial Assets

Transfers of financial assets in which the Company has surrendered control over the transferred assets are accounted for as sales. Control is generally considered to have been surrendered when the transferred assets have been legally isolated from the Company, the transferee has the right to pledge or exchange the assets without any significant constraints, and the Company has not entered into a repurchase agreement, does not hold unconditional call options and has not written put options on the transferred assets. In assessing whether control has been surrendered, the Company considers whether the transferee would be a consolidated affiliate and the impact of all arrangements or agreements made contemporaneously with, or in contemplation of, the transfer, even if they were not entered into at the time of transfer.

Revenues from Contracts with Customers

Revenues from contracts with customers include service charges on deposit accounts, trust and investment management fees, brokerage commissions and fees, card processing fees, net, investment banking and syndication fees, and fees from affiliates. The Company recognizes revenue from contracts with customers according to a five-step revenue recognition model: (1) identify the contract(s) with a customer, (2) identify the performance obligations in the contract, (3) determine the transaction price, (4) allocate the transaction price to the performance obligations in the contract, and (5) recognize revenue when (or as) the entity satisfies a performance obligation. The Company's contracts with customers generally contain a single performance obligation or separately identified performance obligations, each with a stated transaction price and generally do not involve a significant timing difference between satisfaction of the performance obligation and customer payment. Revenues are recognized over time or at a point in time as the performance obligations are satisfied. Revenues are generally not variable and do not involve significant estimates or constraints.

Transfer Pricing

Employees of the Company perform management and support services to MUFG Bank, Ltd. in connection with the operation and administration of MUFG Bank, Ltd.'s businesses in the Americas. In consideration for the services provided, MUFG Bank, Ltd. pays the Company fees under a master services agreement, which reflects market-based pricing for those services. The Company recognizes transfer pricing revenue when delivery (performance) has occurred or services have been rendered. Revenue is typically recognized based on the gross amount billed to MUFG Bank, Ltd. without netting the associated costs to perform those services. Gross presentation is typically deemed appropriate in these instances as the Company acts as a principal when providing these services directly to MUFG Bank, Ltd. Transfer pricing revenue is included in fees from affiliates revenue.

Income Taxes

The Company files consolidated U.S. federal income tax returns, foreign tax returns and various combined and separate company state income tax returns.

We record a provision for income taxes for the anticipated tax consequences of the reported results of operations using the asset and liability method. Under this method, we recognize deferred tax assets and liabilities for the expected future tax consequences of temporary differences between the financial reporting and tax bases of assets and liabilities, as well as for loss and tax credit carryforwards. Deferred tax assets and liabilities are measured using the tax rates that are expected to apply to taxable income for the years in which those tax assets and liabilities are expected to be realized or settled. We recognize the deferred income tax effects of a change in tax rates in the period of the enactment.

We recognize tax benefits from uncertain tax positions only if we believe that it is more likely than not that the tax position will be sustained on examination by the taxing authorities based on the technical merits of

Table of Contents**Note 1—Summary of Significant Accounting Policies and Nature of Operations (Continued)**

the position. We make adjustments to these reserves in accordance with the income tax accounting guidance when facts and circumstances change, such as the closing of a tax audit or the refinement of an estimate. To the extent that the final tax outcome of these matters is different from the amounts recorded, such differences will affect the provision for income taxes in the period in which such determination is made, and could have a material impact on our financial condition and operating results. Foreign taxes paid are generally applied as credits to reduce U.S. federal income taxes payable.

Employee Pension and Other Postretirement Benefits

The Company provides a variety of pension and other postretirement benefit plans for eligible employees and retirees. Net periodic pension and other postretirement benefit cost is recognized over the approximate service period of plan participants and includes significant discount rate and plan asset return assumptions.

Stock-Based Compensation

The Company grants restricted stock units settled in ADRs representing shares of common stock of the Company's ultimate parent company, MUFG, to employees. The Company recognizes compensation expense on restricted stock units granted on a straight-line basis over the vesting period for non-retirement eligible employees based on the grant date fair value of MUFG ADRs. Restricted stock units granted to employees who are retirement eligible or will become retirement eligible during the vesting period are expensed as of the grant date or on a straight-line basis over the period from the grant date to the date the employee becomes retirement eligible. Forfeitures are recognized as incurred.

Business Combinations

The Company accounts for all business combinations using the acquisition method of accounting. Assets and liabilities acquired are recorded at fair value at the acquisition date, with the excess of purchase price over the fair value of the net assets acquired (including identifiable intangibles) recorded as goodwill. Management may further adjust the acquisition date fair values for a period of up to one year from the date of acquisition. The recognition at the acquisition date of an allowance for loan losses is not carried over or recorded as of acquisition date, as credit-related factors are incorporated directly into the fair value measurement of the loans. For combinations between entities under common control, assets and liabilities acquired are recorded at book value at the transfer date.

Recently Issued Accounting Pronouncements***Accounting for Leases***

In February 2016, the FASB issued ASU 2016-02, *Leases*, which will require entities that lease assets (i.e., lessees) to recognize assets and liabilities on their balance sheet for the rights and obligations created by those leases. The accounting by entities that own the assets leased (i.e., lessors) will remain largely unchanged; however, leveraged lease accounting will no longer be permitted for leases that commence after the effective date. The ASU will also require qualitative and quantitative disclosures about the amount, timing and uncertainty of cash flows arising from leases. The ASU is effective for interim and annual periods beginning on January 1, 2019 and requires a modified retrospective approach, with early adoption permitted. In July 2018, the FASB issued ASU 2018-11, *Leases*, which allows entities the option to recognize a cumulative-effect adjustment to the opening balance of retained earnings in the period of adoption. In December 2018, the FASB issued ASU 2018-20, *Leases*, which clarified lessor accounting for sales and similar taxes collected by lessors, certain lessor costs, and lease payments with lease and nonlease components. Effective January 1, 2019 the Company adopted this guidance which does not significantly impact the Company's financial position or results of operations.

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Note 1—Summary of Significant Accounting Policies and Nature of Operations (Continued)

Measurement of Credit Losses on Financial Instruments

In June 2016, the FASB issued ASU 2016-13, *Measurement of Credit Losses on Financial Instruments*, which provides new guidance on the accounting for credit losses for instruments that are within its scope. This new guidance is commonly referred to as the current expected credit loss ("CECL") model. For loans and debt securities accounted for at amortized cost, certain off-balance sheet credit exposures, net investments in leases, and trade receivables, the ASU requires an entity to recognize its estimate of credit losses expected over the life of the financial instrument or exposure. Lifetime expected credit losses on purchased financial assets with credit deterioration will be recognized as an allowance with an offset to the cost basis of the asset. For available for sale debt securities, the new standard will require recognition of expected credit losses by recognizing an allowance for credit losses when the fair value of the security is below amortized cost and the recognition of this allowance is limited to the difference between the security's amortized cost basis and fair value. The ASU is effective for interim and annual periods beginning on January 1, 2020, with early adoption permitted in 2019. The Company plans to adopt the ASU on January 1, 2020. The Company is in the design phase of the implementation. Management is currently assessing the impact of this guidance on the Company's financial position or results of operations.

Simplifying the Test for Goodwill Impairment

In January 2017, the FASB issued ASU 2017-04, *Simplifying the Test for Goodwill Impairment*. The ASU removes Step 2 of the goodwill impairment test, which measures a goodwill impairment loss by comparing the implied fair value of a reporting unit's goodwill with the carrying amount of that goodwill. Under the amendments, a goodwill impairment loss will be measured as the amount by which a reporting unit's carrying amount exceeds its fair value; however, the loss recognized cannot exceed the total amount of goodwill allocated to that reporting unit. Additionally, an entity should consider income tax effects from any tax deductible goodwill on the carrying amount of the reporting unit when measuring the goodwill impairment loss. The ASU will be effective for MUAH beginning January 1, 2020 on a prospective basis. Management does not expect the adoption of this guidance to significantly impact the Company's financial position or results of operations.

Premium Amortization on Purchased Callable Debt Securities

In March 2017, the FASB issued ASU 2017-08, *Premium Amortization on Purchased Callable Debt Securities*, which requires premiums on certain purchased callable debt securities to be amortized to the earliest call date. Under current guidance, premiums on callable debt securities are generally amortized over the contractual life of the security. The amortization period for callable debt securities purchased at a discount will not be impacted. Effective January 1, 2019 the Company adopted this guidance which does not significantly impact the Company's financial position or results of operations.

Targeted Improvements to Accounting for Hedging Activities

In August 2017, the FASB issued ASU 2017-12, *Targeted Improvements to Accounting for Hedging Activities*, which will make more hedging strategies eligible for hedge accounting, simplify the application of hedge accounting, and enhance the transparency and understandability of hedge results. The guidance eliminates the requirement to separately measure and report hedge ineffectiveness and generally requires the entire change in the fair value of a hedging instrument to be presented in the same income statement line as the hedged item. It also amends the disclosure requirements and changes how entities assess effectiveness. Effective January 1, 2019 the Company adopted this guidance which does not significantly impact the Company's financial position or results of operations.

Disclosure Framework - Changes to the Disclosure Requirements for Fair Value Measurement

In August 2018, the FASB issued ASU 2018-13, *Disclosure Framework - Changes to the Disclosure Requirements for Fair Value Measurement*, which modifies disclosure requirements on fair value measurements to improve their effectiveness. The guidance permits entities to consider materiality when evaluating fair value measurement disclosures and, among other modifications, requires certain new disclosures related to Level 3 fair value measurements. The guidance will be effective for MUAH beginning January 1, 2020, with early adoption permitted. The guidance only affects disclosures in the notes to the consolidated financial statements and will

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Note 1—Summary of Significant Accounting Policies and Nature of Operations (Continued)

not affect the Company's financial position or results of operations.

Recently Adopted Accounting Pronouncements

Revenue from Contracts with Customers

Effective January 1, 2018, the Company adopted ASU 2014-09, *Revenue from Contracts with Customers*, which provides guidance on the core principle that an entity should recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. This ASU applies to all contracts with customers, except financial instruments, guarantees, lease contracts, insurance contracts and certain non-monetary exchanges. This guidance did not significantly affect the Company's financial position or results of operations.

Principal versus Agent Considerations (Reporting Revenue Gross versus Net)

Effective January 1, 2018, the Company adopted ASU 2016-08, *Principal versus Agent Considerations (Reporting Revenue Gross versus Net)*. The ASU amends ASU 2014-09, *Revenue from Contracts with Customers*, with respect to assessing whether an entity is a principal (and thus presents revenue gross) or an agent (and thus presents revenue net). The amendments retain the guidance that the principal in an arrangement controls a good or service before it is transferred to a customer and clarify: (1) that an entity must first identify the specified good or service being provided to the customer; (2) that the unit of account for the principal versus agent assessment is each specified good or service promised in a contract; (3) indicators and examples to help an entity evaluate whether it is the principal; and (4) how to assess whether an entity controls services performed by another party. As a result of adopting ASU 2016-08, beginning January 1, 2018, certain expenses that were previously presented as a reduction of related fees from affiliates and investment banking and syndication fees are presented in noninterest expense.

Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost

Effective January 1, 2018, the Company adopted ASU 2017-07, *Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost*, which amended the income statement presentation of the components of net periodic benefit cost for sponsored defined benefit pension and other postretirement plans. As a result of adopting ASU 2017-07, the salaries and employee benefits expense and other expense categories in noninterest expense have been adjusted to reflect adoption of this guidance as follows.

(Dollars in millions)	For the Year Ended			For the Year Ended		
	2017			2016		
	As Previously Reported	Adjustment	As Reported under New Guidance	As Previously Reported	Adjustment	As Reported under New Guidance
Salaries and employee benefits	\$ 2,376	\$ 119	\$ 2,495	\$ 2,355	\$ 84	\$ 2,439
Other	508	(119)	389	479	(84)	395

Disclosure Framework - Changes to the Disclosure Requirements for Defined Benefit Plans

In August 2018, the FASB issued ASU 2018-14, *Disclosure Framework - Changes to the Disclosure Requirements for Defined Benefit Plans*, which modifies the disclosure requirements for employers that sponsor defined benefit pension or other postretirement plans to improve the effectiveness of the disclosures. The guidance includes new requirements to disclose the weighted-average interest crediting rate for cash balance plans and an explanation of the reasons for significant gains and losses related to changes in the benefit obligation. The Company early adopted this guidance, which is reflected in Note 15. This guidance did not affect the Company's financial position or results of operations.

Note 2—Securities**Securities Available for Sale**

At December 31, 2018 and 2017, the amortized cost, gross unrealized gains, gross unrealized losses and fair values of securities available for sale are presented below.

(Dollars in millions)	December 31, 2018			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Asset Liability Management securities:				
U S Treasury	\$ 3,572	\$ 1	\$ 144	\$ 3,429
Residential mortgage-backed securities:				
U S. government agency and government-sponsored agencies	8,168	7	168	8,007
Privately issued	887	—	23	864
Privately issued - commercial mortgage-backed securities	1,179	3	20	1,162
Collateralized loan obligations	1,492	—	18	1,474
Other	4	—	—	4
Asset Liability Management securities	15,302	11	373	14,940
Other debt securities:				
Direct bank purchase bonds	1,190	30	30	1,190
Other	188	—	4	184
Total securities available for sale	\$ 16,680	\$ 41	\$ 407	\$ 16,314

(Dollars in millions)	December 31, 2017			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Asset Liability Management securities:				
U.S Treasury	\$ 3,370	\$ —	\$ 118	\$ 3,252
Residential mortgage-backed securities:				
U.S. government agency and government-sponsored agencies	9,338	2	132	9,208
Privately issued	695	3	4	694
Privately issued - commercial mortgage-backed securities	823	4	5	822
Collateralized loan obligations	1,895	10	—	1,905
Other	5	—	—	5
Asset Liability Management securities	16,126	19	259	15,886
Other debt securities:				
Direct bank purchase bonds	1,495	38	30	1,503
Other	163	1	—	164
Equity securities	10	—	—	10
Total securities available for sale	\$ 17,794	\$ 58	\$ 289	\$ 17,563

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Note 2—Securities (Continued)

The Company's securities available for sale with a continuous unrealized loss position at December 31, 2018 and 2017 are shown below, identified for periods less than 12 months and 12 months or more.

(Dollars in millions)	December 31, 2018					
	Less than 12 months		12 months or more		Total	
	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
Asset Liability Management securities:						
U.S. Treasury	\$ 147	\$ 1	\$ 3,182	\$ 143	\$ 3,329	\$ 144
Residential mortgage-backed securities:						
U.S. government agency and government-sponsored agencies	1,941	8	4,797	160	6,738	168
Privately issued	398	7	383	16	781	23
Privately issued - commercial mortgage-backed securities	364	6	512	14	876	20
Collateralized loan obligations	1,428	18	—	—	1,428	18
Asset Liability Management securities	4,278	40	8,874	333	13,152	373
Other debt securities:						
Direct bank purchase bonds	221	6	417	24	638	30
Other	178	4	1	—	182	4
Total securities available for sale	<u>\$ 4,677</u>	<u>\$ 50</u>	<u>\$ 9,295</u>	<u>\$ 357</u>	<u>\$ 13,972</u>	<u>\$ 407</u>

(Dollars in millions)	December 31, 2017					
	Less than 12 months		12 months or more		Total	
	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
Asset Liability Management securities:						
U.S. Treasury	\$ 1,074	\$ 14	\$ 2,128	\$ 104	\$ 3,202	\$ 118
Residential mortgage-backed securities:						
U.S. government agency and government-sponsored agencies	3,606	22	4,651	110	8,257	132
Privately issued	275	1	164	3	439	4
Privately issued - commercial mortgage-backed securities	447	3	80	2	527	5
Collateralized loan obligations	12	—	—	—	12	—
Asset Liability Management securities	5,414	40	7,023	219	12,437	259
Other debt securities:						
Direct bank purchase bonds	58	4	563	26	621	30
Other	79	—	—	—	79	—
Equity securities	10	—	—	—	10	—
Total securities available for sale	<u>\$ 5,561</u>	<u>\$ 44</u>	<u>\$ 7,586</u>	<u>\$ 245</u>	<u>\$ 13,147</u>	<u>\$ 289</u>

At December 31, 2018, the Company did not have the intent to sell any securities in an unrealized loss position before a recovery of the amortized cost, which may be at maturity. The Company also believes that it is more likely than not that it will not be required to sell the securities prior to recovery of amortized cost.

Agency residential mortgage-backed securities consist of securities guaranteed by a U.S. government corporation, such as Ginnie Mae, or a government-sponsored agency such as Freddie Mac or Fannie Mae. These securities are collateralized by residential mortgage loans and may be prepaid at par prior to maturity. The unrealized losses on agency residential mortgage-backed securities resulted from changes in interest rates and not from changes in credit quality. At December 31, 2018, the Company expects to recover the entire amortized cost basis of these securities because the Company determined that the strength of the issuers'

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Note 2—Securities (Continued)

guarantees through direct obligations or support from the U.S. government is sufficient to protect the Company from losses.

Commercial mortgage-backed securities are collateralized by commercial mortgage loans and are generally subject to prepayment penalties. The unrealized losses on commercial mortgage-backed securities resulted from higher market yields since purchase. Cash flow analysis of the underlying collateral provides an estimate of other-than-temporary impairment, which is performed quarterly when the fair value of a security is lower than its amortized cost. Based on the analysis performed as of December 31, 2018, the Company expects to recover the entire amortized cost basis of these securities.

The Company's CLOs consist of Cash Flow CLOs. A Cash Flow CLO is a structured finance product that securitizes a diversified pool of loan assets into multiple classes of notes. Cash Flow CLOs pay the note holders through the receipt of interest and principal repayments from the underlying loans unlike other types of CLOs that pay note holders through the trading and sale of underlying collateral. Unrealized losses typically arise from widening credit spreads and deteriorating credit quality of the underlying collateral. Cash flow analysis of the underlying collateral provides an estimate of other-than-temporary impairment, which is performed quarterly when the fair value of a security is lower than its amortized cost. Based on the analysis performed as of December 31, 2018, the Company expects to recover the entire amortized cost basis of these securities.

Other debt securities primarily consist of direct bank purchase bonds, which are not rated by external credit rating agencies. The unrealized losses on these bonds resulted from a higher return on capital expected by the secondary market compared with the return on capital required at the time of origination when the bonds were purchased. The Company estimates the unrealized loss for each security by assessing the underlying collateral of each security. The Company estimates the portion of loss attributable to credit based on the expected cash flows of the underlying collateral using estimates of current key assumptions, such as probability of default and loss severity. Cash flow analysis of the underlying collateral provides an estimate of other-than-temporary impairment, which is performed quarterly when the fair value of a security is lower than its amortized cost and potential impairment is identified. Based on the analysis performed as of December 31, 2018, the Company expects to recover the entire amortized cost basis of these securities.

The fair value of debt securities available for sale by contractual maturity are shown below. Actual maturities may differ from contractual maturities because borrowers may have the right to prepay obligations with or without prepayment penalties.

(Dollars in millions)	December 31, 2018				
	One Year or Less	Over One Year Through Five Years	Over Five Years Through Ten Years	Over Ten Years	Total Fair Value
Asset Liability Management securities:					
U.S. Treasury	\$ —	\$ 1,284	\$ 2,145	\$ —	\$ 3,429
Residential mortgage-backed securities:					
U.S. government agency and government-sponsored agencies	—	212	1,306	6,489	8,007
Privately issued	—	—	—	864	864
Privately issued - commercial mortgage-backed securities	—	25	43	1,094	1,162
Collateralized loan obligations	—	1	352	1,121	1,474
Other	1	3	—	—	4
Asset Liability Management securities	1	1,525	3,846	9,568	14,940
Other debt securities:					
Direct bank purchase bonds	26	424	612	128	1,190
Other	3	163	—	18	184
Total debt securities available for sale	<u>\$ 30</u>	<u>\$ 2,112</u>	<u>\$ 4,458</u>	<u>\$ 9,714</u>	<u>\$ 16,314</u>

[Table of Contents](#)**Note 2—Securities (Continued)**

The gross realized gains and losses from sales of available for sale securities for the years ended December 31, 2018, 2017 and 2016 are shown below. The specific identification method is used to calculate realized gains and losses on sales.

(Dollars in millions)	For the Year Ended December 31,		
	2018	2017	2016
Gross realized gains	\$ 8	\$ 17	\$ 69
Gross realized losses	—	—	—

Securities Held to Maturity

At December 31, 2018 and 2017, the amortized cost, gross unrealized gains and losses recognized in OCI, carrying amount, gross unrealized gains and losses not recognized in OCI, and fair values of securities held to maturity are presented below. Management has asserted the positive intent and ability to hold these securities to maturity.

(Dollars in millions)	December 31, 2018						
	Amortized Cost	Recognized in OCI		Carrying Amount	Not Recognized in OCI		Fair Value
		Gross Unrealized Gains	Gross Unrealized Losses		Gross Unrealized Gains	Gross Unrealized Losses	
U.S. Treasury	\$ 528	\$ —	\$ —	\$ 528	\$ 1	\$ 2	\$ 527
U.S. government-sponsored agencies	722	—	—	722	1	—	723
U.S. government agency and government-sponsored agencies - residential mortgage-backed securities	8,302	1	96	8,207	11	191	8,027
U.S. government agency and government-sponsored agencies - commercial mortgage-backed securities	1,486	—	42	1,444	17	18	1,443
Total securities held to maturity	<u>\$ 11,038</u>	<u>\$ 1</u>	<u>\$ 138</u>	<u>\$ 10,901</u>	<u>\$ 30</u>	<u>\$ 211</u>	<u>\$ 10,720</u>

(Dollars in millions)	December 31, 2017						
	Amortized Cost	Recognized in OCI		Carrying Amount	Not Recognized in OCI		Fair Value
		Gross Unrealized Gains	Gross Unrealized Losses		Gross Unrealized Gains	Gross Unrealized Losses	
U.S. Treasury	\$ 525	\$ —	\$ —	\$ 525	\$ 3	\$ 1	\$ 527
U.S. government agency and government-sponsored agencies - residential mortgage-backed securities	7,870	2	31	7,841	15	130	7,726
U.S. government agency and government-sponsored agencies - commercial mortgage-backed securities	1,571	—	52	1,519	36	9	1,546
Total securities held to maturity	<u>\$ 9,966</u>	<u>\$ 2</u>	<u>\$ 83</u>	<u>\$ 9,885</u>	<u>\$ 54</u>	<u>\$ 140</u>	<u>\$ 9,799</u>

Amortized cost is defined as the original purchase cost, adjusted for any accretion or amortization of a purchase discount or premium, less principal payments and any impairment previously recognized in earnings. The carrying amount is the difference between the amortized cost and the amount recognized in OCI. The amount recognized in OCI primarily reflects the unrealized gain or loss at date of transfer from available for sale to the held to maturity classification, net of amortization, which is recorded in interest income on securities.

Table of Contents**Note 2—Securities (Continued)**

The Company's securities held to maturity with a continuous unrealized loss position at December 31, 2018 and 2017 are shown below, separately for periods less than 12 months and 12 months or more.

(Dollars in millions)	December 31, 2018								
	Less than 12 months			12 months or more			Total		
	Unrealized Losses			Unrealized Losses			Unrealized Losses		
	Fair Value	Recognized in OCI	Not Recognized in OCI	Fair Value	Recognized in OCI	Not Recognized in OCI	Fair Value	Recognized in OCI	Not Recognized in OCI
U.S. Treasury	\$ —	\$ —	\$ —	\$ 496	\$ —	\$ 2	\$ 496	\$ —	\$ 2
U.S. government agency and government-sponsored agencies—residential mortgage backed securities	668	—	11	7,191	96	180	7,859	96	191
U.S. government agency and government-sponsored agencies - commercial mortgage-backed securities	29	—	—	1,396	42	18	1,425	42	18
Total securities held to maturity	<u>\$ 697</u>	<u>\$ —</u>	<u>\$ 11</u>	<u>\$ 9,083</u>	<u>\$ 138</u>	<u>\$ 200</u>	<u>\$ 9,780</u>	<u>\$ 138</u>	<u>\$ 211</u>

(Dollars in millions)	December 31, 2017								
	Less than 12 months			12 months or more			Total		
	Unrealized Losses			Unrealized Losses			Unrealized Losses		
	Fair Value	Recognized in OCI	Not Recognized in OCI	Fair Value	Recognized in OCI	Not Recognized in OCI	Fair Value	Recognized in OCI	Not Recognized in OCI
U.S. Treasury	\$ 494	\$ —	\$ 1	\$ —	\$ —	\$ —	\$ 494	\$ —	\$ 1
U.S. government agency and government-sponsored agencies - residential mortgage-backed securities	2,649	—	31	\$ 4,000	31	99	6,649	31	130
U.S. government agency and government-sponsored agencies - commercial mortgage-backed securities	19	—	—	1,496	52	9	1,515	52	9
Total securities held to maturity	<u>\$ 3,162</u>	<u>\$ —</u>	<u>\$ 32</u>	<u>\$ 5,496</u>	<u>\$ 83</u>	<u>\$ 108</u>	<u>\$ 8,658</u>	<u>\$ 83</u>	<u>\$ 140</u>

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Note 2—Securities (Continued)

The carrying amount and fair value of securities held to maturity by contractual maturity are shown below. Actual maturities may differ from contractual maturities because borrowers may have the right to prepay obligations with or without prepayment penalties.

(Dollars in millions)	December 31, 2018									
	Within One Year		Over One Year Through Five Years		Over Five Years Through Ten Years		Over Ten Years		Total	
	Carrying Amount	Fair Value	Carrying Amount	Fair Value	Carrying Amount	Fair Value	Carrying Amount	Fair Value	Carrying Amount	Fair Value
U.S. Treasury	\$ 519	\$ 518	\$ 9	\$ 9	\$ —	\$ —	\$ —	\$ —	\$ 528	\$ 527
U.S. government-sponsored agencies	—	—	—	—	722	723	—	—	722	723
U.S. government agency and government-sponsored agencies - residential mortgage-backed securities	—	—	—	—	1,008	986	7,199	7,041	8,207	8,027
U.S. government agency and government-sponsored agencies - commercial mortgage-backed securities	46	46	787	797	—	—	611	600	1,444	1,443
Total securities held to maturity	<u>\$ 565</u>	<u>\$ 564</u>	<u>\$ 796</u>	<u>\$ 806</u>	<u>\$ 1,730</u>	<u>\$ 1,709</u>	<u>\$ 7,810</u>	<u>\$ 7,641</u>	<u>\$ 10,901</u>	<u>\$ 10,720</u>

Securities Pledged and Received as Collateral

At December 31, 2018 and December 31, 2017, the Company pledged \$11.9 billion and \$12.3 billion of available for sale and trading securities as collateral, respectively, of which \$1.3 billion and \$1.2 billion, respectively, was permitted to be sold or repledged. These securities were pledged as collateral for derivative liability positions, securities loaned or sold under repurchase agreements, securities lending and to secure public and trust department deposits.

At December 31, 2018 and December 31, 2017, the Company received \$33.1 billion and \$31.8 billion, respectively, of collateral, of which \$33.1 billion and \$31.8 billion, respectively, was permitted to be sold or repledged. Of the collateral received, the Company sold or repledged \$32.1 billion and \$30.4 billion at December 31, 2018 and December 31, 2017, respectively, for derivative asset positions and securities borrowed or purchased under resale agreements.

For further information related to the Company's significant accounting policies on securities pledged as collateral, see Note 1 to the Consolidated Financial Statements in Part II, Item 8. "Financial Statements and Supplementary Data" of this Form 10-K.

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Note 3—Loans and Allowance for Loan Losses

The following table provides the outstanding balances of loans held for investment at December 31, 2018 and 2017.

(Dollars in millions)	December 31,	
	2018	2017
Loans held for investment:		
Commercial and industrial	\$ 24,919	\$ 23,281
Commercial mortgage	15,354	14,320
Construction	1,613	1,775
Lease financing	1,249	1,533
Total commercial portfolio	43,135	40,909
Residential mortgage	38,439	35,643
Home equity and other consumer loans	4,933	3,462
Total consumer portfolio	43,372	39,105
Total loans held for investment ⁽¹⁾	86,507	80,014
Allowance for loan losses	(474)	(476)
Loans held for investment, net	\$ 86,033	\$ 79,538

(1) Includes \$340 million and \$301 million at December 31, 2018 and December 31, 2017, respectively, for net unamortized (discounts) and premiums and deferred (fees) and costs

Allowance for Loan Losses

The following tables provide a reconciliation of changes in the allowance for loan losses by portfolio segment:

(Dollars in millions)	For the Year Ended December 31, 2018			
	Commercial	Consumer	Unallocated	Total
Allowance for loan losses, beginning of period	\$ 360	\$ 86	\$ 30	\$ 476
(Reversal of) provision for loan losses	51	58	(25)	84
Loans charged-off	(79)	(41)	—	(120)
Recoveries of loans previously charged-off	27	7	—	34
Allowance for loan losses, end of period	\$ 359	\$ 110	\$ 5	\$ 474

(Dollars in millions)	For the Year Ended December 31, 2017			
	Commercial	Consumer	Unallocated	Total
Allowance for loan losses, beginning of period	\$ 556	\$ 83	\$ —	\$ 639
(Reversal of) provision for loan losses	(132)	37	30	(65)
Other	2	—	—	2
Loans charged-off	(116)	(39)	—	(155)
Recoveries of loans previously charged-off	50	5	—	55
Allowance for loan losses, end of period	\$ 360	\$ 86	\$ 30	\$ 476

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Note 3—Loans and Allowance for Loan Losses (Continued)

(Dollars in millions)	For the Year Ended December 31, 2016			
	Commercial	Consumer	Unallocated	Total
Allowance for loan losses, beginning of period	\$ 654	\$ 49	\$ 20	\$ 723
(Reversal of) provision for loan losses	134	44	(20)	158
Other	2	—	—	2
Loans charged-off	(259)	(12)	—	(271)
Recoveries of loans previously charged-off	25	2	—	27
Allowance for loan losses, end of period	<u>\$ 556</u>	<u>\$ 83</u>	<u>\$ —</u>	<u>\$ 639</u>

The following tables show the allowance for loan losses and related loan balances by portfolio segment as of December 31, 2018 and 2017.

(Dollars in millions)	December 31, 2018			
	Commercial	Consumer	Unallocated	Total
Allowance for loan losses:				
Individually evaluated for impairment	\$ 62	\$ 13	\$ —	\$ 75
Collectively evaluated for impairment	297	97	5	399
Total allowance for loan losses	<u>\$ 359</u>	<u>\$ 110</u>	<u>\$ 5</u>	<u>\$ 474</u>
Loans held for investment:				
Individually evaluated for impairment	\$ 450	\$ 280	\$ —	\$ 730
Collectively evaluated for impairment	42,685	43,092	—	85,777
Total loans held for investment	<u>\$ 43,135</u>	<u>\$ 43,372</u>	<u>\$ —</u>	<u>\$ 86,507</u>

(Dollars in millions)	December 31, 2017			
	Commercial	Consumer	Unallocated	Total
Allowance for loan losses:				
Individually evaluated for impairment	\$ 58	\$ 15	\$ —	\$ 73
Collectively evaluated for impairment	302	71	30	403
Total allowance for loan losses	<u>\$ 360</u>	<u>\$ 86</u>	<u>\$ 30</u>	<u>\$ 476</u>
Loans held for investment:				
Individually evaluated for impairment	\$ 544	\$ 321	\$ —	\$ 865
Collectively evaluated for impairment	40,365	38,784	—	79,149
Total loans held for investment	<u>\$ 40,909</u>	<u>\$ 39,105</u>	<u>\$ —</u>	<u>\$ 80,014</u>

Nonaccrual and Past Due Loans

The following table presents nonaccrual loans as of December 31, 2018 and 2017.

(Dollars in millions)	December 31,	
	2018	2017
Commercial and industrial	\$ 269	\$ 319
Commercial mortgage	12	20
Total commercial portfolio	<u>281</u>	<u>339</u>
Residential mortgage	121	104
Home equity and other consumer loans	19	22
Total consumer portfolio	<u>140</u>	<u>126</u>
Total nonaccrual loans	<u>\$ 421</u>	<u>\$ 465</u>
Troubled debt restructured loans that continue to accrue interest	<u>\$ 299</u>	<u>\$ 348</u>
Troubled debt restructured nonaccrual loans (included in total nonaccrual loans above)	<u>\$ 136</u>	<u>\$ 229</u>

[Table of Contents](#)**Note 3—Loans and Allowance for Loan Losses (Continued)**

The following tables show the aging of the balance of loans held for investment by class as of December 31, 2018 and 2017.

December 31, 2018					
Aging Analysis of Loans					
(Dollars in millions)	Current	30 to 89 Days Past Due	90 Days or More Past Due	Total Past Due	Total
Commercial and industrial	\$ 26,114	\$ 18	\$ 36	\$ 54	\$ 26,168
Commercial mortgage	15,333	17	4	21	15,354
Construction	1,593	20	—	20	1,613
Total commercial portfolio	43,040	55	40	95	43,135
Residential mortgage	38,218	175	46	221	38,439
Home equity and other consumer loans	4,893	28	12	40	4,933
Total consumer portfolio	43,111	203	58	261	43,372
Total loans held for investment	\$ 86,151	\$ 258	\$ 98	\$ 356	\$ 86,507

December 31, 2017					
Aging Analysis of Loans					
(Dollars in millions)	Current	30 to 89 Days Past Due	90 Days or More Past Due	Total Past Due	Total
Commercial and industrial	\$ 24,734	\$ 17	\$ 63	\$ 80	\$ 24,814
Commercial mortgage	14,298	16	6	22	14,320
Construction	1,775	—	—	—	1,775
Total commercial portfolio	40,807	33	69	102	40,909
Residential mortgage	35,453	151	39	190	35,643
Home equity and other consumer loans	3,427	23	12	35	3,462
Total consumer portfolio	38,880	174	51	225	39,105
Total loans held for investment	\$ 79,687	\$ 207	\$ 120	\$ 327	\$ 80,014

Loans 90 days or more past due and still accruing interest totaled \$23 million and \$12 million at December 31, 2018 and 2017, respectively.

Table of Contents**Note 3—Loans and Allowance for Loan Losses (Continued)***Credit Quality Indicators*

Management analyzes the Company's loan portfolios by applying specific monitoring policies and procedures that vary according to the relative risk profile and other characteristics within the various loan portfolios. Loans within the commercial portfolio segment are classified as either pass or criticized. Criticized credits are those that have regulatory risk ratings of special mention, substandard or doubtful; classified credits are those that have regulatory risk ratings of substandard or doubtful. Special mention credits are potentially weak, as the borrower has begun to exhibit deteriorating trends, which, if not corrected, may jeopardize repayment of the loan and result in further downgrade. Substandard credits have well-defined weaknesses, which, if not corrected, could jeopardize the full satisfaction of the debt. A credit classified as doubtful has critical weaknesses that make full collection improbable on the basis of currently existing facts and conditions.

The following tables summarize the loans in the commercial portfolio segment monitored for credit quality based on regulatory risk ratings.

December 31, 2018				
(Dollars in millions)	Pass	Criticized		Total
		Special Mention	Classified	
Commercial and industrial	\$ 25,191	\$ 355	\$ 622	\$ 26,168
Commercial mortgage	15,138	105	111	15,354
Construction	1,542	8	63	1,613
Total commercial portfolio	<u>\$ 41,871</u>	<u>\$ 468</u>	<u>\$ 796</u>	<u>\$ 43,135</u>

December 31, 2017				
(Dollars in millions)	Pass	Criticized		Total
		Special Mention	Classified	
Commercial and industrial	\$ 23,632	\$ 435	\$ 747	\$ 24,814
Commercial mortgage	14,081	80	159	14,320
Construction	1,632	15	128	1,775
Total commercial portfolio	<u>\$ 39,345</u>	<u>\$ 530</u>	<u>\$ 1,034</u>	<u>\$ 40,909</u>

The Company monitors the credit quality of its consumer portfolio segment based primarily on payment status. The following tables summarize the loans in the consumer portfolio segment, which exclude \$6 million and \$8 million of loans covered by FDIC loss share agreements, at December 31, 2018 and 2017, respectively.

December 31, 2018			
(Dollars in millions)	Accrual	Nonaccrual	Total
Residential mortgage	\$ 38,314	\$ 121	\$ 38,435
Home equity and other consumer loans	4,912	19	4,931
Total consumer portfolio	<u>\$ 43,226</u>	<u>\$ 140</u>	<u>\$ 43,366</u>

December 31, 2017			
(Dollars in millions)	Accrual	Nonaccrual	Total
Residential mortgage	\$ 35,534	\$ 104	\$ 35,638
Home equity and other consumer loans	3,437	22	3,459
Total consumer portfolio	<u>\$ 38,971</u>	<u>\$ 126</u>	<u>\$ 39,097</u>

The Company also monitors the credit quality for substantially all of its consumer portfolio segment using credit scores provided by FICO and refreshed LTV ratios. FICO credit scores are refreshed at least quarterly to monitor the quality of the portfolio. Refreshed LTV measures the principal balance of the loan as a percentage of the estimated current value of the property securing the loan. Home equity loans are evaluated using combined LTV, which measures the principal

balance of the combined loans that have liens against the property (including

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Note 3—Loans and Allowance for Loan Losses (Continued)

unused credit lines for home equity products) as a percentage of the estimated current value of the property securing the loans. The LTV ratios are refreshed on a quarterly basis, using the most recent home pricing index data available for the property location.

The following tables summarize the loans in the consumer portfolio segment based on refreshed FICO scores and refreshed LTV ratios at December 31, 2018 and 2017. These tables exclude loans covered by FDIC loss share agreements, as discussed above. The amounts presented reflect unpaid principal balances less partial charge-offs.

(Dollars in millions)	December 31, 2018			
	FICO scores			Total
	720 and Above	Below 720	No FICO Available ⁽¹⁾	
Residential mortgage	\$ 31,589	\$ 6,022	\$ 434	\$ 38,045
Home equity and other consumer loans	3,349	1,448	52	4,849
Total consumer portfolio	<u>\$ 34,938</u>	<u>\$ 7,470</u>	<u>\$ 486</u>	<u>\$ 42,894</u>
Percentage of total	82%	17%	1%	100%

(1) Represents loans for which management was not able to obtain an updated FICO score (e.g., due to recent profile changes).

(Dollars in millions)	December 31, 2017			
	FICO scores			Total
	720 and Above	Below 720	No FICO Available ⁽¹⁾	
Residential mortgage	\$ 28,786	\$ 6,082	\$ 411	\$ 35,279
Home equity and other consumer loans	2,404	918	84	3,406
Total consumer portfolio	<u>\$ 31,190</u>	<u>\$ 7,000</u>	<u>\$ 495</u>	<u>\$ 38,685</u>
Percentage of total	81%	18%	1%	100%

(1) Represents loans for which management was not able to obtain an updated FICO score (e.g., due to recent profile changes).

(Dollars in millions)	December 31, 2018				
	LTV ratios				Total
	Less than or Equal to 80 Percent	Greater than 80 and Less than 100 Percent	Greater than or Equal to 100 Percent	No LTV Available ⁽¹⁾	
Residential mortgage	\$ 36,604	\$ 1,361	\$ 4	\$ 75	\$ 38,044
Home equity loans	1,966	221	12	24	2,223
Total consumer portfolio	<u>\$ 38,570</u>	<u>\$ 1,582</u>	<u>\$ 16</u>	<u>\$ 99</u>	<u>\$ 40,267</u>
Percentage of total	96%	4%	—%	—%	100%

(1) Represents loans for which management was not able to obtain refreshed property values.

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Note 3—Loans and Allowance for Loan Losses (Continued)

(Dollars in millions)	December 31, 2017				
	LTV ratios				Total
	Less than or Equal to 80 Percent	Greater than 80 and Less than 100 Percent	Greater than or Equal to 100 Percent	No LTV Available ⁽¹⁾	
Residential mortgage	\$ 34,472	\$ 771	\$ 4	\$ 32	\$ 35,279
Home equity loans	2,052	248	24	33	2,357
Total consumer portfolio	<u>\$ 36,524</u>	<u>\$ 1,019</u>	<u>\$ 28</u>	<u>\$ 65</u>	<u>\$ 37,636</u>
Percentage of total	97%	3%	—%	—%	100%

(1) Represents loans for which management was not able to obtain refreshed property values

Troubled Debt Restructurings

The following table provides a summary of the Company's recorded investment in TDRs as of December 31, 2018 and 2017. The summary includes those TDRs that are on nonaccrual status and those that continue to accrue interest. The Company had \$49 million and \$66 million in commitments to lend additional funds to borrowers with loan modifications classified as TDRs as of December 31, 2018 and 2017, respectively.

(Dollars in millions)	December 31,	
	2018	2017
Commercial and industrial	\$ 109	\$ 202
Commercial mortgage	46	7
Construction	63	128
Total commercial portfolio	<u>218</u>	<u>337</u>
Residential mortgage	196	215
Home equity and other consumer loans	21	25
Total consumer portfolio	<u>217</u>	<u>240</u>
Total restructured loans	<u>\$ 435</u>	<u>\$ 577</u>

In 2018, TDR modifications in the commercial portfolio segment were substantially composed of interest rate changes, maturity extensions, forbearance, conversions from revolving lines of credit to term loans, or some combination thereof. In the consumer portfolio segment, modifications were primarily composed of maturity extensions. Charge-offs related to TDR modifications for the year ended December 31, 2018 and December 31, 2017 were de minimis. For the commercial and consumer portfolio segments, the allowance for loan losses for TDRs was measured on an individual loan basis or in pools with similar risk characteristics.

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Note 3—Loans and Allowance for Loan Losses (Continued)

The following tables provide the pre- and post-modification outstanding recorded investment amounts of TDRs as of the date of the restructuring that occurred during the years ended December 31, 2018 and 2017.

(Dollars in millions)	For the Year Ended December 31, 2018		For the Year Ended December 31, 2017	
	Pre-Modification Outstanding Recorded Investment ⁽¹⁾	Post-Modification Outstanding Recorded Investment ⁽²⁾	Pre-Modification Outstanding Recorded Investment ⁽¹⁾	Post-Modification Outstanding Recorded Investment ⁽²⁾
Commercial and industrial	\$ 165	\$ 165	\$ 186	\$ 186
Commercial mortgage	4	4	5	5
Construction	—	—	152	131
Total commercial portfolio	169	169	343	322
Residential mortgage	9	9	16	16
Home equity and other consumer loans	2	2	3	3
Total consumer portfolio	11	11	19	19
Total	\$ 180	\$ 180	\$ 362	\$ 341

(1) Represents the recorded investment in the loan immediately prior to the restructuring event.

(2) Represents the recorded investment in the loan immediately following the restructuring event. It includes the effect of paydowns that were required as part of the restructuring terms.

The following tables provide the recorded investment amounts of TDRs at the date of default, for which there was a payment default during the years ended December 31, 2018 and 2017, and where the default occurred within the first twelve months after modification into a TDR. A payment default is defined as the loan being 60 days or more past due.

(Dollars in millions)	December 31,	
	2018	2017
Commercial and industrial	\$ —	\$ 19
Commercial mortgage	—	1
Total commercial portfolio	—	20
Residential mortgage	3	3
Home equity and other consumer loans	—	—
Total consumer portfolio	3	3
Total	\$ 3	\$ 23

For loans in the consumer portfolio in which impairment is measured using the present value of expected future cash flows discounted at the loan's effective interest rate, historical payment defaults and the propensity to redefault are some of the factors considered when determining the allowance for loan losses.

[Table of Contents](#)**Note 3—Loans and Allowance for Loan Losses (Continued)***Loan Impairment*

Loans that are individually evaluated for impairment include larger nonaccruing loans within the commercial and industrial, construction, and commercial mortgage loan portfolios and loans modified in a TDR. The Company records an impairment allowance when the value of an impaired loan is less than the recorded investment in the loan.

The following tables show information about impaired loans by class as of December 31, 2018 and 2017.

(Dollars in millions)	December 31, 2018					
	Recorded Investment			Allowance for Impaired Loans	Unpaid Principal Balance	
	With an Allowance	Without an Allowance	Total		With an Allowance	Without an Allowance
Commercial and industrial	\$ 299	\$ 22	\$ 321	\$ 61	\$ 372	\$ 39
Commercial mortgage	25	41	66	1	25	41
Construction	—	63	63	—	—	63
Total commercial portfolio	324	126	450	62	397	143
Residential mortgage	175	71	246	12	184	85
Home equity and other consumer loans	22	12	34	1	22	21
Total consumer portfolio	197	83	280	13	206	106
Total	\$ 521	\$ 209	\$ 730	\$ 75	\$ 603	\$ 249

(Dollars in millions)	December 31, 2017					
	Recorded Investment			Allowance for Impaired Loans	Unpaid Principal Balance	
	With an Allowance	Without an Allowance	Total		With an Allowance	Without an Allowance
Commercial and industrial	\$ 287	\$ 93	\$ 380	\$ 57	\$ 348	\$ 102
Commercial mortgage	33	3	36	1	33	3
Construction	—	128	128	—	—	128
Total commercial portfolio	320	224	544	58	381	233
Residential mortgage	218	59	277	15	234	69
Home equity and other consumer loans	29	15	44	—	30	24
Total consumer portfolio	247	74	321	15	264	93
Total	\$ 567	\$ 298	\$ 865	\$ 73	\$ 645	\$ 326

Table of Contents**Note 3—Loans and Allowance for Loan Losses (Continued)**

The following table presents the average recorded investment in impaired loans and the amount of interest income recognized for impaired loans during 2018, 2017 and 2016 for the commercial and consumer loans portfolio segments.

(Dollars in millions)	Years Ended December 31,					
	2018		2017		2016	
	Average Recorded Investment	Recognized Interest Income	Average Recorded Investment	Recognized Interest Income	Average Recorded Investment	Recognized Interest Income
Commercial and industrial	\$ 309	\$ 12	\$ 463	\$ 18	\$ 531	\$ 4
Commercial mortgage	60	27	58	41	17	1
Construction	95	8	45	5	—	—
Total commercial portfolio	464	47	566	64	548	5
Residential mortgage	261	13	304	14	258	8
Home equity and other consumer loans	38	4	52	6	31	2
Total consumer portfolio	299	17	356	20	289	10
Total	\$ 763	\$ 64	\$ 922	\$ 84	\$ 837	\$ 15

The following table presents loan transfers from held to investment to held for sale and proceeds from sales of loans during 2018, 2017 and 2016 for the commercial and consumer loans portfolio segments.

(Dollars in millions)	Years Ended December 31,					
	2018		2017		2016	
	Transfer of loans from held for investment to held for sale, net	Proceeds from sale	Transfer of loans from held for investment to held for sale, net	Proceeds from sale	Transfer of loans from held for investment to held for sale, net	Proceeds from sale
Commercial portfolio	\$ 47	\$ 638	\$ 780	\$ 926	\$ 1,632	\$ 1,182
Consumer portfolio	(3)	—	(4)	—	344	344
Total	\$ 44	\$ 638	\$ 776	\$ 926	\$ 1,976	\$ 1,526

Loan Concentrations

The Company's most significant concentrations of credit risk within its loan portfolio include residential mortgage loans, commercial real estate loans, and commercial and industrial loans made to the financial and insurance industry, power and utilities industry, manufacturing industry, and business services industry. At December 31, 2018, the Company had \$38 billion in residential mortgage loans, substantially in California. The Company had \$16 billion in loans made to the commercial real estate industry and an additional \$4 billion in unfunded commitments. At December 31, 2018, the Company had \$7 billion in loans made to the financial and insurance industry and an additional \$7 billion in unfunded commitments. At December 31, 2018, the Company had \$4 billion in loans made to the power and utilities industry and an additional \$5 billion in unfunded commitments. At December 31, 2018, the Company had \$4 billion in loans made to the manufacturing industry and an additional \$3 billion in unfunded commitments. At December 31, 2018, the Company had \$3 billion in loans made to the business services industry and an additional \$2 billion in unfunded commitments.

Table of Contents**Note 4—Other Assets***Other Assets*

The following table shows the balances of other assets as of December 31, 2018 and 2017.

(Dollars in millions)	December 31, 2018	December 31, 2017
Other investments	\$ 3,250	\$ 3,412
Premises and equipment, net	635	610
Software	445	424
Intangible assets	444	377
OREO	1	—
Other	4,845	4,587
Total other assets	<u>\$ 9,620</u>	<u>\$ 9,410</u>

Note 5—Goodwill and Other Intangible Assets*Goodwill*

The changes in the carrying amount of goodwill during 2018 and 2017 are shown in the table below.

(Dollars in millions)	2018	2017
Goodwill, beginning of year	\$ 3,301	\$ 3,225
Net change from transferred subsidiaries ⁽¹⁾	—	76
Goodwill, end of year	<u>\$ 3,301</u>	<u>\$ 3,301</u>

(1) For additional information on transferred subsidiaries, see Note 21 Related Party Transactions.

For impairment testing, goodwill was assigned to the following operating segments at December 31, 2018 and 2017:

(Dollars in millions)	2018	2017
Regional Bank	\$ 2,134	\$ 2,134
U.S. Wholesale & Investment Banking	840	840
Transaction Banking	251	251
MUFG Fund Services	76	76
Goodwill, end of year	<u>\$ 3,301</u>	<u>\$ 3,301</u>

The Company reviews its goodwill for impairment on an annual basis and whenever events or changes in circumstances indicate that the carrying amounts may not be recoverable. The annual goodwill impairment test was performed as of April 1, 2018 and 2017. Based on these tests, we concluded that goodwill allocated to our reporting units was not impaired at December 31, 2018 or 2017. Fair values of the Company's reporting units exceeded their carrying amounts and did not generally represent a significant risk of goodwill impairment based on current projections and valuations.

Table of Contents**Note 5—Goodwill and Other Intangible Assets (Continued)***Intangible Assets*

The table below reflects the Company's identifiable intangible assets and accumulated amortization at December 31, 2018 and 2017.

(Dollars in millions)	December 31, 2018			December 31, 2017		
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Core deposit intangibles	\$ 565	\$ (537)	\$ 28	\$ 565	\$ (530)	\$ 35
Trade names	111	(32)	79	113	(29)	84
Customer relationships	238	(63)	175	238	(47)	191
Other ⁽¹⁾	18	(15)	3	19	(16)	3
Total intangible assets with a definite useful life	<u>\$ 932</u>	<u>\$ (647)</u>	<u>\$ 285</u>	<u>\$ 935</u>	<u>\$ (622)</u>	<u>\$ 313</u>

(1) December 31, 2018 and December 31, 2017 exclude \$159 million and \$64 million, respectively, of mortgage servicing rights accounted for at fair value.

Total amortization expense for 2018, 2017 and 2016 was \$26 million, \$30 million and \$28 million, respectively.

Estimated future amortization expense at December 31, 2018 is as follows:

(Dollars in millions)	Core Deposit Intangibles	Trade Name	Customer Relationships	Other	Total Identifiable Intangible Assets
Years ending December 31, :					
2019	\$ 6	\$ 3	\$ 16	\$ 1	\$ 26
2020	5	3	16	1	25
2021	4	3	15	—	22
2022	4	3	15	—	22
2023	2	3	14	—	19
Thereafter	7	64	99	1	171
Total estimated amortization expense	<u>\$ 28</u>	<u>\$ 79</u>	<u>\$ 175</u>	<u>\$ 3</u>	<u>\$ 285</u>

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Note 6—Variable Interest Entities

In the normal course of business, the Company has certain financial interests in entities which have been determined to be VIEs. Generally, a VIE is a corporation, partnership, trust or other legal structure where the equity investors do not have substantive voting rights, an obligation to absorb the entity's losses or the right to receive the entity's returns, or the ability to direct the significant activities of the entity. The following discusses the Company's consolidated and unconsolidated VIEs.

Consolidated VIEs

The following tables present the assets and liabilities of consolidated VIEs recorded on the Company's consolidated balance sheets at December 31, 2018 and 2017.

(Dollars in millions)	December 31, 2018					
	Consolidated Assets				Consolidated Liabilities	
	Interest Bearing Deposits in Banks	Loans Held for Investment, Net	Other Assets	Total Assets	Other Liabilities	Total Liabilities
LIHC investments	\$ —	\$ —	\$ 43	\$ 43	\$ —	\$ —
Leasing investments	—	570	122	692	17	17
Total consolidated VIEs	\$ —	\$ 570	\$ 165	\$ 735	\$ 17	\$ 17

(Dollars in millions)	December 31, 2017					
	Consolidated Assets				Consolidated Liabilities	
	Interest Bearing Deposits in Banks	Loans Held for Investment, Net	Other Assets	Total Assets	Other Liabilities	Total Liabilities
LIHC investments	\$ —	\$ —	\$ 68	\$ 68	\$ —	\$ —
Leasing investments	1	583	158	742	24	24
Total consolidated VIEs	\$ 1	\$ 583	\$ 226	\$ 810	\$ 24	\$ 24

LIHC Investments

The Company sponsors, manages and syndicates two LIHC investment fund structures. These investments are designed to generate a return primarily through the realization of U.S. federal tax credits and deductions. The Company is considered the primary beneficiary and has consolidated these investments because the Company has the power to direct activities that most significantly impact the funds' economic performances and also has the obligation to absorb losses of the funds that could potentially be significant to the funds. Neither creditors nor equity investors in the LIHC investments have any recourse to the general credit of the Company, and the Company's creditors do not have any recourse to the assets of the consolidated LIHC investments.

Leasing Investments

The Company has leasing investments primarily in the wind energy, rail and coal industries. The Company is considered the primary beneficiary and has consolidated these investments because the Company has the power to direct the activities of these entities that significantly impact the entities' economic performances. The Company also has the right to receive potentially significant benefits or the obligation to absorb potentially significant losses of these investments.

Unconsolidated VIEs

The following tables present the Company's carrying amounts related to the unconsolidated VIEs at December 31, 2018 and 2017. The tables also present the Company's maximum exposure to loss resulting from its involvement with these VIEs. The maximum exposure to loss represents the carrying amount of the Company's involvement plus any legally binding unfunded commitments in the unlikely event that all of the assets in the VIEs become worthless. During 2018, 2017, and 2016, the Company had noncash increases in unfunded commitments on LIHC investments of \$87 million, \$55 million and \$125 million, respectively, included within other liabilities.

[Table of Contents](#)**Note 6—Variable Interest Entities (Continued)**

December 31, 2018								
(Dollars in millions)	Unconsolidated Assets					Unconsolidated Liabilities		
	Interest Bearing Deposits in Banks	Securities Available for Sale	Loans Held for Investment, Net	Other Assets	Total Assets	Other Liabilities	Total Liabilities	Maximum Exposure to Loss
LIHC investments	\$ —	\$ 28	\$ 198	\$ 976	\$ 1,202	\$ 165	\$ 165	\$ 1,202
Leasing investments	26	—	19	1,401	1,446	14	14	1,467
Other investments	—	—	—	35	35	—	—	79
Total unconsolidated VIEs	\$ 26	\$ 28	\$ 217	\$ 2,412	\$ 2,683	\$ 179	\$ 179	\$ 2,748

December 31, 2017								
(Dollars in millions)	Unconsolidated Assets					Unconsolidated Liabilities		
	Interest Bearing Deposits in Banks	Securities Available for Sale	Loans Held for Investment, Net	Other Assets	Total Assets	Other Liabilities	Total Liabilities	Maximum Exposure to Loss
LIHC investments	\$ —	\$ 29	\$ 228	\$ 1,028	\$ 1,285	\$ 254	\$ 254	\$ 1,284
Leasing investments	1	—	24	1,745	1,770	53	53	1,792
Other investments	—	—	24	26	50	—	—	132
Total unconsolidated VIEs	\$ 1	\$ 29	\$ 276	\$ 2,799	\$ 3,105	\$ 307	\$ 307	\$ 3,208

LIHC Investments

The Company makes investments in partnerships and funds formed by third parties. The primary purpose of the partnerships and funds is to invest in low-income housing units and distribute tax credits and tax benefits associated with the underlying properties to investors. The Company is a limited partner investor and is allocated tax credits and deductions, but has no voting or other rights to direct the activities of the funds or partnerships, and therefore is not considered the primary beneficiary and does not consolidate these investments.

The following table presents the impact of the unconsolidated LIHC investments on our consolidated statements of income for the years ended December 31, 2018, 2017 and 2016:

(Dollars in millions)	For the Years Ended December 31,		
	2018	2017	2016
Losses from LIHC investments included in other noninterest expense	\$ 7	\$ 13	\$ 8
Amortization of LIHC investments included in income tax expense	136	185	129
Tax credits and other tax benefits from LIHC investments included in income tax expense	180	193	188

Leasing Investments

The unconsolidated VIEs related to leasing investments are primarily renewable energy investments. Through its subsidiaries, the Company makes equity investments in LLCs established by third party sponsors. The LLCs are created to operate and manage wind, solar, hydroelectric and cogeneration power plant projects. Power generated by the projects is sold to third parties through long-term purchase power agreements. As a limited investor member, the Company is allocated production tax credits and taxable income or losses associated with the projects. The Company has no voting or other rights to direct the significant activities of the LLCs, and therefore is not considered the primary beneficiary and does not consolidate these investments.

Other Investments

The Company has other investments in structures formed by third parties. The Company has no voting or other rights to direct the activities of the investments that would most significantly impact the entities' performance, and therefore is not considered the primary beneficiary and does not consolidate these investments.

Table of Contents**Note 7—Deposits**

The aggregate amount of time deposits that meet or exceed the FDIC insurance limit was \$4.2 billion and \$3.1 billion at December 31, 2018 and 2017, respectively.

At December 31, 2018, the Company had \$11.7 billion in interest bearing time deposits. Maturity information for all interest bearing time deposits is summarized below.

(Dollars in millions)	December 31, 2018
Due in one year or less	\$ 7,049
Due after one year through two years	4,032
Due after two years through three years	500
Due after three years through four years	91
Due after four years through five years	66
Due after five years	1
Total	<u>\$ 11,739</u>

Note 8—Securities Financing Arrangements

The Company enters into repurchase agreements and securities lending agreements to facilitate customer match-book activity, cover short positions and fund the Company's trading inventory. The Company manages credit exposure from certain transactions by entering into master netting agreements and collateral arrangements with counterparties. The relevant agreements allow for the efficient closeout of the transaction, liquidation and set-off of collateral against the net amount owed by the counterparty following a default. Under these agreements and transactions, the Company either receives or provides collateral in the form of securities. In many cases, the Company is permitted to sell or repledge these securities held as collateral and use the securities to secure repurchase agreements or enter into securities lending transactions. In certain cases the Company may agree for collateral to be posted to a third party custodian under a tri-party arrangement that enables the Company to take control of such collateral in the event of a counterparty default. Default events generally include, among other things, failure to pay, insolvency or bankruptcy of a counterparty. For additional information related to securities pledged and received as collateral, refer to Note 2 to these consolidated financial statements.

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Note 8—Securities Financing Arrangements (Continued)

The following tables present the gross obligations for securities sold under agreements to repurchase and securities loaned by remaining contractual maturity and class of collateral pledged as of December 31, 2018 and December 31, 2017.

December 31, 2018					
(Dollars in millions)	Overnight and continuous	Up to 30 days	31 - 90 days	Greater than 90 days	Total
Securities sold under agreements to repurchase:					
U.S. Treasury securities	\$ 9,416	\$ 2,945	\$ 2,991	\$ 335	\$ 15,687
U.S. agency securities	264	—	55	—	319
Money market securities	—	—	49	—	49
Asset-backed securities	—	—	282	—	282
Mortgage-backed securities	9,803	1,640	7,569	—	19,012
Corporate bonds	682	130	1,227	—	2,039
Municipal securities	115	245	188	—	548
Equities	387	220	255	—	862
Total	\$ 20,667	\$ 5,180	\$ 12,616	\$ 335	\$ 38,798
Securities loaned:					
Corporate bonds	\$ 1	\$ —	\$ —	\$ —	\$ 1
Equities	92	—	—	—	92
Total	\$ 93	\$ —	\$ —	\$ —	\$ 93

December 31, 2017					
(Dollars in millions)	Overnight and continuous	Up to 30 days	31 - 90 days	Greater than 90 days	Total
Securities sold under agreements to repurchase:					
U.S. Treasury securities	\$ 8,244	\$ 2,370	\$ 1,046	\$ 1,158	\$ 12,818
U.S. agency securities	115	38	63	—	216
Other sovereign government obligations	—	—	4	—	4
Money market securities	1	—	6	—	7
Asset-backed securities	32	—	164	—	196
Mortgage-backed securities	8,322	4,972	5,859	250	19,403
Corporate bonds	580	620	1,125	—	2,325
Municipal securities	283	—	276	—	559
Equities	416	376	189	—	981
Total	\$ 17,993	\$ 8,376	\$ 8,732	\$ 1,408	\$ 36,509
Securities loaned:					
Corporate bonds	\$ —	\$ 322	\$ —	\$ —	\$ 322
Equities	446	10	101	—	557
Total	\$ 446	\$ 332	\$ 101	\$ —	\$ 879

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Note 8—Securities Financing Arrangements (Continued)

Offsetting Financial Assets and Liabilities

The Company primarily enters into derivative contracts, repurchase agreements and securities lending agreements with counterparties utilizing standard International Swaps and Derivatives Association Master Agreements and Credit Support Annex Agreements, Master Repurchase Agreements, and Master Securities Lending Agreements, respectively. These agreements generally establish the terms and conditions of the transactions, including a legal right to set-off amounts payable and receivable between the Company and a counterparty, regardless of whether or not such amounts have matured or have contingency features.

The following tables present the offsetting of financial assets and liabilities as of December 31, 2018 and December 31, 2017.

(Dollars in millions)	December 31, 2018					
	Gross Amounts of Recognized Assets/Liabilities	Gross Amounts Offset in Balance Sheet	Net Amounts Presented in Balance Sheet	Gross Amounts Not Offset in Balance Sheet		Net Amount
				Financial Instruments	Cash Collateral Received/Pledged	
Financial Assets:						
Derivative assets	\$ 871	\$ 354	\$ 517	\$ 14	\$ —	\$ 503
Securities borrowed or purchased under resale agreements	33,974	11,606	22,368	22,291	—	77
Total	\$ 34,845	\$ 11,960	\$ 22,885	\$ 22,305	\$ —	\$ 580
Financial Liabilities:						
Derivative liabilities	\$ 804	\$ 322	\$ 482	\$ 69	\$ —	\$ 413
Securities loaned or sold under repurchase agreements	38,891	11,606	27,285	26,434	—	851
Total	\$ 39,695	\$ 11,928	\$ 27,767	\$ 26,503	\$ —	\$ 1,264
(Dollars in millions)	December 31, 2017					
	Gross Amounts of Recognized Assets/Liabilities	Gross Amounts Offset in Balance Sheet	Net Amounts Presented in Balance Sheet	Gross Amounts Not Offset in Balance Sheet		Net Amount
				Financial Instruments	Cash Collateral Received/Pledged	
Financial Assets:						
Derivative assets	\$ 1,322	\$ 607	\$ 715	\$ 25	\$ —	\$ 690
Securities borrowed or purchased under resale agreements	31,845	10,951	20,894	20,816	—	78
Total	\$ 33,167	\$ 11,558	\$ 21,609	\$ 20,841	\$ —	\$ 768
Financial Liabilities:						
Derivative liabilities	\$ 1,127	\$ 620	\$ 507	\$ 142	\$ —	\$ 365
Securities loaned or sold under repurchase agreements	37,388	10,951	26,437	25,639	—	798
Total	\$ 38,515	\$ 11,571	\$ 26,944	\$ 25,781	\$ —	\$ 1,163

Table of Contents**Note 9—Commercial Paper and Other Short-Term Borrowings**

The following table is a summary of the Company's commercial paper and other short-term borrowings:

(Dollars in millions)	December 31, 2018	December 31, 2017
Debt issued by MUB		
Commercial paper, with a weighted average interest rate of 2.39% and 1.26% at December 31, 2018 and December 31, 2017, respectively	\$ 382	\$ 347
Federal Home Loan Bank advances, with a weighted average interest rate of 2.52% and 1.42% at December 31, 2018 and December 31, 2017, respectively	7,800	5,750
Total debt issued by MUB	8,182	6,097
Debt issued by other MUAH subsidiaries		
Short-term debt due to MUFG Bank, Ltd., with weighted average interest rates of 3.01% and 1.88% at December 31, 2018 and December 31, 2017, respectively	145	168
Short-term debt due to affiliates, with weighted average interest rates of (-0.07)% and (-0.09)% at December 31, 2018 and December 31, 2017, respectively	936	801
Total debt issued by other MUAH subsidiaries	1,081	969
Total commercial paper and other short-term borrowings	\$ 9,263	\$ 7,066

At December 31, 2018, Federal Home Loan Bank advances had a weighted average maturity of 168 days. The commercial paper outstanding had a weighted average remaining maturity of 97 days. The short-term debt due to MUFG Bank, Ltd. had a weighted average remaining maturity of 53 days and the short-term debt due to affiliates had a weighted average remaining maturity of 244 days.

Short-term debt due to MUFG Bank, Ltd. consists of both secured and unsecured fixed and floating rate borrowings.

MUSA maintains an uncommitted, unsecured lending facility with Mitsubishi UFJ Securities Holdings Co., Ltd. under which it may borrow up to JPY 160 billion (USD equivalent \$1.4 billion). Under the terms of the facility, MUSA can choose to borrow in Japanese Yen or US Dollars. Japanese Yen denominated borrowings include an irrevocable extension option allowing MUSA to extend the maturity of an individual draw by 100 days at any time prior to its original, stated maturity. At December 31, 2018, MUSA had JPY 103 billion (\$936 million USD equivalent) drawn under this facility.

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Note 10—Long-Term Debt

Long-term debt consists of borrowings having an original maturity of one year or more. The following is a summary of the Company's long-term debt:

(Dollars in millions)	December 31, 2018	December 31, 2017
Debt issued by MUAH		
Senior debt:		
Floating rate senior notes due February 2018. These notes, which bore interest at 0.57% above 3-month LIBOR, had a rate of 1.97% at December 31, 2017	\$ —	\$ 250
Fixed rate 1.625% notes due February 2018	—	450
Fixed rate 2.25% notes due February 2020	—	998
Fixed rate 3.50% notes due June 2022	398	398
Fixed rate 3.00% notes due February 2025	397	496
Senior debt due to MUFG Bank, Ltd.		
Floating rate debt due March 2020. This note, which bore interest at 0.86% above 3-month LIBOR, had a rate of 2.45% at December 31, 2017	—	545
Floating rate debt due September 2020. This note, which bore interest at 0.85% above 3-month LIBOR, had a rate of 2.54% at December 31, 2017	—	3,500
Floating rate debt due December 2021. This note, which bears interest at 0.81% above 3-month LIBOR, had a rate of 3.58% at December 31, 2018	1,625	—
Floating rate debt due December 2022. This note, which bears interest at 0.90% above 3-month LIBOR, had a rate of 3.67% at December 31, 2018	3,250	—
Floating rate debt due December 2023. This note, which bears interest at 0.99% above 3-month LIBOR, had a rate of 3.76% at December 31, 2018	1,625	—
Floating rate debt due December 2023. This note, which bears interest at 0.76% above 3-month EURIBOR, had a rate of 0.76% at December 31, 2018 and at December 31, 2017	24	24
Subordinated debt due to MUFG Bank, Ltd.:		
Floating rate subordinated debt due December 2023. This note, which bore interest at 1.38% above 3-month LIBOR, had a rate of 3.07% at December 31, 2017	—	300
Junior subordinated debt payable to trusts:		
Floating rate note due September 2036. This note had an interest rate of 4.49% at December 31, 2018 and 3.29% at December 31, 2017	36	36
Total debt issued by MUAH	7,355	6,997
Debt issued by MUB		
Senior debt:		
Fixed rate FHLB of San Francisco advances due between January 2019 and December 2023. These notes bear a combined weighted average rate of 2.66% at December 31, 2018 and 1.51% at December 31, 2017	9,100	1,500
Fixed rate 2.625% notes due September 2018	—	1,000
Fixed rate 2.25% notes due May 2019	498	497
Subordinated debt due to MUFG Bank, Ltd.:		
Floating rate subordinated debt due June 2023. This note, which bore interest at 1.20% above 3-month LIBOR, had a rate of 2.89% at December 31, 2017	—	750
Other	34	63
Total debt issued by MUB	9,632	3,810
Debt issued by other MUAH subsidiaries		
Senior debt due to MUFG Bank, Ltd.:		
Various floating rate borrowings due between December 2020 and May 2021. These notes, which bear interest above 3-month LIBOR had a weighted average interest rate of 2.80% at December 31, 2018 and 1.78% at December 31, 2017	250	291
Various fixed rate borrowings due between February 2019 and May 2024 with a weighted average interest rate of 1.82% (between 0.14% and 2.44%) at December 31, 2018 and 2.12% (between 1.37% and 2.65%) at December 31, 2017	244	339
Subordinated debt due to Affiliate:		
Floating rate borrowings due March 2019. These notes, which bear interest above 6-month LIBOR had an interest rate of 4.13% at December 31, 2018 and 2.95% (between 2.88% and 3.04%) at December 31, 2017	75	185

Table of Contents**Note 10—Long-Term Debt (Continued)****Non-recourse debt due to MUFG Bank, Ltd.**

Various floating rate non-recourse borrowings due between February 2019 and December 2021. These notes, which bear interest above 1- or 3-month LIBOR had a weighted average interest rate of 4.09% (between 2.75% and 4.17%) at December 31, 2018 and 3.07% (between 1.49% and 5.58%) at December 31, 2017	53	79
Fixed rate non-recourse borrowings due between January 2019 and July 2023 which had an interest rate of 3.05% at December 31, 2018 and 3.27% at December 31, 2017	187	240

Other non-recourse debt:

Various floating rate non-recourse borrowings due between February 2019 and May 2019. These notes, which bear interest above 1- or 3-month LIBOR had a weighted average interest rate of 4.21% (between 4.17% and 4.48%) at December 31, 2018 and 2.88% (between 2.50% and 3.54%) at December 31, 2017	89	185
Fixed rate non-recourse borrowings due December 2026 which had an interest rate of 5.34% at December 31, 2018 and December 31, 2017	33	36
Total debt issued by other MUAH subsidiaries	931	1,355
Total long-term debt	\$ 17,918	\$ 12,162

Senior Debt

Certain of the debt issuances are repayable prior to maturity at the Company's option at a redemption price equal to 100% of par plus accrued interest. MUAH senior debt was issued under a shelf registration statement with the SEC, which expired as of January 29, 2018. In the fourth quarter of 2018, the Company redeemed all of the \$1.0 billion of the senior notes due 2020 and \$100 million of the senior notes due 2025.

MUB senior debt is issued as part of MUB's \$12 billion bank note program under which MUB may issue, from time to time, senior unsecured debt obligations with maturities of more than one year from their respective dates of issue and subordinated debt obligations with maturities of five years or more from their respective dates of issue. At December 31, 2018 there is \$5.9 billion available for issuance under the program. MUB does not have any firm commitments in place to sell notes under this program.

MUAH Senior Debt due to MUFG Bank, Ltd.

In December 2018, MUAH entered into a Master Internal Total Loss Absorbing Capacity Loan Agreement with MUFG Bank, Ltd., under which MUAH initially borrowed an aggregate of \$6.5 billion to comply with the Federal Reserve's TLAC rule (12 CFR Section 252.165). MUAH may prepay the notes, in whole or in part, two years prior to the stated maturities. The outstanding principal of the notes can be declared due and payable immediately, together with any accrued and unpaid interest, in the event of liquidation, insolvency or similar proceeding with respect to MUAH or all or substantially all of its property. Under certain circumstances, the Federal Reserve may issue a conversion order pursuant to the TLAC rule (12 CFR Section 252.163) that would result in the conversion of any then-outstanding note, in whole or in part, to MUAH equity issued to MUFG Bank, Ltd.

During the first quarter of 2017, MUAH borrowed \$3.5 billion from MUFG Bank, Ltd. in the form of a senior loan. This loan and the \$545 million loan outstanding at December 31, 2017 were repaid early in conjunction with the December 2018 TLAC borrowing.

Senior Debt due to MUFG Bank, Ltd. by other MUAH subsidiaries

MUAH's subsidiaries also borrow on a long-term basis from MUFG Bank, Ltd. At December 31, 2018, \$250 million of senior debt issued to MUFG Bank, Ltd. was floating rate and linked to customer deposits maintained at MUFG Bank, Ltd.'s New York Branch. An additional \$244 million was fixed rate, amortizing funding tied to specific assets owned by MUAH's subsidiaries.

FHLB Senior Debt

The Bank borrows periodically from the FHLB on a medium-term basis. The advances are secured by certain of the Bank's assets and bear either a fixed or a floating interest rate. The floating rates are tied to the three-month LIBOR plus a spread, reset every 90 days. As of December 31, 2018 and December 31, 2017, the Bank had \$44.3 billion and \$43.0 billion of pledged loans, respectively, as collateral for short-term and medium-term advances from the FHLB.

Table of Contents**Note 10—Long-Term Debt (Continued)***Subordinated Debt due to MUFG Bank, Ltd.*

The terms and conditions of the subordinated debt due to MUFG Bank, Ltd. were equivalent to those which would apply in a similar transaction with a non-related party. The subordinated debt due to MUFG Bank, Ltd. was a junior obligation to MUAH's and to the Bank's existing and future outstanding senior indebtedness, and qualified as Tier 2 capital under the federal banking agency risk-based capital guidelines. This debt was repaid early during 2018.

Subordinated Debt due to Affiliate

MUSA maintains subordinated funding provided by an affiliate. This subordinated debt is a junior obligation to MUSA's existing and future outstanding senior indebtedness.

Non-recourse Debt

Non-recourse debt serves as funding for certain lease financings offered to customers. The lenders are secured by an interest in the underlying leased assets and have no recourse to the Company or its subsidiaries. Interest and principal on this debt is serviced entirely by the underlying assets and is not supported by the Company.

Table of Contents**Note 11—Fair Value Measurement and Fair Value of Financial Instruments***Valuation Methodologies*

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability (i.e., an exit price) in an orderly transaction between willing market participants at the measurement date. The Company has an established and documented process for determining fair value for financial assets and liabilities that are measured at fair value on either a recurring or nonrecurring basis. When available, quoted market prices are used to determine fair value. If quoted market prices are not available, fair value is based upon valuation techniques that use, where possible, current market-based or independently sourced parameters, such as yield curves, foreign exchange rates, credit spreads, commodity prices and implied volatilities. Valuation adjustments may be made to ensure the financial instruments are recorded at fair value. These adjustments include amounts that reflect counterparty credit quality and that consider the Company's own creditworthiness in determining the fair value of its trading assets and liabilities.

Fair Value Hierarchy

In determining fair value, the Company maximizes the use of observable market inputs and minimizes the use of unobservable inputs. Observable inputs reflect market-derived or market-based information obtained from independent sources, while unobservable inputs reflect the Company's estimate about market data. Based on the observability of the significant inputs used, the Company classifies its fair value measurements in accordance with the three-level hierarchy as defined by GAAP. This hierarchy is based on the quality, observability, and reliability of the information used to determine fair value. The Company's policy is to recognize transfers in and out of Level 1, 2 and 3 as of the end of a reporting period.

Level 1: Valuations are based on quoted prices in active markets for identical assets or liabilities. Since the valuations are based on quoted prices that are readily available in an active market, they do not entail a significant degree of judgment.

Level 2: Valuations are based on quoted prices for similar instruments in active markets, quoted prices for identical or similar instruments in markets that are not active and model-based valuations for which all significant assumptions are observable or can be corroborated by observable market data.

Level 3: Valuations are based on at least one significant unobservable input that is supported by little or no market activity and is significant to the fair value measurement. Values are determined using pricing models and discounted cash flow models that include management judgment and estimation, which may be significant.

In assigning the appropriate levels, the Company performs a detailed analysis of the assets and liabilities that are measured at fair value. In certain cases, the inputs used to measure fair value may fall into different levels of the fair value hierarchy. The level within which the fair value measurement is categorized is based on the lowest level input that is significant to the fair value measurement in its entirety. Therefore, an item may be classified in Level 3 even though there may be many significant inputs that are readily observable.

Valuation Processes

The Company has established a valuation committee to oversee its valuation framework for measuring fair value and to establish valuation policies and procedures. The valuation committee's responsibilities include reviewing fair value measurements and categorizations within the fair value hierarchy and monitoring the use of pricing sources, mark-to-model valuations, dealer quotes and other valuation processes. The valuation committee reports to the Company's Disclosure & Accounting Committee and meets at least quarterly.

Independent price verification is performed periodically by the Company to test the market data and valuations of substantially all instruments measured at fair value on a recurring basis. As part of its independent price verification procedures, the Company compares pricing sources, tests data variances within certain thresholds and performs variance analysis, utilizing third party valuations and both internal and external models. Results are formally reported on a quarterly basis to the valuation committee.

Table of Contents**Note 11—Fair Value Measurement and Fair Value of Financial Instruments (Continued)**

A description of the valuation methodologies used for certain financial assets and liabilities measured at fair value is as follows:

Recurring Fair Value Measurements:

Trading Account Assets: Trading account assets are recorded at fair value and primarily consist of securities and derivatives held for trading purposes. See discussion below on securities available for sale, which utilize the same valuation methodology as trading account securities. See also discussion below on derivatives valuation.

Securities Available for Sale: Securities available for sale are recorded at fair value based on readily available quoted market prices, if available. When available, these securities are classified as Level 1 and include exchange traded equities. If such quoted market prices are not available, management utilizes third-party pricing services and broker quotations from dealers in the specific instruments. These securities are classified as Level 2 and include U.S. Treasuries, U.S. government-sponsored agencies, RMBS and CMBS, CLOs, and certain other debt securities. If no market prices or broker quotes are available, internal pricing models are used. To the extent possible, these pricing model valuations utilize observable market inputs obtained for similar securities. Typical inputs include LIBOR and U.S. Treasury yield curves, benchmark yields, consensus prepayment estimates and credit spreads. When pricing model valuations use significant unobservable inputs, the securities are classified as Level 3. These other debt securities primarily include direct bank purchase bonds. The valuation of these securities is based upon a return on equity method, which incorporates a market-required return on capital, probability of default and loss severity.

Other Assets: Other assets included mortgage servicing rights, loans held for sale and derivative contracts. The fair value of the Company's mortgage servicing rights asset is determined using a discounted cash flow model with significant unobservable inputs, primarily influenced by forecasted future servicing revenues and prepayment speed assumptions. The fair value of the Company's loans held for sale is based on secondary market offerings for loans with similar characteristics. Mortgage servicing rights and loans held for sale are classified as Level 3. See discussion below on derivatives.

Derivatives: The Company's derivatives are primarily traded in over-the-counter markets where quoted market prices are not readily available. The Company values its derivatives using pricing models that are widely accepted in the financial services industry with inputs that are observable in the market or can be derived from or corroborated by observable market data. These models reflect the contractual terms of the derivatives including the period to maturity and market observable inputs such as yield curves and option volatility. Valuation adjustments are made to reflect counterparty credit quality and to consider the creditworthiness of the Company. These derivatives, which are included in trading account assets, trading account liabilities, other assets and other liabilities are generally classified as Level 2. Trading account assets and trading account liabilities include Level 3 derivatives comprised of embedded derivatives contained in market-linked CDs and matched over-the-counter options, whose fair value is obtained through unadjusted third party broker quotes, which incorporate significant unobservable inputs.

Trading Account Liabilities: Trading account liabilities are recorded at fair value and primarily consist of securities sold, not yet purchased and derivatives. See discussion above on derivatives valuation. Securities sold, not yet purchased consist of U.S. Treasury, U.S. government-sponsored agencies, state and municipal, sovereign government obligations, corporate bonds, ABS and equities and are classified as Level 2, which utilize the same valuation methodology as securities available for sale.

Other Liabilities: Other liabilities included the FDIC clawback liability and derivative contracts. The fair value of the Company's FDIC clawback liability is determined using a discounted cash flow model with significant unobservable inputs, which include probability of default and loss severity. The FDIC clawback liability is classified as Level 3. See discussion above on derivatives.

Nonrecurring Fair Value Measurements:

Individually Impaired Loans: Individually impaired loans are valued at the time the loan is identified as impaired based on the present value of the remaining expected cash flows. Because the discount factor applied is based on the loan's original effective yield rather than a current market rate, that present value does not represent fair value. However, as a practical expedient, an impaired loan may be measured based on a loan's

Table of Contents**Note 11—Fair Value Measurement and Fair Value of Financial Instruments (Continued)**

observable market price or the underlying collateral securing the loan (provided the loan is collateral dependent), which does approximate fair value. Collateral may be real estate or business assets, including equipment. The value of collateral is determined based on independent appraisals. Appraised values may be adjusted based on management's historical knowledge, changes in market conditions from the time of valuation, and management's knowledge of the client and the client's business. The loan's market price is determined using market pricing for similar assets, adjusted for management judgment. Impaired loans are reviewed and evaluated at least quarterly for additional impairment and adjusted accordingly. Impaired loans that are adjusted to fair value based on underlying collateral or the loan's market price are classified as Level 3.

Loans Held for Sale: Residential mortgage and commercial loans held for sale are recorded at the lower of cost or fair value. The fair value of fixed-rate residential loans is based on whole loan forward prices obtained from GSEs. These loans are classified as Level 2. The fair value of commercial loans held for sale may be based on secondary market offerings for loans with similar characteristics. These loan values are classified as Level 3.

Private Equity Investments and Renewable Energy Investments: Private equity investments and renewable energy investments are recorded either at cost or using the equity method and are evaluated for impairment. The valuation of these investments requires significant management judgment due to the absence of quoted market prices, lack of liquidity and the long-term nature of these assets. When required, the fair value of the investments is estimated using the net asset value or based on the investee's business model, current and projected financial performance, capital needs and our exit strategy. Private equity investments and renewable energy investments are generally classified as Level 3.

Software: Software is valued at the time it is identified as impaired. Fair value is determined using market pricing for similar assets, adjusted for management judgment. Software that is adjusted to fair value is classified as Level 3.

Consolidated LIHC VIE: The fair value of consolidated LIHC VIE investments is determined using a discounted cash flow analysis. Consolidated LIHC VIE investments are generally classified as Level 3.

Table of Contents**Note 11—Fair Value Measurement and Fair Value of Financial Instruments (Continued)***Fair Value Measurements on a Recurring Basis*

The following tables present financial assets and financial liabilities measured at fair value on a recurring basis at December 31, 2018 and 2017, by major category and by valuation hierarchy level.

(Dollars in millions)	December 31, 2018				
	Level 1	Level 2	Level 3	Netting Adjustment (1)	Fair Value
Assets					
Trading account assets ⁽²⁾ :					
U.S. Treasury securities	\$ —	\$ 2,998	\$ —	\$ —	\$ 2,998
U.S. government-sponsored agency securities	—	73	—	—	73
State and municipal securities	—	10	—	—	10
Commercial paper	—	51	—	—	51
Corporate bonds	—	1,367	—	—	1,367
Asset-backed securities	—	299	—	—	299
Mortgage-backed securities	—	5,785	—	—	5,785
Equities	127	—	—	—	127
Interest rate derivative contracts	9	522	—	(130)	401
Commodity derivative contracts	—	25	—	(24)	1
Foreign exchange derivative contracts	1	259	—	(170)	90
Equity derivative contracts	9	—	13	(11)	11
Total trading account assets	146	11,389	13	(335)	11,213
Securities available for sale ⁽³⁾ :					
U.S. Treasury	—	3,429	—	—	3,429
Residential mortgage-backed securities:					
U.S. government and government-sponsored agencies	—	8,007	—	—	8,007
Privately issued	—	864	—	—	864
Privately issued - commercial mortgage-backed securities	—	1,162	—	—	1,162
Collateralized loan obligations	—	1,474	—	—	1,474
Other	—	4	—	—	4
Other debt securities:					
Direct bank purchase bonds	—	—	1,190	—	1,190
Other	—	43	141	—	184
Total securities available for sale	—	14,983	1,331	—	16,314
Other assets:					
Mortgage servicing rights ⁽²⁾	—	—	159	—	159
Loans held for sale ⁽²⁾	—	—	117	—	117
Interest rate hedging contracts ⁽³⁾	—	6	—	(3)	3
Other derivative contracts ⁽²⁾	—	26	1	(16)	11
Equity securities ⁽²⁾	9	—	—	—	9
Total other assets	9	32	277	(19)	299
Total assets	\$ 155	\$ 26,404	\$ 1,621	\$ (354)	\$ 27,826
Percentage of total	—%	95%	6%	(1)%	100%
Percentage of total Company assets	—%	16%	1%	—%	17%
Liabilities					
Trading account liabilities ⁽²⁾ :					
Securities sold, not yet purchased:					
U.S. Treasury	\$ —	\$ 2,753	\$ —	\$ —	\$ 2,753
Commercial paper	—	10	—	—	10
Corporate bonds	—	717	—	—	717

Equities	70	—	—	—	70
Trading derivatives:					
Interest rate derivative contracts	55	545	—	(262)	338
Commodity derivative contracts	—	18	—	(4)	14
Foreign exchange derivative contracts	—	168	—	(56)	112
Equity derivative contracts	—	—	13	—	13
Total trading account liabilities	125	4,211	13	(322)	4,027
Other liabilities:					
FDIC clawback liability ⁽²⁾	—	—	118	—	118
Other derivative contracts ⁽²⁾	—	3	2	—	5
Total other liabilities	—	3	118	—	121
Total liabilities	\$ 125	\$ 4,214	\$ 131	\$ (322)	\$ 4,148
Percentage of total	3%	102%	3%	(8)%	100%
Percentage of total Company liabilities	—%	3%	—%	—%	3%

(1) Amounts represent the impact of legally enforceable master netting agreements between the same counterparties that allow the Company to net settle all contracts.

(2) Fair value through net income

(3) Fair value through other comprehensive income

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Note 11—Fair Value Measurement and Fair Value of Financial Instruments (Continued)

(Dollars in millions)	December 31, 2017				
	Level 1	Level 2	Level 3	Netting Adjustment ⁽¹⁾	Fair Value
Assets					
Trading account assets ⁽²⁾ :					
U.S. Treasury securities	\$ —	\$ 1,926	\$ —	\$ —	\$ 1,926
U.S. government-sponsored agency securities	—	118	—	—	118
State and municipal securities	—	11	—	—	11
Commercial paper	—	7	—	—	7
Other sovereign government obligations	—	8	—	—	8
Corporate bonds	—	1,054	—	—	1,054
Asset-backed securities	—	199	—	—	199
Mortgage-backed securities	—	6,339	—	—	6,339
Equities	193	—	—	—	193
Interest rate derivative contracts	7	870	1	(353)	525
Commodity derivative contracts	—	50	—	(49)	1
Foreign exchange derivative contracts	—	249	1	(68)	182
Equity derivative contracts	2	—	137	(135)	4
Total trading account assets	202	10,831	139	(605)	10,567
Securities available for sale ⁽³⁾ :					
U.S. Treasury	—	3,252	—	—	3,252
Residential mortgage-backed securities:					
U.S. government and government-sponsored agencies	—	9,208	—	—	9,208
Privately issued	—	694	—	—	694
Privately issued - commercial mortgage-backed securities	—	822	—	—	822
Collateralized loan obligations	—	1,905	—	—	1,905
Other	—	5	—	—	5
Other debt securities:					
Direct bank purchase bonds	—	—	1,503	—	1,503
Other	—	68	96	—	164
Equity securities	10	—	—	—	10
Total securities available for sale	10	15,954	1,599	—	17,563
Other assets:					
Mortgage servicing rights ⁽²⁾	—	—	64	—	64
Interest rate hedging contracts ⁽⁴⁾	—	2	—	—	2
Other derivative contracts ⁽²⁾	—	2	1	(2)	1
Total other assets	—	4	65	(2)	67
Total assets	\$ 212	\$ 26,789	\$ 1,803	\$ (607)	\$ 28,197
Percentage of total	1%	95%	6%	(2)%	100%
Percentage of total Company assets	—%	17%	1%	—%	18%
Liabilities					
Trading account liabilities ⁽²⁾ :					
Securities sold, not yet purchased:					
U.S. Treasury	\$ —	\$ 2,709	\$ —	\$ —	\$ 2,709
Other sovereign government obligations	—	7	—	—	7
Corporate bonds	—	348	—	—	348
Equities	35	—	—	—	35
Trading derivatives:					
Interest rate derivative contracts	3	643	—	(382)	264

Commodity derivative contracts	—	33	—	(20)	13
Foreign exchange derivative contracts	1	144	1	(66)	80
Equity derivative contracts	7	—	137	—	144
Total trading account liabilities	46	3,884	138	(468)	3,600
Other liabilities:					
FDIC clawback liability ⁽²⁾	—	—	113	—	113
Interest rate hedging contracts ⁽³⁾	—	149	—	(149)	—
Other derivative contracts ⁽²⁾	—	3	6	(3)	6
Total other liabilities	—	152	119	(152)	119
Total liabilities	\$ 46	\$ 4,036	\$ 257	\$ (620)	\$ 3,719
Percentage of total	1%	109%	7%	(17)%	100%
Percentage of total Company liabilities	—%	3%	—%	—%	3%

- (1) Amounts represent the impact of legally enforceable master netting agreements between the same counterparties that allow the Company to net settle all contracts.
- (2) Fair value through net income
- (3) Fair value through other comprehensive income

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Note 11—Fair Value Measurement and Fair Value of Financial Instruments (Continued)

The following tables present a reconciliation of the assets and liabilities measured at fair value on a recurring basis using significant unobservable inputs (Level 3) for the years ended December 31, 2018 and 2017. Level 3 securities available for sale at December 31, 2018 primarily consist of direct bank purchase bonds.

(Dollars in millions)	For the Year Ended December 31, 2018				
	Trading Assets	Securities Available for Sale	Other Assets	Trading Liabilities	Other Liabilities
Asset (liability) balance, beginning of period	\$ 139	\$ 1,600	\$ 65	\$ (138)	\$ (119)
Total gains (losses) (realized/unrealized):					
Included in income before taxes	(10)	—	(8)	9	1
Included in other comprehensive income	—	(9)	—	—	—
Purchases/additions	—	126	220	—	—
Settlements	(116)	(386)	—	116	—
Transfers in (out) of level 3	—	—	—	—	—
Asset (liability) balance, end of period	<u>\$ 13</u>	<u>\$ 1,331</u>	<u>\$ 277</u>	<u>\$ (13)</u>	<u>\$ (118)</u>
Changes in unrealized gains (losses) included in income before taxes for assets and liabilities still held at end of period	\$ (10)	\$ —	\$ (8)	\$ 9	\$ 1

(Dollars in millions)	For the Year Ended December 31, 2017				
	Trading Assets	Securities Available for Sale	Other Assets	Trading Liabilities	Other Liabilities
Asset (liability) balance, beginning of period	\$ 168	\$ 1,638	\$ 24	\$ (166)	\$ (121)
Total gains (losses) (realized/unrealized):					
Included in income before taxes	73	—	(3)	(72)	2
Included in other comprehensive income	—	(3)	—	—	—
Purchases/additions	—	83	44	—	—
Settlements	(102)	(118)	—	100	—
Asset (liability) balance, end of period	<u>\$ 139</u>	<u>\$ 1,600</u>	<u>\$ 65</u>	<u>\$ (138)</u>	<u>\$ (119)</u>
Changes in unrealized gains (losses) included in income before taxes for assets and liabilities still held at end of period	\$ 73	\$ —	\$ (3)	\$ (72)	\$ 2

The following table presents information about significant unobservable inputs related to the Company's significant Level 3 assets and liabilities at December 31, 2018.

(Dollars in millions)	December 31, 2018				
	Level 3 Fair Value	Valuation Technique	Significant Unobservable Input(s)	Range of Inputs	Weighted Average
Securities available for sale:					
Direct bank purchase bonds	\$ 1,190	Return on equity	Market-required return on capital	8.0 - 10.0 %	9.5%
			Probability of default	0.0 - 25.0 %	0.3%
			Loss severity	10.0 - 60.0 %	22.4%

The direct bank purchase bonds generally use a return on equity valuation technique. This technique uses significant unobservable inputs such as market-required return on capital, probability of default and loss severity. Increases (decreases) in any of these inputs in isolation would result in a lower (higher) fair value measurement.

Table of Contents**Note 11—Fair Value Measurement and Fair Value of Financial Instruments (Continued)***Fair Value Measurement on a Nonrecurring Basis*

Certain assets may be measured at fair value on a nonrecurring basis. These assets are subject to fair value adjustments that result from the application of the lower of cost or fair value accounting or write-downs of individual assets. For assets measured at fair value on a nonrecurring basis during the years ended December 31, 2018 and 2017 that were still held on the consolidated balance sheet as of the respective periods ended, the following tables present the fair value of such assets by the level of valuation assumptions used to determine each fair value adjustment.

(Dollars in millions)	December 31, 2018				For the Year Ended December 31, 2018
	Fair Value	Level 1	Level 2	Level 3	Gains (Losses)
Loans:					
Impaired loans	\$ 151	\$ —	\$ —	\$ 151	\$ (106)
Other assets:					
Loans held for sale	85	—	—	85	(29)
Private equity investments	11	—	—	11	(2)
Renewable energy investments	—	—	—	—	(2)
Software	—	—	—	—	(4)
Consolidated LIHC VIE	43	—	—	43	(8)
Total	<u>\$ 290</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 290</u>	<u>\$ (151)</u>

(Dollars in millions)	December 31, 2017				For the Year Ended December 31, 2017
	Fair Value	Level 1	Level 2	Level 3	Gains (Losses)
Loans:					
Impaired loans	\$ 79	\$ —	\$ —	\$ 79	\$ (34)
Other assets:					
Loans held for sale	—	—	—	—	(3)
Renewable energy investments	—	—	—	—	2
Software	—	—	—	—	(22)
Consolidated LIHC VIE	66	—	—	66	(21)
Total	<u>\$ 145</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 145</u>	<u>\$ (78)</u>

Fair Value of Financial Instruments Disclosures

In addition to financial instruments recorded at fair value in the Company's financial statements, the disclosure of the estimated fair value of financial instruments that are not carried at fair value is also required. Excluded from this disclosure requirement are lease financing arrangements, investments accounted for under the equity method, employee pension and other postretirement obligations and all nonfinancial assets and liabilities, including goodwill and other intangible assets such as long-term customer relationships. The fair values presented are estimates for certain individual financial instruments and do not represent an estimate of the fair value of the Company as a whole.

Certain financial instruments that are not recognized at fair value on the consolidated balance sheet are carried at amounts that approximate fair value due to their short-term nature. These financial instruments include cash and due from banks, interest bearing deposits in banks, federal funds sold and purchased, securities borrowed or purchased under resale agreements, securities loaned or sold under repurchase agreements and commercial paper. In addition, the fair value of deposits with no stated maturity, such as noninterest bearing demand deposits, interest bearing checking, and market rate and other savings are deemed to equal their carrying amounts.

Table of Contents**Note 11—Fair Value Measurement and Fair Value of Financial Instruments (Continued)**

Financial instruments for which their carrying amounts do not approximate fair value include securities held to maturity, loans held for investment, interest bearing deposits with stated maturities, certain other short-term borrowings, long-term debt and off-balance sheet instruments.

Securities Held to Maturity: The fair value of U.S. Treasury, U.S. government agency and government-sponsored agencies securities, including RMBS and CMBS classified as held to maturity are based on unadjusted third party pricing service prices.

Loans Held for Investment: The fair values of mortgage loans were estimated based on quoted market prices for loans with similar credit and interest rate risk characteristics. The fair values of other loans were estimated based upon the type of loan and maturity and were determined by discounting the future expected cash flows using the current origination rates for similar loans made to borrowers with similar credit ratings and include adjustments for liquidity premiums.

Interest Bearing Deposits: The fair values of savings accounts and certain money market accounts were based on the amounts payable on demand at the reporting date. The fair value of fixed maturity CDs was estimated using a discounted cash flow calculation that applies current interest rates being offered on certificates with similar maturities.

Commercial Paper and Other Short-Term Borrowings: The fair values of Federal Reserve Bank term borrowings, FHLB borrowings and term federal funds purchased were estimated using a discounted cash flow calculation that applies current market rates for applicable maturities. The carrying amounts of other short-term borrowed funds were assumed to approximate their fair value due to their limited duration.

Long-Term Debt: The fair value of senior and subordinated debt was estimated using either a discounted cash flow analysis based on current market interest rates for debt with similar maturities and credit quality or estimated using market quotes. The fair value of junior subordinated debt payable to trusts was estimated using market quotes of similar securities.

Off-Balance Sheet Instruments: Commitments to extend credit and issued standby and commercial letters of credit are instruments that generate ongoing fees, which are recognized over the term of the commitment period. The Company maintains an allowance for losses on unfunded credit commitments. At December 31, 2018, the carrying amount of these instruments was the amount of deferred fees and the fair value was estimated using a discounted cash flow calculation and reflected the portion of unused commitments expected to become funded. At December 31, 2017, the carrying value and fair value were the carrying amount of the deferred fees plus the related reserve.

[Table of Contents](#)**Note 11—Fair Value Measurement and Fair Value of Financial Instruments (Continued)**

The tables below present the carrying amount and estimated fair value of certain financial instruments, all of which are accounted for at amortized cost, classified by valuation hierarchy level as of December 31, 2018 and 2017.

(Dollars in millions)	December 31, 2018				
	Carrying Amount	Fair Value	Level 1	Level 2	Level 3
Assets					
Cash and cash equivalents	\$ 8,350	\$ 8,350	\$ 8,350	\$ —	\$ —
Securities borrowed or purchased under resale agreements	22,368	22,368	—	22,368	—
Securities held to maturity	10,901	10,720	—	10,720	—
Loans held for investment ⁽¹⁾	84,805	84,729	—	—	84,729
Other assets	48	48	48	—	—
Liabilities					
Time deposits	\$ 11,739	\$ 11,714	\$ —	\$ 11,714	\$ —
Securities loaned or sold under repurchase agreements	27,285	27,285	—	27,285	—
Commercial paper and other short-term borrowings	9,263	9,263	—	9,263	—
Long-term debt	17,918	17,961	—	17,961	—
Off-Balance Sheet Instruments					
Commitments to extend credit and standby and commercial letters of credit	\$ 120	\$ 242	\$ —	\$ —	\$ 242

(1) Excludes lease financing. The carrying amount is net of the allowance for loan losses.

(Dollars in millions)	December 31, 2017				
	Carrying Amount	Fair Value	Level 1	Level 2	Level 3
Assets					
Cash and cash equivalents	\$ 3,392	\$ 3,392	\$ 3,392	\$ —	\$ —
Securities borrowed or purchased under resale agreements	20,894	20,894	—	20,894	—
Securities held to maturity	9,885	9,799	—	9,799	—
Loans held for investment ⁽¹⁾	78,023	79,051	—	—	79,051
Liabilities					
Deposits	\$ 84,787	\$ 84,743	\$ —	\$ 84,743	\$ —
Securities loaned or sold under repurchase agreements	26,437	26,437	—	26,437	—
Commercial paper and other short-term borrowings	7,066	7,066	—	7,066	—
Long-term debt	12,162	12,162	—	12,162	—
Off-Balance Sheet Instruments					
Commitments to extend credit and standby and commercial letters of credit	\$ 174	\$ 174	\$ —	\$ —	\$ 174

(1) Excludes lease financing. The carrying amount is net of the allowance for loan losses.

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Note 12—Derivative Instruments and Other Financial Instruments Used For Hedging

The Company enters into certain derivative and other financial instruments primarily to assist customers with their risk management objectives and to manage the Company's exposure to interest rate risk. When entering into derivatives on behalf of customers, the Company generally acts as a financial intermediary by offsetting a significant portion of the market risk for these derivatives with third parties. The Company may also enter into derivatives for other risk management purposes. All derivative instruments are recognized as assets or liabilities on the consolidated balance sheets at fair value.

Counterparty credit risk is inherent in derivative instruments. In order to reduce its exposure to counterparty credit risk, the Company utilizes credit approvals, limits, monitoring procedures and master netting and credit support annex agreements. Additionally, the Company considers counterparty credit quality and the creditworthiness of the Company in estimating the fair value of derivative instruments.

The table below presents the notional amounts and fair value amounts of the Company's derivative instruments reported on the consolidated balance sheets, segregated between derivative instruments designated and qualifying as hedging instruments and derivative instruments not designated as hedging instruments as of December 31, 2018 and December 31, 2017. Asset and liability values are presented gross, excluding the impact of legally enforceable master netting and credit support annex agreements. The fair value of asset and liability derivatives designated and qualifying as hedging instruments and derivatives designated as other risk management are included in other assets and other liabilities, respectively. The fair value of asset and liability trading derivatives are included in trading account assets and trading account liabilities, respectively.

(Dollars in millions)	December 31, 2018			December 31, 2017		
	Notional Amount	Fair Value		Notional Amount	Fair Value	
		Asset Derivatives	Liability Derivatives		Asset Derivatives	Liability Derivatives
Cash flow hedges						
Interest rate contracts	\$ 674	\$ 6	\$ —	\$ 6,998	\$ 2	\$ 149
Fair value hedges						
Interest rate contracts	—	—	—	500	—	—
Not designated as hedging instruments:						
Trading						
Interest rate contracts	189,478	531	600	132,214	878	646
Commodity contracts	336	25	18	1,244	50	33
Foreign exchange contracts	8,475	260	168	7,053	250	146
Equity contracts	300	22	13	1,496	139	144
Other contracts	127	—	—	4	—	—
Total trading	198,716	838	799	142,011	1,317	969
Other risk management	1,704	27	5	1,345	3	9
Total derivative instruments	<u>\$ 201,094</u>	<u>\$ 871</u>	<u>\$ 804</u>	<u>\$ 150,854</u>	<u>\$ 1,322</u>	<u>\$ 1,127</u>

We recognized net losses of \$4 million, \$17 million, and \$19 million on other risk management derivatives for the years ended December 31, 2018, 2017 and 2016, respectively, which are included in other noninterest income.

Derivatives Designated and Qualifying as Hedging Instruments

The Company uses interest rate derivatives to manage the financial impact on the Company from changes in market interest rates. These instruments are used to manage interest rate risk relating to specified groups of assets and liabilities, primarily LIBOR-based commercial loans and debt issuances. Derivatives that qualify for hedge accounting are designated as either fair value or cash flow hedges.

Cash Flow Hedges

At December 31, 2018, the Company used interest rate floors with a notional amount of \$500 million and interest rate swaps with a notional amount of \$174 million to hedge the risk of changes in cash flows attributable to changes in the designated benchmark interest rate on LIBOR indexed loans and LIBOR indexed

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Note 12—Derivative Instruments and Other Financial Instruments Used For Hedging (Continued)

short-term borrowings, respectively. At December 31, 2018, the weighted average remaining life of active cash flow hedges was 2.6 years.

For cash flow hedges, the effective portion of the gain or loss on the hedging instruments is reported as a component of other comprehensive income and reclassified into earnings in the same period or periods during which the hedged cash flows are recognized in net interest income. Gains and losses representing hedge ineffectiveness are recognized in noninterest expense in the period in which they arise. At December 31, 2018, the Company expects to reclassify approximately \$89 million of losses from AOCI as a reduction to net interest income during the year ending December 31, 2019. This amount could differ from amounts actually realized due to changes in interest rates, hedge terminations and the addition of other hedges subsequent to December 31, 2018.

The following table presents the amount and location of the net gains and losses recorded in the Company's consolidated statements of income and changes in stockholders' equity for derivative instruments designated as cash flow hedges for the years ended December 31, 2018, 2017 and 2016:

(Dollars in millions)	Gains (Losses) Recognized in OCI (Effective Portion)			Gains (Losses) Reclassified from AOCI into Income (Effective Portion)			Gains (Losses) Recognized in Income (Ineffective Portion)				
	For the Years Ended December 31,			For the Years Ended December 31,			For the Years Ended December 31,				
	2018	2017	2016	Location	2018	2017	2016	Location	2018	2017	2016
				Interest income	\$ (34)	\$ 69	\$ 170				
Interest rate contracts	\$ (96)	\$ (35)	\$ (26)	Interest expense	—	—	(3)	Noninterest expense	\$ (1)	\$ 3	\$ —
Total	\$ (96)	\$ (35)	\$ (26)		\$ (34)	\$ 69	\$ 167		\$ (1)	\$ 3	\$ —

Fair Value Hedges

The Company engaged in an interest rate hedging strategy in which one or more interest rate swaps were associated with a specified interest bearing liability, in order to convert the liability from a fixed rate to a floating rate instrument. This strategy mitigated the changes in fair value of the hedged liability caused by changes in the designated benchmark interest rate, LIBOR.

For fair value hedges, any ineffectiveness is recognized in noninterest expense in the period in which it arises. The change in the fair value of the hedged item and the hedging instrument, to the extent completely effective, offsets with no impact on earnings.

The following tables present gains (losses) on the Company's fair value hedges and hedged item for the years ended December 31, 2018, 2017 and 2016:

For the Year Ended December 31, 2018			
(Dollars in millions)	Derivative Instrument	Hedged Item	Hedge Ineffectiveness
Interest rate risk on long-term debt	\$ (2)	\$ 2	\$ —
Total	<u>\$ (2)</u>	<u>\$ 2</u>	<u>\$ —</u>

For the Year Ended December 31, 2017			
(Dollars in millions)	Derivative Instrument	Hedged Item	Hedge Ineffectiveness
Interest rate risk on long-term debt	\$ (4)	\$ 3	\$ (1)
Total	<u>\$ (4)</u>	<u>\$ 3</u>	<u>\$ (1)</u>

Table of Contents**Note 12—Derivative Instruments and Other Financial Instruments Used For Hedging (Continued)**

(Dollars in millions)	For the Year Ended December 31, 2016		
	Derivative Instrument	Hedged Item	Hedge Ineffectiveness
Interest rate risk on long-term debt	\$ (2)	\$ 2	\$ —
Total	\$ (2)	\$ 2	\$ —

*Derivatives Not Designated as Hedging Instruments**Trading Derivatives*

Derivative instruments classified as trading are primarily derivatives entered into as an accommodation for customers. Trading derivatives are included in trading assets or trading liabilities with changes in fair value reflected in income from trading account activities. The majority of the Company's derivative transactions for customers were essentially offset by contracts with third parties that reduce or eliminate market risk exposures.

The following table presents the amount of the net gains and losses for derivative instruments classified as trading reported in the consolidated statements of income under the heading trading account activities for the years ended December 31, 2018, 2017 and 2016:

(Dollars in millions)	Gains (Losses) Recognized in Income on Trading Derivatives		
	For the Years Ended		
	December 31, 2018	December 31, 2017	December 31, 2016
Trading derivatives:			
Interest rate contracts	\$ 95	\$ (49)	\$ 137
Equity contracts	36	12	40
Foreign exchange contracts	44	43	39
Commodity contracts	—	1	2
Total	\$ 175	\$ 7	\$ 218

Offsetting Financial Assets and Liabilities

The Company primarily enters into derivative contracts with counterparties utilizing standard International Swaps and Derivatives Association Master Agreements and Credit Support Annex Agreements. These agreements generally establish the terms and conditions of the transactions, including a legal right to set-off amounts payable and receivable between the Company and a counterparty, regardless of whether or not such amounts have matured or have contingency features. For additional information related to offsetting of financial assets and liabilities, refer to Note 8 to these Consolidated Financial Statements.

Table of Contents**Note 13—Accumulated Other Comprehensive Income**

The following tables present the change in each of the components of accumulated other comprehensive income and the related tax effect of the change allocated to each component.

(Dollars in millions)	Before Tax Amount	Tax Effect	Net of Tax
For the Year Ended December 31, 2018			
Cash flow hedge activities:			
Unrealized net gains (losses) on hedges arising during the period	\$ (96)	\$ 25	\$ (71)
Reclassification adjustment for net (gains) losses on hedges included in interest income for loans and interest expense on long-term debt	34	(9)	25
Net change	(62)	16	(46)
Securities:			
Unrealized holding gains (losses) arising during the period on securities available for sale	(210)	55	(155)
Reclassification adjustment for net (gains) losses on securities available for sale included in securities gains, net	(8)	2	(6)
Amortization of net unrealized (gains) losses on held to maturity securities	28	(7)	21
Net change	(190)	50	(140)
Foreign currency translation adjustment	(3)	1	(2)
Pension and other benefits:			
Amortization of prior service credit ⁽¹⁾	(41)	11	(30)
Recognized net actuarial (gain) loss ⁽¹⁾	96	(25)	71
Pension and other benefits arising during the year	(231)	60	(171)
Net change	(176)	46	(130)
Other	(1)	—	(1)
Net change in AOCI	\$ (432)	\$ 113	\$ (319)

(1) These amounts are included in the computation of net periodic pension cost. For further information, see Note 15 to these Consolidated Financial Statements.

Table of Contents**Note 13—Accumulated Other Comprehensive Income (Continued)**

<u>(Dollars in millions)</u>	<u>Before Tax Amount</u>	<u>Tax Effect</u>	<u>Net of Tax</u>
For the Year Ended December 31, 2017			
Cash flow hedge activities:			
Unrealized net gains (losses) on hedges arising during the period	\$ (35)	\$ 13	\$ (22)
Reclassification adjustment for net (gains) losses on hedges included in interest income for loans and interest expense on long-term debt	(69)	25	(44)
Net change	(104)	38	(66)
Securities:			
Unrealized holding gains (losses) arising during the period on securities available for sale	24	(9)	15
Reclassification adjustment for net (gains) losses on securities available for sale included in securities gains, net	(17)	7	(10)
Less: accretion of fair value adjustment on securities available for sale	(1)	—	(1)
Amortization of net unrealized (gains) losses on held to maturity securities	19	(7)	12
Net change	25	(9)	16
Foreign currency translation adjustment	11	(4)	7
Pension and other benefits:			
Amortization of prior service credit ⁽¹⁾	(48)	19	(29)
Recognized net actuarial (gain) loss ⁽¹⁾	91	(36)	55
Pension and other benefits arising during the year	116	(47)	69
Net change	159	(64)	95
Net change in AOCI	\$ 91	\$ (39)	\$ 52

(1) These amounts are included in the computation of net periodic pension cost. For further information, see Note 15 to these Consolidated Financial Statements.

Table of Contents**Note 13—Accumulated Other Comprehensive Income (Continued)**

(Dollars in millions)	Before Tax Amount	Tax Effect	Net of Tax
For the Year Ended December 31, 2016			
Cash flow hedge activities:			
Unrealized net gains (losses) on hedges arising during the period	\$ (26)	\$ 10	\$ (16)
Reclassification adjustment for net (gains) losses on hedges included in interest income for loans and interest expense on long-term debt	(167)	68	(99)
Net change	(193)	78	(115)
Securities:			
Unrealized holding gains (losses) arising during the period on securities available for sale	(40)	15	(25)
Reclassification adjustment for net (gains) losses on securities available for sale included in securities gains, net	(69)	27	(42)
Less: accretion of fair value adjustment on securities available for sale	(1)	—	(1)
Amortization of net unrealized (gains) losses on held to maturity securities	20	(8)	12
Net change	(90)	34	(56)
Foreign currency translation adjustment	3	(1)	2
Pension and other benefits:			
Amortization of prior service credit ⁽¹⁾	(30)	12	(18)
Recognized net actuarial (gain) loss ⁽¹⁾	89	(35)	54
Pension and other benefits arising during the year	(20)	8	(12)
Recognized curtailment gain	(2)	1	(1)
Net change	37	(14)	23
Net change in AOCI	\$ (243)	\$ 97	\$ (146)

(1) These amounts are included in the computation of net periodic pension cost. For further information, see Note 15 to these Consolidated Financial Statements.

The following table presents the change in accumulated other comprehensive loss balances.

(Dollars in millions)	Net Unrealized Gains (Losses) on Cash Flow Hedges	Net Unrealized Gains (Losses) on Securities	Foreign Currency Translation Adjustment	Pension and Other Benefits Adjustment	Other	Accumulated Other Comprehensive Loss
Balance, December 31, 2015	\$ 38	\$ (152)	\$ (24)	\$ (612)	\$ —	\$ (750)
Other comprehensive income before reclassifications	(16)	(14)	2	(12)	—	(40)
Amounts reclassified from AOCI	(99)	(42)	—	35	—	(106)
Balance, December 31, 2016	<u>\$ (77)</u>	<u>\$ (208)</u>	<u>\$ (22)</u>	<u>\$ (589)</u>	<u>\$ —</u>	<u>\$ (896)</u>
Other comprehensive income before reclassifications	(22)	15	7	69	—	69
Amounts reclassified from AOCI	(44)	1	—	26	—	(17)
Subtotal before TCJA reclass	<u>(143)</u>	<u>(192)</u>	<u>(15)</u>	<u>(494)</u>	<u>—</u>	<u>(844)</u>
TCJA reclass	(31)	(41)	(4)	(106)	—	(182)
Balance, December 31, 2017	<u>\$ (174)</u>	<u>\$ (233)</u>	<u>\$ (19)</u>	<u>\$ (600)</u>	<u>\$ —</u>	<u>\$ (1,026)</u>
Other comprehensive income before reclassifications	(71)	(155)	(2)	(171)	(1)	(400)
Amounts reclassified from AOCI	25	15	—	41	—	81
Transfer to additional paid-in capital	—	—	21	—	—	21
Balance, December 31, 2018	<u>\$ (220)</u>	<u>\$ (373)</u>	<u>\$ —</u>	<u>\$ (730)</u>	<u>\$ (1)</u>	<u>\$ (1,324)</u>

Table of Contents**Note 14—Management Stock Plans**

The Company adopted the MUAH Plan on June 8, 2015. Under the MUAH Plan, the Company grants restricted stock units settled in ADRs representing shares of common stock of the Company's indirect parent company, MUFG, to key employees at the discretion of the Human Capital Committee of the Board of Directors (the Committee). The Committee determines the number of shares, vesting requirements and other features and conditions of the restricted stock units. Under the MUAH Plan, MUFG ADRs are purchased in the open market upon the vesting of the restricted stock units, through a revocable trust. There is no amount authorized to be issued under the MUAH Plan since all shares are purchased in the open market. These awards generally vest pro-rata on each anniversary of the grant date and become fully vested three years from the grant date, provided that the employee has completed the specified continuous service requirement. Generally, the grants vest earlier if the employee dies, is permanently and totally disabled, retires under certain grant, age and service conditions, or terminates employment under certain conditions. The Company also issues a small number of off-cycle grants each year, primarily for reasons related to recruitment of new employees. The weighted-average service period for grants issued under the MUAH Plan with outstanding restricted stock units as of December 31, 2018 was 3.0 years.

Participants in the MUAH Plan are entitled to "dividend equivalent credits" on their unvested restricted stock units when MUFG pays dividends to its shareholders. The credit is equal to the dividends that the participants would have received on the shares had the shares been issued to the participants when the restricted stock units were granted. "Dividend equivalent credits" arising from grants under the MUAH Plan are paid to participants in shares on an annual basis.

The following table is a rollforward of the restricted stock units under the MUAH Plan for the year ended December 31, 2018:

	Restricted Stock Units	
	2018	
	Number of Units	Weighted-Average Grant Date Fair Value
Units outstanding, beginning of year	27,838,414	\$ 5.86
Activity during the year:		
Granted	14,667,730	5.89
Vested	(13,198,540)	5.88
Forfeited	(864,534)	5.97
Units outstanding, end of year	28,443,070	5.86

The weighted-average grant date fair value of restricted stock units granted during 2017 and 2016 was 6.53 and 4.63, respectively. The total fair value of restricted stock units that vested during the years ended December 31, 2018, 2017, and 2016 was \$78 million, \$75 million, and \$49 million, respectively.

The following table is a summary of the Company's compensation costs, the corresponding tax benefit, and unrecognized compensation costs:

(Dollars in millions)	Years Ended December 31,		
	2018	2017	2016
Compensation costs	\$ 77	\$ 66	\$ 67
Tax benefit	20	26	26
Unrecognized compensation costs	110	111	96

At December 31, 2018, approximately \$110 million (pretax) of compensation expense related to unvested grants had not yet been charged to net income. Unrecognized compensation costs as of December 31, 2018 are expected to be amortized into compensation expense over a weighted-average period of 1.4 years.

Table of Contents**Note 15—Employee Pension and Other Postretirement Benefits***Retirement Plan*

The Company maintains the MUFG Union Bank, N.A. Retirement Plan (the Pension Plan), which is a noncontributory qualified defined benefit pension plan covering substantially all of the domestic employees of the Company. The Pension Plan provides retirement benefits based on a cash balance formula, with annual pay credits based on a participant's eligible pay multiplied by a percentage determined by their age and years of service, with annual interest credits based on 30-year Treasury bond yields. Employees become eligible for the Pension Plan after 1 year of service, and participants become vested upon completing 3 years of vesting service. Prior to 2017, certain participants earned retirement benefits based on years of credited service and the final average earnings amount, as defined in the Pension Plan; such benefits became fixed as of the effective date of certain Plan amendments implementing the cash balance formula.

The Company's funding policy is to make contributions between the minimum required and the maximum deductible amount as allowed by the Internal Revenue Code. Contributions are intended to provide not only for benefits attributed to services to date, but also for those expected to be earned in the future.

Other Postretirement Benefits

The Company maintains the MUFG Union Bank, N.A. Retiree Health Reimbursement Plan (the HRA Plan), the MUFG Union Bank, N.A. Health Benefit Plan (the Health Plan), and the MUFG Union Bank, N.A. Employee Insurance Plan (the Insurance Plan). Under the HRA Plan, which became effective January 1, 2017, eligible post-65 retirees and dependents receive Company-provided financial support to purchase individual health coverage through annual allocations to a Health Reimbursement Account (HRA) that are designed to keep pace with medical inflation. The Health Plan provides certain healthcare benefits for eligible pre-65 retired employees and dependents; costs are shared between the Company and the retiree at a level of approximately 25% to 50%, depending on the retiree's age and length of service with the Company. The Insurance Plan provides life insurance benefits for those eligible employees who retired prior to January 1, 2001 and is noncontributory. Together, the HRA Plan, the Health Plan, and the Insurance Plan are presented as "Other Benefits Plan." The accounting for the Other Benefits Plan anticipates future cost-sharing changes described above that are consistent with the Company's intent. Assets set aside to cover such obligations are primarily invested in mutual funds and insurance contracts. In April 2014 the Health Benefit Plan was amended to discontinue the availability of retiree health benefits for the majority of employees.

The following table sets forth the fair value of the assets in the Company's Pension Plan and Other Benefits Plan as of December 31, 2018 and 2017.

(Dollars in millions)	Pension Plan		Other Benefits Plan	
	Years Ended December 31,		Years Ended December 31,	
	2018	2017	2018	2017
Change in plan assets:				
Fair value of plan assets, beginning of year	\$ 3,854	\$ 3,254	\$ 288	\$ 260
Actual return on plan assets	(196)	608	(18)	44
Employer contributions	—	115	—	1
Plan participants' contributions	—	—	4	4
Benefits paid	(129)	(123)	(19)	(21)
Fair value of plan assets, end of year	<u>\$ 3,529</u>	<u>\$ 3,854</u>	<u>\$ 255</u>	<u>\$ 288</u>

The investment objective for the Company's Pension Plan and Other Benefits Plan, collectively the Plans, is to maximize total return within reasonable and prudent levels of risk. The Plans' asset allocation strategy is the principal determinant in achieving expected investment returns on the Plans' assets. The Pension Plan asset allocation strategy favors equities, with a target allocation of 53% in equity securities, 35% in debt securities, and 12% in real estate investments as of December 31, 2018. The previous targets, until the 4th quarter of 2018, were 63%, 25%, and 12%, respectively. Similarly, the Other Benefits Plan asset allocation strategy favors equities with a target allocation of 70% in equity securities and 30% in debt securities. Additionally, the Other

Table of Contents**Note 15—Employee Pension and Other Postretirement Benefits (Continued)**

Benefits Plan holds an investment in an insurance contract with Talcott Resolution Life Insurance Company, the cash value of which is invested in alignment with the target allocation. Actual asset allocations may fluctuate within acceptable ranges due to market value variability. If market fluctuations cause an asset class to fall outside of its strategic asset allocation range, the portfolio will be re-balanced as appropriate. A core equity position of domestic large cap and small cap stocks will be maintained, in conjunction with a diversified portfolio of international equities and fixed income securities. Plan asset performance is compared against established indexes and peer groups to evaluate whether the risk associated with the portfolio is appropriate for the level of return.

The Company periodically reviews the Plans' strategic asset allocation policy and the expected long-term rate of return for plan assets. The investment return volatility of different asset classes and the liability structure of the plans are evaluated to determine whether adjustments are required to the Plans' strategic asset allocation policy, taking into account the principles established in the Company's funding policy. Management periodically reviews and adjusts the long-term rate of return on assets assumption for the Plans based on the expected long-term rate of return for the asset classes and their weightings in the Plans' strategic asset allocation policy and taking into account the prevailing economic and regulatory climate and practices of other companies both within and outside our industry.

The following table provides the fair value by level within the fair value hierarchy of the Company's period-end assets by major asset category for the Pension Plan and Other Benefits Plan. For information about the fair value hierarchy levels, refer to Note 11 to these consolidated financial statements. The Plans do not hold any equity or debt securities issued by the Company or any related parties.

(Dollars in millions)	December 31, 2018			
	Level 1	Level 2	Level 3	Total
Pension Plan Investments:				
Cash and cash equivalents	\$ —	\$ 25	\$ —	\$ 25
U.S. government securities	—	382	—	382
Fixed and variable income securities	—	824	—	824
Equity securities	185	6	—	191
Mutual funds	620	—	—	620
Municipal bonds	—	37	—	37
Other	—	20	—	20
Total investments in the fair value hierarchy	<u>\$ 805</u>	<u>\$ 1,294</u>	<u>\$ —</u>	<u>\$ 2,099</u>
Investments measured at net asset value ⁽¹⁾				1,420
Investments at fair value				3,519
Accrued dividends and interest receivable				12
Net pending trades				(2)
Total plan assets				<u>\$ 3,529</u>

(1) In accordance with ASU No. 2015-07, investments in which fair value was measured based on net asset value per share (or its equivalent) using the practical expedient have not been categorized in the fair value hierarchy. The fair value amounts presented in these tables are intended to permit reconciliation of the fair value hierarchy to total plan assets.

Table of Contents**Note 15—Employee Pension and Other Postretirement Benefits (Continued)**

(Dollars in millions)	December 31, 2017			
	Level 1	Level 2	Level 3	Total
Pension Plan Investments:				
Cash and cash equivalents	\$ —	\$ 26	\$ —	\$ 26
U.S. government securities	—	195	—	195
Fixed and variable income securities	—	638	—	638
Equity securities	381	7	—	388
Mutual funds	830	—	—	830
Municipal bonds	—	43	—	43
Other	5	11	—	16
Total investments in the fair value hierarchy	\$ 1,216	\$ 920	\$ —	\$ 2,136
Investments measured at net asset value ⁽¹⁾				1,704
Investments at fair value				3,840
Accrued dividends and interest receivable				8
Net pending trades				6
Total plan assets				\$ 3,854

(1) In accordance with ASU No. 2015-07, investments in which fair value was measured based on net asset value per share (or its equivalent) using the practical expedient have not been categorized in the fair value hierarchy. The fair value amounts presented in these tables are intended to permit reconciliation of the fair value hierarchy to total plan assets.

(Dollars in millions)	December 31, 2018			
	Level 1	Level 2	Level 3	Total
Other Postretirement Benefits Plan Investments:				
Cash and cash equivalents	\$ —	\$ 1	\$ —	\$ 1
U.S. government securities	—	37	—	37
Fixed and variable income securities	—	32	—	32
Equity securities	—	—	—	—
Mutual funds	54	—	—	54
Total investments in the fair value hierarchy	\$ 54	\$ 70	\$ —	\$ 124
Investments measured at net asset value ⁽¹⁾				134
Investments at fair value				258
Net pending trades				(3)
Total plan assets				\$ 255

(1) In accordance with ASU No. 2015-07, investments in which fair value was measured based on net asset value per share (or its equivalent) using the practical expedient have not been categorized in the fair value hierarchy. The fair value amounts presented in these tables are intended to permit reconciliation of the fair value hierarchy to total plan assets.

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Note 15—Employee Pension and Other Postretirement Benefits (Continued)

(Dollars in millions)	December 31, 2017			
	Level 1	Level 2	Level 3	Total
Other Postretirement Benefits Plan Investments:				
Cash and cash equivalents	\$	\$ 3	\$	\$ 3
U.S. government securities	—	44	—	44
Fixed and variable income securities	—	29	—	29
Equity securities	—	1	—	1
Mutual funds	66	—	—	66
Total investments in the fair value hierarchy	\$ 66	\$ 77	\$ —	\$ 143
Investments measured at net asset value ⁽¹⁾				157
Investments at fair value				300
Net pending trades				(12)
Total plan assets				\$ 288

(1) In accordance with ASU No. 2015-07, investments in which fair value was measured based on net asset value per share (or its equivalent) using the practical expedient have not been categorized in the fair value hierarchy. The fair value amounts presented in these tables are intended to permit reconciliation of the fair value hierarchy to total plan assets.

The following tables as of December 31, 2018 and 2017 present the Company's Pension Plan and Other Benefits Plan investments in which fair value is measured using net asset value per share (or its equivalent) as a practical expedient.

December 31, 2018						
(Dollars in millions)	Fair Value	Unfunded Commitment	Redemption Frequency	Other Redemption Restrictions	Redemption Notice Period	
Pension Plan Investments						
Domestic equity funds	\$ 789	\$ —	Daily	None	None	
Real estate funds	415	—	Quarterly	Availability of fund's liquid assets and approval of the board of directors	45-90 days	
Real estate funds	7	3	None	Hold until dissolution date	None	
International equity funds	159	—	Monthly	None	15 days	
Money market funds	50	—	Immediate	None	None	
Total	\$ 1,420	\$ 3				

December 31, 2017						
(Dollars in millions)	Fair Value	Unfunded Commitment	Redemption Frequency	Other Redemption Restrictions	Redemption Notice Period	
Pension Plan Investments						
Domestic equity funds	\$ 1,101	\$ —	Daily	None	None	
Real estate funds	343	—	Quarterly	Availability of fund's liquid assets and approval of the board of directors	45-90 days	
Real estate funds	13	5	None	Hold until dissolution; approximately four to six years from original final closing date	None	
International equity funds	228	—	Monthly	None	15 days	
Money market funds	19	—	Immediate	None	None	
Total	\$ 1,704	\$ 5				

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Note 15—Employee Pension and Other Postretirement Benefits (Continued)

(Dollars in millions)	December 31, 2018				
	Fair Value	Unfunded Commitment	Redemption Frequency	Other Redemption Restrictions	Redemption Notice Period
Other Postretirement Benefits Plan Investments					
Domestic equity funds	\$ 87	\$ —	Daily	None	None
Pooled separate account - variable life insurance policies	46	—	Quarterly	Proof of death for death claim redemptions	7 business days
Money market funds	1	—	Immediate	None	None
Total	<u>\$ 134</u>	<u>\$ —</u>			

(Dollars in millions)	December 31, 2017				
	Fair Value	Unfunded Commitment	Redemption Frequency	Other Redemption Restrictions	Redemption Notice Period
Other Postretirement Benefits Plan Investments					
Domestic equity funds	\$ 100	\$ —	Daily	None	None
Pooled separate account - variable life insurance policies	52	—	Quarterly	Proof of death for death claim redemptions	7 business days
Money market funds	5	—	Immediate	None	None
Total	<u>\$ 157</u>	<u>\$ —</u>			

A description of the valuation methodologies used to determine the fair value of the Plans' assets included within the tables above is as follows:

Cash and Cash Equivalents

Cash and cash equivalents include short-term investments of government securities and other debt securities with remaining maturities of less than three months. These short-term investments are classified as Level 2 based on unadjusted prices in active markets for similar securities. Money market funds were measured at net asset value (NAV) per share and are included in the tables above showing Plan investments that are measured using NAV per share (or its equivalent) as a practical expedient.

U.S. Government Securities

U.S. government securities include U.S. Treasury securities and U.S. agency mortgage-backed securities. U.S. Treasury securities are fixed income securities that are debt instruments issued by the United States Department of the Treasury. U.S. agency mortgage-backed securities are collateralized by residential mortgage loans and may be prepaid at par prior to maturity. U.S. government securities are classified as Level 2 based on valuations provided by third-party pricing services using quoted market prices in active markets for similar securities.

Fixed and Variable Income Securities

Fixed and variable income securities include a variety of debt instruments, including corporate bonds, private placements and asset-backed securities. These securities are classified as Level 2 based on valuations provided by a third-party pricing services using quoted market prices in active markets for similar securities.

Equity Securities

Equity securities are comprised of common stock and preferred securities. The fair value of common stock is recorded based on quoted market prices obtained from an exchange. These securities are classified as Level 1 based on unadjusted prices for identical instruments in active markets. The fair value of preferred securities is based on discounted cash flow models. These securities are classified as Level 2 based on valuations provided by third-party pricing services using observable market data.

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Note 15—Employee Pension and Other Postretirement Benefits (Continued)

Real Estate Funds

Real estate funds invest in real estate property with a focus on apartment, office, industrial and retail properties. These investments were measured at NAV per share and are included in the tables above showing Plan investments that are measured using NAV per share (or its equivalent) as a practical expedient.

International Equity Funds

International equity funds invest in equity securities of foreign companies in developed and emerging markets across diverse industries and may seek to track the performance of the MSCI EAFE® or MSCI All-Country World ex-US indices. These investments were measured at NAV per share and are included in the tables above showing Plan investments that are measured using NAV per share (or its equivalent) as a practical expedient.

Domestic Equity Funds

Domestic equity funds invest in equity securities that seek to track the performance of market indexes including the S&P 500 index. These funds are valued using NAV at the end of the period. Mutual funds are classified as Level 1 based on unadjusted prices for identical instruments in active markets. Collective investment funds are included in the tables above showing Plan investments that are measured using NAV per share (or its equivalent) as a practical expedient.

Pooled Separate Account

The pooled separate account refers to private placement, variable life insurance policies with Talcott Resolution Life Insurance Company, a successor to Hartford Life Insurance Company. The cash value of the life insurance is invested in four managed divisions that seek to track the S&P 500, Russell 2000, MSCI EAFE® and Bloomberg Barclays U.S. Aggregate Bond Indexes. Each division is valued using quoted market prices of its underlying investments to derive the division's NAV at the end of the period. This investment was measured at NAV per share and is included in the tables above showing Plan investments that are measured using NAV per share (or its equivalent) as a practical expedient.

The following table sets forth the benefit obligation activity and the funded status for each of the Company's plans at December 31, 2018 and 2017. In addition, the table sets forth the over (under) funded status at December 31, 2018 and 2017. This pension benefits table does not include the obligations for Executive Supplemental Benefit Plans (ESBPs).

(Dollars in millions)	Pension Benefits		Other Postretirement Benefits	
	Years Ended December 31,		Years Ended December 31,	
	2018	2017	2018	2017
Accumulated benefit obligation	\$ 3,038	\$ 3,101		
Change in benefit obligation				
Benefit obligation, beginning of year	\$ 3,242	\$ 2,942	\$ 265	\$ 261
Service cost	80	71	4	6
Interest cost	100	100	8	8
Plan participants' contributions	—	—	4	4
Actuarial loss/(gain)	(246)	252	(21)	6
Effect of plan amendments	—	—	—	—
Medicare Part D subsidy	—	—	1	1
Benefits paid	(129)	(123)	(19)	(21)
Benefit obligation, end of year	3,047	3,242	242	265
Fair value of plan assets, end of year	3,529	3,854	255	288
Over (Under) funded status	\$ 482	\$ 612	\$ 13	\$ 23

The Pension Plan obligation experienced a net gain of \$246 million and a net loss of \$252 million during 2018 and 2017, respectively, primarily due to changes in the discount rate. The discount rate decreased from 3.98% at December 31,

2016 to 3.48% at December 31, 2017 and increased to 4.12% at December 31, 2018.

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Note 15—Employee Pension and Other Postretirement Benefits (Continued)

The Other Benefits Plan obligation experienced a net gain of \$21 million and a net loss of \$6 million during 2018 and 2017, respectively, primarily due to changes in the discount rate. The discount rate decreased from 3.81% at December 31, 2016 to 3.37% at December 31, 2017 and increased to 4.01% at December 31, 2018.

The following table illustrates the changes that were reflected in AOCI during 2018, 2017 and 2016. Pension benefits do not include the ESBPs.

(Dollars in millions)	Pension Benefits		Other Postretirement Benefits	
	Net Actuarial (Gain) Loss	Prior Service Credit	Net Actuarial (Gain) Loss	Prior Service Credit
Amounts Recognized in Other Comprehensive Loss:				
Balance, December 31, 2015	\$ 1,027	\$ (121)	\$ 82	\$ (15)
Arising during the year	133	(76)	6	(47)
Recognized in net income during the year	(75)	18	(10)	12
Balance, December 31, 2016	<u>\$ 1,085</u>	<u>\$ (179)</u>	<u>\$ 78</u>	<u>\$ (50)</u>
Arising during the year	(101)	—	(19)	—
Recognized in net income during the year	(79)	27	(8)	21
Balance, December 31, 2017	<u>\$ 905</u>	<u>\$ (152)</u>	<u>\$ 51</u>	<u>\$ (29)</u>
Arising during the year	218	—	18	—
Recognized in net income during the year	(87)	26	(5)	15
Balance, December 31, 2018	<u>\$ 1,036</u>	<u>\$ (126)</u>	<u>\$ 64</u>	<u>\$ (14)</u>

At December 31, 2018 and 2017, the following amounts were recognized in accumulated other comprehensive loss for pension, including ESBPs, and other benefits.

(Dollars in millions)	December 31, 2018					
	Pension Benefits			Other Postretirement Benefits		
	Gross	Tax	Net of Tax	Gross	Tax	Net of Tax
Net actuarial loss	\$ 1,036	\$ 273	\$ 763	\$ 64	\$ 18	\$ 46
Prior service credit	(126)	(33)	(93)	(14)	(4)	(10)
Pension and other postretirement benefits	910	240	670	50	14	36
Executive Supplemental Benefits Plans						
Net actuarial loss	32	8	24	—	—	—
Prior service credit	—	—	—	—	—	—
Executive supplemental benefits plans adjustment	32	8	24	—	—	—
Pension and other postretirement benefits, as adjusted	<u>\$ 942</u>	<u>\$ 248</u>	<u>\$ 694</u>	<u>\$ 50</u>	<u>\$ 14</u>	<u>\$ 36</u>

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Note 15—Employee Pension and Other Postretirement Benefits (Continued)

(Dollars in millions)	December 31, 2017					
	Pension Benefits			Other Postretirement Benefits		
	Gross	Tax	Net of Tax	Gross	Tax	Net of Tax
Net actuarial loss	\$ 905	\$ 238	\$ 667	\$ 51	\$ 14	\$ 37
Prior service credit	(152)	(40)	(112)	(29)	(8)	(21)
Pension and other postretirement benefits	753	198	555	22	6	16
Executive Supplemental Benefits Plans						
Net actuarial loss	40	11	29	—	—	—
Prior service credit	—	—	—	—	—	—
Executive supplemental benefits plans adjustment	40	11	29	—	—	—
Pension and other postretirement benefits, as adjusted	\$ 793	\$ 209	\$ 584	\$ 22	\$ 6	\$ 16

Pension Benefits

Our pre-tax net actuarial losses increased \$157 million in 2018 from 2017. At December 31, 2018, the net actuarial loss totaled \$910 million, which is net of \$126 million in prior service credits. In addition, \$214 million, representing the deficiency of the fair value of plan assets over the market-related value of plan assets, is recognized separately through the asset smoothing method over four years. \$447 million of loss is subject to amortization over approximately eight years, and the prior service credits are being amortized until 2022 and 2025. The cumulative net actuarial loss resulted primarily from differences between expected and actual rate of return on plan assets and the discount rate. Included in our 2019 net periodic pension cost will be \$62 million of amortization related to net actuarial losses. We estimate that our total 2019 net periodic pension cost will be a credit of approximately \$27 million, assuming no contributions in 2019. The 2019 estimate for net periodic pension cost was actuarially determined using the individual spot rates of 4.19% for service cost and 3.9% for interest cost, an expected return on plan assets of 7.0% and an expected compensation increase assumption of 5.1%.

A 50 basis point increase in the discount rate or in the expected return on plan assets would decrease the 2019 periodic pension cost by \$25 million and \$18 million, respectively, while a 50 basis point increase in the rate of future compensation levels would increase the 2019 periodic pension cost by \$1 million. A 50 basis point decrease in the discount rate or in the expected return on plan assets would increase the 2019 periodic pension cost by \$27 million and \$18 million, respectively, while a 50 basis point decrease in the rate of future compensation levels would decrease the 2019 periodic pension cost by \$1 million.

Estimated Future Benefit Payments and Subsidies

The following pension and postretirement benefit payments, which reflect expected future service, as appropriate, are expected to be paid over the next 10 years. This table does not include the ESBPs.

(Dollars in millions)	Pension Benefits	Postretirement Benefits
Years ending December 31,		
2019	\$ 140	\$ 17
2020	147	17
2021	153	18
2022	160	18
2023	166	18
Years 2024 - 2028	914	82

The following tables summarize the weighted average assumptions used in computing the present value of the benefit obligations and the net periodic benefit cost.

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Note 15—Employee Pension and Other Postretirement Benefits (Continued)

	Pension Benefits		Other Postretirement Benefits	
	Years Ended December 31,		Years Ended December 31,	
	2018	2017	2018	2017
Discount rate in determining net periodic benefit cost				
For service cost	3.26%	3.79%	3.49%	3.97%
For interest cost	3.16	3.42	3.02	3.19
Discount rate in determining benefit obligations at year end	4.12	3.48	4.01	3.37
Rate of increase in future compensation levels for determining net periodic benefit cost	4.70	4.70	n/a	n/a
Rate of increase in future compensation levels for determining benefit obligations at year end	5.10	4.70	n/a	n/a
Expected return on plan assets	7.50	7.50	7.50	7.50
Cash balance crediting rate for determining net periodic benefit cost	2.74	3.06	n/a	n/a
Cash balance crediting rate for determining benefit obligations at year end	3.02	2.74	n/a	n/a

(Dollars in millions)	Pension Benefits			Other Postretirement Benefits			ESBPs		
	Years Ended December 31,			Years Ended December 31,			Years Ended December 31,		
	2018	2017	2016	2018	2017	2016	2018	2017	2016
Components of net periodic benefit cost:									
Service cost	\$ 80	\$ 71	\$ 91	\$ 4	\$ 6	\$ 8	\$ —	\$ —	\$ 2
Interest cost	100	100	103	8	8	9	3	3	2
Expected return on plan assets	(268)	(254)	(235)	(21)	(19)	(19)	—	—	—
Amortization of prior service credit	(26)	(27)	(18)	(15)	(21)	(12)	—	—	—
Recognized net actuarial loss	87	79	75	5	8	10	3	4	3
Curtailment gain	—	—	—	—	—	—	—	—	(2)
Total net periodic benefit cost	<u>\$ (27)</u>	<u>\$ (31)</u>	<u>\$ 16</u>	<u>\$ (19)</u>	<u>\$ (18)</u>	<u>\$ (4)</u>	<u>\$ 6</u>	<u>\$ 7</u>	<u>\$ 5</u>

The Company's assumed weighted-average healthcare cost trend rates are as follows.

	Years Ended December 31,		
	2018	2017	2016
Healthcare cost trend rate assumed for next year	4.44%	4.44%	4.64%
Rate to which cost trend rate is assumed to decline (the ultimate trend rate)	3.94%	3.94%	3.96%
Year the rate reaches the ultimate trend rate	2027	2026	2026

Executive Supplemental Benefit Plans

The Company has several frozen ESBPs, which provide covered participants with supplemental retirement benefits. The plans are nonqualified defined benefit plans and unfunded. The accrued liability for ESBPs included in other liabilities on the Company's consolidated balance sheets was \$89 million and \$98 million at December 31, 2018 and 2017, respectively.

Table of Contents**Note 15—Employee Pension and Other Postretirement Benefits (Continued)***Section 401(k) Savings Plans*

The Company has a defined contribution plan authorized under Section 401(k) of the Internal Revenue Code. All benefits-eligible employees are eligible to participate in the plan. Employees may contribute up to 75% of their eligible compensation on a pre-tax or Roth basis, or up to 10% of their eligible compensation on an after-tax basis, through payroll deductions, to a combined maximum of 75% of eligible compensation, subject to statutory limits. The Company makes a matching contribution equal to 100% of every pre-tax or Roth dollar an employee contributes on the first 3% of the employee's eligible compensation and 50% of every pre-tax or Roth dollar an employee contributes on the next 2% of the employee's eligible compensation, for a maximum matching opportunity of 4%. Company matching contributions are credited to eligible participants' accounts annually following year-end. Matching contributions are fully vested when credited. All employer contributions are tax deductible by the Company. The Company's combined matching contribution expense was \$59 million, \$55 million and \$48 million for the years ended December 31, 2018, 2017 and 2016, respectively.

Note 16—Other Noninterest Income and Noninterest Expense

The detail of other noninterest income is as follows.

(Dollars in millions)	Years Ended December 31,		
	2018	2017	2016
Gain (loss) on sales	\$ 16	\$ 26	\$ 79
Fund administration fees	100	46	22
Other fee income	100	69	59
Losses on renewable energy investments	(235)	(58)	(37)
Other	134	157	136
Total other noninterest income	<u>\$ 115</u>	<u>\$ 240</u>	<u>\$ 259</u>

The detail of other noninterest expense is as follows.

(Dollars in millions)	Years Ended December 31,		
	2018	2017	2016
Fees to affiliates	\$ 115	\$ 105	\$ 100
Expenses of the LIHC consolidated VIEs	24	43	68
Net periodic pension cost, excluding service cost	(124)	(119)	(84)
Other	394	360	311
Total other noninterest expense	<u>\$ 409</u>	<u>\$ 389</u>	<u>\$ 395</u>

Table of Contents**Note 17—Income Taxes**

The following table is an analysis of the effective tax rate:

(Dollars in millions)	Years Ended December 31,		
	2018	2017	2016
Federal income tax rate	21 %	35 %	35 %
Net tax effects of:			
State income taxes, net of federal income tax benefit	7	5	6
Tax-exempt interest income	(1)	(1)	(1)
Losses from LIHC investments	(2)	(3)	(3)
Amortization of LIHC investments	12	14	10
Tax credits	(25)	(21)	(18)
Effects of US tax law change	(2)	(8)	—
State Tax Refunds	(5)	—	—
Other	—	1	2
Effective tax rate	5 %	22 %	31 %

On December 22, 2017, the Tax Cuts & Jobs Act was signed into law reducing the federal corporate income tax rate from 35% to 21% effective January 1, 2018. As a result of the reduction in the corporate income tax rate, the Company revalued its net deferred tax liabilities at December 31, 2017, resulting in a one-time tax benefit of \$101 million.

The components of income tax expense were as follows:

(Dollars in millions)	Years Ended December 31,		
	2018	2017	2016
Current income tax expense:			
Federal	\$ 195	\$ 257	\$ 228
State	89	21	105
Foreign	10	(4)	7
Total current expense	294	274	340
Deferred income tax expense (benefit):			
Federal	(173)	(49)	58
State	(64)	52	24
Foreign	(5)	22	(3)
Total deferred expense	(242)	25	79
Total income tax expense	\$ 52	\$ 299	\$ 419

Table of Contents**Note 17—Income Taxes (Continued)**

The components of the Company's net deferred tax balances as of December 31, 2018 and 2017 were as follows:

(Dollars in millions)	December 31,	
	2018	2017
Deferred tax assets:		
Tax credits and net operating loss carryforwards	\$ 448	\$ 310
Allowance for credit losses	251	254
Accrued expense, net	159	178
Unrealized losses on pension and postretirement benefits	260	214
Unrealized net losses on securities available for sale	132	82
Fair value adjustments for valuation of FDIC covered assets	53	61
Unrealized gains/losses on cash flow hedges	78	62
Other	—	—
Total deferred tax assets	1,381	1,161
Deferred tax liabilities:		
Leasing and renewable energy	619	769
Intangible assets	59	55
Pension liabilities	365	358
Other	10	7
Total deferred tax liabilities	1,053	1,189
Net deferred tax asset (liability)	\$ 328	\$ (28)

At December 31, 2018, the U.S. federal tax credit carryforwards were \$378 million (net of uncertain tax liability of \$25 million), the federal net operating loss carryforward was \$16 million, AMT tax credit carryforward was \$17 million, state tax credits net of federal benefit was \$33 million and state net operating loss carryforwards net of federal benefit was \$4 million. If not utilized, the federal net operating loss carryforward, state net operating loss and federal tax credits begin to expire in 2032, 2034 and 2035, respectively. The state tax credits can be carried forward indefinitely. Additionally, as a result of Tax Cuts and Jobs Act, the AMT credit carryforward can generally be used to offset regular income tax liability in fiscal years 2019 through 2021. Any remaining amount is generally fully refundable by fiscal year 2022. The Company's AMT Credit carryforward is also subject to rules under separate return limitation years.

Deferred tax assets are evaluated for realization based on the existence of sufficient taxable income of the appropriate character. Management has determined that no valuation allowance is required.

The following table reflects the changes in gross unrecognized tax benefits:

(Dollars in millions)	Years Ended December 31,		
	2018	2017	2016
Balance, beginning of year	\$ 56	\$ 11	\$ 8
Gross increases as a result of tax positions taken during prior periods	72	45	—
Gross decreases as a result of tax positions taken during prior periods	—	—	—
Gross increases as a result of tax positions taken during current period	—	2	3
Gross decrease as a result of closed audit years or settlements	(1)	(2)	—
Balance, end of year	\$ 127	\$ 56	\$ 11

The amount of unrecognized tax positions that would affect the effective tax rate, if recognized, was \$98 million, \$33 million and \$9 million at December 31, 2018, 2017 and 2016, respectively.

The Company recognizes interest and penalties as a component of income tax expense. As of December 31, 2018, we accrued \$2 million in interest and \$3 million in penalties. It is reasonably possible that certain tax positions will be

resolved within the next 12 months, which would decrease the Company's balance of total unrecognized tax benefits by \$23 million with 2017 and 2018 filings.

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Note 17—Income Taxes (Continued)

The Company is subject to U.S. federal income tax as well as various state and foreign income taxes. With limited exception, the Company is not open to examination for periods before 2015 by U.S. federal taxing authorities and 2014 by state taxing authorities.

Note 18—Regulatory Capital Requirements

The Company and the Bank are subject to various regulatory capital requirements administered by the U.S. federal banking agencies. Failure to meet minimum capital requirements can initiate certain mandatory, and possibly additional discretionary, actions by regulators that, if undertaken, could have a material effect on the Company's consolidated financial statements. Under capital adequacy guidelines and the regulatory framework for prompt corrective action, the Company and the Bank must meet specific capital guidelines that involve quantitative measures of the Company's and Bank's assets, liabilities, and certain off-balance sheet items as calculated under regulatory accounting practices. The capital amounts and the Bank's prompt corrective action classification are also subject to qualitative judgments by the regulators about components, risk-weightings and other factors. Prompt corrective action provisions are not applicable to BHCs such as the Company. The Bank is subject to laws and regulations that limit the amount of dividends it can pay to the Company.

Quantitative measures established by regulation to help ensure capital adequacy require the Company and the Bank to maintain minimum amounts and ratios (set forth in the tables below) of Total and Tier 1 capital (as defined in the regulations) to risk-weighted assets (as defined) and of Tier 1 capital (as defined) to quarterly average assets (as defined). As of December 31, 2018, management believes the capital ratios of the Bank met all regulatory requirements of "well-capitalized" institutions, which are 10% for the Total risk-based capital ratio and 8.0% for the Tier 1 risk-based capital ratio. Furthermore, management believes, as of December 31, 2018 and 2017, that the Company and the Bank met all capital adequacy requirements to which they are subject.

The Company's and the Bank's capital amounts and ratios are presented in the following tables.

	U.S. Basel III			Minimum Capital Requirement with Capital Conservation Buffer (1)	
(Dollars In millions)	Amount	Ratio		Amount	Ratio
Capital Ratios for the Company:					
As of December 31, 2018:					
Common equity tier 1 capital (to risk-weighted assets)	\$ 14,256	13.96%	≥	\$ 6,508	6.375%
Tier 1 capital (to risk-weighted assets)	14,256	13.96	≥	8,039	7.875
Total capital (to risk-weighted assets)	14,904	14.60	≥	10,081	9.875
Tier 1 leverage(2)	14,256	8.77	≥	6,502	4.000
As of December 31, 2017:					
Common equity tier 1 capital (to risk-weighted assets)	\$ 15,708	16.31%	≥	\$ 5,539	5.750%
Tier 1 capital (to risk-weighted assets)	15,708	16.31	≥	6,984	7.250
Total capital (to risk-weighted assets)	17,106	17.76	≥	8,910	9.250
Tier 1 leverage(2)	15,708	10.06	≥	6,245	4.000

(1) Beginning January 1, 2018, the minimum capital requirement includes a capital conservation buffer of 1.875%.

(2) Tier 1 capital divided by quarterly average assets (excluding certain disallowed assets, primarily goodwill and other intangibles).

[Table of Contents](#)**Note 18—Regulatory Capital Requirements (Continued)**

(Dollars in millions)	U.S. Basel III		Minimum Capital Requirement with Capital Conservation Buffer ⁽¹⁾		To Be Well-Capitalized Under Prompt Corrective Action Provisions	
	Amount	Ratio	Amount	Ratio	Amount	Ratio
Capital Ratios for the Bank:						
As of December 31, 2018 (U.S. Basel III):						
Common equity tier 1 capital (to risk-weighted assets)	\$ 13,316	14.45%	≥ \$ 5,876	6.375%	≥ \$ 5,991	6.5%
Tier 1 capital (to risk-weighted assets)	13,316	14.45	≥ 7,258	7.875	≥ 7,374	8.0
Total capital (to risk-weighted assets)	13,905	15.09	≥ 9,102	9.875	≥ 9,217	10.0
Tier 1 leverage ⁽²⁾	13,316	10.61	≥ 5,018	4.000	≥ 6,273	5.0
As of December 31, 2017 (U.S. Basel III):						
Common equity tier 1 capital (to risk-weighted assets)	\$ 14,028	16.17%	≥ \$ 4,987	5.750%	≥ \$ 5,637	6.5%
Tier 1 capital (to risk-weighted assets)	14,028	16.17	≥ 6,288	7.250	≥ 6,938	8.0
Total capital (to risk-weighted assets)	15,335	17.68	≥ 8,023	9.250	≥ 8,673	10.0
Tier 1 leverage ⁽²⁾	14,028	11.78	≥ 4,762	4.000	≥ 5,953	5.0

(1) Beginning January 1, 2018, the minimum capital requirement includes a capital conservation buffer of 1.875%.

(2) Tier 1 capital divided by quarterly average assets (excluding certain disallowed assets, primarily goodwill and other intangibles).

Note 19—Restrictions on Cash and Due from Banks, Securities, Loans and Dividends

Federal Reserve regulations require the Bank to maintain reserve balances based on the types and amounts of deposits received. The required reserve balances were \$348 million and \$475 million at December 31, 2018 and 2017, respectively.

See Note 2 to these consolidated financial statements for the carrying amounts of securities that were pledged as collateral to secure public and trust deposits and for other transactions as required by contract or law. See Note 10 to these consolidated financial statements for the carrying amounts of loans and securities that were pledged as collateral for borrowings, including those pledged to the Federal Reserve Bank and FHLB.

The Federal Reserve Act restricts the amount of credit transactions and the terms of both credit and non-credit transactions between a bank and its non-bank affiliates. Such transactions may not exceed 10% of the bank's capital and surplus (which for this purpose represents Tier 1 and Tier 2 capital, as calculated under the risk-based capital guidelines, plus the balance of the allowance for loan losses excluded from Tier 2 capital) with any single non-bank affiliate and 20% of the bank's capital and surplus with all its non-bank affiliates. Transactions that are extensions of credit may require collateral to be held to provide added security to the bank. See Note 18 to these consolidated financial statements for further discussion of risk-based capital. At December 31, 2018, \$80 million of notes payable remained outstanding from Bankers Commercial Corporation.

The declaration of a dividend by the Bank to the Company is subject to the approval of the OCC if the total of all dividends declared in the current calendar year plus the preceding two years exceeds the Bank's total net income in the current calendar year plus the preceding two years. The payment of dividends is also limited by minimum capital requirements imposed on national banks by the OCC.

At December 31, 2018, MUSA had \$17 million of cash segregated in a special reserve account for the exclusive benefit of customers pursuant to Customer Protection Rule 15c3-3 of the Securities and Exchange Act of 1934.

Note 20—Commitments, Contingencies and Guarantees

The following table summarizes the Company's commitments:

(Dollars in millions)	December 31, 2018
Commitments to extend credit	\$ 33,487
Issued standby and commercial letters of credit	4,852
Commitments to enter into forward-starting resale agreements	877
Other commitments	493

Commitments to extend credit are legally binding agreements to lend to a customer provided there are no violations of any condition established in the contract. Commitments have fixed expiration dates or other termination clauses and may require maintenance of compensatory balances. Since many of the commitments to extend credit may expire without being drawn upon, the total commitment amounts do not necessarily represent future cash flow requirements.

Standby and commercial letters of credit are conditional commitments issued to guarantee the performance of a customer to a third party. Standby letters of credit are generally contingent upon the failure of the customer to perform according to the terms of the underlying contract with the third party, while commercial letters of credit are issued specifically to facilitate foreign or domestic trade transactions. The majority of these types of commitments have terms of 1 year or less. At December 31, 2018, the carrying amount of the Company's standby and commercial letters of credit totaled \$4 million. Estimated exposure to loss related to these commitments is covered by the allowance for losses on unfunded commitments. The carrying amounts of the standby and commercial letters of credit and the allowance for losses on unfunded credit commitments are included in other liabilities on the consolidated balance sheet.

The credit risk involved in issuing loan commitments and standby and commercial letters of credit is essentially the same as that involved in extending loans to customers and is represented by the contractual amount of these instruments. Collateral may be obtained based on management's credit assessment of the customer.

Other commitments include collateralized financing activities, commitments to fund principal investments, other securities, and residual value guarantees.

Principal investments include direct investments in private and public companies. The Company issues commitments to provide equity and mezzanine capital financing to private and public companies through direct investments. The timing of future cash requirements to fund such commitments is generally dependent on the investment cycle. This cycle, the period over which privately held companies are funded by private equity investors and ultimately sold, merged, or taken public through an initial offering, can vary based on overall market conditions as well as the nature and type of industry in which the companies operate.

The Company occasionally enters into financial guarantee contracts where a premium is received from another financial institution counterparty to guarantee a portion of the credit risk on interest rate swap contracts entered into between the financial institution and its customer. The Company becomes liable to pay the financial institution only if the financial institution is unable to collect amounts owed to them by their customer. As of December 31, 2018, the current exposure to loss under these contracts totaled \$9 million, and the maximum potential exposure to loss in the future was estimated at \$35 million.

The Company is subject to various pending and threatened legal actions that arise in the normal course of business. The Company maintains liabilities for losses from legal actions that are recorded when they are determined to be both probable in their occurrence and can be reasonably estimated. Management believes the disposition of all claims currently pending, including potential losses from claims that may exceed the liabilities recorded, and claims for loss contingencies that are considered reasonably possible to occur, will not have a material effect, either individually or in the aggregate, on the Company's consolidated financial condition, results of operations or liquidity.

Note 21—Related Party Transactions

MUAH is a financial holding company, bank holding company and intermediate holding company whose principal subsidiaries are MUFG Union Bank, N.A. and MUFG Securities Americas Inc. It is owned by MUFG Bank, Ltd. and MUFG. MUFG Bank, Ltd. is a wholly-owned subsidiary of MUFG.

On July 1, 2016, MUFG designated MUAH as its IHC in accordance with the requirements of the U.S. Federal Reserve Board's final rules for Enhanced Prudential Standards and transferred interests in substantially all its U.S. subsidiaries to the IHC. On July 1, 2017, MUFG transferred interests in its remaining U.S. subsidiaries to MUAH. The transferred subsidiaries had assets of \$1.0 billion, including goodwill and intangibles of \$196 million, and liabilities of \$601 million, all of which were transferred at carrying value. In consideration for the transferred assets and liabilities, MUAH issued 3,267,433 shares to MUFG Bank, Ltd. and MUFG.

The Company provides various business, banking, financial, administrative and support services, and facilities for MUFG Bank, Ltd. in connection with the operation and administration of MUFG Bank, Ltd.'s business in the U.S. (including MUFG Bank, Ltd.'s U.S. branches). The Bank and MUFG Bank, Ltd. participate in a master services agreement whereby the Bank earns fee income in exchange for services and facilities provided.

In addition to the above, the Company conducts transactions with affiliates which include MUFG Bank, Ltd., MUFG and other entities which are directly or indirectly owned by MUFG. The transactions include capital market transactions, facilitating securities transactions, secured financing transactions, advisory services, clearing and operational support. Under service level agreements the Company provides services to and receives services from various affiliates. The Company also has referral agreements with its affiliates and pays referral fees from investment banking revenue earned.

Related party transactions reflect market-based pricing. These transactions are subject to federal and state statutory and regulatory restrictions and limitations.

The tables and discussion below represent the more significant related party balances and income (expenses) generated by related party transactions.

As of December 31, 2018 and December 31, 2017, assets and liabilities with affiliates consisted of the following:

(Dollars in millions)	December 31, 2018	December 31, 2017
Assets:		
Cash and cash equivalents	\$ 80	\$ 119
Securities borrowed or purchased under resale agreements	1,913	3,530
Other assets	146	223
Liabilities:		
Deposits	\$ 451	\$ 362
Securities loaned or sold under repurchase agreements	148	102
Commercial paper and other short-term borrowings	1,081	969
Long-term debt	7,333	6,251
Other liabilities	69	61

Table of Contents**Note 21—Related Party Transactions (Continued)**

Revenues and expenses with affiliates for the years ended 2018, 2017, and 2016 were as follows:

(Dollars in millions)	Years Ended December 31,		
	2018	2017	2016
Interest Income			
Securities borrowed or purchased under resale agreements	\$ 66	\$ 41	\$ 26
Other	2	1	—
Interest Expense			
Deposits	3	5	—
Commercial paper and other short-term borrowings	2	15	24
Long-term debt	171	114	69
Securities loaned or sold under repurchase agreements	18	6	2
Noninterest Income			
Fees from affiliates	1,213	866	957
Other, net	1	13	(28)
Noninterest Expense			
Other	115	112	95

During 2018, the Company sold loans to affiliates for gross proceeds of \$542 million, resulting in gains on sale of \$2.1 million. During 2018, the Company purchased loans from affiliates for \$314 million.

For additional information regarding the debt due to affiliates, see Note 9 and Note 10 to our Consolidated Financial Statements included in this Form 10-K.

At December 31, 2018, the Company had \$1.4 billion in uncommitted, unsecured borrowing facilities with affiliates.

At December 31, 2018 and December 31, 2017, the Company had derivative contracts with affiliates totaling \$4 billion and \$3 billion, respectively, in notional balances, with \$96 million and \$2.4 million in net unrealized gains at December 31, 2018 and December 31, 2017, respectively.

An affiliate extends guarantees on liabilities arising out of or in connection with agreements with certain counterparties. There was no amount guaranteed at December 31, 2018 and December 31, 2017.

Note 22—Business Segments

The Company has four reportable segments: Regional Bank, U.S. Wholesale & Investment Banking, Transaction Banking, and MUSA. The Company uses various management accounting methodologies to measure the performance of its segments. Unlike GAAP, there is no standardized or authoritative guidance for management accounting. Consequently, reported results are not necessarily comparable with those presented by other companies and they are not necessarily indicative of the results that would be reported by the business units if they were separate economic entities.

Methodologies that are applied to the measurement of segment profitability, which are enhanced from time to time, include a funds transfer pricing system, an activity-based costing methodology, other indirect costs and a methodology to allocate the provision for credit losses. In the second quarter of 2018, the Company began measuring the performance of its business segments by reporting revenues and expenses from products and services sold entirely within the business segment that manages the customer relationship. The Company previously applied a “market view” perspective in measuring the business segments, which reported revenues and expenses from products and services sold in both the business segment that provided the product and the business segment that managed the customer relationship. Prior period results have been revised to conform to the current period presentation.

The funds transfer pricing system assigns a cost of funds or a credit for funds to assets or liabilities based on their type, maturity or repricing characteristics. A segment receives a credit from Corporate Treasury for its funding sources. Conversely, a segment is assigned a charge by Corporate Treasury to fund its assets.

Table of Contents**Note 22—Business Segments (Continued)**

Certain indirect costs, such as operations and technology expense, are allocated to the segments based on an activity-based costing methodology. Other indirect costs, such as corporate overhead, are allocated to the segments based on internal surveys and metrics that serve as proxies for estimated usage. During the normal course of business, the Company occasionally changes or updates its management accounting methodologies or organizational structure. Certain non-bank subsidiaries, including MUSA, are reported based on their GAAP results.

Regional Bank

The Regional Bank provides banking products and services to individual and business customers in California, Washington and Oregon through five major business lines.

Consumer Banking serves consumers and small businesses through 343 full-service branches, digital channels, call centers, ATMs and alliances with other financial institutions. Products and services include checking and other deposit accounts; residential mortgage loans; consumer loans; home equity lines of credit; credit cards; bill and loan payment services; and merchant services.

Commercial Banking provides commercial and asset-based loans to clients across a wide range of industries with annual revenues up to \$1 billion. By working with the Company's other segments, Commercial Banking clients also have access to non-credit products and services including global treasury management, capital markets solutions, foreign exchange and interest rate risk and commodity risk management products and services.

Real Estate Industries serves professional real estate investors and developers with products such as construction loans, commercial mortgages, bridge financing and unsecured financing. Property types supported include apartment, office, retail, industrial and single-family residential on the West Coast and in select metropolitan areas across the country. Real Estate Industries also makes tax credit investments in affordable housing projects through its Community Development Finance unit referenced as LIHC investments. By working with the Company's other segments, Real Estate Industries offers its clients a range of non-credit products and services including global treasury management, capital markets solutions, foreign exchange and interest rate risk and commodity risk management products and services.

Wealth Markets serves corporate, institutional, non-profit and individual clients. Capabilities include Wealth Planning / Trust & Estate Services; Investment Management through HighMark Capital Management, Inc., an SEC-registered investment advisory firm wholly-owned by the bank; Brokerage Services through UnionBanc Investment Services, LLC, an SEC-registered broker-dealer/investment advisory firm wholly-owned by the bank; and Private Wealth Management.

PurePoint Financial serves consumers through a national deposit platform offering savings accounts and CD products to customers through an online platform with services provided through a call center and a network of financial centers in New York, Florida, Illinois and Texas.

U.S. Wholesale & Investment Banking

U.S. Wholesale & Investment Banking delivers the full suite of MUAH products and services to large and mid-corporate customers. The segment employs an industry-focused strategy including dedicated coverage teams in General Industries, Power and Utilities, Oil and Gas, Telecom and Media, Technology, Healthcare and Nonprofit, Public Finance, and Financial Institutions (predominantly Insurance and Asset Managers). U.S. Wholesale & Investment Banking provides customers general corporate credit and structured credit services, including project finance, leasing and equipment finance, commercial finance, funds finance and securitizations. By working with the Company's other segments, U.S. Wholesale & Investment Banking offers its customers a range of noncredit services, which include global treasury management, capital market solutions, and various foreign exchange, interest rate risk and commodity risk management products.

Transaction Banking

Transaction Banking works alongside the Company's other segments to provide working capital management and asset servicing solutions, including deposits and treasury management, trade finance, and

Table of Contents**Note 22—Business Segments (Continued)**

institutional trust and custody, to the Company's customers. The client base consists of financial institutions, corporations, government agencies, insurance companies, mutual funds, investment managers and non-profit organizations.

MUFG Securities Americas

MUSA is MUAH's broker-dealer subsidiary which engages in capital markets origination transactions, private placements, collateralized financings, securities borrowing and lending transactions, and domestic and foreign debt and equity securities transactions.

Other

"Other" includes the MUFG Fund Services segment, Markets segment, Japanese Corporate Banking segment and Corporate Treasury. MUFG Fund Services provides comprehensive investment fund administrative solutions. Markets provides risk management solutions, including foreign exchange, interest rate and energy risk management solutions. The Japanese Corporate Banking segment offers a range of credit, deposit, and investment management products and services to companies located primarily in the U.S. that are affiliated with companies headquartered in Japan. Corporate Treasury is responsible for ALM, wholesale funding and the ALM investment and derivatives hedging portfolios. These treasury management activities are carried out to manage the net interest rate and liquidity risks of the Company's balance sheet and to manage those risks within the guidelines established by ALCO. For additional discussion regarding these risk management activities, see Part II, Item 7A. "Quantitative and Qualitative Disclosures About Market Risk" in this Form 10-K.

Additionally, "Other" is comprised of certain corporate activities of the Company; the net impact of funds transfer pricing charges and credits allocated to the reportable segments; the residual costs of support groups; fees from affiliates and noninterest expenses associated with MUFG Bank, Ltd. U.S. branch banking operations; the unallocated allowance; goodwill, intangible assets, and the related amortization/accretion associated with the Company's privatization transaction when we became a privately held company in 2008; the elimination of the fully taxable-equivalent basis amount; the difference between the marginal tax rate and the consolidated effective tax rate; and FDIC covered assets.

The information, set forth in the tables that follow, is prepared using various management accounting methodologies to measure the performance of the individual segments. Unlike GAAP, there is no standardized or authoritative guidance for management accounting. Consequently, reported results are not necessarily comparable with those presented by other companies and they are not necessarily indicative of the results that would be reported by the business units if they were unique economic entities. The management reporting accounting methodologies, which are enhanced from time to time, measure segment profitability by assigning balance sheet and statements of income items to each operating segment. Methodologies that are applied to the measurement of segment profitability include a funds transfer pricing system, an activity-based costing methodology, other indirect costs and a methodology to allocate the provision for credit losses. The funds transfer pricing system assigns a cost of funds or a credit for funds to assets or liabilities based on their type, maturity or repricing characteristics between Corporate Treasury and the operating segments. A segment receives a funding credit from Corporate Treasury for its liabilities. Conversely, a segment is assigned a charge by Corporate Treasury to fund its assets. Certain indirect costs, such as operations and technology expense, are allocated to the segments based on an activity-based costing methodology. Other indirect costs, such as corporate overhead, are allocated to the segments based on internal surveys and metrics that serve as proxies for estimated usage. During the normal course of business, the Company occasionally changes or updates its management accounting methodologies or organizational structure. Certain of the transferred IHC entities are not measured using management accounting methodologies.

Table of Contents**Note 22—Business Segments (Continued)****As of and for the Twelve Months Ended December 31, 2018:**

(Dollars in millions)	Regional Bank	U.S. Wholesale & Investment Banking	Transaction Banking	MUSA	Other	MUFG Americas Holdings Corporation
Results of operations						
Net interest income (expense)	\$ 2,195	\$ 415	\$ 264	\$ 200	\$ 233	\$ 3,307
Noninterest income	451	373	59	300	994	2,177
Total revenue	2,646	788	323	500	1,227	5,484
Noninterest expense	2,058	418	255	443	1,103	4,277
(Reversal of) provision for credit losses	65	42	(3)	—	2	106
Income (loss) before income taxes and including noncontrolling interests	523	328	71	57	122	1,101
Income tax expense (benefit) ⁽¹⁾	105	122	19	17	(211)	52
Net income (loss) including noncontrolling interest	418	206	52	40	333	1,049
Deduct: net loss from noncontrolling interests	—	—	—	—	24	24
Net income (loss) attributable to MUAH	\$ 418	\$ 206	\$ 52	\$ 40	\$ 357	\$ 1,073
Total assets, end of period	\$ 73,554	\$ 20,933	\$ 941	\$ 33,844	\$ 38,828	\$ 168,100

(1) Income tax expense (benefit) includes certain management accounting classification adjustments

As of and for the Twelve Months Ended December 31, 2017:

(Dollars in millions)	Regional Bank	U.S. Wholesale & Investment Banking	Transaction Banking	MUSA	Other	MUFG Americas Holdings Corporation
Results of operations						
Net interest income (expense)	\$ 2,051	\$ 417	\$ 247	\$ 234	\$ 255	\$ 3,204
Noninterest income	442	370	64	351	783	2,010
Total revenue	2,493	787	311	585	1,038	5,214
Noninterest expense	1,961	403	229	445	946	3,984
(Reversal of) provision for credit losses	22	(104)	1	—	(22)	(103)
Income (loss) before income taxes and including noncontrolling interests	510	488	81	140	114	1,333
Income tax expense (benefit) ⁽¹⁾	178	(197)	33	59	226	299
Net income (loss) including noncontrolling interest	332	685	48	81	(112)	1,034
Deduct: net loss from noncontrolling interests	—	—	—	—	43	43
Net income (loss) attributable to MUAH	\$ 332	\$ 685	\$ 48	\$ 81	\$ (69)	\$ 1,077
Total assets, end of period	\$ 67,804	\$ 20,461	\$ 1,063	\$ 32,062	\$ 33,160	\$ 154,550

(1) Income tax expense (benefit) includes certain management accounting classification adjustments.

Table of Contents**Note 22—Business Segments (Continued)****As of and for the Twelve Months Ended December 31, 2016:**

(Dollars in millions)	Regional Bank	U.S. Wholesale & Investment Banking	Transaction Banking	MUSA	Other	MUFG Americas Holdings Corporation
Results of operations						
Net interest income (expense)	\$ 1,952	\$ 541	\$ 202	\$ 164	\$ 194	\$ 3,053
Noninterest income	449	368	72	302	1,034	2,225
Total revenue	2,401	909	274	466	1,228	5,278
Noninterest expense	1,843	404	190	362	983	3,782
(Reversal of) provision for credit losses	30	98	—	—	27	155
Income (loss) before income taxes and including noncontrolling interests	528	407	84	104	218	1,341
Income tax expense (benefit) ⁽¹⁾	152	91	39	41	96	419
Net income (loss) including noncontrolling interest	376	316	45	63	122	922
Deduct: net loss from noncontrolling interests	—	—	—	—	68	68
Net income (loss) attributable to MUAH	\$ 376	\$ 316	\$ 45	\$ 63	\$ 190	\$ 990
Total assets, end of period	\$ 63,169	\$ 23,805	\$ 1,205	\$ 29,252	\$ 30,713	\$ 148,144

(1) Income tax expense (benefit) includes certain management accounting classification adjustments.

Table of Contents**Note 23—Condensed MUFG Americas Holdings Corporation Unconsolidated Financial Statements (Parent Company)****Condensed Balance Sheets**

(Dollars in millions)	December 31,	
	2018	2017
Assets		
Cash and cash equivalents	\$ 739	\$ 1,341
Investments in and advances to subsidiaries		
Bank subsidiary	18,493	19,598
Nonbank subsidiaries	4,618	4,314
Other assets	76	69
Total assets	<u>\$ 23,926</u>	<u>\$ 25,322</u>
Liabilities and Stockholders' Equity		
Long-term debt	\$ 7,355	\$ 6,997
Other liabilities	63	70
Total liabilities	7,418	7,067
Stockholders' equity	16,508	18,255
Total liabilities and stockholders' equity	<u>\$ 23,926</u>	<u>\$ 25,322</u>

Condensed Statements of Income

(Dollars in millions)	Years Ended December 31,		
	2018	2017	2016
Income:			
Dividends from subsidiaries:			
Bank subsidiary	\$ 1,700	\$ 320	\$ —
Nonbank subsidiaries	95	51	—
Interest income on advances to subsidiaries and deposits in bank	137	79	22
Rental income	15	15	16
Total income	<u>1,947</u>	<u>465</u>	<u>38</u>
Expense:			
Interest expense	194	144	75
Other expense	17	14	19
Total expense	<u>211</u>	<u>158</u>	<u>94</u>
Income (loss) before income taxes and equity in undistributed net income of subsidiaries	1,736	307	(56)
Income tax benefit	(13)	(20)	(22)
Income (loss) before equity in undistributed net income of subsidiaries	1,749	327	(34)
Equity in undistributed net income of subsidiaries less dividends received:			
Bank subsidiary	(697)	366	900
Nonbank subsidiaries	21	384	124
Net Income	<u>\$ 1,073</u>	<u>\$ 1,077</u>	<u>\$ 990</u>

Table of Contents**Note 23—Condensed MUFG Americas Holdings Corporation Unconsolidated Financial Statements (Parent Company) (Continued)****Condensed Statements of Cash Flows**

(Dollars in millions)	Years Ended December 31,		
	2018	2017	2016
Cash Flows from Operating Activities:			
Net income	\$ 1,073	\$ 1,077	\$ 990
Adjustments to reconcile net income to net cash provided by (used in) operating activities:			
Equity in undistributed net income of subsidiaries less dividends received	676	(750)	(1,024)
Other, net	(9)	2	—
Net cash provided by (used in) operating activities	1,740	329	(34)
Cash Flows from Investing Activities:			
Investments in and advances to subsidiaries	(2,612)	(5,050)	(1,197)
Repayment of investments in and advances to subsidiaries	2,411	1,495	1,820
Net cash used in investing activities	(201)	(3,555)	623
Cash Flows from Financing Activities:			
Proceeds from advances from subsidiaries	—	200	—
Repayment of advances from subsidiaries	—	(200)	—
Proceeds from issuance of long-term debt	6,500	3,525	545
Repayment of long-term debt	(6,145)	—	—
Dividends paid	—	(500)	—
Share repurchase	(2,496)	—	—
Other, net	—	—	1
Net cash provided by (used in) financing activities	(2,141)	3,025	546
Net increase (decrease) in cash and cash equivalents	(602)	(201)	1,135
Cash and cash equivalents at beginning of year	1,341	1,542	407
Cash and cash equivalents at end of year	\$ 739	\$ 1,341	\$ 1,542

Table of Contents**MUFG Americas Holdings Corporation and Subsidiaries****Management's Report on Internal Control over Financial Reporting**

The management of MUFG Americas Holdings Corporation is responsible for establishing and maintaining adequate internal control over financial reporting, designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles.

We maintain a system of internal accounting controls to provide reasonable assurance that assets are safeguarded and transactions are executed in accordance with management's authorization and recorded properly to permit the preparation of consolidated financial statements in accordance with generally accepted accounting principles. Management recognizes that even a highly effective internal control system has inherent risks, including the possibility of human error and the circumvention or overriding of controls, and that the effectiveness of an internal control system can change with circumstances. Management has assessed the effectiveness of the Company's internal control over financial reporting as of December 31, 2018. In making this assessment, management used the criteria set out by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in *Internal Control—Integrated Framework* (2013). Based on our assessment, we concluded that the Company's internal control system over financial reporting is effective as of December 31, 2018.

The Company's internal control over financial reporting and the Company's consolidated financial statements have been audited by Deloitte & Touche LLP, Independent Registered Public Accounting Firm.

Table of Contents**REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

To the stockholders and the Board of Directors of MUFG Americas Holdings Corporation

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of MUFG Americas Holdings Corporation and subsidiaries (the "Company") as of December 31, 2018 and 2017, the related consolidated statements of income, comprehensive income, changes in stockholders' equity, and cash flows, for each of the three years in the period ended December 31, 2018, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2018 and 2017, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2018, in conformity with accounting principles generally accepted in the United States of America.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2018, based on criteria established in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated February 27, 2019, expressed an unqualified opinion on the Company's internal control over financial reporting.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ DELOITTE & TOUCHE LLP

New York, New York

February 27, 2019

We have served as the Company's auditor since 1996.

Table of Contents**REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

To the stockholders and the Board of Directors of MUFG Americas Holdings Corporation

Opinion on Internal Control over Financial Reporting

We have audited the internal control over financial reporting of MUFG Americas Holdings Corporation and subsidiaries (the "Company") as of December 31, 2018, based on criteria established in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). In our opinion, the Company maintained in all material respects, effective internal control over financial reporting as of December 31, 2018, based on criteria established in Internal Control - Integrated Framework (2013) issued by COSO.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated financial statements as of and for the year ended December 31, 2018, of the Company and our report dated February 27, 2019 expressed an unqualified opinion on those financial statements.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ DELOITTE & TOUCHE LLP

New York, New York

February 27, 2019

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MUFG Americas Holdings Corporation and Subsidiaries
Supplementary Information

Quarterly Financial Data (Unaudited)**Condensed Consolidated Statements of Income:**

(Dollars in millions)	2018 Quarters Ended			
	December 31	September 30	June 30	March 31
Interest income	\$ 1,388	\$ 1,317	\$ 1,254	\$ 1,166
Interest expense	563	485	429	341
Net interest income	825	832	825	825
(Reversal of) provision for credit losses	63	64	(19)	(2)
Noninterest income	573	626	596	382
Noninterest expense	1,051	1,059	1,083	1,084
Income before income taxes and including noncontrolling interests	284	335	357	125
Income tax expense	31	35	28	(42)
Net income including noncontrolling interests	253	300	329	167
Deduct: Net loss from noncontrolling interests	4	6	15	(1)
Net income	<u>\$ 257</u>	<u>\$ 306</u>	<u>\$ 344</u>	<u>\$ 166</u>

(Dollars in millions)	2017 Quarters Ended			
	December 31	September 30	June 30	March 31
Interest income	\$ 1,086	\$ 1,083	\$ 1,026	\$ 984
Interest expense	287	267	232	189
Net interest income	799	816	794	795
(Reversal of) provision for credit losses	(69)	18	(22)	(30)
Noninterest income	518	515	489	488
Noninterest expense	1,039	982	957	1,006
Income before income taxes and including noncontrolling interests	347	331	348	307
Income tax expense	44	109	63	83
Net income including noncontrolling interests	303	222	285	224
Deduct: Net loss from noncontrolling interests	18	10	10	5
Net income	<u>\$ 321</u>	<u>\$ 232</u>	<u>\$ 295</u>	<u>\$ 229</u>

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Exhibit Index

Exhibit No.	Description
2.1	<u>Contribution Agreement by and among MUFG Americas Holdings Corporation, The Bank of Tokyo-Mitsubishi UFJ Ltd. and Mitsubishi UFJ Financial Group Inc. dated June 30, 2016⁽¹⁾</u>
3.1	<u>Second Amended and Restated Certificate of Incorporation of the Registrant⁽²⁾</u>
3.2	<u>Amended and Restated Bylaws of the Registrant⁽³⁾</u>
4.1	<u>Trust Indenture between the Registrant and J.P. Morgan Trust Company, National Association, as Trustee, dated December 8, 2003⁽⁴⁾</u>
4.2	The Registrant agrees to furnish upon request to the Commission a copy of each instrument defining the rights of holders of long-term debt of the Registrant.
4.3	<u>Officer's Certificate establishing the terms of the 3.50% Senior Notes due 2022, dated June 18, 2012⁽⁵⁾</u>
4.4	<u>Form of 3.50% Senior Notes due 2022 (included as Exhibit A to Exhibit 4.3)</u>
4.5	<u>Officer's Certificate establishing the terms of the 1.625% Senior Notes due 2018, 2.250% Senior Notes due 2020, 3.000% Senior Notes due 2025, and Floating Rate Senior Notes due 2018, dated February 10, 2015⁽⁶⁾</u>
4.6	<u>Form of 1.625% Senior Notes due 2018, 2.250% Senior Notes due 2020, 3.000% Senior Notes due 2025, and Floating Rate Senior Notes due 2018 (included as Exhibits A, B, C and D, respectively, to Exhibit 4.5)</u>
10.1	<u>Master Services Agreement by and between MUFG Union Bank, N.A. and The Bank of Tokyo-Mitsubishi UFJ, Ltd. effective July 1, 2014⁽⁷⁾</u>
10.2	Certain exhibits related to compensatory plans, contracts and arrangements have been omitted pursuant to item 601(b) (10)(iii)(C)(6) of Regulation S-K
21.1	Subsidiaries of the Registrant has been omitted pursuant to General Instruction I(2) of Form 10-K
24.1	<u>Power of Attorney⁽⁸⁾</u>
24.2	<u>Resolution of Board of Directors⁽⁸⁾</u>
31.1	<u>Certification of the Chief Executive Officer pursuant to Rule 13a-14(a)/15d-14(a) of the Exchange Act, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002⁽⁸⁾</u>
31.2	<u>Certification of the Chief Financial Officer pursuant to Rule 13a-14(a)/15d-14(a) of the Exchange Act, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002⁽⁸⁾</u>
32.1	<u>Certification of the Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002⁽⁸⁾</u>
32.2	<u>Certification of the Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002⁽⁸⁾</u>
101	Pursuant to Rule 405 of Regulation S-T, the following financial information from the Company's Annual Report on Form 10-K for the year ended December 31, 2018, is formatted in XBRL interactive data files: (i) Consolidated Statements of Income; (ii) Consolidated Balance Sheets; (iii) Consolidated Statements of Changes in Stockholders' Equity; (iv) Consolidated Statements of Cash Flows; and (v) Notes to Financial Statements ⁽⁷⁾

(1) Incorporated by reference to Exhibit 2.1 of the Company's Current Report on Form 8-K dated July 1, 2016.

(2) Incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K dated September 11, 2018.

(3) Incorporated by reference to Exhibit 3.2 to the Company's Current Report on Form 8-K dated July 1, 2014.

(4) Incorporated by reference to Exhibit 99.1 to the Company's Current Report on Form 8-K dated December 8, 2003.

(5) Incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K dated June 18, 2012.

(6) Incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K dated February 10, 2015.

(7) Incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 10-Q for the quarter ended September 30, 2014.

(8) Filed herewith

Table of Contents**SIGNATURES**

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, MUFG Americas Holdings Corporation has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

MUFG AMERICAS HOLDINGS CORPORATION (Registrant)

By: /s/ STEPHEN E. CUMMINGS

Stephen E. Cummings
President and Chief Executive Officer

Date: February 27, 2019

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of MUFG Americas Holdings Corporation and in the capacities and on the dates indicated.

SignatureTitle

/s/ STEPHEN E. CUMMINGS

Stephen E. Cummings

Director, President and Chief Executive Officer
(Principal Executive Officer)

/s/ JOHANNES WORSOE

Johannes Worsoe

Chief Financial Officer

(Principal Financial Officer)

/s/ NEAL HOLLAND

Neal Holland

Controller and Chief Accounting Officer

(Principal Accounting Officer)

*

Michael D. Fraizer

Director

*

Roberta A. Bienfait

Director

*

Mohan S. Gyani

Director

Ann F. Jaedicke

Director

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Suneel Kamlani

Director

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Kazuo Koshi

Director

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Masato Miyachi

Director

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Toby S. Myerson

Director

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Barbara L. Rambo

Director

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Muneaki Tokunari

Director

*

Dean A. Yoost

Director

*By: /s/ NEAL HOLLAND

Neal Holland
Attorney-in-Fact

Dated: February 27, 2019

PNC BANK,
NATIONAL
ASSOCIATION

02019-9946

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT
AND AFFIDAVIT**

SECTION I -- GENERAL INFORMATION

A. Legal name of the Disclosing Party submitting this EDS. Include d/b/a/ if applicable:

PNC Bank, National Association

Check ONE of the following three boxes:

Indicate whether the Disclosing Party submitting this EDS is:

1. ☒ the Applicant

OR

2. ☐ a legal entity currently holding, or anticipated to hold within six months after City action on the contract, transaction or other undertaking to which this EDS pertains (referred to below as the "Matter"), a direct or indirect interest in excess of 7.5% in the Applicant. State the Applicant's legal name: _____

OR

3. ☐ a legal entity with a direct or indirect right of control of the Applicant (see Section II(B)(1))
State the legal name of the entity in which the Disclosing Party holds a right of control: _____

B. Business address of the Disclosing Party: PNC Centre, 1 North Franklin, Suite 2800

Chicago, IL 60606

C. Telephone: 312-338-2295 Fax: N/A Email: jonathan.casiano@pnc.com

D. Name of contact person: Jonathan Casiano - Senior Vice President, Public Finance

E. Federal Employer Identification No. (if you have one): _____

F. Brief description of the Matter to which this EDS pertains. (Include project number and location of property, if applicable):

2020 Municipal Depository RFP

G. Which City agency or department is requesting this EDS? Office of the Comptroller

If the Matter is a contract being handled by the City's Department of Procurement Services, please complete the following:

Specification # _____ and Contract # _____

SECTION II -- DISCLOSURE OF OWNERSHIP INTERESTS

A. NATURE OF THE DISCLOSING PARTY

1. Indicate the nature of the Disclosing Party:

- | | |
|---|--|
| <input type="checkbox"/> Person | <input type="checkbox"/> Limited liability company |
| <input type="checkbox"/> Publicly registered business corporation | <input type="checkbox"/> Limited liability partnership |
| <input type="checkbox"/> Privately held business corporation | <input type="checkbox"/> Joint venture |
| <input type="checkbox"/> Sole proprietorship | <input type="checkbox"/> Not-for-profit corporation |
| <input type="checkbox"/> General partnership | (Is the not-for-profit corporation also a 501(c)(3))? |
| <input type="checkbox"/> Limited partnership | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| <input type="checkbox"/> Trust | <input checked="" type="checkbox"/> Other (please specify) |
| | <u>national banking association</u> |

2. For legal entities, the state (or foreign country) of incorporation or organization, if applicable:

N/A. PNC Bank, National Association is a national banking association formed under U.S. Federal law and regulated by the OCC. As such, it is authorized to conduct business in all states and no state qualification is required.

3. For legal entities not organized in the State of Illinois: Has the organization registered to do business in the State of Illinois as a foreign entity?

☐ Yes ☒ No ☐ Organized in Illinois

B. IF THE DISCLOSING PARTY IS A LEGAL ENTITY:

1. List below the full names and titles, if applicable, of: (i) all executive officers and all directors of the entity; (ii) **for not-for-profit corporations**, all members, if any, which are legal entities (if there are no such members, write "no members which are legal entities"); (iii) **for trusts, estates or other similar entities**, the trustee, executor, administrator, or similarly situated party; (iv) **for general or limited partnerships, limited liability companies, limited liability partnerships or joint ventures**, each general partner, managing member, manager or any other person or legal entity that directly or indirectly controls the day-to-day management of the Applicant.

NOTE: Each legal entity listed below must submit an EDS on its own behalf.

Name	Title
------	-------

See Attachment A

2. Please provide the following information concerning each person or legal entity having a direct or indirect, current or prospective (i.e. within 6 months after City action) beneficial interest (including ownership) in excess of 7.5% of the Applicant. Examples of such an interest include shares in a corporation, partnership interest in a partnership or joint venture, interest of a member or manager in a

limited liability company, or interest of a beneficiary of a trust, estate or other similar entity. If none, state "None."

NOTE: Each legal entity listed below may be required to submit an EDS on its own behalf.

Name	Business Address	Percentage Interest in the Applicant
PNC Bancorp, Inc.	222 Delaware Ave., Wilmington, DE 19801	100%

SECTION III -- INCOME OR COMPENSATION TO, OR OWNERSHIP BY, CITY ELECTED OFFICIALS

Has the Disclosing Party provided any income or compensation to any City elected official during the 12-month period preceding the date of this EDS? ☐ Yes ☒ No

Does the Disclosing Party reasonably expect to provide any income or compensation to any City elected official during the 12-month period following the date of this EDS? ☐ Yes ☒ No

If "yes" to either of the above, please identify below the name(s) of such City elected official(s) and describe such income or compensation:

See Attachment B

Does any City elected official or, to the best of the Disclosing Party's knowledge after reasonable inquiry, any City elected official's spouse or domestic partner, have a financial interest (as defined in Chapter 2-156 of the Municipal Code of Chicago ("MCC")) in the Disclosing Party?

☐ Yes ☒ No See Attachment B

If "yes," please identify below the name(s) of such City elected official(s) and/or spouse(s)/domestic partner(s) and describe the financial interest(s).

SECTION IV -- DISCLOSURE OF SUBCONTRACTORS AND OTHER RETAINED PARTIES

The Disclosing Party must disclose the name and business address of each subcontractor, attorney, lobbyist (as defined in MCC Chapter 2-156), accountant, consultant and any other person or entity whom the Disclosing Party has retained or expects to retain in connection with the Matter, as well as the nature of the relationship, and the total amount of the fees paid or estimated to be paid. The Disclosing Party is not required to disclose employees who are paid solely through the Disclosing Party's regular payroll. If the Disclosing Party is uncertain whether a disclosure is required under this Section, the Disclosing Party must either ask the City whether disclosure is required or make the disclosure.

Name (indicate whether retained or anticipated to be retained)	Business Address	Relationship to Disclosing Party (subcontractor, attorney, lobbyist, etc.)	Fees (indicate whether paid or estimated.) NOTE: "hourly rate" or "t.b.d." is not an acceptable response.
--	------------------	--	--

(Add sheets if necessary)

☒ Check here if the Disclosing Party has not retained, nor expects to retain, any such persons or entities.

SECTION V -- CERTIFICATIONS

A. COURT-ORDERED CHILD SUPPORT COMPLIANCE

Under MCC Section 2-92-415, substantial owners of business entities that contract with the City must remain in compliance with their child support obligations throughout the contract's term.

Has any person who directly or indirectly owns 10% or more of the Disclosing Party been declared in arrearage on any child support obligations by any Illinois court of competent jurisdiction?

☐ Yes ☐ No ☒ No person directly or indirectly owns 10% or more of the Disclosing Party.

If "Yes," has the person entered into a court-approved agreement for payment of all support owed and is the person in compliance with that agreement?

☐ Yes ☐ No

B. FURTHER CERTIFICATIONS

1. [This paragraph 1 applies only if the Matter is a contract being handled by the City's Department of Procurement Services.] In the 5-year period preceding the date of this EDS, neither the Disclosing Party nor any Affiliated Entity [see definition in (5) below] has engaged, in connection with the performance of any public contract, the services of an integrity monitor, independent private sector inspector general, or integrity compliance consultant (i.e., an individual or entity with legal, auditing, investigative, or other similar skills, designated by a public agency to help the agency monitor the activity of specified agency vendors as well as help the vendors reform their business practices so they can be considered for agency contracts in the future, or continue with a contract in progress).

2. The Disclosing Party and its Affiliated Entities are not delinquent in the payment of any fine, fee, tax or other source of indebtedness owed to the City of Chicago, including, but not limited to, water and sewer charges, license fees, parking tickets, property taxes and sales taxes, nor is the Disclosing Party delinquent in the payment of any tax administered by the Illinois Department of Revenue.

3. The Disclosing Party and, if the Disclosing Party is a legal entity, all of those persons or entities identified in Section II(B)(1) of this EDS:

- a. are not presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from any transactions by any federal, state or local unit of government;
- b. have not, during the 5 years before the date of this EDS, been convicted of a criminal offense, adjudged guilty, or had a civil judgment rendered against them in connection with: obtaining, attempting to obtain, or performing a public (federal, state or local) transaction or contract under a public transaction; a violation of federal or state antitrust statutes; fraud; embezzlement; theft; forgery; bribery; falsification or destruction of records; making false statements; or receiving stolen property;
- c. are not presently indicted for, or criminally or civilly charged by, a governmental entity (federal, state or local) with committing any of the offenses set forth in subparagraph (b) above;
- d. have not, during the 5 years before the date of this EDS, had one or more public transactions (federal, state or local) terminated for cause or default; and
- e. have not, during the 5 years before the date of this EDS, been convicted, adjudged guilty, or found liable in a civil proceeding, or in any criminal or civil action, including actions concerning environmental violations, instituted by the City or by the federal government, any state, or any other unit of local government.

4. The Disclosing Party understands and shall comply with the applicable requirements of MCC Chapters 2-56 (Inspector General) and 2-156 (Governmental Ethics).

5. Certifications (5), (6) and (7) concern:

- the Disclosing Party;
- any "Contractor" (meaning any contractor or subcontractor used by the Disclosing Party in connection with the Matter, including but not limited to all persons or legal entities disclosed under Section IV, "Disclosure of Subcontractors and Other Retained Parties");
- any "Affiliated Entity" (meaning a person or entity that, directly or indirectly: controls the Disclosing Party, is controlled by the Disclosing Party, or is, with the Disclosing Party, under common control of another person or entity). Indicia of control include, without limitation: interlocking management or ownership; identity of interests among family members, shared facilities and equipment; common use of employees; or organization of a business entity following the ineligibility of a business entity to do business with federal or state or local government, including the City, using substantially the same management, ownership, or principals as the ineligible entity. With respect to Contractors, the term Affiliated Entity means a person or entity that directly or indirectly controls the Contractor, is controlled by it, or, with the Contractor, is under common control of another person or entity;
- any responsible official of the Disclosing Party, any Contractor or any Affiliated Entity or any other official, agent or employee of the Disclosing Party, any Contractor or any Affiliated Entity, acting pursuant to the direction or authorization of a responsible official of the Disclosing Party, any Contractor or any Affiliated Entity (collectively "Agents").

Neither the Disclosing Party, nor any Contractor, nor any Affiliated Entity of either the Disclosing Party or any Contractor, nor any Agents have, during the 5 years before the date of this EDS, or, with respect to a Contractor, an Affiliated Entity, or an Affiliated Entity of a Contractor during the 5 years before the date of such Contractor's or Affiliated Entity's contract or engagement in connection with the Matter:

a. bribed or attempted to bribe, or been convicted or adjudged guilty of bribery or attempting to bribe, a public officer or employee of the City, the State of Illinois, or any agency of the federal government or of any state or local government in the United States of America, in that officer's or employee's official capacity;

b. agreed or colluded with other bidders or prospective bidders, or been a party to any such agreement, or been convicted or adjudged guilty of agreement or collusion among bidders or prospective bidders, in restraint of freedom of competition by agreement to bid a fixed price or otherwise; or

c. made an admission of such conduct described in subparagraph (a) or (b) above that is a matter of record, but have not been prosecuted for such conduct; or

d. violated the provisions referenced in MCC Subsection 2-92-320(a)(4)(Contracts Requiring a Base Wage); (a)(5)(Debarment Regulations); or (a)(6)(Minimum Wage Ordinance).

6. Neither the Disclosing Party, nor any Affiliated Entity or Contractor, or any of their employees, officials, agents or partners, is barred from contracting with any unit of state or local government as a result of engaging in or being convicted of (1) bid-rigging in violation of 720 ILCS 5/33E-3; (2) bid-rotating in violation of 720 ILCS 5/33E-4; or (3) any similar offense of any state or of the United States of America that contains the same elements as the offense of bid-rigging or bid-rotating.

7. Neither the Disclosing Party nor any Affiliated Entity is listed on a Sanctions List maintained by the United States Department of Commerce, State, or Treasury, or any successor federal agency.

8. [FOR APPLICANT ONLY] (i) Neither the Applicant nor any "controlling person" [see MCC Chapter 1-23, Article I for applicability and defined terms] of the Applicant is currently indicted or charged with, or has admitted guilt of, or has ever been convicted of, or placed under supervision for, any criminal offense involving actual, attempted, or conspiracy to commit bribery, theft, fraud, forgery, perjury, dishonesty or deceit against an officer or employee of the City or any "sister agency"; and (ii) the Applicant understands and acknowledges that compliance with Article I is a continuing requirement for doing business with the City. NOTE: If MCC Chapter 1-23, Article I applies to the Applicant, that Article's permanent compliance timeframe supersedes 5-year compliance timeframes in this Section V.

9. [FOR APPLICANT ONLY] The Applicant and its Affiliated Entities will not use, nor permit their subcontractors to use, any facility listed as having an active exclusion by the U.S. EPA on the federal System for Award Management ("SAM").

10. [FOR APPLICANT ONLY] The Applicant will obtain from any contractors/subcontractors hired or to be hired in connection with the Matter certifications equal in form and substance to those in Certifications (2) and (9) above and will not, without the prior written consent of the City, use any such

contractor/subcontractor that does not provide such certifications or that the Applicant has reason to believe has not provided or cannot provide truthful certifications.

11. If the Disclosing Party is unable to certify to any of the above statements in this Part B (Further Certifications), the Disclosing Party must explain below:

See Attachment B

If the letters "NA," the word "None," or no response appears on the lines above, it will be conclusively presumed that the Disclosing Party certified to the above statements.

12. To the best of the Disclosing Party's knowledge after reasonable inquiry, the following is a complete list of all current employees of the Disclosing Party who were, at any time during the 12-month period preceding the date of this EDS, an employee, or elected or appointed official, of the City of Chicago (if none, indicate with "N/A" or "none").

Carole Brown, City of Chicago employee

Thurman Smith, Affordable Requirement Ordinance (ARO) Task Force

13. To the best of the Disclosing Party's knowledge after reasonable inquiry, the following is a complete list of all gifts that the Disclosing Party has given or caused to be given, at any time during the 12-month period preceding the execution date of this EDS, to an employee, or elected or appointed official, of the City of Chicago. For purposes of this statement, a "gift" does not include: (i) anything made generally available to City employees or to the general public, or (ii) food or drink provided in the course of official City business and having a retail value of less than \$25 per recipient, or (iii) a political contribution otherwise duly reported as required by law (if none, indicate with "N/A" or "none"). As to any gift listed below, please also list the name of the City recipient.

NONE

C. CERTIFICATION OF STATUS AS FINANCIAL INSTITUTION

1. The Disclosing Party certifies that the Disclosing Party (check one)

☒ is ☐ is not

a "financial institution" as defined in MCC Section 2-32-455(b).

2. If the Disclosing Party IS a financial institution, then the Disclosing Party pledges:

"We are not and will not become a predatory lender as defined in MCC Chapter 2-32. We further pledge that none of our affiliates is, and none of them will become, a predatory lender as defined in MCC Chapter 2-32. We understand that becoming a predatory lender or becoming an affiliate of a predatory lender may result in the loss of the privilege of doing business with the City."

If the Disclosing Party is unable to make this pledge because it or any of its affiliates (as defined in MCC Section 2-32-455(b)) is a predatory lender within the meaning of MCC Chapter 2-32, explain here (attach additional pages if necessary):

If the letters "NA," the word "None," or no response appears on the lines above, it will be conclusively presumed that the Disclosing Party certified to the above statements.

D. CERTIFICATION REGARDING FINANCIAL INTEREST IN CITY BUSINESS

Any words or terms defined in MCC Chapter 2-156 have the same meanings if used in this Part D.

1. In accordance with MCC Section 2-156-110: To the best of the Disclosing Party's knowledge after reasonable inquiry, does any official or employee of the City have a financial interest in his or her own name or in the name of any other person or entity in the Matter?

☐ Yes ☒ No See Attachment B

NOTE: If you checked "Yes" to Item D(1), proceed to Items D(2) and D(3). If you checked "No" to Item D(1), skip Items D(2) and D(3) and proceed to Part E.

2. Unless sold pursuant to a process of competitive bidding, or otherwise permitted, no City elected official or employee shall have a financial interest in his or her own name or in the name of any other person or entity in the purchase of any property that (i) belongs to the City, or (ii) is sold for taxes or assessments, or (iii) is sold by virtue of legal process at the suit of the City (collectively, "City Property Sale"). Compensation for property taken pursuant to the City's eminent domain power does not constitute a financial interest within the meaning of this Part D.

Does the Matter involve a City Property Sale?

☐ Yes ☐ No

3. If you checked "Yes" to Item D(1), provide the names and business addresses of the City officials or employees having such financial interest and identify the nature of the financial interest:

Name	Business Address	Nature of Financial Interest

4. The Disclosing Party further certifies that no prohibited financial interest in the Matter will be acquired by any City official or employee.

E. CERTIFICATION REGARDING SLAVERY ERA BUSINESS

Please check either (1) or (2) below. If the Disclosing Party checks (2), the Disclosing Party must disclose below or in an attachment to this EDS all information required by (2). Failure to comply with these disclosure requirements may make any contract entered into with the City in connection with the Matter voidable by the City.

 1. The Disclosing Party verifies that the Disclosing Party has searched any and all records of the Disclosing Party and any and all predecessor entities regarding records of investments or profits from slavery or slaveholder insurance policies during the slavery era (including insurance policies issued to slaveholders that provided coverage for damage to or injury or death of their slaves), and the Disclosing Party has found no such records.

 X 2. The Disclosing Party verifies that, as a result of conducting the search in step (1) above, the Disclosing Party has found records of investments or profits from slavery or slaveholder insurance policies. The Disclosing Party verifies that the following constitutes full disclosure of all such records, including the names of any and all slaves or slaveholders described in those records:

See Attachment B

SECTION VI -- CERTIFICATIONS FOR FEDERALLY FUNDED MATTERS

NOTE: If the Matter is federally funded, complete this Section VI. If the Matter is not federally funded, proceed to Section VII. For purposes of this Section VI, tax credits allocated by the City and proceeds of debt obligations of the City are not federal funding.

A. CERTIFICATION REGARDING LOBBYING

1. List below the names of all persons or entities registered under the federal Lobbying Disclosure Act of 1995, as amended, who have made lobbying contacts on behalf of the Disclosing Party with respect to the Matter: (Add sheets if necessary):

(If no explanation appears or begins on the lines above, or if the letters "NA" or if the word "None" appear, it will be conclusively presumed that the Disclosing Party means that NO persons or entities registered under the Lobbying Disclosure Act of 1995, as amended, have made lobbying contacts on behalf of the Disclosing Party with respect to the Matter.)

2. The Disclosing Party has not spent and will not expend any federally appropriated funds to pay any person or entity listed in paragraph A(1) above for his or her lobbying activities or to pay any person or entity to influence or attempt to influence an officer or employee of any agency, as defined by applicable federal law, a member of Congress, an officer or employee of Congress, or an employee

of a member of Congress, in connection with the award of any federally funded contract, making any federally funded grant or loan, entering into any cooperative agreement, or to extend, continue, renew, amend, or modify any federally funded contract, grant, loan, or cooperative agreement.

3. The Disclosing Party will submit an updated certification at the end of each calendar quarter in which there occurs any event that materially affects the accuracy of the statements and information set forth in paragraphs A(1) and A(2) above.

4. The Disclosing Party certifies that either: (i) it is not an organization described in section 501(c)(4) of the Internal Revenue Code of 1986; or (ii) it is an organization described in section 501(c)(4) of the Internal Revenue Code of 1986 but has not engaged and will not engage in "Lobbying Activities," as that term is defined in the Lobbying Disclosure Act of 1995, as amended.

5. If the Disclosing Party is the Applicant, the Disclosing Party must obtain certifications equal in form and substance to paragraphs A(1) through A(4) above from all subcontractors before it awards any subcontract and the Disclosing Party must maintain all such subcontractors' certifications for the duration of the Matter and must make such certifications promptly available to the City upon request.

B. CERTIFICATION REGARDING EQUAL EMPLOYMENT OPPORTUNITY

If the Matter is federally funded, federal regulations require the Applicant and all proposed subcontractors to submit the following information with their bids or in writing at the outset of negotiations.

Is the Disclosing Party the Applicant?

☐ Yes

☐ No

If "Yes," answer the three questions below:

1. Have you developed and do you have on file affirmative action programs pursuant to applicable federal regulations? (Sec 41 CFR Part 60-2.)

☐ Yes

☐ No

2. Have you filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance Programs, or the Equal Employment Opportunity Commission all reports due under the applicable filing requirements?

☐ Yes

☐ No

☐ Reports not required

3. Have you participated in any previous contracts or subcontracts subject to the equal opportunity clause?

☐ Yes

☐ No

If you checked "No" to question (1) or (2) above, please provide an explanation:

SECTION VII -- FURTHER ACKNOWLEDGMENTS AND CERTIFICATION

The Disclosing Party understands and agrees that:

A. The certifications, disclosures, and acknowledgments contained in this EDS will become part of any contract or other agreement between the Applicant and the City in connection with the Matter, whether procurement, City assistance, or other City action, and are material inducements to the City's execution of any contract or taking other action with respect to the Matter. The Disclosing Party understands that it must comply with all statutes, ordinances, and regulations on which this EDS is based.

B. The City's Governmental Ethics Ordinance, MCC Chapter 2-156, imposes certain duties and obligations on persons or entities seeking City contracts, work, business, or transactions. The full text of this ordinance and a training program is available on line at www.cityofchicago.org/Ethics, and may also be obtained from the City's Board of Ethics, 740 N. Sedgwick St., Suite 500, Chicago, IL 60610, (312) 744-9660. The Disclosing Party must comply fully with this ordinance.

C. If the City determines that any information provided in this EDS is false, incomplete or inaccurate, any contract or other agreement in connection with which it is submitted may be rescinded or be void or voidable, and the City may pursue any remedies under the contract or agreement (if not rescinded or void), at law, or in equity, including terminating the Disclosing Party's participation in the Matter and/or declining to allow the Disclosing Party to participate in other City transactions. Remedies at law for a false statement of material fact may include incarceration and an award to the City of treble damages.

D. It is the City's policy to make this document available to the public on its Internet site and/or upon request. Some or all of the information provided in, and appended to, this EDS may be made publicly available on the Internet, in response to a Freedom of Information Act request, or otherwise. By completing and signing this EDS, the Disclosing Party waives and releases any possible rights or claims which it may have against the City in connection with the public release of information contained in this EDS and also authorizes the City to verify the accuracy of any information submitted in this EDS.

E. The information provided in this EDS must be kept current. In the event of changes, the Disclosing Party must supplement this EDS up to the time the City takes action on the Matter. If the Matter is a contract being handled by the City's Department of Procurement Services, the Disclosing Party must update this EDS as the contract requires. **NOTE:** With respect to Matters subject to MCC Chapter 1-23, Article I (imposing **PERMANENT INELIGIBILITY** for certain specified offenses), the information provided herein regarding eligibility must be kept current for a longer period, as required by MCC Chapter 1-23 and Section 2-154-020.

CERTIFICATION

Under penalty of perjury, the person signing below: (1) warrants that he/she is authorized to execute this EDS, and all applicable Appendices, on behalf of the Disclosing Party, and (2) warrants that all certifications and statements contained in this EDS, and all applicable Appendices, are true, accurate and complete as of the date furnished to the City.

PNC Bank, National Association

(Print or type exact legal name of Disclosing Party)

By: _____

(Sign here)

Jonathan Casiano

(Print or type name of person signing)

Senior Vice President

(Print or type title of person signing)

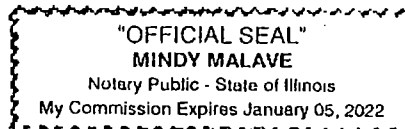
Signed and sworn to before me on (date) 15th Nov 2019,

at Cook North Franklin County, IL (state).

Mindy Malave

Notary Public

Commission expires: 1/5/2022



**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
APPENDIX A**

**FAMILIAL RELATIONSHIPS WITH ELECTED CITY OFFICIALS
AND DEPARTMENT HEADS**

This Appendix is to be completed only by (a) the Applicant, and (b) any legal entity which has a direct ownership interest in the Applicant exceeding 7.5%. It is not to be completed by any legal entity which has only an indirect ownership interest in the Applicant.

Under MCC Section 2-154-015, the Disclosing Party must disclose whether such Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof currently has a "familial relationship" with any elected city official or department head. A "familial relationship" exists if, as of the date this EDS is signed, the Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof is related to the mayor, any alderman, the city clerk, the city treasurer or any city department head as spouse or domestic partner or as any of the following, whether by blood or adoption: parent, child, brother or sister, aunt or uncle, niece or nephew, grandparent, grandchild, father-in-law, mother-in-law, son-in-law, daughter-in-law, stepfather or stepmother, stepson or stepdaughter, stepbrother or stepsister or half-brother or half-sister.

"Applicable Party" means (1) all executive officers of the Disclosing Party listed in Section II.B.1.a., if the Disclosing Party is a corporation; all partners of the Disclosing Party, if the Disclosing Party is a general partnership; all general partners and limited partners of the Disclosing Party, if the Disclosing Party is a limited partnership; all managers, managing members and members of the Disclosing Party, if the Disclosing Party is a limited liability company; (2) all principal officers of the Disclosing Party; and (3) any person having more than a 7.5% ownership interest in the Disclosing Party. "Principal officers" means the president, chief operating officer, executive director, chief financial officer, treasurer or secretary of a legal entity or any person exercising similar authority.

Does the Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof currently have a "familial relationship" with an elected city official or department head?

☐ Yes

☒ No

If yes, please identify below (1) the name and title of such person, (2) the name of the legal entity to which such person is connected; (3) the name and title of the elected city official or department head to whom such person has a familial relationship, and (4) the precise nature of such familial relationship.

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
APPENDIX B**

BUILDING CODE SCOFFLAW/PROBLEM LANDLORD CERTIFICATION

This Appendix is to be completed only by (a) the Applicant, and (b) any legal entity which has a direct ownership interest in the Applicant exceeding 7.5% (an "Owner"). It is not to be completed by any legal entity which has only an indirect ownership interest in the Applicant.

1. Pursuant to MCC Section 2-154-010, is the Applicant or any Owner identified as a building code scofflaw or problem landlord pursuant to MCC Section 2-92-416?

☐ Yes

☒ No

2. If the Applicant is a legal entity publicly traded on any exchange, is any officer or director of the Applicant identified as a building code scofflaw or problem landlord pursuant to MCC Section 2-92-416?

☐ Yes

☒ No

☐ The Applicant is not publicly traded on any exchange.

3. If yes to (1) or (2) above, please identify below the name of each person or legal entity identified as a building code scofflaw or problem landlord and the address of each building or buildings to which the pertinent code violations apply.

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
APPENDIX C**

PROHIBITION ON WAGE & SALARY HISTORY SCREENING - CERTIFICATION

This Appendix is to be completed only by an Applicant that is completing this EDS as a “contractor” as defined in MCC Section 2-92-385. That section, which should be consulted (www.amlegal.com), generally covers a party to any agreement pursuant to which they: (i) receive City of Chicago funds in consideration for services, work or goods provided (including for legal or other professional services), or (ii) pay the City money for a license, grant or concession allowing them to conduct a business on City premises.

On behalf of an Applicant that is a contractor pursuant to MCC Section 2-92-385, I hereby certify that the Applicant is in compliance with MCC Section 2-92-385(b)(1) and (2), which prohibit: (i) screening job applicants based on their wage or salary history, or (ii) seeking job applicants’ wage or salary history from current or former employers. I also certify that the Applicant has adopted a policy that includes those prohibitions.

☐ Yes

☐ No

☒ N/A – I am not an Applicant that is a “contractor” as defined in MCC Section 2-92-385.

This certification shall serve as the affidavit required by MCC Section 2-92-385(c)(1).

If you checked “no” to the above, please explain.

Directors/Officers Report

As of November 08, 2019

PNC Bank, National Association

Directors

Joseph Alvarado	Director
Charles E. Bunch	Director
Debra A. Cafaro	Director
Marjorie Rodgers Cheshire	Director
William S. Demchak	Director
Andrew T. Feldstein	Director
Richard J. Harshman	Director
Daniel R. Hesse	Director
Richard B. Kelson	Director
Michael P. Lyons	Director
Linda R. Medler	Director
E William Parsley, III	Director
Martin Pfinsgraff	Director
Robert Q. Reilly	Director
Toni Townes-Whitley	Director
Michael J. Ward	Director

Executive Officers

William S. Demchak	President Chief Executive Officer Chairman
Michael J. Hannon	Executive Vice President Chief Credit Officer
Vicki C. Henn	Chief Human Resources Officer Executive Vice President
Gregory B. Jordan	Executive Vice President General Counsel Head of Regulatory and Government Affairs Chief Administrative Officer
Stacy M. Juchno	Executive Vice President General Auditor
Gregory H. Kozich	Executive Vice President Controller
Karen L. Larrimer	Executive Vice President Chief Customer Officer Head of Retail Banking
Michael P. Lyons	Executive Vice President Head of Corporate and Institutional Banking Head of Asset Management Group
E William Parsley, III	Executive Vice President Head of Consumer Lending Chief Operating Officer
Robert Q. Reilly	Executive Vice President Chief Financial Officer
Joseph E. Rockey	Executive Vice President Chief Risk Officer Derivatives Chief Compliance Officer
Steven C. Van Wyk	Executive Vice President Head of Technology and Innovation

Attachment B
To: City of Chicago
Economic Disclosure Statement and Affidavit
Filed by: PNC Bank, National Association

This Attachment B modifies and supplements the information provided in the City of Chicago Economic Disclosure Statement and Affidavit executed by the Disclosing Party as of November 8, 2019 (the "EDS"). Any capitalized term used in this Attachment B will have the definition set forth in the EDS, except as provided below.

SECTION III: INCOME OR COMPENSATION TO, OR OWNERSHIP BY, CITY ELECTED OFFICIALS

To the best knowledge of the Disclosing Party, after reasonable inquiry, the Disclosing Party has not provided nor reasonably expects to provide any income or compensation during the 12 months preceding or following the date that the Disclosing Party executed the EDS. For purposes of this certification, the term "City elected official" is treated as including only the City's Mayor, Aldermen, Treasurer and Clerk and not including their spouses, domestic partners (as defined in Chapter 2-156 of the Municipal Code) or any entity in which any such person has an interest.

SECTION V – CERTIFICATIONS

B. FURTHER CERTIFICATIONS

With respect to the statements contained in Section V, paragraph B.2, the Disclosing Party certifies, to the best of its knowledge, after reasonable inquiry, that neither the Disclosing Party nor any Affiliated Entity is delinquent in paying any fine, fee, tax or other source of indebtedness owed to the City other than fines, fees, taxes or other charges that are being contested in good faith by the Disclosing Party or such Affiliated Entity by appropriate legal proceedings.

The Disclosing Party certifies that, as of the date that the Disclosing Party executed the EDS, to the best of its knowledge, after reasonable inquiry, (x) the statement contained in Section V, paragraph B.3. a, B.3.d and B.3.8 is accurate with respect to itself (the Disclosing Party); and (y) the statements contained in Section V, paragraphs B.3.a through and including B.3.e and B.8 are accurate with respect to the executive officers and directors of the Disclosing Party. With respect to Section V, paragraphs B.3.b, c and e, the Disclosing Party hereby makes reference to the information on legal proceedings set forth in the filings made by its ultimate parent company, The PNC Financial Services Group, Inc., with the Securities and Exchange Commission, which may be found at www.sec.gov or www.pnc.com/secfilings. Specifically, On the Form 10Q(s) (Quarterly Period Ending June 30, 2019 and Quarterly Period Ending Mar 31, 2019) of the PNC Financial Services Group, Inc., please see Note 12 Legal Proceedings section on pages 1-4 and 5-7. On 10K (Fiscal Year Ending December 31, 2018), please see Note 19 Legal Proceedings section on pages 8-14. The Disclosing Party certifies that none of the judgments set forth therein, individually or in the aggregate, would have a material adverse effect on its ability to perform with respect to the Matter. With respect to Section V, paragraph B.3.d., PNC can certify to the best of its knowledge that no public transaction agreements have been terminated for cause or default.

The Disclosing Party certifies that, as of the date that the Disclosing Party executed the EDS, to the best of its knowledge, after reasonable inquiry, the statements contained in Section V, paragraphs B.5.a through and including B.5.d and B.6 are accurate with respect to any Affiliated Entity of the Disclosing Party or any responsible official of the Disclosing Party or any such Affiliated Entity acting in such capacity or any other official or employee of the Disclosing Party or any such Affiliated Entity acting in such capacity pursuant to the direction or authorization of a responsible official of the Disclosing Party or any such Affiliated Entity acting in such capacity. The Disclosing Party makes no certification concerning (x) any Contractor, any Affiliated Entity of a Contractor or any Agent of any such Contractor or Affiliated Entity; or (y) any agent of the Disclosing Party or any Affiliated Entity of the Disclosing Party. With respect to the statements contained in Section V, paragraph B.7, the Disclosing Party is only certifying with respect to the Disclosing Party and any Affiliated Entity of the Disclosing Party.

For purposes of the certifications contained in the EDS as modified in this Attachment B: The term "Affiliated Entity" does not include BlackRock, Inc. or any of its subsidiaries or other affiliates (as such term is defined for purposes of the Securities Exchange Act of 1934, as amended), except to the extent that such entity would be an Affiliated Entity of the Disclosing Party for any other reason.

D. FINANCIAL INTEREST IN CITY BUSINESS

As to the disclosure set forth in Section V, paragraph D.1., to the best knowledge of the Disclosing Party, after reasonable inquiry, no official or employee of the City of Chicago has a financial interest in his or her own name or in the name of any other person in the Matter.

As to the disclosure set forth in Section V, paragraph D.4., the Disclosing Party only certifies that no official or employee of the City of Chicago will acquire a prohibited financial interest in the Matter from the Disclosing Party, any Affiliated Entity of the Disclosing Party or any responsible official of the Disclosing Party or any such Affiliated Entity acting in such capacity or any other official or employee of the Disclosing Party or any such Affiliated Entity acting in such capacity pursuant to the direction or authorization of a responsible official of the Disclosing Party or any such Affiliated Entity acting in such capacity.

E. CERTIFICATION REGARDING SLAVERY ERA BUSINESS

The PNC Financial Services Group, Inc. reviewed the historical records of acquired institutions and discovered two instances of reportable pre-1865 business activities in the records of the National Bank of Kentucky, a predecessor of National City Bank, which is a predecessor of PNC Bank.

- In 1836, the National Bank of Kentucky loaned \$200,000 to the City of Louisville. Records indicate the City then invested in the Lexington & Ohio Railroad Company.
- In 1852, the National Bank of Kentucky loaned \$135,000 to the Louisville & Nashville Railroad Company.

Research indicates that both railroads used slave labor. There is no evidence that any additional transactions were conducted with either railroad.

Any questions regarding this statement should be directed to the following PNC executive:

Jonathan Casiano
Senior Vice President & Relationship Manager
PNC Bank - Public Finance Group
One North Franklin Street, Suite 2800
Chicago, IL 60606
(T) 312.338.2295
jonathan.casiano@pnc.com



CERTIFICATE

The undersigned, Janet L. Deringer, a duly appointed Assistant Secretary of PNC Bank, National Association (the "Bank"), does hereby certify that:

(1) the following is a true and correct copy of an excerpt from the By-Laws of the Bank and a true and correct copy of Resolutions adopted by the Board of Directors of the Bank on April 25, 2017;

(2) the excerpt from the By-Laws of the Bank and Resolutions described above are in full force and effect as of the date of this Certificate; and

(3) Jonathan N. Casiano is a duly appointed Senior Vice President of the Bank.

Excerpt from By-Laws of PNC Bank, National Association

"Article VI. General Powers of Officers

Section 1. The corporate seal of the Bank may be Imprinted or affixed by any process. The Secretary and any other officers authorized by resolution of the Board of Directors shall have authority to affix and attest the corporate seal of the Bank.

Section 2. The authority of officers and employees of this Bank to execute documents and Instruments on its behalf in cases not specifically provided for in these By-Laws shall be as determined from time to time by the Board of Directors, or, in the case of employees, by officers in accordance with authority given them by the Board of Directors."

Board Resolutions Adopted April 25, 2017

WHEREAS, pursuant to the By-Laws of PNC Bank, National Association (the "Bank"), the board of directors ("Board"), seeks to grant authority to certain officers to take the actions evidenced herein.

NOW, THEREFORE, BE IT RESOLVED, that the Chairman of the Board, the Chief Executive Officer, the President, each Senior Vice Chairman, each Vice Chairman, each Executive Vice President, each Senior Vice President, each Vice President, each Assistant Vice President, the Treasurer and each Assistant Treasurer, the Cashier and each Assistant Cashier, the Secretary and each Assistant Secretary, each Trust Officer and Assistant Trust Officer, each Chief Investment Officer, each Regional President or chief executive of a business region, the General Counsel, the Senior Deputy General Counsel, and each Deputy General Counsel (the "Authorizing Officers") of PNC Bank, National Association (the "Bank") shall have the authority to affix and attest the seal of the Bank;

RESOLVED FURTHER, that the Authorizing Officers of the Bank, and any other officers acting at the discretion of any officer authorized to affix and attest the seal of the Bank, are and each of them is hereby authorized and empowered in the name and on behalf of the Bank to execute, acknowledge and deliver any and all agreements, instruments, or other documents relating to the property or rights of all kinds held or owned by the Bank or to the operation of the Bank, either for its own account or in any agency or fiduciary capacity. Notwithstanding the foregoing, any and all agreements of sale, contracts, deeds and other documentation pertaining to the purchase, sale or

Member of The PNC Financial Services Group

The Tower at PNC Plaza 300 Fifth Avenue Pittsburgh Pennsylvania 15222-2401

M:\Pittsburgh\OFFICE\2017-17 SIGNATURE AUTHORITY TEMPLATES AND CERTIFICATES\CASIANO, JONATHAN N.docx

transfer of real estate or buildings occupied by the Bank in the transaction of its business shall be executed in accordance with the terms of resolutions adopted from time to time in connection therewith and specifically designating the officer or officers authorized to execute the same. Notwithstanding the foregoing, those persons holding the title of General Counsel, Senior Deputy General Counsel, Deputy General Counsel, or Chief Counsel of the Bank are and each of them is hereby authorized and empowered in the name and on behalf of the Bank to execute, acknowledge and deliver law firm engagement letters;

RESOLVED FURTHER, that the Bank's Chairman of the Board, Chief Executive Officer, President, Secretary, or any Senior Vice Chairman, Vice Chairman, or Executive Vice President or any of them, is authorized to name, constitute and appoint such person or persons as they or any of them deem necessary as attorney-in-fact for the Bank, to execute documents for and in its name and stead, and to perform all other acts, deeds and things as may be required to effect the particular transactions for which the appointment is made;

RESOLVED FURTHER, that the Bank's Chairman of the Board, Chief Executive Officer, President, Secretary, or any Senior Vice Chairman, Vice Chairman, or Executive Vice President or any of them, is authorized to name, constitute and appoint such person or persons employed by the Corporation or any of its wholly owned direct or indirect subsidiaries as they or any of them deem necessary as attorney-in-fact for the Bank, to execute documents for and in its name and stead, and to perform all other acts, deeds and things as may be required to effect the particular transactions for which the appointment is made. Notwithstanding the foregoing, persons to be appointed to act as attorney-in-fact in the name and on behalf of the Corporation or the Bank, or any of the Corporation's or the Bank's wholly owned direct or indirect subsidiaries (the "Subsidiaries"), to execute and file tax-related documents for and in the Corporation's, the Bank's or the Subsidiaries' name and stead, shall be appointed pursuant to the terms of resolutions adopted from time to time specifically designating the persons authorized to appoint such attorneys-in-fact;

RESOLVED FURTHER, that any officer of the Bank and any non-officer employee of the Corporation or the Bank (or any affiliate of the Corporation or Bank) designated in writing by the Chief Executive Officer, the President, any Senior Vice Chairman, Vice Chairman, Executive Vice President, Senior Vice President, or the Corporate Secretary or Secretary of the Corporation or Bank, are each hereby authorized and empowered:

- (a) To sign or countersign checks, drafts, acceptances, guarantees of signatures on assignments of securities, certificates of securities of entities for whom the Bank is acting as registrar or transfer agent or in a fiduciary or representative capacity, correspondence or other papers or documents not ordinarily requiring execution under seal; and
- (b) To receive any sums of money or property due or owing to the Bank in its own right, as an agent for another party, or in any fiduciary or representative capacity and, either as attorney-in-fact for the Bank or otherwise, to sign or countersign agreements, instruments, or other documents related to the foreclosure of residential real estate loans owned or serviced by the Corporation or the Bank or the enforcement of any other rights and remedies with respect to such loans (including, without limitation, in a bankruptcy or insolvency proceeding), including, without limitation, correspondence, affidavits, certifications, declarations, deeds, substitutions of trustee, verifications, assignments, powers of attorney, sales contracts or any other papers or documents, to execute any instrument of satisfaction for any mortgage, deed of trust, judgment or lien in the Office of the Recorder of Deeds, Prothonotary, or other office or court of record in any jurisdiction, provided, however, that in respect to any mortgage or deed of trust made to this Bank as trustee for bondholders, the foregoing authority shall be exercised only pursuant to an authorization of the Board of Directors or committee of the Board of Directors with oversight of fiduciary risk; and

RESOLVED FURTHER, that, in accordance with the Bank Act of Canada, the Principal Officer of the Canada Branch or any employee of the Canada Branch who is an Executive Vice President, Senior Vice President, Vice President, Assistant Vice President, Assistant Treasurer, Assistant Cashier,

Assistant Secretary, or Assistant Trust Officer (the "Canadian Authorized Officers") of the Bank shall have the sole authority to affix and attest the seal of the Bank with respect to agreements, instruments, or other documents executed on behalf of the Canada Branch;

RESOLVED FURTHER, that the Canadian Authorized Officers are and each of them is hereby authorized and empowered in the name and on behalf of the Bank to execute, acknowledge and deliver any and all agreements, Instruments, or other documents relating to the property or rights of all kinds held or owned by the Canada Branch or to the operation of the Canada Branch, either for its own account or in any agency or fiduciary capacity. Notwithstanding the foregoing, any and all agreements of sale, contracts, deeds and other documentation pertaining to the purchase, sale or transfer of real estate or buildings occupied by the Canada Branch in the transaction of its business shall be executed in accordance with the terms of resolutions adopted from time to time in connection therewith and specifically designating the officer or officers authorized to execute the same;

RESOLVED FURTHER, that any Canadian Authorized Officer is hereby authorized and empowered:

- (a) To sign or countersign checks, drafts, acceptances, guarantees of signatures on assignments of securities, certificates of securities of entities for whom the Canada Branch is acting as registrar or transfer agent or in a fiduciary or representative capacity, correspondence or other papers or documents not ordinarily requiring execution under seal; and
- (b) To receive any sums of money or property due or owing to the Canada Branch in its own right, as an agent for another party, or in any fiduciary or representative capacity;


RESOLVED FURTHER, that the Principal Officer of the Canada Branch and the Chief Operating Officer of the Canada Branch or either of them, is authorized to name, constitute and appoint such person or persons as they or any of them deem necessary as attorney-in-fact for the Canada Branch, to execute documents for and in its name and stead, and to perform all other acts, deeds and things as may be required to effect the particular transactions for which the appointment is made; and

RESOLVED FURTHER, that the Canadian Authorized Officers shall be the only employees or officers of the Bank who are permitted to execute agreements, Instruments, or other documents on behalf of the Canada Branch, consistent with the foregoing resolutions.

RESOLVED FURTHER, that all actions heretofore taken by any of the officers, representatives or agents of the Bank, by or on behalf of the Bank or any of its affiliates in connection with the foregoing resolutions be, and each of the same is, ratified and approved.

IN WITNESS WHEREOF, the undersigned has hereunto set her hand and affixed the seal of the Association this 25th day of July, 2017.




Janet L. Derlinger

FIRMWIDE

PLEASE POPULATE THE HIGHLIGHTED PORTIONS ONLY

Firm Name:	The PNC Financial Services Group
Primary Representative:	Jonathan Casiano
Primary Representative Email and Telephone:	jonathan.casiano@pnc.com 312-338-2295
Headquarters Address:	249 Fifth Ave, One PNC Plaza, Pittsburgh, PA 15222
Chicago Public Finance Office Address:	PNC Centre, 1 North Franklin St., Chicago, IL 60606
Total Number of Employees:	51,982
Number of Employees in Illinois:	2,746
Number of Employees in Chicago (Public Finance/Total):	Total: 668 Public Finance: 2
Capital Position:	\$47,770,000,000
Minority Designation:	N/A

**As of September 30, 2019

Job Categories	21,085					30,897				
	Male					Female				
	White (Not Hispanic)	Black (Not Hispanic)	Hispanic	Asian	Native American	White (Not Hispanic)	Black (Not Hispanic)	Hispanic	Asian	Native American
Overall Totals	8,571	3,460	287	246	285	11	3,309	272	189	7
Officials and Managers	19,814	8,865	575	416	701	22	7,232	866	461	655
Professionals	0	0	0	0	0	0	0	0	0	21
Technicians	8,639	1,607	507	516	186	4	3,522	989	902	387
Sales Workers	14,958	2,260	620	349	161	7	7,212	2,643	1,177	498
Office and Clerical	0	0	0	0	0	0	0	0	0	31
Craft Workers (Skilled)	0	0	0	0	0	0	0	0	0	0
Operatives (Semi-Skilled)	0	0	0	0	0	0	0	0	0	0
Laborers	0	0	0	0	0	0	0	0	0	0
Service Workers	0	0	0	0	0	0	0	0	0	0
Total	51,982	16,192	1,989	1,527	1,333	44	21,275	5,003	2,812	1,729

Male	Female	Total
41%	59%	100%

Job Categories	White (Not Hispanic)	Black (Not Hispanic)	Hispanic	Asian	Native American
Overall Totals	16%	13%	2%	1%	1%
Officials and Managers	38%	31%	3%	2%	3%
Professionals	0%	0%	0%	0%	0%
Technicians	17%	10%	3%	3%	1%
Sales Workers	29%	18%	6%	3%	1%
Office and Clerical	0%	0%	0%	0%	0%
Craft Workers (Skilled)	0%	0%	0%	0%	0%
Operatives (Semi-Skilled)	0%	0%	0%	0%	0%
Laborers	0%	0%	0%	0%	0%
Service Workers	0%	0%	0%	0%	0%
Total	100%	72%	13%	8%	6%

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT
AND AFFIDAVIT**

SECTION I -- GENERAL INFORMATION

A. Legal name of the Disclosing Party submitting this EDS. Include d/b/a/ if applicable:

PNC Bancorp, Inc.

Check ONE of the following three boxes:

Indicate whether the Disclosing Party submitting this EDS is:

1. ☐ the Applicant

OR

2. ☒ a legal entity currently holding, or anticipated to hold within six months after City action on the contract, transaction or other undertaking to which this EDS pertains (referred to below as the "Matter"), a direct or indirect interest in excess of 7.5% in the Applicant. State the Applicant's legal name: PNC Bank, National Association

OR

3. ☐ a legal entity with a direct or indirect right of control of the Applicant (see Section II(B)(1)) State the legal name of the entity in which the Disclosing Party holds a right of control:

B. Business address of the Disclosing Party: 222 Delaware Avenue

Wilmington, DE 19801

C. Telephone: 312-338-2295 Fax: N/A Email: jonathan.casiano@pnc.com

D. Name of contact person: Jonathan Casiano - Senior Vice President, Public Finance

E. Federal Employer Identification No. (if you have one): 51-0326854

F. Brief description of the Matter to which this EDS pertains. (Include project number and location of property, if applicable):

2020 Municipal Depository RFP

G. Which City agency or department is requesting this EDS? Office of the Comptroller

If the Matter is a contract being handled by the City's Department of Procurement Services, please complete the following:

Specification # _____ and Contract # _____

SECTION II -- DISCLOSURE OF OWNERSHIP INTERESTS

A. NATURE OF THE DISCLOSING PARTY

1. Indicate the nature of the Disclosing Party:

- | | |
|---|--|
| <input type="checkbox"/> Person | <input type="checkbox"/> Limited liability company |
| <input type="checkbox"/> Publicly registered business corporation | <input type="checkbox"/> Limited liability partnership |
| <input checked="" type="checkbox"/> Privately held business corporation | <input type="checkbox"/> Joint venture |
| <input type="checkbox"/> Sole proprietorship | <input type="checkbox"/> Not-for-profit corporation |
| <input type="checkbox"/> General partnership | (Is the not-for-profit corporation also a 501(c)(3))? |
| <input type="checkbox"/> Limited partnership | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| <input type="checkbox"/> Trust | <input type="checkbox"/> Other (please specify) |
| | <u>national banking association</u> |

2. For legal entities, the state (or foreign country) of incorporation or organization, if applicable:

Delaware

3. For legal entities not organized in the State of Illinois: Has the organization registered to do business in the State of Illinois as a foreign entity?

☐ Yes

☒ No

☐ Organized in Illinois

B. IF THE DISCLOSING PARTY IS A LEGAL ENTITY:

1. List below the full names and titles, if applicable, of: (i) all executive officers and all directors of the entity; (ii) **for not-for-profit corporations**, all members, if any, which are legal entities (if there are no such members, write "no members which are legal entities"); (iii) **for trusts, estates or other similar entities**, the trustee, executor, administrator, or similarly situated party; (iv) **for general or limited partnerships, limited liability companies, limited liability partnerships or joint ventures**, each general partner, managing member, manager or any other person or legal entity that directly or indirectly controls the day-to-day management of the Applicant.

NOTE: Each legal entity listed below must submit an EDS on its own behalf.

Name

Title

See Attachment A

2. Please provide the following information concerning each person or legal entity having a direct or indirect, current or prospective (i.e. within 6 months after City action) beneficial interest (including ownership) in excess of 7.5% of the Applicant. Examples of such an interest include shares in a corporation, partnership interest in a partnership or joint venture, interest of a member or manager in a

limited liability company, or interest of a beneficiary of a trust, estate or other similar entity. If none, state "None."

NOTE: Each legal entity listed below may be required to submit an EDS on its own behalf.

Name	Business Address	Percentage Interest in the Applicant
------	------------------	--------------------------------------

The PNC Financial Services Group, Inc	The Tower at PNC Plaza, 300 Fifth Ave., Pittsburgh, PA 15222	100%
---------------------------------------	--	------

SECTION III -- INCOME OR COMPENSATION TO, OR OWNERSHIP BY, CITY ELECTED OFFICIALS

Has the Disclosing Party provided any income or compensation to any City elected official during the 12-month period preceding the date of this EDS? ☐ Yes ☒ No

Does the Disclosing Party reasonably expect to provide any income or compensation to any City elected official during the 12-month period following the date of this EDS? ☐ Yes ☒ No

If "yes" to either of the above, please identify below the name(s) of such City elected official(s) and describe such income or compensation:

See Attachment B

Does any City elected official or, to the best of the Disclosing Party's knowledge after reasonable inquiry, any City elected official's spouse or domestic partner, have a financial interest (as defined in Chapter 2-156 of the Municipal Code of Chicago ("MCC")) in the Disclosing Party?

☐ Yes

☒ No

See Attachment B

If "yes," please identify below the name(s) of such City elected official(s) and/or spouse(s)/domestic partner(s) and describe the financial interest(s).

SECTION IV -- DISCLOSURE OF SUBCONTRACTORS AND OTHER RETAINED PARTIES

The Disclosing Party must disclose the name and business address of each subcontractor, attorney, lobbyist (as defined in MCC Chapter 2-156), accountant, consultant and any other person or entity whom the Disclosing Party has retained or expects to retain in connection with the Matter, as well as the nature of the relationship, and the total amount of the fees paid or estimated to be paid. The Disclosing Party is not required to disclose employees who are paid solely through the Disclosing Party's regular payroll. If the Disclosing Party is uncertain whether a disclosure is required under this Section, the Disclosing Party must either ask the City whether disclosure is required or make the disclosure.

Name (indicate whether retained or anticipated to be retained)	Business Address	Relationship to Disclosing Party (subcontractor, attorney, lobbyist, etc.)	Fees (indicate whether paid or estimated.) NOTE: "hourly rate" or "t.b.d." is not an acceptable response.
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(Add sheets if necessary)

☒ Check here if the Disclosing Party has not retained, nor expects to retain, any such persons or entities.

SECTION V -- CERTIFICATIONS

A. COURT-ORDERED CHILD SUPPORT COMPLIANCE

Under MCC Section 2-92-415, substantial owners of business entities that contract with the City must remain in compliance with their child support obligations throughout the contract's term.

Has any person who directly or indirectly owns 10% or more of the Disclosing Party been declared in arrearage on any child support obligations by any Illinois court of competent jurisdiction?

☐ Yes ☐ No ☒ No person directly or indirectly owns 10% or more of the Disclosing Party.

If "Yes," has the person entered into a court-approved agreement for payment of all support owed and is the person in compliance with that agreement?

☐ Yes ☐ No

B. FURTHER CERTIFICATIONS

1. [This paragraph 1 applies only if the Matter is a contract being handled by the City's Department of Procurement Services.] In the 5-year period preceding the date of this EDS, neither the Disclosing Party nor any Affiliated Entity [see definition in (5) below] has engaged, in connection with the performance of any public contract, the services of an integrity monitor, independent private sector inspector general, or integrity compliance consultant (i.e., an individual or entity with legal, auditing, investigative, or other similar skills, designated by a public agency to help the agency monitor the activity of specified agency vendors as well as help the vendors reform their business practices so they can be considered for agency contracts in the future, or continue with a contract in progress).

2. The Disclosing Party and its Affiliated Entities are not delinquent in the payment of any fine, fee, tax or other source of indebtedness owed to the City of Chicago, including, but not limited to, water and sewer charges, license fees, parking tickets, property taxes and sales taxes, nor is the Disclosing Party delinquent in the payment of any tax administered by the Illinois Department of Revenue.

3. The Disclosing Party and, if the Disclosing Party is a legal entity, all of those persons or entities identified in Section II(B)(1) of this EDS:

- a. are not presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from any transactions by any federal, state or local unit of government;
- b. have not, during the 5 years before the date of this EDS, been convicted of a criminal offense, adjudged guilty, or had a civil judgment rendered against them in connection with: obtaining, attempting to obtain, or performing a public (federal, state or local) transaction or contract under a public transaction; a violation of federal or state antitrust statutes; fraud; embezzlement; theft; forgery; bribery; falsification or destruction of records; making false statements; or receiving stolen property;
- c. are not presently indicted for, or criminally or civilly charged by, a governmental entity (federal, state or local) with committing any of the offenses set forth in subparagraph (b) above;
- d. have not, during the 5 years before the date of this EDS, had one or more public transactions (federal, state or local) terminated for cause or default; and
- e. have not, during the 5 years before the date of this EDS, been convicted, adjudged guilty, or found liable in a civil proceeding, or in any criminal or civil action, including actions concerning environmental violations, instituted by the City or by the federal government, any state, or any other unit of local government.

4. The Disclosing Party understands and shall comply with the applicable requirements of MCC Chapters 2-56 (Inspector General) and 2-156 (Governmental Ethics).

5. Certifications (5), (6) and (7) concern:

- the Disclosing Party;
- any "Contractor" (meaning any contractor or subcontractor used by the Disclosing Party in connection with the Matter, including but not limited to all persons or legal entities disclosed under Section IV, "Disclosure of Subcontractors and Other Retained Parties");
- any "Affiliated Entity" (meaning a person or entity that, directly or indirectly: controls the Disclosing Party, is controlled by the Disclosing Party, or is, with the Disclosing Party, under common control of another person or entity). Indicia of control include, without limitation: interlocking management or ownership; identity of interests among family members, shared facilities and equipment; common use of employees; or organization of a business entity following the ineligibility of a business entity to do business with federal or state or local government, including the City, using substantially the same management, ownership, or principals as the ineligible entity. With respect to Contractors, the term Affiliated Entity means a person or entity that directly or indirectly controls the Contractor, is controlled by it, or, with the Contractor, is under common control of another person or entity;
- any responsible official of the Disclosing Party, any Contractor or any Affiliated Entity or any other official, agent or employee of the Disclosing Party, any Contractor or any Affiliated Entity, acting pursuant to the direction or authorization of a responsible official of the Disclosing Party, any Contractor or any Affiliated Entity (collectively "Agents").

Neither the Disclosing Party, nor any Contractor, nor any Affiliated Entity of either the Disclosing Party or any Contractor, nor any Agents have, during the 5 years before the date of this EDS, or, with respect to a Contractor, an Affiliated Entity, or an Affiliated Entity of a Contractor during the 5 years before the date of such Contractor's or Affiliated Entity's contract or engagement in connection with the Matter:

- a. bribed or attempted to bribe, or been convicted or adjudged guilty of bribery or attempting to bribe, a public officer or employee of the City, the State of Illinois, or any agency of the federal government or of any state or local government in the United States of America, in that officer's or employee's official capacity;
- b. agreed or colluded with other bidders or prospective bidders, or been a party to any such agreement, or been convicted or adjudged guilty of agreement or collusion among bidders or prospective bidders, in restraint of freedom of competition by agreement to bid a fixed price or otherwise; or
- c. made an admission of such conduct described in subparagraph (a) or (b) above that is a matter of record, but have not been prosecuted for such conduct; or
- d. violated the provisions referenced in MCC Subsection 2-92-320(a)(4)(Contracts Requiring a Base Wage); (a)(5)(Debarment Regulations); or (a)(6)(Minimum Wage Ordinance).

6. Neither the Disclosing Party, nor any Affiliated Entity or Contractor, or any of their employees, officials, agents or partners, is barred from contracting with any unit of state or local government as a result of engaging in or being convicted of (1) bid-rigging in violation of 720 ILCS 5/33E-3; (2) bid-rotating in violation of 720 ILCS 5/33E-4; or (3) any similar offense of any state or of the United States of America that contains the same elements as the offense of bid-rigging or bid-rotating.

7. Neither the Disclosing Party nor any Affiliated Entity is listed on a Sanctions List maintained by the United States Department of Commerce, State, or Treasury, or any successor federal agency.

8. [FOR APPLICANT ONLY] (i) Neither the Applicant nor any "controlling person" [see MCC Chapter 1-23, Article I for applicability and defined terms] of the Applicant is currently indicted or charged with, or has admitted guilt of, or has ever been convicted of, or placed under supervision for, any criminal offense involving actual, attempted, or conspiracy to commit bribery, theft, fraud, forgery, perjury, dishonesty or deceit against an officer or employee of the City or any "sister agency"; and (ii) the Applicant understands and acknowledges that compliance with Article I is a continuing requirement for doing business with the City. NOTE: If MCC Chapter 1-23, Article I applies to the Applicant, that Article's permanent compliance timeframe supersedes 5-year compliance timeframes in this Section V.

9. [FOR APPLICANT ONLY] The Applicant and its Affiliated Entities will not use, nor permit their subcontractors to use, any facility listed as having an active exclusion by the U.S. EPA on the federal System for Award Management ("SAM").

10. [FOR APPLICANT ONLY] The Applicant will obtain from any contractors/subcontractors hired or to be hired in connection with the Matter certifications equal in form and substance to those in Certifications (2) and (9) above and will not, without the prior written consent of the City, use any such

contractor/subcontractor that does not provide such certifications or that the Applicant has reason to believe has not provided or cannot provide truthful certifications.

11. If the Disclosing Party is unable to certify to any of the above statements in this Part B (Further Certifications), the Disclosing Party must explain below:

See Attachment B

If the letters "NA," the word "None," or no response appears on the lines above, it will be conclusively presumed that the Disclosing Party certified to the above statements.

12. To the best of the Disclosing Party's knowledge after reasonable inquiry, the following is a complete list of all current employees of the Disclosing Party who were, at any time during the 12-month period preceding the date of this EDS, an employee, or elected or appointed official, of the City of Chicago (if none, indicate with "N/A" or "none").

None

13. To the best of the Disclosing Party's knowledge after reasonable inquiry, the following is a complete list of all gifts that the Disclosing Party has given or caused to be given, at any time during the 12-month period preceding the execution date of this EDS, to an employee, or elected or appointed official, of the City of Chicago. For purposes of this statement, a "gift" does not include: (i) anything made generally available to City employees or to the general public, or (ii) food or drink provided in the course of official City business and having a retail value of less than \$25 per recipient, or (iii) a political contribution otherwise duly reported as required by law (if none, indicate with "N/A" or "none"). As to any gift listed below, please also list the name of the City recipient.

NONE

C. CERTIFICATION OF STATUS AS FINANCIAL INSTITUTION

1. The Disclosing Party certifies that the Disclosing Party (check one)

☒ is ☐ is not

a "financial institution" as defined in MCC Section 2-32-455(b).

2. If the Disclosing Party IS a financial institution, then the Disclosing Party pledges:

"We are not and will not become a predatory lender as defined in MCC Chapter 2-32. We further pledge that none of our affiliates is, and none of them will become, a predatory lender as defined in MCC Chapter 2-32. We understand that becoming a predatory lender or becoming an affiliate of a predatory lender may result in the loss of the privilege of doing business with the City."

If the Disclosing Party is unable to make this pledge because it or any of its affiliates (as defined in MCC Section 2-32-455(b)) is a predatory lender within the meaning of MCC Chapter 2-32, explain here (attach additional pages if necessary):

If the letters "NA," the word "None," or no response appears on the lines above, it will be conclusively presumed that the Disclosing Party certified to the above statements.

D. CERTIFICATION REGARDING FINANCIAL INTEREST IN CITY BUSINESS

Any words or terms defined in MCC Chapter 2-156 have the same meanings if used in this Part D.

1. In accordance with MCC Section 2-156-110: To the best of the Disclosing Party's knowledge after reasonable inquiry, does any official or employee of the City have a financial interest in his or her own name or in the name of any other person or entity in the Matter?

☐ Yes ☒ No See Attachment B

NOTE: If you checked "Yes" to Item D(1), proceed to Items D(2) and D(3). If you checked "No" to Item D(1), skip Items D(2) and D(3) and proceed to Part E.

2. Unless sold pursuant to a process of competitive bidding, or otherwise permitted, no City elected official or employee shall have a financial interest in his or her own name or in the name of any other person or entity in the purchase of any property that (i) belongs to the City, or (ii) is sold for taxes or assessments, or (iii) is sold by virtue of legal process at the suit of the City (collectively, "City Property Sale"). Compensation for property taken pursuant to the City's eminent domain power does not constitute a financial interest within the meaning of this Part D.

Does the Matter involve a City Property Sale?

☐ Yes ☐ No

3. If you checked "Yes" to Item D(1), provide the names and business addresses of the City officials or employees having such financial interest and identify the nature of the financial interest:

Name	Business Address	Nature of Financial Interest
_____	_____	_____
_____	_____	_____
_____	_____	_____

4. The Disclosing Party further certifies that no prohibited financial interest in the Matter will be acquired by any City official or employee.

F. CERTIFICATION REGARDING SLAVERY ERA BUSINESS

Please check either (1) or (2) below. If the Disclosing Party checks (2), the Disclosing Party must disclose below or in an attachment to this EDS all information required by (2). Failure to comply with these disclosure requirements may make any contract entered into with the City in connection with the Matter voidable by the City.

 1. The Disclosing Party verifies that the Disclosing Party has searched any and all records of the Disclosing Party and any and all predecessor entities regarding records of investments or profits from slavery or slaveholder insurance policies during the slavery era (including insurance policies issued to slaveholders that provided coverage for damage to or injury or death of their slaves), and the Disclosing Party has found no such records.

X 2. The Disclosing Party verifies that, as a result of conducting the search in step (1) above, the Disclosing Party has found records of investments or profits from slavery or slaveholder insurance policies. The Disclosing Party verifies that the following constitutes full disclosure of all such records, including the names of any and all slaves or slaveholders described in those records:

See Attachment B

SECTION VI -- CERTIFICATIONS FOR FEDERALLY FUNDED MATTERS

NOTE: If the Matter is federally funded, complete this Section VI. If the Matter is not federally funded, proceed to Section VII. For purposes of this Section VI, tax credits allocated by the City and proceeds of debt obligations of the City are not federal funding.

A. CERTIFICATION REGARDING LOBBYING

1. List below the names of all persons or entities registered under the federal Lobbying Disclosure Act of 1995, as amended, who have made lobbying contacts on behalf of the Disclosing Party with respect to the Matter: (Add sheets if necessary):

(If no explanation appears or begins on the lines above, or if the letters "NA" or if the word "None" appear, it will be conclusively presumed that the Disclosing Party means that NO persons or entities registered under the Lobbying Disclosure Act of 1995, as amended, have made lobbying contacts on behalf of the Disclosing Party with respect to the Matter.)

2. The Disclosing Party has not spent and will not expend any federally appropriated funds to pay any person or entity listed in paragraph A(1) above for his or her lobbying activities or to pay any person or entity to influence or attempt to influence an officer or employee of any agency, as defined by applicable federal law, a member of Congress, an officer or employee of Congress, or an employee

of a member of Congress, in connection with the award of any federally funded contract, making any federally funded grant or loan, entering into any cooperative agreement, or to extend, continue, renew, amend, or modify any federally funded contract, grant, loan, or cooperative agreement.

3. The Disclosing Party will submit an updated certification at the end of each calendar quarter in which there occurs any event that materially affects the accuracy of the statements and information set forth in paragraphs A(1) and A(2) above.

4. The Disclosing Party certifies that either: (i) it is not an organization described in section 501(c)(4) of the Internal Revenue Code of 1986; or (ii) it is an organization described in section 501(c)(4) of the Internal Revenue Code of 1986 but has not engaged and will not engage in "Lobbying Activities," as that term is defined in the Lobbying Disclosure Act of 1995, as amended.

5. If the Disclosing Party is the Applicant, the Disclosing Party must obtain certifications equal in form and substance to paragraphs A(1) through A(4) above from all subcontractors before it awards any subcontract and the Disclosing Party must maintain all such subcontractors' certifications for the duration of the Matter and must make such certifications promptly available to the City upon request.

B. CERTIFICATION REGARDING EQUAL EMPLOYMENT OPPORTUNITY

If the Matter is federally funded, federal regulations require the Applicant and all proposed subcontractors to submit the following information with their bids or in writing at the outset of negotiations.

Is the Disclosing Party the Applicant?

☐ Yes ☐ No

If "Yes," answer the three questions below:

1. Have you developed and do you have on file affirmative action programs pursuant to applicable federal regulations? (See 41 CFR Part 60-2.)

☐ Yes ☐ No

2. Have you filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance Programs, or the Equal Employment Opportunity Commission all reports due under the applicable filing requirements?

☐ Yes ☐ No ☐ Reports not required

3. Have you participated in any previous contracts or subcontracts subject to the equal opportunity clause?

☐ Yes ☐ No

If you checked "No" to question (1) or (2) above, please provide an explanation:

SECTION VII -- FURTHER ACKNOWLEDGMENTS AND CERTIFICATION

The Disclosing Party understands and agrees that:

- A. The certifications, disclosures, and acknowledgments contained in this EDS will become part of any contract or other agreement between the Applicant and the City in connection with the Matter, whether procurement, City assistance, or other City action, and are material inducements to the City's execution of any contract or taking other action with respect to the Matter. The Disclosing Party understands that it must comply with all statutes, ordinances, and regulations on which this EDS is based.
- B. The City's Governmental Ethics Ordinance, MCC Chapter 2-156, imposes certain duties and obligations on persons or entities seeking City contracts, work, business, or transactions. The full text of this ordinance and a training program is available on line at www.cityofchicago.org/Ethics, and may also be obtained from the City's Board of Ethics, 740 N. Sedgwick St., Suite 500, Chicago, IL 60610, (312) 744-9660. The Disclosing Party must comply fully with this ordinance.
- C. If the City determines that any information provided in this EDS is false, incomplete or inaccurate, any contract or other agreement in connection with which it is submitted may be rescinded or be void or voidable, and the City may pursue any remedies under the contract or agreement (if not rescinded or void), at law, or in equity, including terminating the Disclosing Party's participation in the Matter and/or declining to allow the Disclosing Party to participate in other City transactions. Remedies at law for a false statement of material fact may include incarceration and an award to the City of treble damages.
- D. It is the City's policy to make this document available to the public on its Internet site and/or upon request. Some or all of the information provided in, and appended to, this EDS may be made publicly available on the Internet, in response to a Freedom of Information Act request, or otherwise. By completing and signing this EDS, the Disclosing Party waives and releases any possible rights or claims which it may have against the City in connection with the public release of information contained in this EDS and also authorizes the City to verify the accuracy of any information submitted in this EDS.
- E. The information provided in this EDS must be kept current. In the event of changes, the Disclosing Party must supplement this EDS up to the time the City takes action on the Matter. If the Matter is a contract being handled by the City's Department of Procurement Services, the Disclosing Party must update this EDS as the contract requires. **NOTE:** With respect to Matters subject to MCC Chapter 1-23, Article I (imposing **PERMANENT INELIGIBILITY** for certain specified offenses), the information provided herein regarding eligibility must be kept current for a longer period, as required by MCC Chapter 1-23 and Section 2-154-020.

CERTIFICATION

Under penalty of perjury, the person signing below: (1) warrants that he/she is authorized to execute this EDS, and all applicable Appendices, on behalf of the Disclosing Party, and (2) warrants that all certifications and statements contained in this EDS, and all applicable Appendices, are true, accurate and complete as of the date furnished to the City.

PNC Bancorp, Inc.

(Print or type exact legal name of Disclosing Party)

By: 

(Sign here)

George Whitmer

(Print or type name of person signing)

Vice President

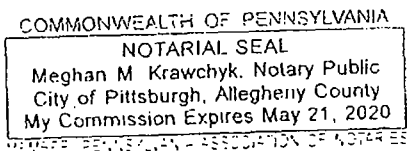
(Print or type title of person signing)

Signed and sworn to before me on (date) 11/15/19.

at Allegheny County, Pennsylvania (state).


Notary Public

Commission expires: 5/21/20



**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
APPENDIX A**

**FAMILIAL RELATIONSHIPS WITH ELECTED CITY OFFICIALS
AND DEPARTMENT HEADS**

This Appendix is to be completed only by (a) the Applicant, and (b) any legal entity which has a direct ownership interest in the Applicant exceeding 7.5%. It is not to be completed by any legal entity which has only an indirect ownership interest in the Applicant.

Under MCC Section 2-154-015, the Disclosing Party must disclose whether such Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof currently has a "familial relationship" with any elected city official or department head. A "familial relationship" exists if, as of the date this EDS is signed, the Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof is related to the mayor, any alderman, the city clerk, the city treasurer or any city department head as spouse or domestic partner or as any of the following, whether by blood or adoption: parent, child, brother or sister, aunt or uncle, niece or nephew, grandparent, grandchild, father-in-law, mother-in-law, son-in-law, daughter-in-law, stepfather or stepmother, stepson or stepdaughter, stepbrother or stepsister or half-brother or half-sister.

"Applicable Party" means (1) all executive officers of the Disclosing Party listed in Section II.B.1.a., if the Disclosing Party is a corporation; all partners of the Disclosing Party, if the Disclosing Party is a general partnership; all general partners and limited partners of the Disclosing Party, if the Disclosing Party is a limited partnership; all managers, managing members and members of the Disclosing Party, if the Disclosing Party is a limited liability company; (2) all principal officers of the Disclosing Party; and (3) any person having more than a 7.5% ownership interest in the Disclosing Party. "Principal officers" means the president, chief operating officer, executive director, chief financial officer, treasurer or secretary of a legal entity or any person exercising similar authority.

Does the Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof currently have a "familial relationship" with an elected city official or department head?

☐ Yes

☒ No

If yes, please identify below (1) the name and title of such person, (2) the name of the legal entity to which such person is connected; (3) the name and title of the elected city official or department head to whom such person has a familial relationship, and (4) the precise nature of such familial relationship.

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
APPENDIX B**

BUILDING CODE SCOFFLAW/PROBLEM LANDLORD CERTIFICATION

This Appendix is to be completed only by (a) the Applicant, and (b) any legal entity which has a direct ownership interest in the Applicant exceeding 7.5% (an "Owner"). It is not to be completed by any legal entity which has only an indirect ownership interest in the Applicant.

1. Pursuant to MCC Section 2-154-010, is the Applicant or any Owner identified as a building code scofflaw or problem landlord pursuant to MCC Section 2-92-416?

☐ Yes

☒ No

2. If the Applicant is a legal entity publicly traded on any exchange, is any officer or director of the Applicant identified as a building code scofflaw or problem landlord pursuant to MCC Section 2-92-416?

☐ Yes

☐ No

☒ The Applicant is not publicly traded on any exchange.

3. If yes to (1) or (2) above, please identify below the name of each person or legal entity identified as a building code scofflaw or problem landlord and the address of each building or buildings to which the pertinent code violations apply.

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
APPENDIX C**

PROHIBITION ON WAGE & SALARY HISTORY SCREENING - CERTIFICATION

This Appendix is to be completed only by an Applicant that is completing this EDS as a “contractor” as defined in MCC Section 2-92-385. That section, which should be consulted (www.amlegal.com), generally covers a party to any agreement pursuant to which they: (i) receive City of Chicago funds in consideration for services, work or goods provided (including for legal or other professional services), or (ii) pay the City money for a license, grant or concession allowing them to conduct a business on City premises.

On behalf of an Applicant that is a contractor pursuant to MCC Section 2-92-385, I hereby certify that the Applicant is in compliance with MCC Section 2-92-385(b)(1) and (2), which prohibit: (i) screening job applicants based on their wage or salary history, or (ii) seeking job applicants’ wage or salary history from current or former employers. I also certify that the Applicant has adopted a policy that includes those prohibitions.

☐ Yes

☐ No

☒ N/A – I am not an Applicant that is a “contractor” as defined in MCC Section 2-92-385.

This certification shall serve as the affidavit required by MCC Section 2-92-385(c)(1).

If you checked “no” to the above, please explain.

Directors/Officers Report

As of November 08, 2019

PNC Bancorp, Inc.

Directors

Janet Lynn Kavanaugh Pilling Jolles
Robert Q. Reilly

Director
Director

Executive Officers

Janet Lynn Kavanaugh Pilling Jolles

Chairman
President

Attachment B
To: City of Chicago
Economic Disclosure Statement and Affidavit
Filed by: PNC Bancorp, Inc.

This Attachment B modifies and supplements the information provided in the City of Chicago Economic Disclosure Statement and Affidavit executed by the Disclosing Party as of November 8, 2019 (the "EDS"). Any capitalized term used in this Attachment B will have the definition set forth in the EDS, except as provided below.

SECTION III: INCOME OR COMPENSATION TO, OR OWNERSHIP BY, CITY ELECTED OFFICIALS

To the best knowledge of the Disclosing Party, after reasonable inquiry, the Disclosing Party has not provided nor reasonably expects to provide any income or compensation during the 12 months preceding or following the date that the Disclosing Party executed the EDS. For purposes of this certification, the term "City elected official" is treated as including only the City's Mayor, Aldermen, Treasurer and Clerk and not including their spouses, domestic partners (as defined in Chapter 2-156 of the Municipal Code) or any entity in which any such person has an interest.

SECTION V – CERTIFICATIONS

B. FURTHER CERTIFICATIONS

With respect to the statements contained in Section V, paragraph B.2, the Disclosing Party certifies, to the best of its knowledge, after reasonable inquiry, that neither the Disclosing Party nor any Affiliated Entity is delinquent in paying any fine, fee, tax or other source of indebtedness owed to the City other than fines, fees, taxes or other charges that are being contested in good faith by the Disclosing Party or such Affiliated Entity by appropriate legal proceedings.

The Disclosing Party certifies that, as of the date that the Disclosing Party executed the EDS, to the best of its knowledge, after reasonable inquiry, (x) the statement contained in Section V, paragraph B.3. a and B.3.d is accurate with respect to itself (the Disclosing Party); and (y) the statements contained in Section V, paragraphs B.3.a through and including B.3.e are accurate with respect to the executive officers and directors of the Disclosing Party. With respect to Section V, paragraphs B.3.b, c and e, the Disclosing Party hereby makes reference to the information on legal proceedings set forth in the filings made by its parent company, The PNC Financial Services Group, Inc., with the Securities and Exchange Commission, which may be found at www.sec.gov or www.pnc.com/secfilings. Specifically, On the Form 10Q(s) (Quarterly Period Ending June 30, 2019 and Quarterly Period Ending Mar 31, 2019) of the PNC Financial Services Group, Inc., please see Note 12 Legal Proceedings section on pages 1-4 and 5-7. On 10K (Fiscal Year Ending December 31, 2018), please see Note 19 Legal Proceedings section on pages 8-14. The Disclosing Party certifies that none of the judgments set forth therein, individually or in the aggregate, would have a material adverse effect on the Applicant's ability to perform with respect to the Matter. With respect to Section V, paragraph B.3.d., PNC can certify to the best of its knowledge that no public transaction agreements have been terminated for cause or default.

The Disclosing Party certifies that, as of the date that the Disclosing Party executed the EDS, to the best of its knowledge, after reasonable inquiry, the statements contained in Section V, paragraphs B.5.a through and

including B.5.d and B.6 are accurate with respect to any Affiliated Entity of the Disclosing Party or any responsible official of the Disclosing Party or any such Affiliated Entity acting in such capacity or any other official or employee of the Disclosing Party or any such Affiliated Entity acting in such capacity pursuant to the direction or authorization of a responsible official of the Disclosing Party or any such Affiliated Entity acting in such capacity. The Disclosing Party makes no certification concerning (x) any Contractor, any Affiliated Entity of a Contractor or any Agent of any such Contractor or Affiliated Entity; or (y) any agent of the Disclosing Party or any Affiliated Entity of the Disclosing Party.

For purposes of the certifications contained in the EDS as modified in this Attachment B: The term "Affiliated Entity" does not include BlackRock, Inc. or any of its subsidiaries or other affiliates (as such term is defined for purposes of the Securities Exchange Act of 1934, as amended), except to the extent that such entity would be an Affiliated Entity of the Disclosing Party for any other reason.

D. FINANCIAL INTEREST IN CITY BUSINESS

As to the disclosure set forth in Section V, paragraph D.1., to the best knowledge of the Disclosing Party, after reasonable inquiry, no official or employee of the City of Chicago has a financial interest in his or her own name or in the name of any other person in the Matter.

As to the disclosure set forth in Section V, paragraph D.4., the Disclosing Party only certifies that no official or employee of the City of Chicago will acquire a prohibited financial interest in the Matter from the Disclosing Party, any Affiliated Entity of the Disclosing Party or any responsible official of the Disclosing Party or any such Affiliated Entity acting in such capacity or any other official or employee of the Disclosing Party or any such Affiliated Entity acting in such capacity pursuant to the direction or authorization of a responsible official of the Disclosing Party or any such Affiliated Entity acting in such capacity.

E. CERTIFICATION REGARDING SLAVERY ERA BUSINESS

The PNC Financial Services Group, Inc. reviewed the historical records of acquired institutions and discovered two instances of reportable pre-1865 business activities in the records of the National Bank of Kentucky, a predecessor of National City Bank, which is a predecessor of PNC Bank.

- In 1836, the National Bank of Kentucky loaned \$200,000 to the City of Louisville. Records indicate the City then invested in the Lexington & Ohio Railroad Company.
- In 1852, the National Bank of Kentucky loaned \$135,000 to the Louisville & Nashville Railroad Company.

Research indicates that both railroads used slave labor. There is no evidence that any additional transactions were conducted with either railroad.

Any questions regarding this statement should be directed to the following PNC executive:

Jonathan Casiano
Senior Vice President & Relationship Manager
PNC Bank - Public Finance Group
One North Franklin Street, Suite 2800
Chicago, IL 60606
(T) 312.338.2295
jonathan.casiano@pnc.com

PNC BANCORP, INC.

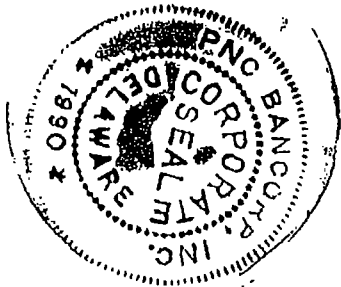
222 DELAWARE AVENUE
WILMINGTON, DE 19801

CERTIFICATE

The undersigned, Deborah L. Falkowski, Secretary of PNC Bancorp, Inc. (the "Corporation"), does hereby certify that George R. Whitmer is a duly elected Vice President of the Corporation.

Further, the undersigned hereby certifies that George R. Whitmer is, by virtue of his office, authorized to execute and deliver on behalf of the Corporation guarantees, contracts and other legal documents.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the corporate seal of the Corporation this 8th day of November, 2019.



Deborah L. Falkowski
Deborah L. Falkowski

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT
AND AFFIDAVIT**

SECTION I -- GENERAL INFORMATION

A. Legal name of the Disclosing Party submitting this EDS. Include d/b/a/ if applicable:

The PNC Financial Services Group, Inc.

Check ONE of the following three boxes:

Indicate whether the Disclosing Party submitting this EDS is:

1. ☐ the Applicant

OR

2. ☒ a legal entity currently holding, or anticipated to hold within six months after City action on the contract, transaction or other undertaking to which this EDS pertains (referred to below as the "Matter"), a direct or indirect interest in excess of 7.5% in the Applicant. State the Applicant's legal name: PNC Bank, National Association

OR

3. ☐ a legal entity with a direct or indirect right of control of the Applicant (see Section II(B)(1)) State the legal name of the entity in which the Disclosing Party holds a right of control:

B. Business address of the Disclosing Party: The Tower at PNC Plaza, 300 Fifth Avenue
Pittsburgh, PA 15222-2401

C. Telephone: 312-338-2295 Fax: N/A Email: jonathan.casiano@pnc.com

D. Name of contact person: Jonathan Casiano - Senior Vice President, Public Finance

E. Federal Employer Identification No. (if you have one): 25-1435979

F. Brief description of the Matter to which this EDS pertains. (Include project number and location of property, if applicable):

2020 Municipal Depository RFP

G. Which City agency or department is requesting this EDS? Office of the Comptroller

If the Matter is a contract being handled by the City's Department of Procurement Services, please complete the following:

Specification # _____ and Contract # _____

SECTION II -- DISCLOSURE OF OWNERSHIP INTERESTS

A. NATURE OF THE DISCLOSING PARTY

1. Indicate the nature of the Disclosing Party:

- | | |
|--|--|
| <input type="checkbox"/> Person | <input type="checkbox"/> Limited liability company |
| <input checked="" type="checkbox"/> Publicly registered business corporation | <input type="checkbox"/> Limited liability partnership |
| <input type="checkbox"/> Privately held business corporation | <input type="checkbox"/> Joint venture |
| <input type="checkbox"/> Sole proprietorship | <input type="checkbox"/> Not-for-profit corporation |
| <input type="checkbox"/> General partnership | (Is the not-for-profit corporation also a 501(c)(3))? |
| <input type="checkbox"/> Limited partnership | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| <input type="checkbox"/> Trust | <input type="checkbox"/> Other (please specify) |
| | <u>national banking association</u> |

2. For legal entities, the state (or foreign country) of incorporation or organization, if applicable:

Pennsylvania

3. For legal entities not organized in the State of Illinois: Has the organization registered to do business in the State of Illinois as a foreign entity?

☐ Yes ☒ No ☐ Organized in Illinois

B. IF THE DISCLOSING PARTY IS A LEGAL ENTITY:

1. List below the full names and titles, if applicable, of: (i) all executive officers and all directors of the entity; (ii) **for not-for-profit corporations**, all members, if any, which are legal entities (if there are no such members, write "no members which are legal entities"); (iii) **for trusts, estates or other similar entities**, the trustee, executor, administrator, or similarly situated party; (iv) **for general or limited partnerships, limited liability companies, limited liability partnerships or joint ventures**, each general partner, managing member, manager or any other person or legal entity that directly or indirectly controls the day-to-day management of the Applicant.

NOTE: Each legal entity listed below must submit an EDS on its own behalf.

Name	Title
------	-------

See Attachment A

2. Please provide the following information concerning each person or legal entity having a direct or indirect, current or prospective (i.e. within 6 months after City action) beneficial interest (including ownership) in excess of 7.5% of the Applicant. Examples of such an interest include shares in a corporation, partnership interest in a partnership or joint venture, interest of a member or manager in a

limited liability company, or interest of a beneficiary of a trust, estate or other similar entity. If none, state "None."

NOTE: Each legal entity listed below may be required to submit an EDS on its own behalf.

Name	Business Address	Percentage Interest in the Applicant
------	------------------	--------------------------------------

None

SECTION III -- INCOME OR COMPENSATION TO, OR OWNERSHIP BY, CITY ELECTED OFFICIALS

Has the Disclosing Party provided any income or compensation to any City elected official during the 12-month period preceding the date of this EDS? ☐ Yes ☒ No

Does the Disclosing Party reasonably expect to provide any income or compensation to any City elected official during the 12-month period following the date of this EDS? ☐ Yes ☒ No

If "yes" to either of the above, please identify below the name(s) of such City elected official(s) and describe such income or compensation:

See Attachment B

Does any City elected official or, to the best of the Disclosing Party's knowledge after reasonable inquiry, any City elected official's spouse or domestic partner, have a financial interest (as defined in Chapter 2-156 of the Municipal Code of Chicago ("MCC")) in the Disclosing Party?

☐ Yes ☒ No See Attachment B

If "yes," please identify below the name(s) of such City elected official(s) and/or spouse(s)/domestic partner(s) and describe the financial interest(s).

SECTION IV -- DISCLOSURE OF SUBCONTRACTORS AND OTHER RETAINED PARTIES

The Disclosing Party must disclose the name and business address of each subcontractor, attorney, lobbyist (as defined in MCC Chapter 2-156), accountant, consultant and any other person or entity whom the Disclosing Party has retained or expects to retain in connection with the Matter, as well as the nature of the relationship, and the total amount of the fees paid or estimated to be paid. The Disclosing Party is not required to disclose employees who are paid solely through the Disclosing Party's regular payroll. If the Disclosing Party is uncertain whether a disclosure is required under this Section, the Disclosing Party must either ask the City whether disclosure is required or make the disclosure.

Name (indicate whether retained or anticipated to be retained)	Business Address	Relationship to Disclosing Party (subcontractor, attorney, lobbyist, etc.)	Fees (indicate whether paid or estimated.) NOTE: "hourly rate" or "t.b.d." is not an acceptable response.
--	------------------	--	--

(Add sheets if necessary)

☒ Check here if the Disclosing Party has not retained, nor expects to retain, any such persons or entities.

SECTION V -- CERTIFICATIONS

A. COURT-ORDERED CHILD SUPPORT COMPLIANCE

Under MCC Section 2-92-415, substantial owners of business entities that contract with the City must remain in compliance with their child support obligations throughout the contract's term.

Has any person who directly or indirectly owns 10% or more of the Disclosing Party been declared in arrearage on any child support obligations by any Illinois court of competent jurisdiction?

☐ Yes ☐ No ☒ No person directly or indirectly owns 10% or more of the Disclosing Party.

If "Yes," has the person entered into a court-approved agreement for payment of all support owed and is the person in compliance with that agreement?

☐ Yes ☐ No

B. FURTHER CERTIFICATIONS

1. [This paragraph 1 applies only if the Matter is a contract being handled by the City's Department of Procurement Services.] In the 5-year period preceding the date of this EDS, neither the Disclosing Party nor any Affiliated Entity [see definition in (5) below] has engaged, in connection with the performance of any public contract, the services of an integrity monitor, independent private sector inspector general, or integrity compliance consultant (i.e., an individual or entity with legal, auditing, investigative, or other similar skills, designated by a public agency to help the agency monitor the activity of specified agency vendors as well as help the vendors reform their business practices so they can be considered for agency contracts in the future, or continue with a contract in progress).

2. The Disclosing Party and its Affiliated Entities are not delinquent in the payment of any fine, fee, tax or other source of indebtedness owed to the City of Chicago, including, but not limited to, water and sewer charges, license fees, parking tickets, property taxes and sales taxes, nor is the Disclosing Party delinquent in the payment of any tax administered by the Illinois Department of Revenue.

3. The Disclosing Party and, if the Disclosing Party is a legal entity, all of those persons or entities identified in Section II(B)(1) of this EDS:

- a. are not presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from any transactions by any federal, state or local unit of government;
- b. have not, during the 5 years before the date of this EDS, been convicted of a criminal offense, adjudged guilty, or had a civil judgment rendered against them in connection with: obtaining, attempting to obtain, or performing a public (federal, state or local) transaction or contract under a public transaction; a violation of federal or state antitrust statutes; fraud; embezzlement; theft; forgery; bribery; falsification or destruction of records; making false statements; or receiving stolen property;
- c. are not presently indicted for, or criminally or civilly charged by, a governmental entity (federal, state or local) with committing any of the offenses set forth in subparagraph (b) above;
- d. have not, during the 5 years before the date of this EDS, had one or more public transactions (federal, state or local) terminated for cause or default; and
- e. have not, during the 5 years before the date of this EDS, been convicted, adjudged guilty, or found liable in a civil proceeding, or in any criminal or civil action, including actions concerning environmental violations, instituted by the City or by the federal government, any state, or any other unit of local government.

4. The Disclosing Party understands and shall comply with the applicable requirements of MCC Chapters 2-56 (Inspector General) and 2-156 (Governmental Ethics).

5. Certifications (5), (6) and (7) concern:

- the Disclosing Party;
- any "Contractor" (meaning any contractor or subcontractor used by the Disclosing Party in connection with the Matter, including but not limited to all persons or legal entities disclosed under Section IV, "Disclosure of Subcontractors and Other Retained Parties");
- any "Affiliated Entity" (meaning a person or entity that, directly or indirectly: controls the Disclosing Party, is controlled by the Disclosing Party, or is, with the Disclosing Party, under common control of another person or entity). Indicia of control include, without limitation: interlocking management or ownership; identity of interests among family members, shared facilities and equipment; common use of employees; or organization of a business entity following the ineligibility of a business entity to do business with federal or state or local government, including the City, using substantially the same management, ownership, or principals as the ineligible entity. With respect to Contractors, the term Affiliated Entity means a person or entity that directly or indirectly controls the Contractor, is controlled by it, or, with the Contractor, is under common control of another person or entity;
- any responsible official of the Disclosing Party, any Contractor or any Affiliated Entity or any other official, agent or employee of the Disclosing Party, any Contractor or any Affiliated Entity, acting pursuant to the direction or authorization of a responsible official of the Disclosing Party, any Contractor or any Affiliated Entity (collectively "Agents").

Neither the Disclosing Party, nor any Contractor, nor any Affiliated Entity of either the Disclosing Party or any Contractor, nor any Agents have, during the 5 years before the date of this EDS, or, with respect to a Contractor, an Affiliated Entity, or an Affiliated Entity of a Contractor during the 5 years before the date of such Contractor's or Affiliated Entity's contract or engagement in connection with the Matter:

- a. bribed or attempted to bribe, or been convicted or adjudged guilty of bribery or attempting to bribe, a public officer or employee of the City, the State of Illinois, or any agency of the federal government or of any state or local government in the United States of America, in that officer's or employee's official capacity;
- b. agreed or colluded with other bidders or prospective bidders, or been a party to any such agreement, or been convicted or adjudged guilty of agreement or collusion among bidders or prospective bidders, in restraint of freedom of competition by agreement to bid a fixed price or otherwise; or
- c. made an admission of such conduct described in subparagraph (a) or (b) above that is a matter of record, but have not been prosecuted for such conduct; or
- d. violated the provisions referenced in MCC Subsection 2-92-320(a)(4)(Contracts Requiring a Base Wage); (a)(5)(Debarment Regulations); or (a)(6)(Minimum Wage Ordinance).

6. Neither the Disclosing Party, nor any Affiliated Entity or Contractor, or any of their employees, officials, agents or partners, is barred from contracting with any unit of state or local government as a result of engaging in or being convicted of (1) bid-rigging in violation of 720 ILCS 5/33E-3; (2) bid-rotating in violation of 720 ILCS 5/33E-4; or (3) any similar offense of any state or of the United States of America that contains the same elements as the offense of bid-rigging or bid-rotating.

7. Neither the Disclosing Party nor any Affiliated Entity is listed on a Sanctions List maintained by the United States Department of Commerce, State, or Treasury, or any successor federal agency.

8. [FOR APPLICANT ONLY] (i) Neither the Applicant nor any "controlling person" [see MCC Chapter 1-23, Article I for applicability and defined terms] of the Applicant is currently indicted or charged with, or has admitted guilt of, or has ever been convicted of, or placed under supervision for, any criminal offense involving actual, attempted, or conspiracy to commit bribery, theft, fraud, forgery, perjury, dishonesty or deceit against an officer or employee of the City or any "sister agency"; and (ii) the Applicant understands and acknowledges that compliance with Article I is a continuing requirement for doing business with the City. NOTE: If MCC Chapter 1-23, Article I applies to the Applicant, that Article's permanent compliance timeframe supersedes 5-year compliance timeframes in this Section V.

9. [FOR APPLICANT ONLY] The Applicant and its Affiliated Entities will not use, nor permit their subcontractors to use, any facility listed as having an active exclusion by the U.S. EPA on the federal System for Award Management ("SAM").

10. [FOR APPLICANT ONLY] The Applicant will obtain from any contractors/subcontractors hired or to be hired in connection with the Matter certifications equal in form and substance to those in Certifications (2) and (9) above and will not, without the prior written consent of the City, use any such

contractor/subcontractor that does not provide such certifications or that the Applicant has reason to believe has not provided or cannot provide truthful certifications.

11. If the Disclosing Party is unable to certify to any of the above statements in this Part B (Further Certifications), the Disclosing Party must explain below:

See Attachment B

If the letters "NA," the word "None," or no response appears on the lines above, it will be conclusively presumed that the Disclosing Party certified to the above statements.

12. To the best of the Disclosing Party's knowledge after reasonable inquiry, the following is a complete list of all current employees of the Disclosing Party who were, at any time during the 12-month period preceding the date of this EDS, an employee, or elected or appointed official, of the City of Chicago (if none, indicate with "N/A" or "none").

None

13. To the best of the Disclosing Party's knowledge after reasonable inquiry, the following is a complete list of all gifts that the Disclosing Party has given or caused to be given, at any time during the 12-month period preceding the execution date of this EDS, to an employee, or elected or appointed official, of the City of Chicago. For purposes of this statement, a "gift" does not include: (i) anything made generally available to City employees or to the general public, or (ii) food or drink provided in the course of official City business and having a retail value of less than \$25 per recipient, or (iii) a political contribution otherwise duly reported as required by law (if none, indicate with "N/A" or "none"). As to any gift listed below, please also list the name of the City recipient.

NONE

C. CERTIFICATION OF STATUS AS FINANCIAL INSTITUTION

1. The Disclosing Party certifies that the Disclosing Party (check one)

☒ is ☐ is not

a "financial institution" as defined in MCC Section 2-32-455(b).

2. If the Disclosing Party IS a financial institution, then the Disclosing Party pledges:

"We are not and will not become a predatory lender as defined in MCC Chapter 2-32. We further pledge that none of our affiliates is, and none of them will become, a predatory lender as defined in MCC Chapter 2-32. We understand that becoming a predatory lender or becoming an affiliate of a predatory lender may result in the loss of the privilege of doing business with the City."

If the Disclosing Party is unable to make this pledge because it or any of its affiliates (as defined in MCC Section 2-32-455(b)) is a predatory lender within the meaning of MCC Chapter 2-32, explain here (attach additional pages if necessary):

If the letters "NA," the word "None," or no response appears on the lines above, it will be conclusively presumed that the Disclosing Party certified to the above statements.

D. CERTIFICATION REGARDING FINANCIAL INTEREST IN CITY BUSINESS

Any words or terms defined in MCC Chapter 2-156 have the same meanings if used in this Part D.

1. In accordance with MCC Section 2-156-110: To the best of the Disclosing Party's knowledge after reasonable inquiry, does any official or employee of the City have a financial interest in his or her own name or in the name of any other person or entity in the Matter?

☐ Yes ☒ No See Attachment B

NOTE: If you checked "Yes" to Item D(1), proceed to Items D(2) and D(3). If you checked "No" to Item D(1), skip Items D(2) and D(3) and proceed to Part E.

2. Unless sold pursuant to a process of competitive bidding, or otherwise permitted, no City elected official or employee shall have a financial interest in his or her own name or in the name of any other person or entity in the purchase of any property that (i) belongs to the City, or (ii) is sold for taxes or assessments, or (iii) is sold by virtue of legal process at the suit of the City (collectively, "City Property Sale"). Compensation for property taken pursuant to the City's eminent domain power does not constitute a financial interest within the meaning of this Part D.

Does the Matter involve a City Property Sale?

☐ Yes ☐ No

3. If you checked "Yes" to Item D(1), provide the names and business addresses of the City officials or employees having such financial interest and identify the nature of the financial interest:

Name	Business Address	Nature of Financial Interest
_____	_____	_____
_____	_____	_____
_____	_____	_____

4. The Disclosing Party further certifies that no prohibited financial interest in the Matter will be acquired by any City official or employee.

E. CERTIFICATION REGARDING SLAVERY ERA BUSINESS

Please check either (1) or (2) below. If the Disclosing Party checks (2), the Disclosing Party must disclose below or in an attachment to this EDS all information required by (2). Failure to comply with these disclosure requirements may make any contract entered into with the City in connection with the Matter voidable by the City.

 1. The Disclosing Party verifies that the Disclosing Party has searched any and all records of the Disclosing Party and any and all predecessor entities regarding records of investments or profits from slavery or slaveholder insurance policies during the slavery era (including insurance policies issued to slaveholders that provided coverage for damage to or injury or death of their slaves), and the Disclosing Party has found no such records.

X 2. The Disclosing Party verifies that, as a result of conducting the search in step (1) above, the Disclosing Party has found records of investments or profits from slavery or slaveholder insurance policies. The Disclosing Party verifies that the following constitutes full disclosure of all such records, including the names of any and all slaves or slaveholders described in those records:

See Attachment B

SECTION VI -- CERTIFICATIONS FOR FEDERALLY FUNDED MATTERS

NOTE: If the Matter is federally funded, complete this Section VI. If the Matter is not federally funded, proceed to Section VII. For purposes of this Section VI, tax credits allocated by the City and proceeds of debt obligations of the City are not federal funding.

A. CERTIFICATION REGARDING LOBBYING

1. List below the names of all persons or entities registered under the federal Lobbying Disclosure Act of 1995, as amended, who have made lobbying contacts on behalf of the Disclosing Party with respect to the Matter: (Add sheets if necessary):

(If no explanation appears or begins on the lines above, or if the letters "NA" or if the word "None" appear, it will be conclusively presumed that the Disclosing Party means that NO persons or entities registered under the Lobbying Disclosure Act of 1995, as amended, have made lobbying contacts on behalf of the Disclosing Party with respect to the Matter.)

2. The Disclosing Party has not spent and will not expend any federally appropriated funds to pay any person or entity listed in paragraph A(1) above for his or her lobbying activities or to pay any person or entity to influence or attempt to influence an officer or employee of any agency, as defined by applicable federal law, a member of Congress, an officer or employee of Congress, or an employee

of a member of Congress, in connection with the award of any federally funded contract, making any federally funded grant or loan, entering into any cooperative agreement, or to extend, continue, renew, amend, or modify any federally funded contract, grant, loan, or cooperative agreement.

3. The Disclosing Party will submit an updated certification at the end of each calendar quarter in which there occurs any event that materially affects the accuracy of the statements and information set forth in paragraphs A(1) and A(2) above.

4. The Disclosing Party certifies that either: (i) it is not an organization described in section 501(c)(4) of the Internal Revenue Code of 1986; or (ii) it is an organization described in section 501(c)(4) of the Internal Revenue Code of 1986 but has not engaged and will not engage in "Lobbying Activities," as that term is defined in the Lobbying Disclosure Act of 1995, as amended.

5. If the Disclosing Party is the Applicant, the Disclosing Party must obtain certifications equal in form and substance to paragraphs A(1) through A(4) above from all subcontractors before it awards any subcontract and the Disclosing Party must maintain all such subcontractors' certifications for the duration of the Matter and must make such certifications promptly available to the City upon request.

B. CERTIFICATION REGARDING EQUAL EMPLOYMENT OPPORTUNITY

If the Matter is federally funded, federal regulations require the Applicant and all proposed subcontractors to submit the following information with their bids or in writing at the outset of negotiations.

Is the Disclosing Party the Applicant?

☐ Yes

☐ No

If "Yes," answer the three questions below:

1. Have you developed and do you have on file affirmative action programs pursuant to applicable federal regulations? (See 41 CFR Part 60-2.)

☐ Yes

☐ No

2. Have you filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance Programs, or the Equal Employment Opportunity Commission all reports due under the applicable filing requirements?

☐ Yes

☐ No

☐ Reports not required

3. Have you participated in any previous contracts or subcontracts subject to the equal opportunity clause?

☐ Yes

☐ No

If you checked "No" to question (1) or (2) above, please provide an explanation:

SECTION VII -- FURTHER ACKNOWLEDGMENTS AND CERTIFICATION

The Disclosing Party understands and agrees that:

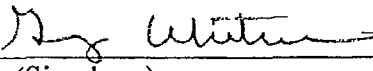
- A. The certifications, disclosures, and acknowledgments contained in this EDS will become part of any contract or other agreement between the Applicant and the City in connection with the Matter, whether procurement, City assistance, or other City action, and are material inducements to the City's execution of any contract or taking other action with respect to the Matter. The Disclosing Party understands that it must comply with all statutes, ordinances, and regulations on which this EDS is based.
- B. The City's Governmental Ethics Ordinance, MCC Chapter 2-156, imposes certain duties and obligations on persons or entities seeking City contracts, work, business, or transactions. The full text of this ordinance and a training program is available on line at www.cityofchicago.org/Ethics, and may also be obtained from the City's Board of Ethics, 740 N. Sedgwick St., Suite 500, Chicago, IL 60610, (312) 744-9660. The Disclosing Party must comply fully with this ordinance.
- C. If the City determines that any information provided in this EDS is false, incomplete or inaccurate, any contract or other agreement in connection with which it is submitted may be rescinded or be void or voidable, and the City may pursue any remedies under the contract or agreement (if not rescinded or void), at law, or in equity, including terminating the Disclosing Party's participation in the Matter and/or declining to allow the Disclosing Party to participate in other City transactions. Remedies at law for a false statement of material fact may include incarceration and an award to the City of treble damages.
- D. It is the City's policy to make this document available to the public on its Internet site and/or upon request. Some or all of the information provided in, and appended to, this EDS may be made publicly available on the Internet, in response to a Freedom of Information Act request, or otherwise. By completing and signing this EDS, the Disclosing Party waives and releases any possible rights or claims which it may have against the City in connection with the public release of information contained in this EDS and also authorizes the City to verify the accuracy of any information submitted in this EDS.
- E. The information provided in this EDS must be kept current. In the event of changes, the Disclosing Party must supplement this EDS up to the time the City takes action on the Matter. If the Matter is a contract being handled by the City's Department of Procurement Services, the Disclosing Party must update this EDS as the contract requires. **NOTE:** With respect to Matters subject to MCC Chapter 1-23, Article I (imposing **PERMANENT INELIGIBILITY** for certain specified offenses), the information provided herein regarding eligibility must be kept current for a longer period, as required by MCC Chapter 1-23 and Section 2-154-020.

CERTIFICATION

Under penalty of perjury, the person signing below: (1) warrants that he/she is authorized to execute this EDS, and all applicable Appendices, on behalf of the Disclosing Party, and (2) warrants that all certifications and statements contained in this EDS, and all applicable Appendices, are true, accurate and complete as of the date furnished to the City.

The PNC Financial Services Group, Inc.

(Print or type exact legal name of Disclosing Party)

By: 
(Sign here)

George R. Whitmer

(Print or type name of person signing)

Vice President

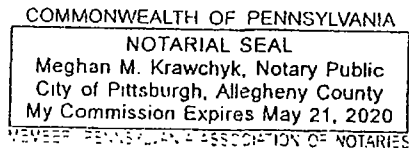
(Print or type title of person signing)

Signed and sworn to before me on (date) 11/15/19,

at Allegheny County, Pennsylvania (state).


Notary Public

Commission expires: 5/21/20



**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
APPENDIX A**

**FAMILIAL RELATIONSHIPS WITH ELECTED CITY OFFICIALS
AND DEPARTMENT HEADS**

This Appendix is to be completed only by (a) the Applicant, and (b) any legal entity which has a direct ownership interest in the Applicant exceeding 7.5%. It is not to be completed by any legal entity which has only an indirect ownership interest in the Applicant.

Under MCC Section 2-154-015, the Disclosing Party must disclose whether such Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof currently has a "familial relationship" with any elected city official or department head. A "familial relationship" exists if, as of the date this EDS is signed, the Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof is related to the mayor, any alderman, the city clerk, the city treasurer or any city department head as spouse or domestic partner or as any of the following, whether by blood or adoption: parent, child, brother or sister, aunt or uncle, niece or nephew, grandparent, grandchild, father-in-law, mother-in-law, son-in-law, daughter-in-law, stepfather or stepmother, stepson or stepdaughter, stepbrother or stepsister or half-brother or half-sister.

"Applicable Party" means (1) all executive officers of the Disclosing Party listed in Section II.B.1.a., if the Disclosing Party is a corporation; all partners of the Disclosing Party, if the Disclosing Party is a general partnership; all general partners and limited partners of the Disclosing Party, if the Disclosing Party is a limited partnership; all managers, managing members and members of the Disclosing Party, if the Disclosing Party is a limited liability company; (2) all principal officers of the Disclosing Party; and (3) any person having more than a 7.5% ownership interest in the Disclosing Party. "Principal officers" means the president, chief operating officer, executive director, chief financial officer, treasurer or secretary of a legal entity or any person exercising similar authority.

Does the Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof currently have a "familial relationship" with an elected city official or department head?

☐ Yes

☐ No

If yes, please identify below (1) the name and title of such person, (2) the name of the legal entity to which such person is connected; (3) the name and title of the elected city official or department head to whom such person has a familial relationship, and (4) the precise nature of such familial relationship.

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
APPENDIX B**

BUILDING CODE SCOFFLAW/PROBLEM LANDLORD CERTIFICATION

This Appendix is to be completed only by (a) the Applicant, and (b) any legal entity which has a direct ownership interest in the Applicant exceeding 7.5% (an "Owner"). It is not to be completed by any legal entity which has only an indirect ownership interest in the Applicant.

1. Pursuant to MCC Section 2-154-010, is the Applicant or any Owner identified as a building code scofflaw or problem landlord pursuant to MCC Section 2-92-416?

☐ Yes

☐ No

2. If the Applicant is a legal entity publicly traded on any exchange, is any officer or director of the Applicant identified as a building code scofflaw or problem landlord pursuant to MCC Section 2-92-416?

☐ Yes

☐ No

☐ The Applicant is not publicly traded on any exchange.

3. If yes to (1) or (2) above, please identify below the name of each person or legal entity identified as a building code scofflaw or problem landlord and the address of each building or buildings to which the pertinent code violations apply.

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
APPENDIX C**

PROHIBITION ON WAGE & SALARY HISTORY SCREENING - CERTIFICATION

This Appendix is to be completed only by an Applicant that is completing this EDS as a “contractor” as defined in MCC Section 2-92-385. That section, which should be consulted (www.amlegal.com), generally covers a party to any agreement pursuant to which they: (i) receive City of Chicago funds in consideration for services, work or goods provided (including for legal or other professional services), or (ii) pay the City money for a license, grant or concession allowing them to conduct a business on City premises.

On behalf of an Applicant that is a contractor pursuant to MCC Section 2-92-385, I hereby certify that the Applicant is in compliance with MCC Section 2-92-385(b)(1) and (2), which prohibit: (i) screening job applicants based on their wage or salary history, or (ii) seeking job applicants’ wage or salary history from current or former employers. I also certify that the Applicant has adopted a policy that includes those prohibitions.

☐ Yes

☐ No

☐ N/A – I am not an Applicant that is a “contractor” as defined in MCC Section 2-92-385.

This certification shall serve as the affidavit required by MCC Section 2-92-385(c)(1).

If you checked “no” to the above, please explain.

Directors/Officers Report

As of November 08, 2019

PNC Financial Services Group, Inc., The

Directors

Joseph Alvarado	Director
Charles E. Bunch	Director
Debra A. Cafaro	Director
Marjorie Rodgers Cheshire	Director
William S. Demchak	Director
Andrew T. Feldstein	Director
Richard J. Harshman	Director
Daniel R. Hesse	Director
Richard B. Kelson	Director
Linda R. Medler	Director
Martin Pfinsgraff	Director
Toni Townes-Whitley	Director
Michael J. Ward	Director

Executive Officers

William S. Demchak	President Chief Executive Officer Chairman
Michael J. Hannon	Executive Vice President Chief Credit Officer
Vicki C. Henn	Chief Human Resources Officer
Gregory B. Jordan	Executive Vice President Executive Vice President General Counsel Head of Regulatory and Government Affairs Chief Administrative Officer
Stacy M. Juchno	General Auditor
Karen L. Larrimer	Executive Vice President Executive Vice President Chief Customer Officer Head of Retail Banking
Michael P. Lyons	Executive Vice President Head of Corporate and Institutional Banking Head of Asset Management Group
E William Parsley, III	Executive Vice President Head of Consumer Lending Chief Operating Officer
Robert Q. Reilly	Executive Vice President Chief Financial Officer
Joseph E. Rockey	Chief Risk Officer
Steven C. Van Wyk	Executive Vice President Executive Vice President Head of Technology and Innovation
Gregory H. Kozich	Senior Vice President Controller

Attachment B
To: City of Chicago
Economic Disclosure Statement and Affidavit
Filed by: The PNC Financial Services Group, Inc.

This Attachment B modifies and supplements the information provided in the City of Chicago Economic Disclosure Statement and Affidavit executed by the Disclosing Party as of November 8, 2019 (the "EDS"). Any capitalized term used in this Attachment B will have the definition set forth in the EDS, except as provided below.

SECTION III: INCOME OR COMPENSATION TO, OR OWNERSHIP BY, CITY ELECTED OFFICIALS

To the best knowledge of the Disclosing Party, after reasonable inquiry, the Disclosing Party has not provided nor reasonably expects to provide any income or compensation during the 12 months preceding or following the date that the Disclosing Party executed the EDS. For purposes of this certification, the term "City elected official" is treated as including only the City's Mayor, Aldermen, Treasurer and Clerk and not including their spouses, domestic partners (as defined in Chapter 2-156 of the Municipal Code) or any entity in which any such person has an interest.

SECTION V – CERTIFICATIONS

B. FURTHER CERTIFICATIONS

With respect to the statements contained in Section V, paragraph B.2, the Disclosing Party certifies, to the best of its knowledge, after reasonable inquiry, that neither the Disclosing Party nor any Affiliated Entity is delinquent in paying any fine, fee, tax or other source of indebtedness owed to the City other than fines, fees, taxes or other charges that are being contested in good faith by the Disclosing Party or such Affiliated Entity by appropriate legal proceedings.

The Disclosing Party certifies that, as of the date that the Disclosing Party executed the EDS, to the best of its knowledge, after reasonable inquiry, (x) the statement contained in Section V, paragraph B.3. a and B.3.d is accurate with respect to itself (the Disclosing Party); and (y) the statements contained in Section V, paragraphs B.3.a through and including B.3.e are accurate with respect to the executive officers and directors of the Disclosing Party. With respect to Section V, paragraphs B.3.b, c and e, the Disclosing Party hereby makes reference to the information on legal proceedings set forth in the filings made by its parent company, The PNC Financial Services Group, Inc., with the Securities and Exchange Commission, which may be found at www.sec.gov or www.pnc.com/secfilings. Specifically, On the Form 10Q(s) (Quarterly Period Ending June 30, 2019 and Quarterly Period Ending Mar 31, 2019) of the PNC Financial Services Group, Inc., please see Note 12 Legal Proceedings section on pages 1-4 and 5-7. On 10K (Fiscal Year Ending December 31, 2018), please see Note 19 Legal Proceedings section on pages 8-14. The Disclosing Party certifies that none of the judgments set forth therein, individually or in the aggregate, would have a material adverse effect on the Applicant's ability to perform with respect to the Matter. With respect to Section V, paragraph B.3.d., PNC can certify to the best of its knowledge that no public transaction agreements have been terminated for cause or default.

The Disclosing Party certifies that, as of the date that the Disclosing Party executed the EDS, to the best of its knowledge, after reasonable inquiry, the statements contained in Section V, paragraphs B.5.a through and

including B.5.d and B.6 are accurate with respect to any Affiliated Entity of the Disclosing Party or any responsible official of the Disclosing Party or any such Affiliated Entity acting in such capacity or any other official or employee of the Disclosing Party or any such Affiliated Entity acting in such capacity pursuant to the direction or authorization of a responsible official of the Disclosing Party or any such Affiliated Entity acting in such capacity. The Disclosing Party makes no certification concerning (x) any Contractor, any Affiliated Entity of a Contractor or any Agent of any such Contractor or Affiliated Entity; or (y) any agent of the Disclosing Party or any Affiliated Entity of the Disclosing Party.

For purposes of the certifications contained in the EDS as modified in this Attachment B: The term "Affiliated Entity" does not include BlackRock, Inc. or any of its subsidiaries or other affiliates (as such term is defined for purposes of the Securities Exchange Act of 1934, as amended), except to the extent that such entity would be an Affiliated Entity of the Disclosing Party for any other reason.

D. FINANCIAL INTEREST IN CITY BUSINESS

As to the disclosure set forth in Section V, paragraph D.1., to the best knowledge of the Disclosing Party, after reasonable inquiry, no official or employee of the City of Chicago has a financial interest in his or her own name or in the name of any other person in the Matter.

As to the disclosure set forth in Section V, paragraph D.4., the Disclosing Party only certifies that no official or employee of the City of Chicago will acquire a prohibited financial interest in the Matter from the Disclosing Party, any Affiliated Entity of the Disclosing Party or any responsible official of the Disclosing Party or any such Affiliated Entity acting in such capacity or any other official or employee of the Disclosing Party or any such Affiliated Entity acting in such capacity pursuant to the direction or authorization of a responsible official of the Disclosing Party or any such Affiliated Entity acting in such capacity.

E. CERTIFICATION REGARDING SLAVERY ERA BUSINESS

The PNC Financial Services Group, Inc. reviewed the historical records of acquired institutions and discovered two instances of reportable pre-1865 business activities in the records of the National Bank of Kentucky, a predecessor of National City Bank, which is a predecessor of PNC Bank.

- In 1836, the National Bank of Kentucky loaned \$200,000 to the City of Louisville. Records indicate the City then invested in the Lexington & Ohio Railroad Company.
- In 1852, the National Bank of Kentucky loaned \$135,000 to the Louisville & Nashville Railroad Company.

Research indicates that both railroads used slave labor. There is no evidence that any additional transactions were conducted with either railroad.

Any questions regarding this statement should be directed to the following PNC executive:

Jonathan Casiano
Senior Vice President & Relationship Manager
PNC Bank - Public Finance Group
One North Franklin Street, Suite 2800
Chicago, IL 60606
(T) 312.338.2295
jonathan.casiano@pnc.com

THE HUNTINGTON NATIONAL BANK

O2019-9946

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT
AND AFFIDAVIT**

SECTION I -- GENERAL INFORMATION

A. Legal name of the Disclosing Party submitting this EDS. Include d/b/a/ if applicable:

The Huntington National Bank

Check ONE of the following three boxes:

Indicate whether the Disclosing Party submitting this EDS is:

1. ☒ the Applicant

OR

2. ☐ a legal entity currently holding, or anticipated to hold within six months after City action on the contract, transaction or other undertaking to which this EDS pertains (referred to below as the "Matter"), a direct or indirect interest in excess of 7.5% in the Applicant. State the Applicant's legal name: _____

OR

3. ☐ a legal entity with a direct or indirect right of control of the Applicant (see Section II(B)(1)) State the legal name of the entity in which the Disclosing Party holds a right of control: _____

B. Business address of the Disclosing Party: 222 N. LaSalle Street

Chicago, IL 60601

C. Telephone: 312-263-0206 Fax: _____ Email: steven.h.abbey@huntington.com

D. Name of contact person: Steven Abbey

E. Federal Employer Identification No. (if you have one): _____

F. Brief description of the Matter to which this EDS pertains. (Include project number and location of property, if applicable):

Request for Proposal for Payment of Interest on the Monies of the City of Chicago and the Chicago Board of Education

G. Which City agency or department is requesting this EDS? Department of Finance

If the Matter is a contract being handled by the City's Department of Procurement Services, please complete the following:

Specification # _____ and Contract # _____

SECTION II -- DISCLOSURE OF OWNERSHIP INTERESTS

A. NATURE OF THE DISCLOSING PARTY

1. Indicate the nature of the Disclosing Party:

- | | |
|---|--|
| <input type="checkbox"/> Person | <input type="checkbox"/> Limited liability company |
| <input type="checkbox"/> Publicly registered business corporation | <input type="checkbox"/> Limited liability partnership |
| <input type="checkbox"/> Privately held business corporation | <input type="checkbox"/> Joint venture |
| <input type="checkbox"/> Sole proprietorship | <input type="checkbox"/> Not-for-profit corporation |
| <input type="checkbox"/> General partnership | (Is the not-for-profit corporation also a 501(c)(3))? |
| <input type="checkbox"/> Limited partnership | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| <input type="checkbox"/> Trust | <input checked="" type="checkbox"/> Other (please specify) |
| | <u>Federally Chartered Financial Institution</u> |

2. For legal entities, the state (or foreign country) of incorporation or organization, if applicable:

United States of America, Office of the Comptroller of the Currency

3. For legal entities not organized in the State of Illinois: Has the organization registered to do business in the State of Illinois as a foreign entity?

☒ Yes ☐ No ☐ Organized in Illinois

B. IF THE DISCLOSING PARTY IS A LEGAL ENTITY:

1. List below the full names and titles, if applicable, of: (i) all executive officers and all directors of the entity; (ii) **for not-for-profit corporations**, all members, if any, which are legal entities (if there are no such members, write "no members which are legal entities"); (iii) **for trusts, estates or other similar entities**, the trustee, executor, administrator, or similarly situated party; (iv) **for general or limited partnerships, limited liability companies, limited liability partnerships or joint ventures**, each general partner, managing member, manager or any other person or legal entity that directly or indirectly controls the day-to-day management of the Applicant.

NOTE: Each legal entity listed below must submit an EDS on its own behalf.

Name

Title

A full list of executive officers and all directors of the entity is provided as Exhibit I of the submission documents.

2. Please provide the following information concerning each person or legal entity having a direct or indirect, current or prospective (i.e. within 6 months after City action) beneficial interest (including ownership) in excess of 7.5% of the Applicant. Examples of such an interest include shares in a corporation, partnership interest in a partnership or joint venture, interest of a member or manager in a

limited liability company, or interest of a beneficiary of a trust, estate or other similar entity. If none, state "None."

NOTE: Each legal entity listed below may be required to submit an EDS on its own behalf.

Name	Business Address	Percentage Interest in the Applicant
Huntington Bancshares Inc.,	41 S. High Street, Columbus, OH 43287	100%
The Vanguard Group, Inc.,	100 Vanguard Blvd, Malvern, PA 19355	11.260%*
FMR, LLC,	245 Sumner Street, Boston MA 02210	7.574%*

*Ownership interest in Huntington Bancshares Inc. which is publicly traded

SECTION III -- INCOME OR COMPENSATION TO, OR OWNERSHIP BY, CITY ELECTED OFFICIALS

Has the Disclosing Party provided any income or compensation to any City elected official during the 12-month period preceding the date of this EDS? ☐ Yes ☒ No

Does the Disclosing Party reasonably expect to provide any income or compensation to any City elected official during the 12-month period following the date of this EDS? ☐ Yes ☒ No

If "yes" to either of the above, please identify below the name(s) of such City elected official(s) and describe such income or compensation:

Does any City elected official or, to the best of the Disclosing Party's knowledge after reasonable inquiry, any City elected official's spouse or domestic partner, have a financial interest (as defined in Chapter 2-156 of the Municipal Code of Chicago ("MCC")) in the Disclosing Party?

☐ Yes ☒ No

If "yes," please identify below the name(s) of such City elected official(s) and/or spouse(s)/domestic partner(s) and describe the financial interest(s).

SECTION IV -- DISCLOSURE OF SUBCONTRACTORS AND OTHER RETAINED PARTIES

The Disclosing Party must disclose the name and business address of each subcontractor, attorney, lobbyist (as defined in MCC Chapter 2-156), accountant, consultant and any other person or entity whom the Disclosing Party has retained or expects to retain in connection with the Matter, as well as the nature of the relationship, and the total amount of the fees paid or estimated to be paid. The Disclosing Party is not required to disclose employees who are paid solely through the Disclosing Party's regular payroll. If the Disclosing Party is uncertain whether a disclosure is required under this Section, the Disclosing Party must either ask the City whether disclosure is required or make the disclosure.

Name (indicate whether retained or anticipated to be retained)	Business Address	Relationship to Disclosing Party (subcontractor, attorney, lobbyist, etc.)	Fees (<u>indicate whether paid or estimated.</u>) NOTE: "hourly rate" or "t.b.d." is not an acceptable response.
--	------------------	--	---

(Add sheets if necessary)

☒ Check here if the Disclosing Party has not retained, nor expects to retain, any such persons or entities.

SECTION V -- CERTIFICATIONS

A. COURT-ORDERED CHILD SUPPORT COMPLIANCE

Under MCC Section 2-92-415, substantial owners of business entities that contract with the City must remain in compliance with their child support obligations throughout the contract's term.

Has any person who directly or indirectly owns 10% or more of the Disclosing Party been declared in arrearage on any child support obligations by any Illinois court of competent jurisdiction?

☐ Yes ☐ No ☒ No person directly or indirectly owns 10% or more of the Disclosing Party.

If "Yes," has the person entered into a court-approved agreement for payment of all support owed and is the person in compliance with that agreement?

☐ Yes ☐ No

B. FURTHER CERTIFICATIONS

1. [This paragraph 1 applies only if the Matter is a contract being handled by the City's Department of Procurement Services.] In the 5-year period preceding the date of this EDS, neither the Disclosing Party nor any Affiliated Entity [see definition in (5) below] has engaged, in connection with the performance of any public contract, the services of an integrity monitor, independent private sector inspector general, or integrity compliance consultant (i.e., an individual or entity with legal, auditing, investigative, or other similar skills, designated by a public agency to help the agency monitor the activity of specified agency vendors as well as help the vendors reform their business practices so they can be considered for agency contracts in the future, or continue with a contract in progress).

2. The Disclosing Party and its Affiliated Entities are not delinquent in the payment of any fine, fee, tax or other source of indebtedness owed to the City of Chicago, including, but not limited to, water and sewer charges, license fees, parking tickets, property taxes and sales taxes, nor is the Disclosing Party delinquent in the payment of any tax administered by the Illinois Department of Revenue.

3. The Disclosing Party and, if the Disclosing Party is a legal entity, all of those persons or entities identified in Section II(B)(1) of this EDS:

- a. are not presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from any transactions by any federal, state or local unit of government;
- b. have not, during the 5 years before the date of this EDS, been convicted of a criminal offense, adjudged guilty, or had a civil judgment rendered against them in connection with: obtaining, attempting to obtain, or performing a public (federal, state or local) transaction or contract under a public transaction; a violation of federal or state antitrust statutes; fraud; embezzlement; theft; forgery; bribery; falsification or destruction of records; making false statements; or receiving stolen property;
- c. are not presently indicted for, or criminally or civilly charged by, a governmental entity (federal, state or local) with committing any of the offenses set forth in subparagraph (b) above;
- d. have not, during the 5 years before the date of this EDS, had one or more public transactions (federal, state or local) terminated for cause or default; and
- e. have not, during the 5 years before the date of this EDS, been convicted, adjudged guilty, or found liable in a civil proceeding, or in any criminal or civil action, including actions concerning environmental violations, instituted by the City or by the federal government, any state, or any other unit of local government.

4. The Disclosing Party understands and shall comply with the applicable requirements of MCC Chapters 2-56 (Inspector General) and 2-156 (Governmental Ethics).

5. Certifications (5), (6) and (7) concern:

- the Disclosing Party;
- any "Contractor" (meaning any contractor or subcontractor used by the Disclosing Party in connection with the Matter, including but not limited to all persons or legal entities disclosed under Section IV, "Disclosure of Subcontractors and Other Retained Parties");
- any "Affiliated Entity" (meaning a person or entity that, directly or indirectly: controls the Disclosing Party, is controlled by the Disclosing Party, or is, with the Disclosing Party, under common control of another person or entity). Indicia of control include, without limitation: interlocking management or ownership; identity of interests among family members, shared facilities and equipment; common use of employees; or organization of a business entity following the ineligibility of a business entity to do business with federal or state or local government, including the City, using substantially the same management, ownership, or principals as the ineligible entity. With respect to Contractors, the term Affiliated Entity means a person or entity that directly or indirectly controls the Contractor, is controlled by it, or, with the Contractor, is under common control of another person or entity;
- any responsible official of the Disclosing Party, any Contractor or any Affiliated Entity or any other official, agent or employee of the Disclosing Party, any Contractor or any Affiliated Entity, acting pursuant to the direction or authorization of a responsible official of the Disclosing Party, any Contractor or any Affiliated Entity (collectively "Agents").

Neither the Disclosing Party, nor any Contractor, nor any Affiliated Entity of either the Disclosing Party or any Contractor, nor any Agents have, during the 5 years before the date of this EDS, or, with respect to a Contractor, an Affiliated Entity, or an Affiliated Entity of a Contractor during the 5 years before the date of such Contractor's or Affiliated Entity's contract or engagement in connection with the Matter:

- a. bribed or attempted to bribe, or been convicted or adjudged guilty of bribery or attempting to bribe, a public officer or employee of the City, the State of Illinois, or any agency of the federal government or of any state or local government in the United States of America, in that officer's or employee's official capacity;
- b. agreed or colluded with other bidders or prospective bidders, or been a party to any such agreement, or been convicted or adjudged guilty of agreement or collusion among bidders or prospective bidders, in restraint of freedom of competition by agreement to bid a fixed price or otherwise; or
- c. made an admission of such conduct described in subparagraph (a) or (b) above that is a matter of record, but have not been prosecuted for such conduct; or
- d. violated the provisions referenced in MCC Subsection 2-92-320(a)(4)(Contracts Requiring a Base Wage); (a)(5)(Debarment Regulations); or (a)(6)(Minimum Wage Ordinance).

6. Neither the Disclosing Party, nor any Affiliated Entity or Contractor, or any of their employees, officials, agents or partners, is barred from contracting with any unit of state or local government as a result of engaging in or being convicted of (1) bid-rigging in violation of 720 ILCS 5/33F-3; (2) bid-rotating in violation of 720 ILCS 5/33E-4; or (3) any similar offense of any state or of the United States of America that contains the same elements as the offense of bid-rigging or bid-rotating.

7. Neither the Disclosing Party nor any Affiliated Entity is listed on a Sanctions List maintained by the United States Department of Commerce, State, or Treasury, or any successor federal agency.

8. [FOR APPLICANT ONLY] (i) Neither the Applicant nor any "controlling person" [see MCC Chapter 1-23, Article I for applicability and defined terms] of the Applicant is currently indicted or charged with, or has admitted guilt of, or has ever been convicted of, or placed under supervision for, any criminal offense involving actual, attempted, or conspiracy to commit bribery, theft, fraud, forgery, perjury, dishonesty or deceit against an officer or employee of the City or any "sister agency"; and (ii) the Applicant understands and acknowledges that compliance with Article I is a continuing requirement for doing business with the City. NOTE: If MCC Chapter 1-23, Article I applies to the Applicant, that Article's permanent compliance timeframe supersedes 5-year compliance timeframes in this Section V.

9. [FOR APPLICANT ONLY] The Applicant and its Affiliated Entities will not use, nor permit their subcontractors to use, any facility listed as having an active exclusion by the U.S. EPA on the federal System for Award Management ("SAM").

10. [FOR APPLICANT ONLY] The Applicant will obtain from any contractors/subcontractors hired or to be hired in connection with the Matter certifications equal in form and substance to those in Certifications (2) and (9) above and will not, without the prior written consent of the City, use any such

contractor/subcontractor that does not provide such certifications or that the Applicant has reason to believe has not provided or cannot provide truthful certifications.

11. If the Disclosing Party is unable to certify to any of the above statements in this Part B (Further Certifications), the Disclosing Party must explain below:

The foregoing responses are to the best knowledge of disclosing party's knowledge after reasonable inquiry.

If the letters "NA," the word "None," or no response appears on the lines above, it will be conclusively presumed that the Disclosing Party certified to the above statements.

12. To the best of the Disclosing Party's knowledge after reasonable inquiry, the following is a complete list of all current employees of the Disclosing Party who were, at any time during the 12-month period preceding the date of this EDS, an employee, or elected or appointed official, of the City of Chicago (if none, indicate with "N/A" or "none").

None

13. To the best of the Disclosing Party's knowledge after reasonable inquiry, the following is a complete list of all gifts that the Disclosing Party has given or caused to be given, at any time during the 12-month period preceding the execution date of this EDS, to an employee, or elected or appointed official, of the City of Chicago. For purposes of this statement, a "gift" does not include: (i) anything made generally available to City employees or to the general public, or (ii) food or drink provided in the course of official City business and having a retail value of less than \$25 per recipient, or (iii) a political contribution otherwise duly reported as required by law (if none, indicate with "N/A" or "none"). As to any gift listed below, please also list the name of the City recipient.

None

C. CERTIFICATION OF STATUS AS FINANCIAL INSTITUTION

1. The Disclosing Party certifies that the Disclosing Party (check one)

☒ is ☐ is not

a "financial institution" as defined in MCC Section 2-32-455(b).

2. If the Disclosing Party IS a financial institution, then the Disclosing Party pledges:

"We are not and will not become a predatory lender as defined in MCC Chapter 2-32. We further pledge that none of our affiliates is, and none of them will become, a predatory lender as defined in MCC Chapter 2-32. We understand that becoming a predatory lender or becoming an affiliate of a predatory lender may result in the loss of the privilege of doing business with the City."

If the Disclosing Party is unable to make this pledge because it or any of its affiliates (as defined in MCC Section 2-32-455(b)) is a predatory lender within the meaning of MCC Chapter 2-32, explain here (attach additional pages if necessary):

None

If the letters "NA," the word "None," or no response appears on the lines above, it will be conclusively presumed that the Disclosing Party certified to the above statements.

D. CERTIFICATION REGARDING FINANCIAL INTEREST IN CITY BUSINESS

Any words or terms defined in MCC Chapter 2-156 have the same meanings if used in this Part D.

1. In accordance with MCC Section 2-156-110: To the best of the Disclosing Party's knowledge after reasonable inquiry, does any official or employee of the City have a financial interest in his or her own name or in the name of any other person or entity in the Matter?

☐ Yes

☒ No

NOTE: If you checked "Yes" to Item D(1), proceed to Items D(2) and D(3). If you checked "No" to Item D(1), skip Items D(2) and D(3) and proceed to Part E.

2. Unless sold pursuant to a process of competitive bidding, or otherwise permitted, no City elected official or employee shall have a financial interest in his or her own name or in the name of any other person or entity in the purchase of any property that (i) belongs to the City, or (ii) is sold for taxes or assessments, or (iii) is sold by virtue of legal process at the suit of the City (collectively, "City Property Sale"). Compensation for property taken pursuant to the City's eminent domain power does not constitute a financial interest within the meaning of this Part D.

Does the Matter involve a City Property Sale?

☐ Yes

☐ No

3. If you checked "Yes" to Item D(1), provide the names and business addresses of the City officials or employees having such financial interest and identify the nature of the financial interest:

Name

Business Address

Nature of Financial Interest

4. The Disclosing Party further certifies that no prohibited financial interest in the Matter will be acquired by any City official or employee.

E. CERTIFICATION REGARDING SLAVERY ERA BUSINESS

Please check either (1) or (2) below. If the Disclosing Party checks (2), the Disclosing Party must disclose below or in an attachment to this EDS all information required by (2). Failure to comply with these disclosure requirements may make any contract entered into with the City in connection with the Matter voidable by the City.

 X 1.* The Disclosing Party verifies that the Disclosing Party has searched any and all records of the Disclosing Party and any and all predecessor entities regarding records of investments or profits from slavery or slaveholder insurance policies during the slavery era (including insurance policies issued to slaveholders that provided coverage for damage to or injury or death of their slaves), and the Disclosing Party has found no such records.

 2. The Disclosing Party verifies that, as a result of conducting the search in step (1) above, the Disclosing Party has found records of investments or profits from slavery or slaveholder insurance policies. The Disclosing Party verifies that the following constitutes full disclosure of all such records, including the names of any and all slaves or slaveholders described in those records:

*The disclosing party has conducted a search of its records as well as its predecessor entities
and could not find records of itself or predecessor entities regarding investments or profits
from slavery or shareholder insurance policies during the slavery era.

SECTION VI -- CERTIFICATIONS FOR FEDERALLY FUNDED MATTERS

NOTE: If the Matter is federally funded, complete this Section VI. If the Matter is not federally funded, proceed to Section VII. For purposes of this Section VI, tax credits allocated by the City and proceeds of debt obligations of the City are not federal funding.

A. CERTIFICATION REGARDING LOBBYING

1. List below the names of all persons or entities registered under the federal Lobbying Disclosure Act of 1995, as amended, who have made lobbying contacts on behalf of the Disclosing Party with respect to the Matter: (Add sheets if necessary):

None

(If no explanation appears or begins on the lines above, or if the letters "NA" or if the word "None" appear, it will be conclusively presumed that the Disclosing Party means that NO persons or entities registered under the Lobbying Disclosure Act of 1995, as amended, have made lobbying contacts on behalf of the Disclosing Party with respect to the Matter.)

2. The Disclosing Party has not spent and will not expend any federally appropriated funds to pay any person or entity listed in paragraph A(1) above for his or her lobbying activities or to pay any person or entity to influence or attempt to influence an officer or employee of any agency, as defined by applicable federal law, a member of Congress, an officer or employee of Congress, or an employee

of a member of Congress, in connection with the award of any federally funded contract, making any federally funded grant or loan, entering into any cooperative agreement, or to extend, continue, renew, amend, or modify any federally funded contract, grant, loan, or cooperative agreement.

3. The Disclosing Party will submit an updated certification at the end of each calendar quarter in which there occurs any event that materially affects the accuracy of the statements and information set forth in paragraphs A(1) and A(2) above.

4. The Disclosing Party certifies that either: (i) it is not an organization described in section 501(c)(4) of the Internal Revenue Code of 1986; or (ii) it is an organization described in section 501(c)(4) of the Internal Revenue Code of 1986 but has not engaged and will not engage in "Lobbying Activities," as that term is defined in the Lobbying Disclosure Act of 1995, as amended.

5. If the Disclosing Party is the Applicant, the Disclosing Party must obtain certifications equal in form and substance to paragraphs A(1) through A(4) above from all subcontractors before it awards any subcontract and the Disclosing Party must maintain all such subcontractors' certifications for the duration of the Matter and must make such certifications promptly available to the City upon request.

B. CERTIFICATION REGARDING EQUAL EMPLOYMENT OPPORTUNITY

If the Matter is federally funded, federal regulations require the Applicant and all proposed subcontractors to submit the following information with their bids or in writing at the outset of negotiations.

Is the Disclosing Party the Applicant?

☒ Yes

☐ No

If "Yes," answer the three questions below:

1. Have you developed and do you have on file affirmative action programs pursuant to applicable federal regulations? (See 41 CFR Part 60-2.)

☒ Yes

☐ No

2. Have you filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance Programs, or the Equal Employment Opportunity Commission all reports due under the applicable filing requirements?

☒ Yes

☐ No

☐ Reports not required

3. Have you participated in any previous contracts or subcontracts subject to the equal opportunity clause?

☒ Yes

☐ No

If you checked "No" to question (1) or (2) above, please provide an explanation:

SECTION VII -- FURTHER ACKNOWLEDGMENTS AND CERTIFICATION

) The Disclosing Party understands and agrees that:

A. The certifications, disclosures, and acknowledgments contained in this EDS will become part of any contract or other agreement between the Applicant and the City in connection with the Matter, whether procurement, City assistance, or other City action, and are material inducements to the City's execution of any contract or taking other action with respect to the Matter. The Disclosing Party understands that it must comply with all statutes, ordinances, and regulations on which this EDS is based.

B. The City's Governmental Ethics Ordinance, MCC Chapter 2-156, imposes certain duties and obligations on persons or entities seeking City contracts, work, business, or transactions. The full text of this ordinance and a training program is available on line at www.cityofchicago.org/Ethics, and may also be obtained from the City's Board of Ethics, 740 N. Sedgwick St., Suite 500, Chicago, IL 60610, (312) 744-9660. The Disclosing Party must comply fully with this ordinance.

C. If the City determines that any information provided in this EDS is false, incomplete or inaccurate, any contract or other agreement in connection with which it is submitted may be rescinded or be void or voidable, and the City may pursue any remedies under the contract or agreement (if not rescinded or void), at law, or in equity, including terminating the Disclosing Party's participation in the Matter and/or declining to allow the Disclosing Party to participate in other City transactions. Remedies at law for a false statement of material fact may include incarceration and an award to the City of treble damages.

) D. It is the City's policy to make this document available to the public on its Internet site and/or upon request. Some or all of the information provided in, and appended to, this EDS may be made publicly available on the Internet, in response to a Freedom of Information Act request, or otherwise. By completing and signing this EDS, the Disclosing Party waives and releases any possible rights or claims which it may have against the City in connection with the public release of information contained in this EDS and also authorizes the City to verify the accuracy of any information submitted in this EDS.

E. The information provided in this EDS must be kept current. In the event of changes, the Disclosing Party must supplement this EDS up to the time the City takes action on the Matter. If the Matter is a contract being handled by the City's Department of Procurement Services, the Disclosing Party must update this EDS as the contract requires. **NOTE:** With respect to Matters subject to MCC Chapter 1-23, Article I (imposing **PERMANENT INELIGIBILITY** for certain specified offenses), the information provided herein regarding eligibility must be kept current for a longer period, as required by MCC Chapter 1-23 and Section 2-154-020.

SECTION VII -- FURTHER ACKNOWLEDGMENTS AND CERTIFICATION

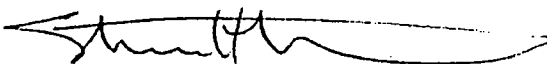
The Disclosing Party understands and agrees that:

- A. The certifications, disclosures, and acknowledgments contained in this EDS will become part of any contract or other agreement between the Applicant and the City in connection with the Matter, whether procurement, City assistance, or other City action, and are material inducements to the City's execution of any contract or taking other action with respect to the Matter. The Disclosing Party understands that it must comply with all statutes, ordinances, and regulations on which this EDS is based.
- B. The City's Governmental Ethics Ordinance, MCC Chapter 2-156, imposes certain duties and obligations on persons or entities seeking City contracts, work, business, or transactions. The full text of this ordinance and a training program is available on line at www.cityofchicago.org/Ethics, and may also be obtained from the City's Board of Ethics, 740 N. Sedgwick St., Suite 500, Chicago, IL 60610, (312) 744-9660. The Disclosing Party must comply fully with this ordinance.
- C. If the City determines that any information provided in this EDS is false, incomplete or inaccurate, any contract or other agreement in connection with which it is submitted may be rescinded or be void or voidable, and the City may pursue any remedies under the contract or agreement (if not rescinded or void), at law, or in equity, including terminating the Disclosing Party's participation in the Matter and/or declining to allow the Disclosing Party to participate in other City transactions. Remedies at law for a false statement of material fact may include incarceration and an award to the City of treble damages.
- D. It is the City's policy to make this document available to the public on its Internet site and/or upon request. Some or all of the information provided in, and appended to, this EDS may be made publicly available on the Internet, in response to a Freedom of Information Act request, or otherwise. By completing and signing this EDS, the Disclosing Party waives and releases any possible rights or claims which it may have against the City in connection with the public release of information contained in this EDS and also authorizes the City to verify the accuracy of any information submitted in this EDS.
- E. The information provided in this EDS must be kept current. In the event of changes, the Disclosing Party must supplement this EDS up to the time the City takes action on the Matter. If the Matter is a contract being handled by the City's Department of Procurement Services, the Disclosing Party must update this EDS as the contract requires. **NOTE:** With respect to Matters subject to MCC Chapter 1-23, Article I (imposing **PERMANENT INELIGIBILITY** for certain specified offenses), the information provided herein regarding eligibility must be kept current for a longer period, as required by MCC Chapter 1-23 and Section 2-154-020.

CERTIFICATION

Under penalty of perjury, the person signing below: (1) warrants that he/she is authorized to execute this EDS, and all applicable Appendices, on behalf of the Disclosing Party, and (2) warrants that all certifications and statements contained in this EDS, and all applicable Appendices, are true, accurate and complete as of the date furnished to the City.

Huntington National Bank
(Print or type exact legal name of Disclosing Party)

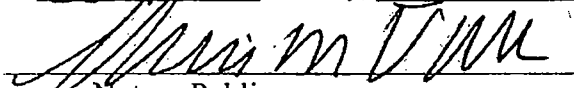
By: 
(Sign here)

Steve Abbey
(Print or type name of person signing)

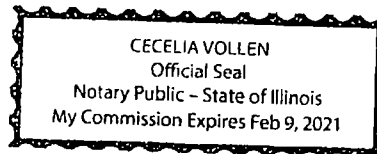
Managing Director Institutional, Government & Nonprofit
(Print or type title of person signing)

Signed and sworn to before me on (date) Nov 18, 2019,

at COOK County, IL (state).


Notary Public

Commission expires: 2-9-2021



**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
APPENDIX A**

**FAMILIAL RELATIONSHIPS WITH ELECTED CITY OFFICIALS
AND DEPARTMENT HEADS**

This Appendix is to be completed only by (a) the Applicant, and (b) any legal entity which has a direct ownership interest in the Applicant exceeding 7.5%. It is not to be completed by any legal entity which has only an indirect ownership interest in the Applicant.

Under MCC Section 2-154-015, the Disclosing Party must disclose whether such Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof currently has a "familial relationship" with any elected city official or department head. A "familial relationship" exists if, as of the date this EDS is signed, the Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof is related to the mayor, any alderman, the city clerk, the city treasurer or any city department head as spouse or domestic partner or as any of the following, whether by blood or adoption: parent, child, brother or sister, aunt or uncle, niece or nephew, grandparent, grandchild, father-in-law, mother-in-law, son-in-law, daughter-in-law, stepfather or stepmother, stepson or stepdaughter, stepbrother or stepsister or half-brother or half-sister.

"Applicable Party" means (1) all executive officers of the Disclosing Party listed in Section II.B.1.a., if the Disclosing Party is a corporation; all partners of the Disclosing Party, if the Disclosing Party is a general partnership; all general partners and limited partners of the Disclosing Party, if the Disclosing Party is a limited partnership; all managers, managing members and members of the Disclosing Party, if the Disclosing Party is a limited liability company; (2) all principal officers of the Disclosing Party; and (3) any person having more than a 7.5% ownership interest in the Disclosing Party. "Principal officers" means the president, chief operating officer, executive director, chief financial officer, treasurer or secretary of a legal entity or any person exercising similar authority.

Does the Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof currently have a "familial relationship" with an elected city official or department head?

☐ Yes

☒ No

If yes, please identify below (1) the name and title of such person, (2) the name of the legal entity to which such person is connected; (3) the name and title of the elected city official or department head to whom such person has a familial relationship, and (4) the precise nature of such familial relationship.

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
APPENDIX B**

BUILDING CODE SCOFFLAW/PROBLEM LANDLORD CERTIFICATION

This Appendix is to be completed only by (a) the Applicant, and (b) any legal entity which has a direct ownership interest in the Applicant exceeding 7.5% (an "Owner"). It is not to be completed by any legal entity which has only an indirect ownership interest in the Applicant.

1. Pursuant to MCC Section 2-154-010, is the Applicant or any Owner identified as a building code scofflaw or problem landlord pursuant to MCC Section 2-92-416?

☐ Yes

☒ No

2. If the Applicant is a legal entity publicly traded on any exchange, is any officer or director of the Applicant identified as a building code scofflaw or problem landlord pursuant to MCC Section 2-92-416?

☐ Yes

☒ No

☐ The Applicant is not publicly traded on any exchange.

3. If yes to (1) or (2) above, please identify below the name of each person or legal entity identified as a building code scofflaw or problem landlord and the address of each building or buildings to which the pertinent code violations apply.

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
APPENDIX C**

PROHIBITION ON WAGE & SALARY HISTORY SCREENING - CERTIFICATION

This Appendix is to be completed only by an Applicant that is completing this EDS as a “contractor” as defined in MCC Section 2-92-385. That section, which should be consulted (www.amlegal.com), generally covers a party to any agreement pursuant to which they: (i) receive City of Chicago funds in consideration for services, work or goods provided (including for legal or other professional services), or (ii) pay the City money for a license, grant or concession allowing them to conduct a business on City premises.

On behalf of an Applicant that is a contractor pursuant to MCC Section 2-92-385, I hereby certify that the Applicant is in compliance with MCC Section 2-92-385(b)(1) and (2), which prohibit: (i) screening job applicants based on their wage or salary history, or (ii) seeking job applicants’ wage or salary history from current or former employers. I also certify that the Applicant has adopted a policy* that includes those prohibitions. *or practice

☒ Yes

☐ No

☐ N/A – I am not an Applicant that is a “contractor” as defined in MCC Section 2-92-385.

This certification shall serve as the affidavit required by MCC Section 2-92-385(c)(1).

If you checked “no” to the above, please explain.

**Exhibit I
to the
Economic Disclosure Statement and Affidavit**

Executive Management Team

Name	Title
Stephen D. Steinour	Chairman, President and Chief Executive Officer
Paul Heller	Senior Executive Vice President, Chief Technology & Operations Officer
Helga Houston	Senior Executive Vice President, Chief Risk Officer
Sandra Pierce	Senior Executive Vice President, Private Client Group & Regional Banking Director and Chair of Michigan
Rick Remiker	Senior Executive Vice President, Director of Commercial Banking
Mark Thompson	Senior Executive Vice President, Director of Corporate Operations
Zachary "Zach" Wasserman	Senior Executive Vice President, Chief Financial Officer
Andy Harmening	Senior Executive Vice President, Consumer and Business Banking Director
Nathanael "Nate" Herman	Executive Vice President, Chief Auditor
Jana Litsey	Senior Executive Vice President and General Counsel

**Exhibit I
to the
Economic Disclosure Statement and Affidavit**

Executive Management Team Continued

Name	Title
Richard "Rich" Pohle	Executive Vice President, Chief Credit Officer
Rajeev "Raj" Syal	Senior Executive Vice President, Chief Human Resources Officer
Julie C. Tutkovics	Executive Vice President, Chief Marketing and Communications Officer

**Exhibit I
to the
Economic Disclosure Statement and Affidavit**

Board of Directors

Name	Title
Lizabeth Ardisana	Owner and CEO, ASG Renaissance LLC
Robert S. Cubbin	Retired President and CEO, Meadowbrook Insurance Group
Gina D. France	Founder, President and CEO, France Strategic Partners LLC
John C. "Chris" Inglis	Retired Deputy Director, National Security Agency
Katherine M.A. "Allie" Kline	Former Chief Marketing and Communications Officer for Oath, Inc.
Kenneth J. Phelan	Former Chief Risk Officer of the U.S. Department of Treasury.
Kathleen H. Ransier	Retired Partner, Vorys, Sater, Seymour and Pease LLP
Ann "Tanny" B. Crane	President and CEO, Crane Group Company
Steven G. Elliott	Retired Senior Vice Chairman, BNY Mellon
J. Michael Hochschwender	President and CEO, The Smithers Group

**Exhibit I
to the
Economic Disclosure Statement and Affidavit**

Board of Directors Continued

Name	Title
Peter J. Kight	Former Managing Partner, Comvest Partners
Richard W. Neu	Retired Chairman, MCG Capital Corporation; Retired Treasurer and Director, Charter One Financial
David L. Porteous	Attorney, McCurdy Wotila & Porteous, P.C.; Lead Director, Huntington Bancshares Incorporated
Stephen D. Steinour	Chairman, President and Chief Executive Officer, Huntington Bancshares Incorporated and The Huntington National Bank

EEOC FORM

FIRMWIDE

PLEASE POPULATE THE HIGHLIGHTED PORTIONS ONLY

Firm Name:	Huntington National Bank
Primary Representative:	Emily Riepenhoff
Primary Representative Email and Telephone:	Emily.riepenhoff@huntington.com 614-480-1970
Headquarters Address:	37 West Broad Columbus OH, 43215
Chicago Public Finance Office Address:	
Total Number of Employees:	15,977 as of 05/02/2019
Number of Employees in Illinois:	467 as of 5/02/2019
Number of Employees in Chicago:	165 as of 5/02/2019
Capital Position:	
Minority Designation:	

Job Categories

Officials and Managers
Professionals
Technicians
Sales Workers
Office and Clerical
Craft Workers (Skilled)
Operatives (Semi-Skilled)
Laborers
Service Workers
Total

Overall Totals	Male					Female				
	White (Not Hispanic)	Black (Not Hispanic)	Hispanic	Asian	Native American	White (Not Hispanic)	Black (Not Hispanic)	Hispanic	Asian	Native American
Officials and Managers	4,019	1,648	87	48	44	0	1,799	186	58	43
Professionals	3,382	1,309	103	25	120	1	1,326	166	35	110
Technicians	0	0	0	0	0	0	0	0	0	0
Sales Workers	3,751	1,572	135	64	26	7	1,448	175	72	59
Office and Clerical	4,665	562	155	28	33	1	2,705	694	143	94
Craft Workers (Skilled)	1	1	0	0	0	0	0	0	0	0
Operatives (Semi-Skilled)	0	0	0	0	0	0	0	0	0	0
Laborers	1	1	0	0	0	0	0	0	0	0
Service Workers	129	20	5	4	1	0	29	42	10	2
Total	15,948	5,113	485	169	224	9	7,307	1,263	318	308

Job Categories

Officials and Managers
Professionals
Technicians
Sales Workers
Office and Clerical
Craft Workers (Skilled)
Operatives (Semi-Skilled)
Laborers
Service Workers
Total

Overall Totals	White (Not Hispanic)	Black (Not Hispanic)	Hispanic	Asian	Native American
Officials and Managers	25%	22%	2%	1%	1%
Professionals	21%	16%	2%	0%	1%
Technicians	0%	0%	0%	0%	0%
Sales Workers	23%	19%	2%	1%	0%
Office and Clerical	30%	20%	5%	1%	1%
Craft Workers (Skilled)	0%	100%	0%	0%	0%
Operatives (Semi-Skilled)	0%	0%	0%	0%	0%
Laborers	0%	0%	0%	0%	0%
Service Workers	0%	0%	0%	0%	0%
Total	100%	84%	10%	3%	0%

Male	Female	Total
40%	60%	100%

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549**

FORM 10-K

(Mark One)

☒ **Annual Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934**

For the fiscal year ended December 31, 2018

or

☐ **Transition Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934**

Commission File Number

Huntington Bancshares Incorporated
(Exact name of registrant as specified in its charter)

Maryland
(State or other jurisdiction of
incorporation or organization)

(I.R.S. Employer
Identification No.)

41 S. High Street, Columbus, Ohio
(Address of principal executive offices)

43287
(Zip Code)

Registrant's telephone number, including area code (614) 480-2265

Securities registered pursuant to Section 12(b) of the Act:

Title of class	Name of exchange on which registered
5.875% Series C Non-Cumulative, perpetual preferred stock	NASDAQ
6.250% Series D Non-Cumulative, perpetual preferred stock	NASDAQ
Common Stock—Par Value \$0.01 per Share	NASDAQ

Securities registered pursuant to Section 12(g) of the Act:

Title of class

Depository Shares (each representing a 1/40th interest in a share of Floating Rate Series B Non-Cumulative Perpetual Preferred Stock)

Depository Shares (each representing a 1/100th interest in a share of 5.700% Series E Fixed-to-Floating Non-Cumulative Perpetual Preferred Stock)

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Exchange Act. ☒ Yes ☐ No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Act. ☐ Yes ☒ No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days ☒ Yes ☐ No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). ☒ Yes ☐ No

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Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K ☒

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer", "accelerated filer", "smaller reporting company", and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer ☒

Accelerated filer ☐

Non-accelerated filer ☐

Smaller reporting company ☐

Emerging growth company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act) ☐ Yes ☒ No

The aggregate market value of voting and non-voting common equity held by non-affiliates of the registrant as of June 30, 2018, determined by using a per share closing price of \$14.76, as quoted by NASDAQ on that date, was \$16,029,310,082. As of January 31, 2019, there were 1,046,813,306 shares of common stock with a par value of \$0.01 outstanding.

Documents Incorporated By Reference

Part III of this Form 10-K incorporates by reference certain information from the registrant's definitive Proxy Statement for the 2019 Annual Shareholders' Meeting.

HUNTINGTON BANCSHARES INCORPORATED
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Signatures

Glossary of Acronyms and Terms

The following listing provides a comprehensive reference of common acronyms and terms used throughout the document:

ACL	Allowance for Credit Losses
AFS	Available-for-Sale
ALCO	Asset-Liability Management Committee
ALLL	Allowance for Loan and Lease Losses
AML	Anti-Money Laundering
ANPR	Advance Notice of Proposed Rulemaking
AOCI	Accumulated Other Comprehensive Income
ASC	Accounting Standards Codification
ASR	Accelerated Share Repurchase
ATM	Automated Teller Machine
AULC	Allowance for Unfunded Loan Commitments
Bank Secrecy Act	Financial Recordkeeping and Reporting of Currency and Foreign Transactions Act of 1970
BHC	Bank Holding Company
BHC Act	Bank Holding Company Act of 1956
C&I	Commercial and Industrial
CCAR	Comprehensive Capital Analysis and Review
CCPA	California Consumer Privacy Act of 2018
CDs	Certificates of Deposit
CET1	Common equity tier 1 on a transitional Basel III basis
CFPB	Consumer Financial Protection Bureau
CISA	Cybersecurity Information Sharing Act
CMO	Collateralized Mortgage Obligations
CRA	Community Reinvestment Act
CRE	Commercial Real Estate
DIF	Deposit Insurance Fund
Dodd-Frank Act	Dodd-Frank Wall Street Reform and Consumer Protection Act
Economic Growth Act	Economic Growth, Regulatory Relief and Consumer Protection Act
EPS	Earnings Per Share
EVE	Economic Value of Equity
FASB	Financial Accounting Standards Board
FCRA	Fair Credit Reporting Act
FDIA	Federal Deposit Insurance Act
FDIC	Federal Deposit Insurance Corporation
Federal Reserve	Board of Governors of the Federal Reserve System
FHA	Federal Housing Administration
FHC	Financial Holding Company
FHLB	Federal Home Loan Bank
FICO	Fair Isaac Corporation
FinCEN	Financial Crimes Enforcement Network
FINRA	Financial Industry Regulatory Authority, Inc
FirstMerit	FirstMerit Corporation
FRB	Federal Reserve Bank
FTE	Fully-Taxable Equivalent
FTP	Funds Transfer Pricing
FVO	Fair Value Option

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GAAP	Generally Accepted Accounting Principles in the United States of America
GLBA	Gramm-Leach-Bliley Act
GSE	Government Sponsored Enterprise
HMDA	Home Mortgage Disclosure Act
HSE	Hutchinson, Shockey, Erley & Co.
HTM	Held-to-Maturity
IRS	Internal Revenue Service
LCR	Liquidity Coverage Ratio
LGD	Loss Given Default
LIBOR	London Interbank Offered Rate
LFI Rating System	Large Financial Institution Rating System
LIHTC	Low Income Housing Tax Credit
LTD	Long Term Debt
LTV	Loan to Value
MBS	Mortgage-Backed Securities
MD&A	Management's Discussion and Analysis of Financial Condition and Results of Operations
MSA	Metropolitan Statistical Area
MSR	Mortgage Servicing Right
NAICS	North American Industry Classification System
NALs	Nonaccrual Loans
NCO	Net Charge-off
NII	Noninterest Income
NIM	Net Interest Margin
NOW	Negotiable Order of Withdrawal
NPAs	Nonperforming Assets
NSF	Non-Sufficient Funds
OCC	Office of the Comptroller of the Currency
OCI	Other Comprehensive Income (Loss)
OCR	Optimal Customer Relationship
OFAC	Office of Foreign Assets Control
OIS	Overnight Indexed Swaps
OLEM	Other Loans Especially Mentioned
OREO	Other Real Estate Owned
OTTI	Other-Than-Temporary Impairment
Patriot Act	Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act of 2001
PD	Probability Of Default
Plan	Huntington Bancshares Retirement Plan
Problem Loans	Includes nonaccrual loans and leases, accruing loans and leases past due 90 days or more, troubled debt restructured loans, and criticized commercial loans
Proposed Capital and Liquidity Tailoring Rule	Refers to the proposed rule, Proposed changes to applicability thresholds for regulatory and capital and liquidity requirements, issued by the OCC, the Federal Reserve and the FDIC on October 31, 2018
Proposed EPS Tailoring Rule	Refers to the proposed rule, Prudential Standards for Large Bank Holding Companies and Savings and Loan Holding, issued by the Federal Reserve on October 31, 2018
Proposed Tailoring Rules	Refers to the Proposed Capital and Liquidity Tailoring Rule and the Proposed EPS Tailoring Rule
RBHPCG	Regional Banking and The Huntington Private Client Group
REIT	Real Estate Investment Trust
Riegle-Neal Act	The Riegle-Neal Interstate Banking and Branching Efficiency Act of 1994

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ROC	Risk Oversight Committee
RWA	Risk-Weighted Assets
SAD	Special Assets Division
SBA	Small Business Administration
SEC	Securities and Exchange Commission
SERP	Supplemental Executive Retirement Plan
SIFMA	Securities Industry and Financial Markets Association
SOFR	Secured Overnight Financing Rate
SRIP	Supplemental Retirement Income Plan
TCJA	H.R. 1, Originally known as the Tax Cuts and Jobs Act
TDR	Troubled Debt Restructuring
U.S. Basel III	Refers to the final rule issued by the Federal Reserve and OCC and published in the Federal Register on October 11, 2013
U.S. Treasury	U.S. Department of the Treasury
UCS	Uniform Classification System
UPB	Unpaid Principal Balance
USDA	U.S. Department of Agriculture
VA	U.S. Department of Veteran Affairs
VIE	Variable Interest Entity
XBRL	eXtensible Business Reporting Language

Huntington Bancshares Incorporated

PART I

When we refer to “Huntington,” “we,” “our,” “us,” and “the Company” in this report, we mean Huntington Bancshares Incorporated and our consolidated subsidiaries, unless the context indicates that we refer only to the parent company, Huntington Bancshares Incorporated. When we refer to the “Bank” in this report, we mean our only bank subsidiary, The Huntington National Bank, and its subsidiaries.

Item 1: Business

We are a multi-state diversified regional bank holding company organized under Maryland law in 1966 and headquartered in Columbus, Ohio. We have 15,693 average full-time equivalent employees. Through the Bank, we have over 150 years of serving the financial needs of our customers. Through our subsidiaries, we provide full-service commercial, small business, consumer banking services, mortgage banking services, automobile financing, recreational vehicle and marine financing, equipment leasing, investment management, trust services, brokerage services, insurance programs, and other financial products and services. The Bank, organized in 1866, is our only bank subsidiary. At December 31, 2018, the Bank had 10 private client group offices and 944 branches as follows:

- 451 branches in Ohio
- 300 branches in Michigan
- 49 branches in Pennsylvania
- 41 branches in Indiana
- 37 branches in Illinois
- 31 branches in Wisconsin
- 25 branches in West Virginia
- 10 branches in Kentucky

Select financial services and other activities are also conducted in various other states. International banking services are available through the headquarters office in Columbus, Ohio. Our foreign banking activities, in total or with any individual country, are not significant.

Our business segments are based on our internally-aligned segment leadership structure, which is how we monitor results and assess performance. For each of our four business segments, we expect the combination of our business model and exceptional service to provide a competitive advantage that supports revenue and earnings growth. Our business model emphasizes the delivery of a complete set of banking products and services offered by larger banks but distinguished by local delivery and customer service.

A key strategic emphasis has been for our business segments to operate in cooperation to provide products and services to our customers and to build stronger and more profitable relationships using our OCR sales and service process. The objectives of OCR are to:

- Use a consultative sales approach to provide solutions that are specific to each customer.
- Leverage each business segment in terms of its products and expertise to benefit customers.
- Develop prospects who may want to have multiple products and services as part of their relationship with us.

Following is a description of our four business segments and the Treasury / Other function:

- **Consumer and Business Banking:** The Consumer and Business Banking segment provides a wide array of financial products and services to consumer and small business customers including but not limited to checking accounts, savings accounts, money market accounts, certificates of deposit, investments, consumer loans, credit cards, and small business loans. Other financial services available to consumer and small business customers include mortgages, insurance, interest rate risk protection, foreign exchange, and treasury management. Huntington serves customers through our network of branches. In addition to our extensive branch network, customers can access Huntington through online banking, mobile banking, telephone banking, and ATMs.

We have a “Fair Play” banking philosophy; providing differentiated products and services, built on a strong foundation of customer advocacy. Our brand resonates with consumers and businesses; earning us new customers and deeper relationships with current customers.

Business Banking is a dynamic part of our business and we are committed to being the bank of choice for businesses in our markets. Business Banking is defined as serving companies with revenues up to \$20 million. Huntington continues to develop products and services that are designed specifically to meet the needs of small business and look for ways to help companies find solutions to their financing needs.

Home Lending, an operating unit of Consumer and Business Banking, originates consumer loans and mortgages for customers who are generally located in our primary banking markets. Consumer and mortgage lending products are primarily distributed through the Consumer and Business Banking and Regional Banking and The Huntington Private

Client Group segments, as well as through commissioned loan originators. Home Lending earns interest on portfolio loans and loans held-for-sale, earns fee income from the origination and servicing of mortgage loans, and recognizes gains or losses from the sale of mortgage loans. Home Lending supports the origination of mortgage loans across all segments.

- **Commercial Banking:** Through a relationship banking model, this segment provides a wide array of products and services to the middle market, corporate, real estate and government public sector customers located primarily within our geographic footprint. The segment is divided into six business units: Middle Market, Specialty Banking, Asset Finance, Capital Markets/Institutional Corporate Banking, Commercial Real Estate, and Treasury Management.

Middle Market primarily focuses on providing banking solutions to companies with annual revenues of \$20 million to \$500 million. Through a relationship management approach, various products, capabilities, and solutions are seamlessly delivered in a client centric way.

Specialty Banking offers tailored products and services to select industries that have a foothold in the Midwest. Each team is comprised of industry experts with a dynamic understanding of the market and industry. Many of these industries are experiencing tremendous change, which creates opportunities for Huntington to leverage our expertise and help clients navigate, adapt, and succeed.

Asset Finance is a combination of our Huntington Equipment Finance, Huntington Public Capital*, Technology and Healthcare Equipment Leasing, and Lender Finance divisions that focus on providing financing solutions against these respective asset classes.

Capital Markets/Institutional Corporate Banking has three distinct product offerings: 1) corporate risk management services, 2) institutional sales, trading, and underwriting, 3) institutional corporate banking. The Capital Markets Group offers a full suite of risk management tools including commodities, foreign exchange, and interest rate hedging services. The Institutional Sales, Trading, & Underwriting team provides access to capital and investment solutions for both municipal and corporate institutions. Institutional Corporate Banking works with larger, often more complex companies with revenues greater than \$500 million. These entities, many of which are publicly traded, require a different and customized approach to their banking needs.

The Commercial Real Estate team serves real estate developers, REITs, and other customers with lending needs that are secured by commercial properties. Most of these customers are located within our footprint. Within Commercial Real Estate, Huntington Community Development focuses on improving the quality of life for our communities and the residents of low-to moderate-income neighborhoods by developing and delivering innovative products and services to support affordable housing and neighborhood stabilization.

Treasury Management teams help businesses manage their working capital programs and reduce expenses. Our liquidity solutions help customers save and invest wisely, while our payables and receivables capabilities help them manage purchases and the receipt of payments for goods and services. All of this is provided while helping customers take a sophisticated approach to managing their overhead, inventory, equipment, and labor.

- **Vehicle Finance:** Our products and services include providing financing to consumers for the purchase of automobiles, light-duty trucks, recreational vehicles, and marine craft at franchised and other select dealerships, and providing financing to franchised dealerships for the acquisition of new and used inventory. Products and services are delivered through highly specialized relationship-focused bankers and product partners. Huntington creates well-defined relationship plans which identify needs where solutions are developed and customer commitments are obtained.

The Vehicle Finance team services automobile dealerships, its owners, and consumers buying automobiles through these franchised dealerships. Huntington has provided new and used automobile financing and dealer services throughout the Midwest since the early 1950s. This consistency in the market and our focus on working with strong dealerships has allowed us to expand into select markets outside of the Midwest and to actively deepen relationships while building a strong reputation. Huntington also provides financing for the purchase by consumers of recreational vehicles and marine craft on an indirect basis through a series of dealerships.

- **Regional Banking and The Huntington Private Client Group:** Regional Banking and The Huntington Private Client Group is closely aligned with our regional banking markets. A fundamental point of differentiation is our commitment to be actively engaged within our local markets - building connections with community and business leaders and offering a uniquely personal experience delivered by colleagues working within those markets.

The core business of The Huntington Private Client Group is The Huntington Private Bank, which consists of Private Banking, Wealth & Investment Management, and Retirement Plan Services. The Huntington Private Bank provides high net-worth customers with deposit, lending (including specialized lending options), and banking services. The Huntington Private Bank also delivers wealth management and legacy planning through investment and portfolio management, fiduciary administration, and trust services. This group also provides retirement plan services to corporate

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businesses. The Huntington Private Client Group also provides corporate trust services and institutional and mutual fund custody services.

- **Treasury/Other:** The Treasury / Other function includes technology and operations, other unallocated assets, liabilities, revenue, and expense.

The financial results for each of these business segments are included in Note 23 of Notes to Consolidated Financial Statements and are discussed in the Business Segment Discussion of our MD&A.

Competition

We compete with other banks and financial services companies such as savings and loans, credit unions, and finance and trust companies, as well as mortgage banking companies, automobile and equipment financing companies (including captive automobile finance companies), insurance companies, mutual funds, investment advisors, and brokerage firms, both within and outside of our primary market areas. Financial Technology Companies, or FinTechs, are also providing nontraditional, but increasingly strong, competition for our borrowers, depositors, and other customers.

We compete for loans primarily on the basis of a combination of value and service by building customer relationships as a result of addressing our customers' entire suite of banking needs, demonstrating expertise, and providing convenience to our customers. We also consider the competitive pricing pressures in each of our markets.

We compete for deposits similarly on a basis of a combination of value and service and by providing convenience through a banking network of branches and ATMs within our markets and our website at www.huntington.com. We also employ customer friendly practices, such as our 24-Hour Grace[®] account feature, which gives customers an additional business day to cover overdrafts to their consumer account without being charged overdraft fees.

The table below shows our competitive ranking and market share based on deposits of FDIC-insured institutions as of June 30, 2018, in the top 10 metropolitan statistical areas (MSA) in which we compete:

MSA	Rank	Deposits (in millions)	Market Share
Columbus, OH	1	\$ 24,746	37%
Cleveland, OH	2	9,718	14
Detroit, MI	6	7,737	6
Akron, OH	1	3,937	28
Indianapolis, IN	4	3,452	7
Cincinnati, OH	5	3,365	3
Pittsburgh, PA	9	2,955	2
Toledo, OH	2	2,491	22
Grand Rapids, MI	2	2,416	11
Chicago, IL	20	2,303	1

Source: FDIC.gov, based on June 30, 2018 survey.

Many of our nonfinancial institution competitors have fewer regulatory constraints, broader geographic service areas, greater capital, and, in some cases, lower cost structures. In addition, competition for quality customers has intensified as a result of changes in regulation, advances in technology and product delivery systems, consolidation among financial service providers, and bank failures.

FinTechs continue to emerge in key areas of banking. In response, we are monitoring activity in marketplace lending along with businesses engaged in money transfer, investment advice, and money management tools. Our strategy involves assessing the marketplace and determining our near term plan, while developing a longer term approach to effectively service our existing customers and attract new customers. This includes evaluating which products we develop in-house, as well as evaluating partnership options, where applicable.

Regulatory Matters

Regulatory Environment

The banking industry is highly regulated. We are subject to supervision, regulation, and examination by various federal and state regulators, including the Federal Reserve, OCC, SEC, CFPB, FDIC, FINRA, and various state regulatory agencies. The

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statutory and regulatory framework that governs us is generally intended to protect depositors and customers, the DIF, the U.S. banking and financial system, and financial markets as a whole.

Banking statutes, regulations, and policies are continually under review by Congress, state legislatures, and federal and state regulatory agencies. In addition to laws and regulations, state and federal bank regulatory agencies may issue policy statements, interpretive letters, and similar written guidance applicable to Huntington and its subsidiaries. Any change in the statutes, regulations, or regulatory policies applicable to us, including changes in their interpretation or implementation, could have a material effect on our business or organization.

Both the scope of the laws and regulations and the intensity of the supervision to which we are subject increased in response to the financial crisis, as well as other factors, such as technological and market changes. Regulatory enforcement and fines have also increased across the banking and financial services sector. Many of these changes have occurred as a result of the Dodd-Frank Act and its implementing regulations, most of which are now in place. While the regulatory environment has entered a period of rebalancing of the post financial crisis framework, we expect that our business will remain subject to extensive regulation and supervision.

On May 24, 2018, the Economic Growth Act was signed into law. Among other regulatory changes, the Economic Growth Act amends various sections of the Dodd-Frank Act, including section 165 of Dodd-Frank Act, which was revised to raise the asset thresholds for determining the application of enhanced prudential standards for BHCs. Under the Economic Growth Act, BHCs with consolidated assets below \$100 billion were immediately exempted from all of the enhanced prudential standards, except risk committee requirements, which will now apply to publicly-traded BHCs with \$50 billion or more of consolidated assets. BHCs with consolidated assets between \$100 billion and \$250 billion, including Huntington, will continue to be subject to the enhanced prudential standards that applied to them before enactment of the Economic Growth Act for 18 months after the date of enactment, unless the Federal Reserve acts earlier to exempt these BHCs from enhanced prudential standards or to continue to subject these BHCs to some form of enhanced prudential standards. Following that 18-month period, BHCs with consolidated assets between \$100 billion and \$250 billion will be exempt from all enhanced prudential standards that the Federal Reserve has not made applicable to them, with the exception of risk committee requirements. As discussed immediately below, the Federal Reserve has proposed a rule to implement the Economic Growth Act under which Huntington would remain subject to certain enhanced prudential standards.

On October 31, 2018, the Federal Reserve issued the Proposed EPS Tailoring Rule pursuant to the Economic Growth Act to adjust the thresholds at which certain enhanced prudential standards apply to U.S. BHCs with \$100 billion or more in total consolidated assets. Also on October 31, 2018, the Federal Reserve, OCC, and FDIC issued the Proposed Capital and Liquidity Tailoring Rule to similarly adjust the thresholds at which certain other capital and liquidity standards apply to U.S. BHCs and banks with \$100 billion or more in total consolidated assets. Under the Proposed Tailoring Rules, these BHCs and banks, including Huntington and the Bank, would be placed into one of four risk-based categories based on the banking organization's size, status as a global systemically important bank (or not), cross-jurisdictional activity, weighted short-term wholesale funding, nonbank assets, and off-balance sheet exposure. The extent to which enhanced prudential standards and certain other capital and liquidity standards would apply to these BHCs and banks would depend on the banking organization's category. Under the Proposed Tailoring Rules, which remain subject to finalization and may be revised, Huntington and the Bank would each qualify as a Category IV banking organization subject to the least restrictive of the proposed requirements applicable to firms with \$100 billion or more in total consolidated assets.

The ultimate benefits or consequences of the Economic Growth Act for Huntington, the Bank, Huntington's other subsidiaries, and Huntington's activities will depend on the final form of the Proposed Tailoring Rules and additional rulemakings to implement the Act that are expected to be issued by the U.S. banking agencies, which we cannot predict.

We are also subject to the disclosure and regulatory requirements of the Securities Act of 1933, as amended, and the Securities Exchange Act of 1934, as amended, both as administered by the SEC, as well as the rules of Nasdaq that apply to companies with securities listed on the Nasdaq Global Select Market.

The following discussion describes certain elements of the comprehensive regulatory framework applicable to us. This discussion is not intended to describe all laws and regulations applicable to Huntington, the Bank, and Huntington's other subsidiaries.

Huntington as a Bank Holding Company

Huntington is registered as a BHC with the Federal Reserve under the BHC Act and qualifies for and has elected to become a FHC under the GLBA. As a FHC, Huntington is permitted to engage in, and be affiliated with companies engaging in, a broader range of activities than those permitted for a BHC. BHCs are generally restricted to engaging in the business of banking, managing or controlling banks, and certain other activities determined by the Federal Reserve to be closely related to banking. FHCs may also engage in activities that are considered to be financial in nature, as well as those incidental or complementary to financial activities, including underwriting, dealing and making markets in securities, and making merchant banking investments in non-financial companies. Huntington and the Bank must each remain "well-capitalized" and "well managed" in order for

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Huntington to maintain its status as a FHC. In addition, the Bank must receive a CRA rating of at least "Satisfactory" at its most recent examination for Huntington to engage in the full range of activities permissible for FHCs.

Huntington is subject to primary supervision, regulation and examination by the Federal Reserve, which serves as the primary regulator of our consolidated organization. The primary regulators of our non-bank subsidiaries directly regulate the activities of those subsidiaries, with the Federal Reserve exercising a supervisory role. Such non-bank subsidiaries include, for example, broker-dealers registered with the SEC and investment advisers registered with the SEC with respect to their investment advisory activities.

The Bank as a National Bank

The Bank is a national banking association chartered under the laws of the United States. As a national bank, the activities of the Bank are limited to those specifically authorized under the National Bank Act and OCC regulations. The Bank is subject to comprehensive primary supervision, regulation, and examination by the OCC. As a member of the DIF, the Bank is also subject to regulation and examination by the FDIC.

Supervision, Examination and Enforcement

A principal objective of the U.S. bank regulatory regime is to protect depositors and customers, the DIF, the U.S. banking and financial system, and financial markets as a whole by ensuring the financial safety and soundness of BHCs and banks, including Huntington and the Bank. Bank regulators regularly examine the operations of BHCs and banks. In addition, BHCs and banks are subject to periodic reporting and filing requirements.

The Federal Reserve, OCC, and FDIC have broad supervisory and enforcement authority with regard to BHCs and banks, including the power to conduct examinations and investigations, impose nonpublic supervisory agreements, issue cease and desist orders, impose fines and other civil and criminal penalties, terminate deposit insurance, and appoint a conservator or receiver. In addition, Huntington, the Bank and other Huntington subsidiaries are subject to supervision, regulation, and examination by the CFPB, which is the primary administrator of most federal consumer financial statutes and Huntington's primary consumer financial regulator. Supervision and examinations are confidential, and the outcomes of these actions may not be made public.

Bank regulators have various remedies available if they determine that the financial condition, capital resources, asset quality, earnings prospects, management, liquidity, or other aspects of a banking organization's operations are unsatisfactory. The regulators may also take action if they determine that the banking organization or its management is violating or has violated any law or regulation. The regulators have the power to, among other things, prohibit unsafe or unsound practices, require affirmative actions to correct any violation or practice, issue administrative orders that can be judicially enforced, direct increases in capital, direct the sale of subsidiaries or other assets, limit dividends and distributions, restrict growth, assess civil monetary penalties, remove officers and directors, and terminate deposit insurance.

Engaging in unsafe or unsound practices or failing to comply with applicable laws, regulations, and supervisory agreements could subject the Company, its subsidiaries, and their respective officers, directors, and institution-affiliated parties to the remedies described above, and other sanctions. In addition, the FDIC may terminate a bank's deposit insurance upon a finding that the bank's financial condition is unsafe or unsound or that the bank has engaged in unsafe or unsound practices or has violated an applicable rule, regulation, order, or condition enacted or imposed by the bank's regulatory agency.

In November 2018, the Federal Reserve adopted a new rating system, the LFI Rating System, to align its supervisory rating system for large financial institutions, including Huntington, with its current supervisory programs for these firms. As compared to the rating system it replaces, which will continue to be used for smaller BHCs, the LFI Rating System places a greater emphasis on capital and liquidity, including related planning and risk management practices. Huntington will receive its first rating under the LFI Rating System in 2020. These ratings will remain confidential.

Bank Acquisitions by Huntington

BHCs, such as Huntington, must obtain prior approval of the Federal Reserve in connection with any acquisition that results in the BHC owning or controlling 5% or more of any class of voting securities of a bank or another BHC.

Acquisitions of Ownership of the Company

Acquisitions of Huntington's voting stock above certain thresholds are subject to prior regulatory notice or approval under federal banking laws, including the BHC Act and the Change in Bank Control Act of 1978. Under the Change in Bank Control Act, a person or entity generally must provide prior notice to the Federal Reserve before acquiring the power to vote 10% or more of our outstanding common stock. Investors should be aware of these requirements when acquiring shares in our stock.

Interstate Banking

Under the Riegle-Neal Act, a BHC may acquire banks in states other than its home state, subject to any state requirement that the bank has been organized and operating for a minimum period of time, not to exceed five years, and the requirement that the

BHC not control, prior to or following the proposed acquisition, more than 10% of the total amount of deposits of insured depository institutions nationwide or, unless the acquisition is the BHC's initial entry into the state, more than 30% of such deposits in the state (or such lesser or greater amount set by the state). The Riegle-Neal Act also authorizes banks to merge across state lines, thereby creating interstate branches. A national bank, such as the Bank, with the approval of the OCC may open a branch in any state if the law of that state would permit a state bank chartered in that state to establish the branch.

Regulatory Capital Requirements

Huntington and the Bank are subject to certain risk-based capital and leverage ratio requirements under the U.S. Basel III capital rules adopted by the Federal Reserve, for Huntington, and by the OCC, for the Bank. These rules implement the Basel III international regulatory capital standards in the United States, as well as certain provisions of the Dodd-Frank Act. These quantitative calculations are minimums, and the Federal Reserve and OCC may determine that a banking organization, based on its size, complexity, or risk profile, must maintain a higher level of capital in order to operate in a safe and sound manner.

Under the U.S. Basel III capital rules, Huntington's and the Bank's assets, exposures, and certain off-balance sheet items are subject to risk weights used to determine the institutions' risk-weighted assets. These risk-weighted assets are used to calculate the following minimum capital ratios for Huntington and the Bank:

- **CET1 Risk-Based Capital Ratio**, equal to the ratio of CET1 capital to risk-weighted assets. CET1 capital primarily includes common shareholders' equity subject to certain regulatory adjustments and deductions, including with respect to goodwill, intangible assets, certain deferred tax assets, and AOCI. Certain of these adjustments and deductions were subject to phase-in periods that began on January 1, 2015, and was scheduled to end on January 1, 2018. Together with the FDIC, the Federal Reserve and OCC have issued proposed rules that would simplify the capital treatment of certain capital deductions and adjustments, and the final phase-in period for these capital deductions and adjustments has been indefinitely delayed. In addition, in December 2018, the U.S. federal banking agencies finalized rules that would permit BHCs and banks to phase-in, for regulatory capital purposes, the day-one impact of the new current expected credit loss accounting rule on retained earnings over a period of three years. For further discussion of the new current expected credit loss accounting rule, see Note 2 of the Notes to Consolidated Financial Statements.
- **Tier 1 Risk-Based Capital Ratio**, equal to the ratio of Tier 1 capital to risk-weighted assets. Tier 1 capital is primarily comprised of CET1 capital, perpetual preferred stock, and certain qualifying capital instruments.
- **Total Risk-Based Capital Ratio**, equal to the ratio of total capital, including CET1 capital, Tier 1 capital, and Tier 2 capital, to risk-weighted assets. Tier 2 capital primarily includes qualifying subordinated debt and qualifying ALLL. Tier 2 capital also includes, among other things, certain trust preferred securities.
- **Tier 1 Leverage Ratio**, equal to the ratio of Tier 1 capital to quarterly average assets (net of goodwill, certain other intangible assets, and certain other deductions).

The total minimum regulatory capital ratios and well-capitalized minimum ratios are reflected on the following page. The Federal Reserve has not yet revised the well-capitalized standard for BHCs to reflect the higher capital requirements imposed under the U.S. Basel III capital rules. For purposes of the Federal Reserve's Regulation Y, including determining whether a BHC meets the requirements to be an FHC, BHCs, such as Huntington, must maintain a Tier 1 Risk-Based Capital Ratio of 6.0% or greater and a Total Risk-Based Capital Ratio of 10.0% or greater. If the Federal Reserve were to apply the same or a very similar well-capitalized standard to BHCs as that applicable to the Bank, Huntington's capital ratios as of December 31, 2018 would exceed such revised well-capitalized standard. The Federal Reserve may require BHCs, including Huntington, to maintain capital ratios substantially in excess of mandated minimum levels, depending upon general economic conditions and a BHC's particular condition, risk profile, and growth plans.

Failure to be well-capitalized or to meet minimum capital requirements could result in certain mandatory and possible additional discretionary actions by regulators that, if undertaken, could have an adverse material effect on our operations or financial condition. Failure to be well-capitalized or to meet minimum capital requirements could also result in restrictions on Huntington's or the Bank's ability to pay dividends or otherwise distribute capital or to receive regulatory approval of applications.

In addition to meeting the minimum capital requirements, under the U.S. Basel III capital rules, Huntington and the Bank must also maintain the required Capital Conservation Buffer to avoid becoming subject to restrictions on capital distributions and certain discretionary bonus payments to management. The Capital Conservation Buffer is calculated as a ratio of CET1 capital to risk-weighted assets, and it effectively increases the required minimum risk-based capital ratios. The Capital Conservation Buffer requirement was phased in over a three-year period that began on January 1, 2016. The phase-in period ended on January 1, 2019, and the Capital Conservation Buffer is now at its fully phased-in level of 2.5%. Throughout 2018, the required Capital Conservation Buffer was 1.875%. The Tier 1 Leverage Ratio is not impacted by the Capital Conservation Buffer, and a banking institution may be considered well-capitalized while remaining out of compliance with the Capital Conservation Buffer. In April 2018, the Federal Reserve issued a proposal that would, among other things, replace the Capital Conservation Buffer with stress

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buffer requirements for certain large BHCs, including Huntington. Please refer to the Proposed Stress Buffer Requirements section below for further details.

The table below summarizes the capital requirements that Huntington and the Bank must satisfy to avoid limitations on capital distributions and certain discretionary bonus payments (i.e., the required minimum capital ratios plus the Capital Conservation Buffer) during the remaining transition period for the Capital Conservation Buffer:

	Minimum Basel III Regulatory Capital Ratio Plus Capital Conservation Buffer	
	January 1, 2018	January 1, 2019
CET 1 risk-based capital ratio	6.375%	7.00%
Tier 1 risk-based capital ratio	7.875	8.50
Total risk-based capital ratio	9.875	10.50

The following table presents the minimum regulatory capital ratios, minimum ratio plus capital conservation buffer, and well-capitalized minimums compared with Huntington's and the Bank's regulatory capital ratios as of December 31, 2018, calculated using the regulatory capital methodology applicable during 2018.

<i>(dollar amounts in billions)</i>		Minimum Regulatory Capital Ratio	Minimum Ratio + Capital Conservation Buffer (1)	Well-Capitalized Minimums (2)	At December 31, 2018 Actual
Ratios:					
CET 1 risk-based capital ratio	Consolidated	4.50%	6.375%	N/A	9.65%
	Bank	4.50	6.375	6.50%	10.19
Tier 1 risk-based capital ratio	Consolidated	6.00	7.875	6.00	11.06
	Bank	6.00	7.875	8.00	11.21
Total risk-based capital ratio	Consolidated	8.00	9.875	10.00	12.98
	Bank	8.00	9.875	10.00	13.42
Tier 1 leverage ratio	Consolidated	4.00	N/A	N/A	9.10
	Bank	4.00	N/A	5.00	9.23

- (1) Reflects the capital conservation buffer of 1.875% applicable during 2018. Huntington and the Bank already meet the Capital Conservation Buffer at the fully phased-in level of 2.5%.
- (2) Reflects the well-capitalized standard applicable to Huntington under Federal Reserve Regulation Y and the well-capitalized standard applicable to the Bank.

Huntington has the ability to provide additional capital to the Bank to maintain the Bank's risk-based capital ratios at levels which would be considered well-capitalized.

As of December 31, 2018, Huntington's and the Bank's regulatory capital ratios were above the well-capitalized standards and met the then-applicable Capital Conservation Buffer and the Capital Conservation Buffer on a fully phased-in basis. Based on current estimates, we believe that Huntington and the Bank will continue to exceed all applicable well-capitalized regulatory capital requirements and the Capital Conservation Buffer, on a fully phased-in basis.

Liquidity Requirements

BHCs with total consolidated assets of \$250 billion or more are subject to a minimum LCR, and BHCs with at least \$100 billion but less than \$250 billion in total consolidated assets, including Huntington, are currently subject to a less stringent modified version of the LCR. The LCR requires Huntington to meet certain liquidity measures by holding an adequate amount of unencumbered high-quality liquid assets, such as Treasury securities and other sovereign debt, to cover its projected net cash outflows over a 30 calendar-day stress scenario window. Because the LCR assigns less severe outflow assumptions to certain types of customer deposits, banks' demand for and the cost of these deposits may increase. Additionally, the LCR has increased the demand for direct U.S. government and U.S. government-guaranteed debt that, while high quality, generally carry lower yields than other securities BHCs hold in their investment portfolios. Under the Proposed Capital and Liquidity Tailoring Rule, Huntington, as a Category IV banking organization, would be exempt from the LCR.

In addition, in May 2016, the federal bank regulatory agencies proposed a Net Stable Funding Ratio rule, which would require large financial firms to meet certain net stable funding measures by funding themselves with adequate amounts of medium- and long-term funding. As initially proposed, Huntington would be subject to a less stringent modified version of the Net Stable Funding Ratio. Under the Proposed Capital and Liquidity Tailoring Rule, however, Huntington, as a Category IV banking organization, would be exempt from the proposed Net Stable Funding Ratio.

We cannot predict whether the final form of the Proposed Capital and Liquidity Tailoring Rule will exempt Huntington from the LCR and the proposed Net Stable Funding Ratio.

Enhanced Prudential Standards

Under the Dodd-Frank Act, as modified by the Economic Growth Act, BHCs with consolidated assets of more than \$100 billion, such as Huntington, are currently subject to certain enhanced prudential standards. As a result, Huntington is subject to more stringent standards, including liquidity and capital requirements, leverage limits, stress testing, resolution planning, and risk management standards, than those applicable to smaller institutions. Certain larger banking organizations are subject to additional enhanced prudential standards.

A rule to implement one other enhanced prudential standard—early remediation requirements—is still under consideration by the Federal Reserve. In June 2018, the Federal Reserve adopted a final rule that established single counterparty credit limits. The new single counterparty credit limits do not apply to BHCs like Huntington that do not have at least \$250 billion of total consolidated assets.

As discussed in the Regulatory Environment section above, following the 18-month period after the enactment of the Economic Growth Act, BHCs with consolidated assets between \$100 billion and \$250 billion, such as Huntington, will be exempt from all enhanced prudential standards that the Federal Reserve has not made applicable to them, with the exception of risk committee requirements. Under the Proposed EPS Tailoring Rule, Huntington, as a Category IV banking organization, would be subject to the least restrictive enhanced prudential standards applicable to firms with \$100 billion or more in total consolidated assets. As compared to enhanced prudential standards currently applicable to Huntington, under the Proposed EPS Tailoring Rule, Huntington would no longer be subject to company-run stress testing requirements and would be subject to less frequent supervisory stress tests, less frequent internal liquidity stress tests, and reduced liquidity risk management requirements. We cannot predict whether the Proposed EPS Tailoring Rule will be adopted as proposed or whether any changes will be made to it that would affect the enhanced prudential standards applicable to Huntington. In addition, future rulemakings to implement the Economic Growth Act may further change the enhanced prudential standards applicable to Huntington.

Capital Planning

Huntington is required to submit a capital plan annually to the Federal Reserve for supervisory review in connection with its annual CCAR process. Huntington is required to include within its capital plan an assessment of the expected uses and sources of capital and a description of all planned capital actions over the nine-quarter planning horizon, a detailed description of the process for assessing capital adequacy, its capital policy, and a discussion of any expected changes to its business plan that are likely to have a material impact on its capital adequacy.

The Federal Reserve expects BHCs subject to CCAR, such as Huntington, to have sufficient capital to withstand a highly adverse operating environment and to be able to continue operations, maintain ready access to funding, meet obligations to creditors and counterparties, and serve as credit intermediaries. In addition, the Federal Reserve evaluates the planned capital actions of these BHCs, including planned capital distributions such as dividend payments or stock repurchases. This involves a quantitative assessment of capital based on supervisory-run stress tests that assess the ability to maintain capital levels above certain minimum ratios, after taking all capital actions included in a BHC's capital plan, under baseline and stressful conditions throughout the nine-quarter planning horizon. As part of CCAR, the Federal Reserve evaluates whether BHCs have sufficient capital to continue operations throughout times of economic and financial market stress and whether they have robust, forward-looking capital planning processes that account for their unique risks. We generally may pay dividends and repurchase stock only in accordance with a capital plan that has been reviewed by the Federal Reserve and as to which the Federal Reserve has not objected. In addition, we are generally prohibited from making a capital distribution unless, after giving effect to the distribution, we will meet all minimum regulatory capital ratios.

Under revised CCAR rules that became effective on March 6, 2017, the Federal Reserve is no longer allowed to object to the capital plan of a large and non-complex BHC, such as Huntington, on a qualitative, as opposed to quantitative, basis. Instead, the Federal Reserve may evaluate the strength of Huntington's qualitative capital planning process through the regular supervisory process and targeted horizontal reviews of particular aspects of capital planning. In April 2018, the Federal Reserve issued a proposal to integrate its annual capital planning and stress testing requirements with certain ongoing regulatory capital requirements, which would make changes to capital planning and stress testing processes for BHCs subject to the proposed rule, including Huntington. Please refer to the Proposed Stress Buffer Requirements section below for further details. In addition, the Federal Reserve has stated that, as part of a future rulemaking to implement the Economic Growth Act, it may further streamline the CCAR rules and other capital planning requirements applicable to certain BHCs with consolidated assets between \$100 billion and \$250 billion, including Huntington.

Huntington submitted its 2018 capital plan to the Federal Reserve in April 2018. The Federal Reserve did not object to Huntington's 2018 capital plan. On February 5, 2019, the Federal Reserve announced that certain less-complex U.S. BHCs with less than \$250 billion in total consolidated assets, including Huntington, would not be subject to supervisory stress testing, company-run stress testing, or the CCAR process for the 2019 capital plan and stress test cycle. Those BHCs, including Huntington, remain subject to the requirement to develop and maintain a capital plan, and the board of directors (or designated subcommittee thereof) at those BHCs remain subject to the requirement to review and approve the BHC's capital plan. If

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Huntington chooses to submit a capital plan to the FRB in the 2019 capital plan cycle, it will be subject to a supervisory stress test by the FRB. There can be no assurance that the Federal Reserve will respond favorably to Huntington's future capital plans, capital actions, or stress test results.

Stress Testing

Huntington is subject to annual supervisory stress tests. These supervisory stress tests are forward-looking quantitative evaluations of the impact of stressful economic and financial market conditions on Huntington's capital. Huntington also must conduct semi-annual company-run stress tests, the results of which are filed with the Federal Reserve and publicly disclosed. The objective of the annual company-run stress test is to ensure that covered institutions have robust, forward-looking capital planning processes that account for their unique risks and to help ensure that covered institutions have sufficient capital to continue operations throughout times of economic and financial stress. The results of these annual stress tests must be publicly disclosed.

As noted above, Huntington is not subject to supervisory stress testing or company-run stress testing for the 2019 stress test cycle.

Under the Proposed EPS Tailoring Rule, Huntington, as a Category IV banking organization, would no longer be subject to company-run stress testing requirements and would be subject to supervisory stress tests every two years, instead of annually. In addition, on December 18, 2018, the OCC proposed a rule to implement the Economic Growth Act that would change the minimum threshold at which company-run stress test requirements apply for national banks to \$250 billion in total consolidated assets. Under this proposed rule, the Bank would no longer be subject to company-run stress testing requirements. We cannot predict whether the Proposed EPS Tailoring Rule or the OCC's proposed rule will be adopted as proposed or whether any changes will be made to either rule that would affect the stress testing requirements applicable to Huntington or the Bank.

Proposed Stress Buffer Requirements

On April 10, 2018, the Federal Reserve issued a proposal to integrate its annual capital planning and stress testing requirements with certain ongoing regulatory capital requirements. The proposal, which would apply to certain BHCs, including Huntington, would introduce a stress capital buffer and a stress leverage buffer, or stress buffer requirements, and related changes to the capital planning and stress testing processes.

For risk-based capital requirements, the stress capital buffer would replace the existing Capital Conservation Buffer, which is 2.5% as of January 1, 2019. The stress capital buffer would equal the greater of (i) the maximum decline in our CET1 Risk-Based Capital Ratio under the severely adverse scenario over the supervisory stress test measurement period, plus the sum of the ratios of the dollar amount of our planned common stock dividends to our projected risk-weighted assets for each of the fourth through seventh quarters of the supervisory stress test projection period, and (ii) 2.5%.

Like the stress capital buffer, the stress leverage buffer would be calculated based on the results of our most recent supervisory stress tests. The stress leverage buffer would equal the maximum decline in our Tier 1 Leverage Ratio under the severely adverse scenario, plus the sum of the ratios of the dollar amount of our planned common stock dividends to our projected leverage ratio denominator for each of the fourth through seventh quarters of the supervisory stress test projection period. No floor would be established for the stress leverage buffer, which would apply in addition to the current minimum Tier 1 Leverage Ratio of 4%.

The proposal would make related changes to capital planning and stress testing processes for BHCs subject to the stress buffer requirements. In particular, the proposal would limit projected capital actions to planned common stock dividends in the fourth through seventh quarters of the supervisory stress test projection period and would assume that BHCs maintain a constant level of assets and risk-weighted assets throughout the supervisory stress test projection period.

In November 2018, the Federal Reserve's Vice Chairman for Supervision stated that the Federal Reserve does not expect that the proposed stress buffer requirements will go into effect before 2020, and that, while the Federal Reserve expects to finalize certain elements of those requirements as proposed, other elements of the proposal will be re-proposed and again subject to public comment.

Restrictions on Dividends

Huntington is a legal entity separate and distinct from its banking and non-banking subsidiaries. Since our consolidated net income consists largely of net income of Huntington's subsidiaries, our ability to pay dividends and repurchase shares depends upon our receipt of dividends from these subsidiaries. Under federal law, there are various limitations on the extent to which the Bank can declare and pay dividends to Huntington, including those related to regulatory capital requirements, general regulatory oversight to prevent unsafe or unsound practices, and federal banking law requirements concerning the payment of dividends out of net profits, surplus, and available earnings. Certain contractual restrictions also may limit the ability of the Bank to pay dividends to Huntington. No assurances can be given that the Bank will, in any circumstances, pay dividends to Huntington.

Huntington's ability to declare and pay dividends to our shareholders is similarly limited by federal banking law and Federal Reserve regulations and policy. As discussed in the Capital Planning section above, a BHC may pay dividends and repurchase

stock only in accordance with a capital plan that has been reviewed by the Federal Reserve and as to which the Federal Reserve has not objected.

Huntington and the Bank must maintain the applicable CET1 Capital Conservation Buffer to avoid becoming subject to restrictions on capital distributions, including dividends. As of January 1, 2019, the fully phased in Capital Conservation Buffer is 2.5%. For more information on the Capital Conservation Buffer and the stress buffer requirements that the Federal Reserve has proposed that would replace the Capital Conservation Buffer for BHCs, see the Regulatory Capital Requirements section and Proposed Stress Buffer Requirements sections above, respectively.

Federal Reserve policy provides that a BHC should not pay dividends unless (1) the BHC's net income over the last four quarters (net of dividends paid) is sufficient to fully fund the dividends, (2) the prospective rate of earnings retention appears consistent with the capital needs, asset quality, and overall financial condition of the BHC and its subsidiaries, and (3) the BHC will continue to meet minimum required capital adequacy ratios. Accordingly, a BHC should not pay cash dividends that can only be funded in ways that weaken the BHC's financial health, such as by borrowing. The policy also provides that a BHC should inform the Federal Reserve reasonably in advance of declaring or paying a dividend that exceeds earnings for the period for which the dividend is being paid or that could result in a material adverse change to the BHC's capital structure. BHCs also are required to consult with the Federal Reserve before increasing dividends or redeeming or repurchasing capital instruments. Additionally, the Federal Reserve could prohibit or limit the payment of dividends by a BHC if it determines that payment of the dividend would constitute an unsafe or unsound practice.

Volcker Rule

Under the Volcker Rule, we are prohibited from (1) engaging in short-term proprietary trading for our own account and (2) having certain ownership interests in and relationships with hedge funds or private equity funds (covered funds). The Volcker Rule regulations contain exemptions for market-making, hedging, underwriting, trading in U.S. government and agency obligations, and also permit certain ownership interests in certain types of covered funds to be retained. They also permit the offering and sponsoring of covered funds under certain conditions. The Volcker Rule regulations impose significant compliance and reporting obligations on banking entities, such as us. We have put in place the compliance programs required by the Volcker Rule and have either divested or received extensions for any holdings in illiquid covered funds.

The five federal agencies implementing the Volcker Rule regulations have approved an interim final rule to permit banking entities to retain interests in certain collateralized debt obligations backed primarily by trust preferred securities if certain qualifications are met. In addition, the agencies released a non-exclusive list of issuers that meet the requirements of the interim final rule. As of December 31, 2018, we had no investments in trust preferred securities.

In May 2018, the five federal agencies with rulemaking authority with respect to the Volcker Rule released a proposal to revise the Volcker Rule. The proposal would tailor the Volcker Rule's compliance requirements to the amount of a firm's trading activity, revise the definition of trading account, clarify certain key provisions in the Volcker Rule, and modify the information companies are required to provide the federal agencies. If adopted, the proposed changes to the definition of trading account would likely expand the scope of investing and trading activities subject to the Volcker Rule's restrictions. We are currently evaluating the potential impact that this proposed rule would have on our investing and trading activities.

Recovery and Resolution Planning

As a BHC with assets of \$50 billion or more, Huntington is currently required to submit annually to the Federal Reserve and the FDIC a resolution plan for the orderly resolution of Huntington and its significant legal entities under the U.S. Bankruptcy Code or other applicable insolvency laws in a rapid and orderly fashion in the event of future material financial distress or failure. If the Federal Reserve and the FDIC jointly determine that the resolution plan is not credible and the deficiencies are not cured in a timely manner, they may jointly impose on us more stringent capital, leverage, or liquidity requirements, or restrictions on our growth, activities, or operations. If we were to fail to address the deficiencies in our resolution plan when required, we could eventually be required to divest certain assets or operations. Huntington submitted its resolution plan to the Federal Reserve and the FDIC on December 21, 2017. The Federal Reserve and FDIC have extended the filing deadline for certain BHCs, including Huntington, and as a result Huntington's next resolution plan is not due to the Federal Reserve and FDIC until December 31, 2019. In addition, the Bank is required to periodically file a separate resolution plan with the FDIC. The public versions of the resolution plans previously submitted by Huntington and the Bank are available on the FDIC's website and, in the case of Huntington's resolution plans, also on the Federal Reserve's website.

The Economic Growth Act raised the threshold for BHC resolution plans to \$250 billion in consolidated assets, but BHCs with consolidated assets between \$100 billion and \$250 billion, including Huntington, continue to be subject to this requirement for 18 months after the Economic Growth Act's date of enactment, and the Federal Reserve and FDIC may require such BHCs to remain subject to these requirements. The Federal Reserve and the FDIC have stated that they will propose a rule to amend the applicability of resolution planning requirements for BHCs with between \$100 billion and \$250 billion in consolidated assets. We cannot predict whether and to what extent Huntington will continue to be subject to the resolution plan requirements as a result of

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any final rule resulting from this proposal.

The Economic Growth Act did not change the FDIC's rules that require the Bank to periodically file a separate resolution plan. The FDIC's Chairman, however, has indicated that the FDIC intends to release an advanced notice of proposed rulemaking with respect to the FDIC's bank resolution plan requirements meant to better tailor bank resolution plans to a firm's size, complexity, and risk profile. Until the FDIC's revisions to its bank resolution plan requirement are finalized, no bank resolution plans will be required to be filed.

The Bank had previously been required to develop and maintain a recovery plan that is appropriate for its individual size, risk profile, activities, and complexity, including the complexity of its organizational and legal entity structure under OCC guidelines that establish enforceable standards for recovery planning for insured national banks. On December 27, 2018, the OCC finalized an amendment to its guidelines that, among other things, raised the threshold at which banks become subject to the OCC's recovery planning guidelines to \$250 billion in total consolidated assets. This increased threshold became effective on January 28, 2019, and as a result, the Bank is no longer subject to the OCC's recovery planning guidelines.

Source of Strength

Huntington is required to serve as a source of financial and managerial strength to the Bank and, under appropriate conditions, to commit resources to support the Bank. This support may be required by the Federal Reserve at times when we might otherwise determine not to provide it or when doing so is not otherwise in the interests of Huntington or our shareholders or creditors. The Federal Reserve may require a BHC to make capital injections into a troubled subsidiary bank and may charge the BHC with engaging in unsafe and unsound practices if the BHC fails to commit resources to such a subsidiary bank or if it undertakes actions that the Federal Reserve believes might jeopardize the BHC's ability to commit resources to such subsidiary bank.

Under these requirements, Huntington may in the future be required to provide financial assistance to the Bank should it experience financial distress. Capital loans by Huntington to the Bank would be subordinate in right of payment to deposits and certain other debts of the Bank. In the event of Huntington's bankruptcy, any commitment by Huntington to a federal bank regulatory agency to maintain the capital of the Bank would be assumed by the bankruptcy trustee and entitled to a priority of payment.

FDIC as Receiver or Conservator of Huntington

Upon the insolvency of an insured depository institution, such as the Bank, the FDIC may be appointed as the conservator or receiver of the institution. Under the Orderly Liquidation Authority, upon the insolvency of a BHC, such as Huntington, the FDIC may be appointed as conservator or receiver of the BHC, if certain findings are made by the FDIC, the Federal Reserve, and the Secretary of the Treasury, in consultation with the President. Acting as a conservator or receiver, the FDIC would have broad powers to transfer any assets or liabilities of the institution without the approval of the institution's creditors.

Depositor Preference

The FDIA provides that, in the event of the liquidation or other resolution of an insured depository institution, including the Bank, the claims of depositors of the institution (including the claims of the FDIC as subrogee of insured depositors) and certain claims for administrative expenses of the FDIC as a receiver would have priority over other general unsecured claims against the institution. If the Bank were to fail, insured and uninsured depositors, along with the FDIC, would have priority in payment ahead of unsecured, non-deposit creditors, including Huntington, with respect to any extensions of credit they have made to such insured depository institution.

Transactions between a Bank and its Affiliates

Federal banking laws and regulations impose qualitative standards and quantitative limitations upon certain transactions between a bank and its affiliates, including between a bank and its holding company and companies that the BHC may be deemed to control for these purposes. Transactions covered by these provisions must be on arm's-length terms and cannot exceed certain amounts which are determined with reference to the bank's regulatory capital. Moreover, if the transaction is a loan or other extension of credit, it must be secured by collateral in an amount and quality expressly prescribed by statute, and if the affiliate is unable to pledge sufficient collateral, the BHC may be required to provide it. The Dodd-Frank Act expanded the coverage and scope of these regulations, including by applying them to the credit exposure arising under derivative transactions, repurchase and reverse repurchase agreements, and securities borrowing and lending transactions. Federal banking laws also place similar restrictions on loans and other extensions of credit by FDIC-insured banks, such as the Bank, and their subsidiaries to their directors, executive officers, and principal shareholders.

Lending Standards and Guidance

The federal bank regulatory agencies have adopted uniform regulations prescribing standards for extensions of credit that are secured by liens or interests in real estate or made for the purpose of financing permanent improvements to real estate. Under

these regulations, all insured depository institutions, such as the Bank, must adopt and maintain written policies establishing appropriate limits and standards for extensions of credit that are secured by liens or interests in real estate or are made for the purpose of financing permanent improvements to real estate. These policies must establish loan portfolio diversification standards, prudent underwriting standards (including loan-to-value limits) that are clear and measurable, loan administration procedures, and documentation, approval and reporting requirements. The real estate lending policies must reflect consideration of the federal bank regulatory agencies' Interagency Guidelines for Real Estate Lending Policies.

Heightened Governance and Risk Management Standards

The OCC has published guidelines to update expectations for the governance and risk management practices of certain large financial institutions, including the Bank. The guidelines require covered institutions to establish and adhere to a written governance framework in order to manage and control their risk-taking activities. In addition, the guidelines provide standards for the institutions' boards of directors to oversee the risk governance framework. As discussed in the Risk Management and Capital section of the MDA, the Bank currently has a written governance framework and associated controls.

Anti-Money Laundering

The Bank Secrecy Act and the Patriot Act contain anti-money laundering and financial transparency provisions intended to detect and prevent the use of the U.S. financial system for money laundering and terrorist financing activities. The Bank Secrecy Act, as amended by the Patriot Act, requires depository institutions and their holding companies to undertake activities including maintaining an AML program, verifying the identity of clients, monitoring for and reporting suspicious transactions, reporting on cash transactions exceeding specified thresholds, and responding to requests for information by regulatory authorities and law enforcement agencies. The Bank is subject to the Bank Secrecy Act and, therefore, is required to provide its employees with AML training, designate an AML compliance officer, and undergo an annual, independent audit to assess the effectiveness of its AML program. The Bank has implemented policies, procedures, and internal controls that are designed to comply with these AML requirements. In May 2016, FinCEN, which is a unit of the Treasury Department that drafts regulations implementing the Patriot Act and other AML legislation, issued final rules governing enhanced customer due diligence. The rules impose several new obligations on covered financial institutions with respect to their "legal entity customers," including corporations, limited liability companies, and other similar entities. For each such customer that opens an account (including an existing customer opening a new account), the covered financial institution must identify and verify the customer's "beneficial owners," who are specifically defined in the rules. The rules contain an exemption for insurance premium financing transactions, but cash refunds issued in connection with such transactions are not exempt, thus requiring verification of beneficial ownership before cash refunds may be issued to borrowers. Bank regulators are focusing their examinations on AML compliance, and we will continue to monitor and augment, where necessary, our AML compliance programs. The federal banking agencies are required, when reviewing bank and BHC acquisition or merger applications, to take into account the effectiveness of the AML activities of the applicant.

OFAC Regulation

OFAC is responsible for administering economic sanctions that affect transactions with designated foreign countries, nationals, and others, as defined by various Executive Orders and in various legislation. OFAC-administered sanctions take many different forms. For example, sanctions may include: (1) restrictions on trade with or investment in a sanctioned country, including prohibitions against direct or indirect imports from and exports to a sanctioned country and prohibitions on U.S. persons engaging in financial transactions relating to, making investments in, or providing investment-related advice or assistance to, a sanctioned country; and (2) a blocking of assets in which the government or "specially designated nationals" of the sanctioned country have an interest, by prohibiting transfers of property subject to U.S. jurisdiction, including property in the possession or control of U.S. persons. OFAC also publishes lists of persons, organizations, and countries suspected of aiding, harboring, or engaging in terrorist acts, known as Specially Designated Nationals and Blocked Persons. Blocked assets, for example property and bank deposits, cannot be paid out, withdrawn, set off, or transferred in any manner without a license from OFAC. Failure to comply with these sanctions could have serious legal and reputational consequences.

Data Privacy

Federal and state law contains extensive consumer privacy protection provisions. The GLBA requires financial institutions to periodically disclose their privacy policies and practices relating to sharing such information and enables retail customers to opt out of our ability to share information with unaffiliated third parties under certain circumstances. Other federal and state laws and regulations impact our ability to share certain information with affiliates and non-affiliates for marketing and/or non-marketing purposes, or to contact customers with marketing offers. The GLBA also requires financial institutions to implement a comprehensive information security program that includes administrative, technical, and physical safeguards to ensure the security and confidentiality of customer records and information. These security and privacy policies and procedures for the protection of personal and confidential information are in effect across all businesses and geographic locations as applicable. Federal law also makes it a criminal offense, except in limited circumstances, to obtain or attempt to obtain customer information of a financial nature by fraudulent or deceptive means.

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Data privacy and data protection are areas of increasing state legislative focus. For example, in June of 2018, the Governor of California signed into law the CCPA. The CCPA, which becomes effective on January 1, 2020, applies to for-profit businesses that conduct business in California and meet certain revenue or data collection thresholds. The CCPA will give consumers the right to request disclosure of information collected about them, and whether that information has been sold or shared with others, the right to request deletion of personal information (subject to certain exceptions), the right to opt out of the sale of the consumer's personal information, and the right not to be discriminated against for exercising these rights. The CCPA contains several exemptions, including an exemption applicable to information that is collected, processed, sold, or disclosed pursuant to the GLBA. The California Attorney General has not yet proposed or adopted regulations implementing the CCPA, and the California State Legislature has amended the Act since its passage. In California the CCPA may be interpreted or applied in a manner inconsistent with our understanding or similar laws may be adopted by other states where we operate. We are continuing to assess the impact of the CCPA on our business. The federal government may also pass data privacy or data protection legislation.

Like other lenders, the Bank and other of our subsidiaries use credit bureau data in their underwriting activities. Use of such data is regulated under the FCRA, and the FCRA also regulates reporting information to credit bureaus, prescreening individuals for credit offers, sharing of information between affiliates, and using affiliate data for marketing purposes. Similar state laws may impose additional requirements on us and our subsidiaries.

FDIC Insurance

The DIF provides insurance coverage for certain deposits, up to a standard maximum deposit insurance amount of \$250,000 per depositor and is funded through assessments on insured depository institutions, based on the risk each institution poses to the DIF. The Bank accepts customer deposits that are insured by the DIF and, therefore, must pay insurance premiums. The FDIC may increase the Bank's insurance premiums based on various factors, including the FDIC's assessment of its risk profile. Until September 30, 2018, banks with \$10 billion or more in total assets, such as the Bank, were required to pay an assessment surcharge. This requirement ended effective September 30, 2018, as a result of the FDIC's reserve ratio exceeding 1.35%.

The FDIC issued a rule that requires large insured depository institutions, including the Bank, to enhance their deposit account recordkeeping and related information technology system capabilities to facilitate prompt payment of insured deposits if such an institution were to fail. We must comply with these new requirements by April 1, 2020.

Compensation

Our compensation practices are subject to oversight by the Federal Reserve and, with respect to some of our subsidiaries and employees, by other financial regulatory bodies. The scope and content of compensation regulation in the financial industry are continuing to develop, and we expect that these regulations and resulting market practices will continue to evolve over a number of years.

The federal bank regulatory agencies have issued joint guidance on executive compensation designed to ensure that the incentive compensation policies of banking organizations, such as Huntington and the Bank, do not encourage imprudent risk taking and are consistent with the safety and soundness of the organization. In addition, the Dodd-Frank Act requires the federal bank regulatory agencies and the SEC to issue regulations or guidelines requiring covered financial institutions, including Huntington and the Bank, to prohibit incentive-based payment arrangements that encourage inappropriate risks by providing compensation that is excessive or that could lead to material financial loss to the institution. A proposed rule was issued in 2016. Also pursuant to the Dodd-Frank Act, in 2015, the SEC proposed rules that would direct stock exchanges to require listed companies to implement clawback policies to recover incentive-based compensation from current or former executive officers in the event of certain financial restatements and would also require companies to disclose their clawback policies and their actions under those policies. Huntington continues to evaluate the proposed rules, both of which are subject to further rulemaking procedures.

Cybersecurity

The CISA is intended to improve cybersecurity in the United States by enhanced sharing of information about security threats among the U.S. government and private sector entities, including financial institutions. The CISA also authorizes companies to monitor their own systems notwithstanding any other provision of law and allows companies to carry out defensive measures on their own systems from cyber-attacks. The law includes liability protections for companies that share cyber threat information with third parties so long as such sharing activity is conducted in accordance with CISA.

In October 2016, the federal bank regulatory agencies issued an ANPR regarding enhanced cyber risk management standards which would apply to a wide range of large financial institutions and their third-party service providers, including us and the Bank. The proposed standards would expand existing cybersecurity regulations and guidance to focus on cyber risk governance and management, management of internal and external dependencies, and incident response, cyber resilience, and situational awareness. In addition, the proposal contemplates more stringent standards for institutions with systems that are critical to the financial sector.

Community Reinvestment Act

The CRA is intended to encourage banks to help meet the credit needs of their service areas, including low- and moderate-income neighborhoods, consistent with safe and soundness practices. The relevant federal bank regulatory agency, the OCC in the Bank's case, examines each bank and assigns it a public CRA rating. A bank's record of fair lending compliance is part of the resulting CRA examination report.

The CRA requires the relevant federal bank regulatory agency to consider a bank's CRA assessment when considering the bank's application to conduct certain mergers or acquisitions or to open or relocate a branch office. The Federal Reserve also must consider the CRA record of each subsidiary bank of a BHC in connection with any acquisition or merger application filed by the BHC. An unsatisfactory CRA record could substantially delay or result in the denial of an approval or application by Huntington or the Bank. The Bank received a CRA rating of "Outstanding" in its most recent examination.

Leaders of the federal banking agencies recently have indicated their support for revising the CRA regulatory framework, and on August 28, 2018, the OCC issued an ANPR to solicit ideas for building a new CRA framework. It is too early to tell whether any changes will be made to applicable CRA requirements.

Transaction Account Reserves

Federal Reserve rules require depository institutions to maintain reserves against their transaction accounts, primarily negotiable order of withdrawal (NOW) and regular checking accounts. For 2019, the first \$16.3 million of covered balances are exempt from the reserve requirement, aggregate balances between \$16.3 million and \$124.2 million are subject to a 3% reserve requirement, and aggregate balances above \$124.2 million are subject to a 10% reserve requirement. These reserve requirements are subject to annual adjustment by the Federal Reserve. The Bank is in compliance with these requirements.

Debit Interchange Fees

We are subject to a statutory requirement that interchange fees for electronic debit transactions that are paid to or charged by payment card issuers, including the Bank, be reasonable and proportional to the cost incurred by the issuer. Interchange fees for electronic debit transactions are limited to 21 cents plus 0.05% of the transaction, plus an additional one cent per transaction fraud adjustment. These fees impose requirements regarding routing and exclusivity of electronic debit transactions, and generally require that debit cards be usable in at least two unaffiliated networks.

Consumer Protection Regulation and Supervision

We are subject to supervision and regulation by the CFPB with respect to federal consumer protection laws. We are also subject to certain state consumer protection laws, and under the Dodd-Frank Act, state attorneys general and other state officials are empowered to enforce certain federal consumer protection laws and regulations. State authorities have increased their focus on and enforcement of consumer protection rules. These federal and state consumer protection laws apply to a broad range of our activities and to various aspects of our business and include laws relating to interest rates, fair lending, disclosures of credit terms and estimated transaction costs to consumer borrowers, debt collection practices, the use of and the provision of information to consumer reporting agencies, and the prohibition of unfair, deceptive, or abusive acts or practices in connection with the offer, sale, or provision of consumer financial products and services.

The CFPB has promulgated many mortgage-related final rules since it was established under the Dodd-Frank Act, including rules related to the ability to repay and qualified mortgage standards, mortgage servicing standards, loan originator compensation standards, high-cost mortgage requirements, HMDA requirements, and appraisal and escrow standards for higher priced mortgages. The mortgage-related final rules issued by the CFPB have materially restructured the origination, servicing, and securitization of residential mortgages in the United States. These rules have impacted, and will continue to impact, the business practices of mortgage lenders, including the Company.

Available Information

We are subject to the informational requirements of the Exchange Act and, in accordance with the Exchange Act, we file annual, quarterly, and current reports, proxy statements, and other information with the SEC. The SEC maintains an Internet web site that contains reports, proxy statements, and other information about issuers, like us, who file electronically with the SEC. The address of the site is <http://www.sec.gov>. The reports and other information, including any related amendments, filed by us with, or furnished by us to, the SEC are also available free of charge at our Internet web site as soon as reasonably practicable after such material is electronically filed with, or furnished to, the SEC. The address of the site is <http://www.huntington.com>. Except as specifically incorporated by reference into this Annual Report on Form 10-K, information on those web sites is not part of this report. You also should be able to inspect reports, proxy statements, and other information about us at the offices of the Nasdaq National Market at 33 Whitehall Street, New York, New York 10004.

Item 1A: Risk Factors

We, like other financial companies, are subject to a number of risks that may adversely affect our financial condition or results of operations, many of which are outside of our direct control. Among these risks are:

- **Credit risk**, which is the risk of loss due to loan and lease customers or other counterparties not being able to meet their financial obligations under agreed upon terms;
- **Market risk**, which occurs when fluctuations in interest rates impact earnings and capital. Financial impacts are realized through changes in the interest rates of balance sheet assets and liabilities (net interest margin) or directly through valuation changes of capitalized MSR and/or trading assets (noninterest income);
- **Liquidity risk**, which is the risk to current or anticipated earnings or capital arising from an inability to meet obligations when they come due. Liquidity risk includes the inability to access funding sources or manage fluctuations in funding levels. Liquidity risk also results from the failure to recognize or address changes in market conditions that affect our ability to liquidate assets quickly and with minimal loss in value;
- **Operational and Legal risk**, which is the risk of loss arising from inadequate or failed internal processes or systems, human errors or misconduct, or adverse external events. Operational losses result from internal fraud, external fraud, inadequate or inappropriate employment practices and workplace safety, failure to meet professional obligations involving customers, products, and business practices, damage to physical assets, business disruption and systems failures, and failures in execution, delivery, and process management. Legal risk includes, but is not limited to, exposure to orders, fines, penalties, or punitive damages resulting from litigation, as well as regulatory actions;
- **Compliance risk**, which exposes us to money penalties, enforcement actions, or other sanctions as a result of non-conformance with laws, rules, and regulations that apply to the financial services industry;
- **Strategic risk**, which is defined as risk to current or anticipated earnings, capital, or enterprise value arising from adverse business decisions, improper implementation of business decisions or lack of responsiveness to industry / market changes; and
- **Reputation risk**, which is the risk that negative publicity regarding an institution's business practices, whether true or not, will cause a decline in the customer base, costly litigation, or revenue reductions.

In addition to the other information included or incorporated by reference into this report, readers should carefully consider that the following important factors, among others, could negatively impact our business, future results of operations, and future cash flows materially.

Credit Risks:

Our ACL level may prove to not be adequate or be negatively affected by credit risk exposures which could adversely affect our net income and capital.

Our business depends on the creditworthiness of our customers. Our ACL of \$868 million at December 31, 2018, represented Management's estimate of probable losses inherent in our loan and lease portfolio (ALLL) as well as our unfunded loan commitments and letters of credit (AULC). We regularly review our ACL for appropriateness. In doing so, we consider economic conditions and trends, collateral values, and credit quality indicators, such as past charge-off experience, levels of past due loans, and NPAs. There is no certainty that our ACL will be appropriate over time to cover losses in the portfolio because of unanticipated adverse changes in the economy, market conditions, or events adversely affecting specific customers, industries, or markets. If the credit quality of our customer base materially decreases, if the risk profile of a market, industry, or group of customers changes materially, or if the ACL is not appropriate, our net income and capital could be materially adversely affected, which could have a material adverse effect on our financial condition and results of operations.

In addition, regulatory review of risk ratings and loan and lease losses may impact the level of the ACL and could have a material adverse effect on our financial condition and results of operations.

Furthermore, in June 2016, the FASB issued a new current expected credit loss rule, which will require banks to record, at the time of origination, credit losses expected throughout the life of the asset portfolio on loans and held-to-maturity securities, as opposed to the current practice of recording losses when it is probable that a loss event has occurred. We are required to adopt the current expected credit loss rule in 2020 and expect to recognize a one-time cumulative effect adjustment to our ACL and retained earnings as of January 1, 2020. The current expected credit loss model could materially affect how we determine our ACL and report our financial condition and results of operations. For further discussion, see Note 2 of the Notes to Consolidated Financial Statements.

Weakness in economic conditions could adversely affect our business.

Our performance could be negatively affected to the extent there is deterioration in business and economic conditions which have direct or indirect material adverse impacts on us, our customers, and our counterparties. These conditions could result in one or more of the following:

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- A decrease in the demand for loans and other products and services offered by us;
- A decrease in customer savings generally and in the demand for savings and investment products offered by us; and
- An increase in the number of customers and counterparties who become delinquent, file for protection under bankruptcy laws, or default on their loans or other obligations to us.

An increase in the number of delinquencies, bankruptcies, or defaults could result in a higher level of NPAs, NCOs, provision for credit losses, and valuation adjustments on loans held for sale. The markets we serve are dependent on industrial and manufacturing businesses and, thus, are particularly vulnerable to adverse changes in economic conditions affecting these sectors.

Market Risks:

Changes in interest rates could reduce our net interest income, reduce transactional income, and negatively impact the value of our loans, securities, and other assets. This could have an adverse impact on our cash flows, financial condition, results of operations, and capital.

Our results of operations depend substantially on net interest income, which is the difference between interest earned on interest earning assets (such as investments and loans) and interest paid on interest bearing liabilities (such as deposits and borrowings). Interest rates are highly sensitive to many factors, including governmental monetary policies and domestic and international economic and political conditions. Conditions such as inflation, deflation, recession, unemployment, money supply, and other factors beyond our control may also affect interest rates. In addition, after an extended period during which the Federal Reserve increased the size of its balance sheet substantially above historical levels through the purchase of debt securities, the Federal Reserve has begun to reduce the size of its balance sheet from these elevated levels, which might also affect interest rates. If our interest earning assets mature or reprice faster than interest bearing liabilities in a declining interest rate environment, net interest income could be materially adversely impacted. Likewise, if interest bearing liabilities mature or reprice more quickly than interest earning assets in a rising interest rate environment, net interest income could be adversely impacted.

After a prolonged period of low and relatively stable interest rates, interest rates rose over the course of 2017 and 2018, although interest rates continue to remain low by historical standards.

Changes in interest rates can affect the value of loans, securities, assets under management, and other assets, including mortgage and nonmortgage servicing rights. An increase in interest rates that adversely affects the ability of borrowers to pay the principal or interest on loans and leases may lead to an increase in NPAs and a reduction of income recognized, which could have a material adverse effect on our results of operations and cash flows. When we place a loan on nonaccrual status, we reverse any accrued but unpaid interest receivable, which decreases interest income. However, we continue to incur interest expense as a cost of funding NALs without any corresponding interest income. In addition, transactional income, including trust income, brokerage income, and gain on sales of loans can vary significantly from period-to-period based on a number of factors, including the interest rate environment. A decline in interest rates along with a flattening yield curve limits our ability to reprice deposits given the current historically low level of interest rates and could result in declining net interest margins if longer duration assets reprice faster than deposits.

Rising interest rates reduce the value of our fixed-rate securities. Any unrealized loss from these portfolios impacts OCI, shareholders' equity, and the Tangible Common Equity ratio. Any realized loss from these portfolios impacts regulatory capital ratios. In a rising interest rate environment, pension and other post-retirement obligations somewhat mitigate negative OCI impacts from securities and financial instruments. For more information, refer to "Market Risk" of the MD&A.

Certain investment securities, notably mortgage-backed securities, are very sensitive to rising and falling rates. Generally, when rates rise, prepayments of principal and interest will decrease and the duration of mortgage-backed securities will increase. Conversely, when rates fall, prepayments of principal and interest will increase and the duration of mortgage-backed securities will decrease. In either case, interest rates have a significant impact on the value of mortgage-backed securities.

MSR fair values are sensitive to movements in interest rates, as expected future net servicing income depends on the projected outstanding principal balances of the underlying loans, which can be reduced by prepayments. Prepayments usually increase when mortgage interest rates decline and decrease when mortgage interest rates rise.

In addition to volatility associated with interest rates, the Company also has exposure to equity markets related to the investments within the benefit plans and other income from client based transactions.

Industry competition may have an adverse effect on our success.

Our profitability depends on our ability to compete successfully. We operate in a highly competitive environment, and we expect competition to intensify. Certain of our competitors are larger and have more resources than we do, enabling them to be more aggressive than us in competing for loans and deposits. In our market areas, we face competition from other banks and financial service companies that offer similar services. Some of our non-bank competitors are not subject to the same extensive regulations we are and, therefore, may have greater flexibility in competing for business. Technological advances have made it possible for our non-bank competitors to offer products and services that traditionally were banking products and for financial institutions and other

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companies to provide electronic and internet-based financial solutions, including mobile payments, online deposit accounts, electronic payment processing, and marketplace lending, without having a physical presence where their customers are located. Legislative or regulatory changes also could lead to increased competition in the financial services sector. For example, the Economic Growth Act and, if adopted, the Proposed Tailoring Rules reduce the regulatory burden of certain large BHCs and raise the asset thresholds at which more onerous requirements apply, which could cause certain large BHCs to become more competitive or to more aggressively pursue expansion. Our ability to compete successfully depends on a number of factors, including customer convenience, quality of service by investing in new products and services, electronic platforms, personal contacts, pricing, and range of products. If we are unable to successfully compete for new customers and retain our current customers, our business, financial condition, or results of operations may be adversely affected. In particular, if we experience an outflow of deposits as a result of our customers seeking investments with higher yields or greater financial stability, or a desire to do business with our competitors, we may be forced to rely more heavily on borrowings and other sources of funding to operate our business and meet withdrawal demands, thereby adversely affecting our net interest margin. For more information, refer to “Competition” section of Item 1. Business.

Uncertainty about the future of LIBOR may adversely affect our business.

LIBOR and certain other interest rate “benchmarks” are the subject of recent national, international, and other regulatory guidance and proposals for reform. These reforms may cause such benchmarks to perform differently than in the past or have other consequences which cannot be predicted. On July 27, 2017, the United Kingdom’s Financial Conduct Authority, which regulates LIBOR, publicly announced that it intends to stop persuading or compelling banks to submit information to the administrator of LIBOR after 2021. The announcement indicates that the continuation of LIBOR on the current basis cannot be guaranteed after 2021. While there is no consensus on what rate or rates may become accepted alternatives to LIBOR, a group of market participants convened by the Federal Reserve, the Alternative Reference Rate Committee, has selected the Secured Overnight Finance Rate as its recommended alternative to LIBOR. The Federal Reserve Bank of New York started to publish the Secured Overnight Financing Rate in April 2018. The Secured Overnight Financing Rate is a broad measure of the cost of overnight borrowings collateralized by Treasury securities that was selected by the Alternative Reference Rate Committee due to the depth and robustness of the U.S. Treasury repurchase market. At this time, it is impossible to predict whether the Secured Overnight Financing Rate will become an accepted alternative to LIBOR.

The market transition away from LIBOR to an alternative reference rate, such as the Secured Overnight Financing Rate, is complex and could have a range of adverse effects on our business, financial condition and results of operations. In particular, any such transition could:

- adversely affect the interest rates paid or received on, the revenue and expenses associated with or the value of Huntington’s LIBOR-based assets and liabilities, which include certain variable rate loans, Huntington’s Series B preferred stock, certain of Huntington’s junior subordinated debentures, certain of the Bank’s senior notes and certain other securities or financial arrangements;
- adversely affect the interest rates paid or received on, the revenue and expenses associated with or the value of other securities or financial arrangements, given LIBOR’s role in determining market interest rates globally;
- prompt inquiries or other actions from regulators in respect of Huntington’s preparation and readiness for the replacement of LIBOR with an alternative reference rate; and
- result in disputes, litigation or other actions with counterparties regarding the interpretation and enforceability of certain fallback language in LIBOR-based contracts and securities.

The transition away from LIBOR to an alternative reference rate will require the transition to or development of appropriate systems and analytics to effectively transition Huntington’s risk management and other processes from LIBOR-based products to those based on the applicable alternative reference rate, such as the Secured Overnight Financing Rate. Huntington has developed a LIBOR transition team and project plan that outlines timelines and priorities to prepare its processes, systems and people to support this transition. Timelines and priorities include assessing the impact on our customers, as well as assessing system requirements for operational processes. There can be no guarantee that these efforts will successfully mitigate the operational risks associated with the transition away from LIBOR to an alternative reference rate.

The manner and impact of the transition from LIBOR to an alternative reference rate, as well as the effect of these developments on our funding costs, loan and investment and trading securities portfolios, asset-liability management, and business, is uncertain.

Liquidity Risks:

Changes in either Huntington's financial condition or in the general banking industry could result in a loss of depositor confidence.

Liquidity is the ability to meet cash flow needs on a timely basis at a reasonable cost. The Bank uses its liquidity to extend credit and to repay liabilities as they become due or as demanded by customers. The board of directors establishes liquidity policies, including contingency funding plans, and limits, and management establishes operating guidelines for liquidity.

Our primary source of liquidity is our large supply of deposits from consumer and commercial customers. The continued availability of this supply depends on customer willingness to maintain deposit balances with banks in general and us in particular. The availability of deposits can also be impacted by regulatory changes (e.g., changes in FDIC insurance, the LCR, etc.), changes in the financial condition of Huntington, other banks, or the banking industry in general, changes in the interest rates our competitors pay on their deposits, and other events which can impact the perceived safety or economic benefits of bank deposits. Recently, competition for deposits has increased and interest rates paid on deposits have generally risen. While we make significant efforts to consider and plan for hypothetical disruptions in our deposit funding, market related, geopolitical, or other events could impact the liquidity derived from deposits.

We are a holding company and depend on dividends by our subsidiaries for most of our funds.

Huntington is an entity separate and distinct from the Bank. The Bank conducts most of our operations, and Huntington depends upon dividends from the Bank to service Huntington's debt and to pay dividends to Huntington's shareholders. The availability of dividends from the Bank is limited by various statutes and regulations. It is possible, depending upon the financial condition including liquidity and capital adequacy of the Bank and other factors, that the OCC could limit the payment of dividends or other payments to Huntington by the Bank. In addition, the payment of dividends by our other subsidiaries is also subject to the laws of the subsidiary's state of incorporation, and regulatory capital and liquidity requirements applicable to such subsidiaries. In the event that the Bank was unable to pay dividends to us, we in turn would likely have to reduce or stop paying dividends on our Preferred and Common Stock. Our failure to pay dividends on our Preferred and Common Stock could have a material adverse effect on the market price of our Preferred and Common Stock. Additional information regarding dividend restrictions is provided in Item 1. Regulatory Matters.

If we lose access to capital markets, we may not be able to meet the cash flow requirements of our depositors, creditors, and borrowers, or have the operating cash needed to fund corporate expansion and other corporate activities.

Wholesale funding sources include securitization, federal funds purchased, securities sold under repurchase agreements, non-core deposits, and long-term debt. The Bank is also a member of the Federal Home Loan Bank of Cincinnati, which provides members access to funding through advances collateralized with mortgage-related assets. We maintain a portfolio of highly-rated, marketable securities that is available as a source of liquidity.

Capital markets disruptions can directly impact the liquidity of Huntington and the Bank. The inability to access capital markets funding sources as needed could adversely impact our financial condition, results of operations, cash flows, and level of regulatory-qualifying capital. We may, from time-to-time, consider using our existing liquidity position to opportunistically retire outstanding securities in privately negotiated or open market transactions.

A reduction in our credit rating could adversely affect our access to capital and could increase our cost of funds.

The credit rating agencies regularly evaluate Huntington and the Bank, and credit ratings are based on a number of factors, including our financial strength and ability to generate earnings, as well as factors not entirely within our control, including conditions affecting the financial services industry, the economy, and changes in rating methodologies. There can be no assurance that we will maintain our current credit ratings. A downgrade of the credit ratings of Huntington or the Bank could adversely affect our access to liquidity and capital, and could significantly increase our cost of funds, trigger additional collateral or funding requirements, and decrease the number of investors and counterparties willing to lend to us or purchase our securities. This could affect our growth, profitability, and financial condition, including liquidity.

Operational and Legal Risks:

Our operational or security systems or infrastructure, or those of third parties, could fail or be breached, which could disrupt our business and adversely impact our results of operations, liquidity, and financial condition, as well as cause legal or reputational harm.

The potential for operational risk exposure exists throughout our business and, as a result of our interactions with, and reliance on, third parties, is not limited to our own internal operational functions. Our operational and security systems and infrastructure, including our computer systems, data management, and internal processes, as well as those of third parties, are integral to our performance. We rely on our employees and third parties in our day-to-day and ongoing operations, who may, as a result of human

error, misconduct, malfeasance, or failure, or breach of our or of third-party systems or infrastructure, expose us to risk. For example, our ability to conduct business may be adversely affected by any significant disruptions to us or to third parties with whom we interact or upon whom we rely. In addition, our ability to implement backup systems and other safeguards with respect to third-party systems is more limited than with respect to our own systems. Our financial, accounting, data processing, backup, or other operating or security systems and infrastructure may fail to operate properly or become disabled or damaged as a result of a number of factors, including events that are wholly or partially beyond our control, which could adversely affect our ability to process transactions or provide services. Such events may include sudden increases in customer transaction volume; electrical, telecommunications, or other major physical infrastructure outages; natural disasters such as earthquakes, tornadoes, hurricanes, and floods; disease pandemics; cyber-attacks; and events arising from local or larger scale political or social matters, including wars and terrorist acts. In addition, we may need to take our systems offline if they become infected with malware or a computer virus or as a result of another form of cyber-attack. In the event that backup systems are utilized, they may not process data as quickly as our primary systems and some data might not have been saved to backup systems, potentially resulting in a temporary or permanent loss of such data. We frequently update our systems to support our operations and growth and to remain compliant with applicable laws, rules, and regulations. This updating entails significant costs and creates risks associated with implementing new systems and integrating them with existing ones, including business interruptions. Implementation and testing of controls related to our computer systems, security monitoring, and retaining and training personnel required to operate our systems also entail significant costs. Operational risk exposures could adversely impact our operations, liquidity, and financial condition, as well as cause reputational harm. In addition, we may not have adequate insurance coverage to compensate for losses from a major interruption.

We face security risks, including denial of service attacks, hacking, social engineering attacks targeting our colleagues and customers, malware intrusion or data corruption attempts, and identity theft that could result in the disclosure of confidential information, adversely affect our business or reputation, and create significant legal and financial exposure.

Our computer systems and network infrastructure and those of third parties, on which we are highly dependent, are subject to security risks and could be susceptible to cyber-attacks, such as denial of service attacks, hacking, terrorist activities, or identity theft. Our business relies on the secure processing, transmission, storage, and retrieval of confidential, proprietary, and other information in our computer and data management systems and networks, and in the computer and data management systems and networks of third parties. In addition, to access our network, products, and services, our customers and other third parties may use personal mobile devices or computing devices that are outside of our network environment and are subject to their own cybersecurity risks.

We, our customers, regulators, and other third parties, including other financial services institutions and companies engaged in data processing, have been subject to, and are likely to continue to be the target of, cyber-attacks. These cyber-attacks include computer viruses, malicious or destructive code, phishing attacks, denial of service or information, ransomware, improper access by employees or vendors, attacks on personal email of employees, ransom demands to not expose security vulnerabilities in our systems or the systems of third parties or other security breaches that could result in the unauthorized release, gathering, monitoring, misuse, loss, or destruction of confidential, proprietary, and other information of ours, our employees, our customers, or of third parties, damage our systems or otherwise materially disrupt our or our customers' or other third parties' network access or business operations. As cyber threats continue to evolve, we may be required to expend significant additional resources to continue to modify or enhance our protective measures or to investigate and remediate any information security vulnerabilities or incidents. Despite efforts to ensure the integrity of our systems and implement controls, processes, policies, and other protective measures, we may not be able to anticipate all security breaches, nor may we be able to implement guaranteed preventive measures against such security breaches. Cyber threats are rapidly evolving, and we may not be able to anticipate or prevent all such attacks and could be held liable for any security breach or loss.

Cybersecurity risks for banking organizations have significantly increased in recent years in part because of the proliferation of new technologies, and the use of the internet and telecommunications technologies to conduct financial transactions. For example, cybersecurity risks may increase in the future as we continue to increase our mobile-payment and other internet-based product offerings and expand our internal usage of web-based products and applications. In addition, cybersecurity risks have significantly increased in recent years in part due to the increased sophistication and activities of organized crime affiliates, terrorist organizations, hostile foreign governments, disgruntled employees or vendors, activists, and other external parties, including those involved in corporate espionage. Even the most advanced internal control environment may be vulnerable to compromise. Targeted social engineering attacks and "spear phishing" attacks are becoming more sophisticated and are extremely difficult to prevent. In such an attack, an attacker will attempt to fraudulently induce colleagues, customers, or other users of our systems to disclose sensitive information in order to gain access to its data or that of its clients. Persistent attackers may succeed in penetrating defenses given enough resources, time, and motive. The techniques used by cyber criminals change frequently, may not be recognized until launched, and may not be recognized until well after a breach has occurred. The risk of a security breach caused by a cyber-attack at a vendor or by unauthorized vendor access has also increased in recent years. Additionally, the existence of cyber-attacks or security breaches at third-party vendors with access to our data may not be disclosed to us in a timely manner.

We also face indirect technology, cybersecurity, and operational risks relating to the customers, clients, and other third parties with whom we do business or upon whom we rely to facilitate or enable our business activities, including, for example, financial counterparties, regulators, and providers of critical infrastructure such as internet access and electrical power. As a result of increasing

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consolidation, interdependence, and complexity of financial entities and technology systems, a technology failure, cyber-attack, or other information or security breach that significantly degrades, deletes, or compromises the systems or data of one or more financial entities could have a material impact on counterparties or other market participants, including us. This consolidation, interconnectivity, and complexity increases the risk of operational failure, on both individual and industry-wide bases, as disparate systems need to be integrated, often on an accelerated basis. Any third-party technology failure, cyber-attack, or other information or security breach, termination, or constraint could, among other things, adversely affect our ability to effect transactions, service our clients, manage our exposure to risk, or expand our business.

Cyber-attacks or other information or security breaches, whether directed at us or third parties, may result in a material loss or have material consequences. Furthermore, the public perception that a cyber-attack on our systems has been successful, whether or not this perception is correct, may damage our reputation with customers and third parties with whom we do business. Hacking of personal information and identity theft risks, in particular, could cause serious reputational harm. A successful penetration or circumvention of system security could cause us serious negative consequences, including our loss of customers and business opportunities, costs associated with maintaining business relationships after an attack or breach; significant business disruption to our operations and business, misappropriation, exposure, or destruction of our confidential information, intellectual property, funds, and/or those of our customers; or damage to our or our customers' and/or third parties' computers or systems, and could result in a violation of applicable privacy laws and other laws, litigation exposure, regulatory fines, penalties or intervention, loss of confidence in our security measures, reputational damage, reimbursement or other compensatory costs, additional compliance costs, and could adversely impact our results of operations, liquidity and financial condition. In addition, we may not have adequate insurance coverage to compensate for losses from a cybersecurity event.

The resolution of significant pending litigation, if unfavorable, could have an adverse effect on our results of operations for a particular period.

We face legal risks in our businesses, and the volume of claims and amount of damages and penalties claimed in litigation and regulatory proceedings against financial institutions remain high. Substantial legal liability against us could have material adverse financial effects or cause significant reputational harm to us, which in turn could seriously harm our business prospects. It is possible that the ultimate resolution of these matters, if unfavorable, may be material to the results of operations for a particular reporting period.

For more information on litigation risks, see Note 20 to the Consolidated Financial Statements.

We face significant operational risks which could lead to financial loss, expensive litigation, and loss of confidence by our customers, regulators, and capital markets.

We are exposed to many types of operational risks, including the risk of fraud or theft by colleagues or outsiders, unauthorized transactions by colleagues or outsiders, operational errors by colleagues, business disruption, and system failures. Huntington executes against a significant number of controls, a large percent of which are manual and dependent on adequate execution by colleagues and third-party service providers. There is inherent risk that unknown single points of failure through the execution chain could give rise to material loss through inadvertent errors or malicious attack. These operational risks could lead to financial loss, expensive litigation, and loss of confidence by our customers, regulators, and the capital markets.

Moreover, negative public opinion can result from our actual or alleged conduct in any number of activities, including clients, products, and business practices; corporate governance; acquisitions; and from actions taken by government regulators and community organizations in response to those activities. Negative public opinion can adversely affect our ability to attract and retain customers and can also expose us to litigation and regulatory action.

Relative to acquisitions, we incur risks and challenges associated with the integration of employees, accounting systems, and technology platforms from acquired businesses and institutions in a timely and efficient manner, and we cannot guarantee that we will be successful in retaining existing customer relationships or achieving anticipated operating efficiencies expected from such acquisitions. Acquisitions may be subject to the receipt of approvals from certain governmental authorities, including the Federal Reserve, the OCC, and the United States Department of Justice, as well as the approval of our shareholders and the shareholders of companies that we seek to acquire. These approvals for acquisitions may not be received, may take longer than expected, or may impose conditions that are not presently anticipated or that could have an adverse effect on the combined company following the acquisitions. Subject to requisite regulatory approvals, future business acquisitions may result in the issuance and payment of additional shares of stock, which would dilute current shareholders' ownership interests. Additionally, acquisitions may involve the payment of a premium over book and market values. Therefore, dilution of our tangible book value and net income per common share could occur in connection with any future transaction.

Failure to maintain effective internal controls over financial reporting could impair our ability to accurately and timely report our financial results or prevent fraud, resulting in loss of investor confidence and adversely affecting our business and our stock price.

Effective internal controls over financial reporting are necessary to provide reliable financial reports and prevent fraud. We are subject to regulation that focuses on effective internal controls and procedures. Such controls and procedures are modified,

supplemented, and changed from time-to-time as necessitated by our growth and in reaction to external events and developments. Any failure to maintain an effective internal control environment could impact our ability to report our financial results on an accurate and timely basis, which could result in regulatory actions, loss of investor confidence, and an adverse impact on our business and our stock price.

We rely on quantitative models to measure risks and to estimate certain financial values.

Quantitative models may be used to help manage certain aspects of our business and to assist with certain business decisions, including estimating probable loan losses, measuring the fair value of financial instruments when reliable market prices are unavailable, estimating the effects of changing interest rates and other market measures on our financial condition and results of operations, managing risk, and for capital planning purposes (including during the CCAR capital planning and capital adequacy process). Our measurement methodologies rely on many assumptions, historical analyses, and correlations. These assumptions may not capture or fully incorporate conditions leading to losses, particularly in times of market distress, and the historical correlations on which we rely may no longer be relevant. Additionally, as businesses and markets evolve, our measurements may not accurately reflect this evolution. Even if the underlying assumptions and historical correlations used in our models are adequate, our models may be deficient due to errors in computer code, inaccurate data, misuse of data, or the use of a model for a purpose outside the scope of the model's design.

All models have certain limitations. Reliance on models presents the risk that our business decisions based on information incorporated from models will be adversely affected due to incorrect, missing, or misleading information. In addition, our models may not capture or fully express the risks we face, may suggest that we have sufficient capitalization when we do not, or may lead us to misjudge the business and economic environment in which we will operate. If our models fail to produce reliable results on an ongoing basis, we may not make appropriate risk management, capital planning, or other business or financial decisions. Strategies that we employ to manage and govern the risks associated with our use of models may not be effective or fully reliable. Also, information that we provide to the public or regulators based on poorly designed models could be inaccurate or misleading.

Banking regulators continue to focus on the models used by banks and bank holding companies in their businesses. Some of our decisions that the regulators evaluate, including distributions to our shareholders, could be affected adversely due to their perception that the quality of the models used to generate the relevant information is insufficient.

We rely on third parties to provide key components of our business infrastructure.

We rely on third-party service providers to leverage subject matter expertise and industry best practice, provide enhanced products and services, and reduce costs. Although there are benefits in entering into third-party relationships with vendors and others, there are risks associated with such activities. When entering a third-party relationship, the risks associated with that activity are not passed to the third-party but remain our responsibility. The Technology Committee of the board of directors provides oversight related to the overall risk management process associated with third-party relationships. Management is accountable for the review and evaluation of all new and existing third-party relationships. Management is responsible for ensuring that adequate controls are in place to protect us and our customers from the risks associated with vendor relationships.

Increased risk could occur based on poor planning, oversight, control, and inferior performance or service on the part of the third-party, and may result in legal costs or loss of business. While we have implemented a vendor management program to actively manage the risks associated with the use of third-party service providers, any problems caused by third-party service providers could adversely affect our ability to deliver products and services to our customers and to conduct our business. Replacing a third-party service provider could also take a long period of time and result in increased expenses.

Changes in accounting policies, standards, and interpretations could affect how we report our financial condition and results of operations.

The FASB, regulatory agencies, and other bodies that establish accounting standards periodically change the financial accounting and reporting standards governing the preparation of our financial statements. Additionally, those bodies that establish and interpret the accounting standards (such as the FASB, SEC, and banking regulators) may change prior interpretations or positions on how these standards should be applied.

For further discussion, see Note 2 to the Consolidated Financial Statements.

Impairment of goodwill could require charges to earnings, which could result in a negative impact on our results of operations.

Our goodwill could become impaired in the future. If goodwill were to become impaired, it could limit the ability of the Bank to pay dividends to Huntington, adversely impacting Huntington liquidity and ability to pay dividends or repay debt. The most significant assumptions affecting our goodwill impairment evaluation are variables including the market price of our Common Stock, projections of earnings, the discount rates used in the income approach to fair value, and the control premium above our current stock price that an acquirer would pay to obtain control of us. We are required to test goodwill for impairment at least annually or when impairment indicators are present. If an impairment determination is made in a future reporting period, our earnings and book value of goodwill will be reduced by the amount of the impairment. If an impairment loss is recorded, it will have little or no impact on the

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tangible book value of our Common Stock, or our regulatory capital levels, but such an impairment loss could significantly reduce the Bank's earnings and thereby restrict the Bank's ability to make dividend payments to us without prior regulatory approval, because Federal Reserve policy states the bank holding company dividends should be paid from current earnings. At December 31, 2018, the book value of our goodwill was \$2.0 billion, substantially all of which was recorded at the Bank. Any such write down of goodwill or other acquisition related intangibles will reduce Huntington's earnings, as well.

Negative publicity could damage our reputation and could significantly harm our business.

Our ability to attract and retain customers, clients, investors, and highly-skilled management and employees is affected by our reputation. Public perception of the financial services industry in general was damaged as a result of the financial crisis that started in 2008. We face increased public and regulatory scrutiny resulting from the financial crisis and economic downturn. Significant harm to our reputation can also arise from other sources, including employee misconduct, actual or perceived unethical behavior, conflicts of interest, litigation, GSE or regulatory actions, failing to deliver minimum or required standards of service and quality, failing to address customer and agency complaints, compliance failures, unauthorized release of confidential information due to cyber-attacks or otherwise, and the activities of our clients, customers, and counterparties, including vendors. Actions by the financial service industry generally or by institutions or individuals in the industry can adversely affect our reputation, indirectly by association. All of these could adversely affect our growth, results of operation, and financial condition.

We depend on our executive officers and key personnel to continue the implementation of our long-term business strategy and could be harmed by the loss of their services.

We believe that our continued growth and future success will depend in large part on the skills of our management team and our ability to motivate and retain these individuals and other key personnel. The loss of service of one or more of our executive officers or key personnel could reduce our ability to successfully implement our long-term business strategy, our business could suffer, and the value of our stock could be materially adversely affected. Leadership changes will occur from time to time, and we cannot predict whether significant resignations will occur or whether we will be able to recruit additional qualified personnel. We believe our management team possesses valuable knowledge about the banking industry and that their knowledge and relationships would be very difficult to replicate. Our success also depends on the experience of our branch managers and lending officers and on their relationships with the customers and communities they serve. The loss of these key personnel could negatively impact our banking operations. The loss of key personnel, or the inability to recruit and retain qualified personnel in the future, could have an adverse effect on our business, financial condition, or operating results.

Compliance Risks:

We operate in a highly regulated industry, and the laws and regulations that govern our operations, corporate governance, executive compensation and financial accounting, or reporting, including changes in them, or our failure to comply with them, may adversely affect us.

The banking industry is highly regulated. We are subject to supervision, regulation, and examination by various federal and state regulators, including the Federal Reserve, OCC, SEC, CFPB, FDIC, FINRA, and various state regulatory agencies. The statutory and regulatory framework that governs us is generally intended to protect depositors and customers, the DIF, the U.S. banking and financial system, and financial markets as a whole—not to protect shareholders. These laws and regulations, among other matters, prescribe minimum capital requirements, impose limitations on our business activities (including foreclosure and collection practices), limit the dividend or distributions that we can pay, restrict the ability of institutions to guarantee our debt, and impose certain specific accounting requirements that may be more restrictive and may result in greater or earlier charges to earnings or reductions in our capital than accounting principles generally accepted in the United States. Compliance with laws and regulations can be difficult and costly, and changes to laws and regulations often impose additional compliance costs. Both the scope of the laws and regulations and the intensity of the supervision to which we are subject have increased in recent years in response to the financial crisis, as well as other factors such as technological and market changes. Such regulation and supervision may increase our costs and limit our ability to pursue business opportunities. Further, our failure to comply with these laws and regulations, even if the failure was inadvertent or reflects a difference in interpretation, could subject us to restrictions on our business activities, fines, and other penalties, any of which could adversely affect our results of operations, capital base, and the price of our securities. Further, any new laws, rules, and regulations could make compliance more difficult or expensive or otherwise adversely affect our business and financial condition.

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Bank regulations regarding capital and liquidity, including the annual CCAR assessment process and the U.S. Basel III capital and liquidity standards, could require higher levels of capital and liquidity. Among other things, these regulations could impact our ability to pay common stock dividends, repurchase common stock, attract cost-effective sources of deposits, or require the retention of higher amounts of low yielding securities.

The Federal Reserve administers CCAR, an annual forward-looking quantitative assessment of Huntington's capital adequacy and planned capital distributions and a review of the strength of Huntington's practices to assess capital needs. We generally may pay dividends and repurchase stock only in accordance with a capital plan that has been reviewed by the Federal Reserve and as to which the Federal Reserve has not objected. The Federal Reserve also makes a quantitative assessment of capital based on supervisory-run stress tests that assess the ability to maintain capital levels above each minimum regulatory capital ratio after making all capital actions included in Huntington's capital plan, under baseline and stressful conditions throughout a nine-quarter planning horizon. There can be no assurance that the Federal Reserve or OCC will respond favorably to our capital plans, planned capital actions or stress test results, and the Federal Reserve, OCC, or other regulatory capital requirements may limit or otherwise restrict how we utilize our capital, including common stock dividends and stock repurchases.

We are also required to maintain minimum capital ratios and the Federal Reserve and OCC may determine that Huntington and/or the Bank, based on size, complexity, or risk profile, must maintain capital ratios above these minimums in order to operate in a safe and sound manner. In the event we are required to raise capital to maintain required minimum capital and leverage ratios or ratios above the required applicable minimums, we may be forced to do so when market conditions are undesirable or on terms that are less favorable to us than we would otherwise require. Furthermore, in order to prevent becoming subject to restrictions on our ability to distribute capital or make certain discretionary bonus payments to management, we must maintain a Capital Conservation Buffer (of 1.875% in 2018 and 2.5% as of January 1, 2019), which is in addition to our required minimum capital ratios.

We are also currently subject to a modified LCR requirement that requires Huntington to maintain an adequate amount of unencumbered high-quality liquid assets, such as Treasury securities and other sovereign debt, to cover projected net cash outflows over a 30 calendar-day stress scenario window. Because the LCR assigns less severe outflow assumptions to certain types of customer deposits, banks' demand for and the cost of these deposits may increase. Additionally, the LCR has increased the demand for direct U.S. government and U.S. government-guaranteed debt that, while high quality, generally carry lower yields than other securities BHCs hold in their investment portfolios.

For more information regarding CCAR, stress testing, and capital and liquidity requirements, including several proposed rules that would alter, reduce, or eliminate certain of these requirements as they apply to Huntington, refer to Item 1: Business - Regulatory Matters.

If our regulators deem it appropriate, they can take regulatory actions that could result in a material adverse impact on our financial results, ability to compete for new business, or preclude mergers or acquisitions. In addition, regulatory actions could constrain our ability to fund our liquidity needs or pay dividends. Any of these actions could increase the cost of our services.

We are subject to the supervision and regulation of various state and federal regulators, including the OCC, Federal Reserve, FDIC, SEC, CFPB, FINRA, and various state regulatory agencies. As such, we are subject to a wide variety of laws and regulations, many of which are discussed in Item 1. Regulatory Matters. As part of their supervisory process, which includes periodic examinations and continuous monitoring, the regulators have the authority to impose restrictions or conditions on our activities and the manner in which we manage the organization. Such actions could negatively impact us in a variety of ways, including charging monetary fines, impacting our ability to pay dividends, precluding mergers or acquisitions, limiting our ability to offer certain products or services, or imposing additional capital requirements.

Under the supervision of the CFPB, our Consumer and Business Banking products and services are subject to heightened regulatory oversight and scrutiny with respect to compliance under consumer laws and regulations. We may face a greater number or wider scope of investigations, enforcement actions, and litigation in the future related to consumer practices, thereby increasing costs associated with responding to or defending such actions. Also, federal and state regulators have been increasingly focused on sales practices of branch personnel, including taking regulatory action against other financial institutions. In addition, increased regulatory inquiries and investigations, as well as any additional legislative or regulatory developments affecting our consumer businesses, and any required changes to our business operations resulting from these developments, could result in significant loss of revenue, require remuneration to our customers, trigger fines or penalties, limit the products or services we offer, require us to increase our prices and, therefore, reduce demand for our products, impose additional compliance costs on us, increase the cost of collection, cause harm to our reputation, or otherwise adversely affect our consumer businesses.

In addition, we are allowed to conduct certain activities that are financial in nature by virtue of Huntington's status as an FHC, as discussed in more detail in Item 1. Regulatory Matters. If Huntington or the Bank cease to meet the requirements necessary for Huntington to continue to qualify as an FHC, the Federal Reserve may impose upon us corrective capital and managerial requirements, and may place limitations on our ability to conduct all of the business activities that we conduct as a FHC. If the failure to meet these standards persists, we could be required to divest our Bank, or cease all activities other than those activities that may be conducted by a BHC but not an FHC.

Legislative and regulatory actions taken now or in the future that impact the financial industry may materially adversely affect us by increasing our costs, adding complexity in doing business, impeding the efficiency of our internal business processes, negatively impacting the recoverability of certain of our recorded assets, requiring us to increase our regulatory capital, limiting our ability to pursue business opportunities, and otherwise resulting in a material adverse impact on our financial condition, results of operation, liquidity, or stock price.

Both the scope of the laws and regulations and the intensity of the supervision to which we are subject increased in response to the financial crisis as well as other factors such as technological and market changes. Regulatory enforcement and fines have also increased across the banking and financial services sector. Compliance with these laws and regulations have resulted in and will continue to result in additional costs, which could be significant, and may have a material and adverse effect on our results of operations. In addition, if we do not appropriately comply with current or future legislation and regulations, especially those that apply to our consumer operations, which has been an area of heightened focus, we may be subject to fines, penalties or judgments, or material regulatory restrictions on our businesses, which could adversely affect operations and, in turn, financial results.

We may become subject to more stringent regulatory requirements and activity restrictions if the Federal Reserve and FDIC determine that our resolution plan is not credible.

Huntington is required to submit annually to the Federal Reserve and the FDIC a resolution plan for its orderly resolution under the U.S. Bankruptcy Code. If the Federal Reserve and the FDIC jointly determine that our resolution plan is not credible, we could become subjected to more stringent capital, leverage or liquidity requirements or restrictions, or restrictions on our growth, activities, or operations. If we were to fail to address deficiencies in our resolution plan when required, we could eventually be required to divest certain assets or operations in ways that could negatively impact our operations and strategy.

For more information regarding resolution planning requirements, refer to Item 1: Business - Regulatory Matters.

Noncompliance with the Bank Secrecy Act and other anti-money laundering statutes and regulations could cause us material financial loss.

The Bank Secrecy Act and the Patriot Act contain anti-money laundering and financial transparency provisions intended to detect and prevent the use of the U.S. financial system for money laundering and terrorist financing activities. The Bank Secrecy Act, as amended by the Patriot Act, requires depository institutions and their holding companies to undertake activities including maintaining an anti-money laundering program, verifying the identity of clients, monitoring for and reporting suspicious transactions, reporting on cash transactions exceeding specified thresholds, and responding to requests for information by regulatory authorities and law enforcement agencies. FinCEN, a unit of the Treasury Department that administers the Bank Secrecy Act, is authorized to impose significant civil money penalties for violations of those requirements and has recently engaged in coordinated enforcement efforts with the federal bank regulatory agencies, as well as the United States Department of Justice, Drug Enforcement Administration, and IRS.

There is also increased scrutiny of compliance with the rules enforced by the OFAC. If our policies, procedures, and systems are deemed deficient or the policies, procedures, and systems of the financial institutions that we have already acquired or may acquire in the future are deficient, we would be subject to liability, including fines and regulatory actions such as restrictions on our ability to pay dividends and the necessity to obtain regulatory approvals to proceed with certain planned business activities, including acquisition plans, which would negatively impact our business, financial condition, and results of operations. Failure to maintain and implement adequate programs to combat money laundering and terrorist financing could also have serious reputational consequences for us.

For more information regarding the Bank Secrecy Act, Patriot Act, anti-money laundering requirements and OFAC-administered sanctions, refer to Item 1: Business - Regulatory Matters.

Cybersecurity and data privacy are areas of heightened legislative and regulatory focus.

As cybersecurity and data privacy risks for banking organizations and the broader financial system have significantly increased in recent years, cybersecurity and data privacy issues have become the subject of increasing legislative and regulatory focus. The federal bank regulatory agencies have proposed enhanced cyber risk management standards, which would apply to a wide range of large financial institutions and their third-party service providers, including us and the Bank, and would focus on cyber risk governance and management, management of internal and external dependencies, and incident response, cyber resilience, and situational awareness. Several states have also proposed or adopted cybersecurity legislation and regulations, which require, among other things, notification to affected individuals when there has been a security breach of their personal data. For more information regarding cybersecurity, refer to Item 1: Business - Regulatory Matters.

We receive, maintain, and store non-public personal information of our customers and counterparties, including, but not limited to, personally identifiable information and personal financial information. The sharing, use, disclosure, and protection of this information are governed by federal and state law. Both personally identifiable information and personal financial information is increasingly subject to legislation and regulation, the intent of which is to protect the privacy of personal information that is collected and handled. For example, in June of 2018, the Governor of California signed into law the CCPA. The CCPA, which becomes effective on January 1, 2020, applies to for-profit businesses that conduct business in California and meet certain revenue or data

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collection thresholds. For more information regarding data privacy laws and regulations, refer to Item 1: Business - Regulatory Matters.

We may become subject to new legislation or regulation concerning cybersecurity or the privacy of personally identifiable information and personal financial information or of any other information we may store or maintain. We could be adversely affected if new legislation or regulations are adopted or if existing legislation or regulations are modified such that we are required to alter our systems or require changes to our business practices or privacy policies. If cybersecurity, data privacy, data protection, data transfer, or data retention laws are implemented, interpreted, or applied in a manner inconsistent with our current practices, we may be subject to fines, litigation, or regulatory enforcement actions or ordered to change our business practices, policies, or systems in a manner that adversely impacts our operating results.

Item 1B: Unresolved Staff Comments

None.

Item 2: Properties

Our headquarters, as well as the Bank's, is located in the Huntington Center, a thirty seven story office building located in Columbus, Ohio. Of the building's total office space available, we lease approximately 22%. The lease term expires in 2030, with six five-year renewal options for up to 30 years but with no purchase option. The Bank has an indirect minority equity interest of 18.4% in the building.

Our other major properties consist of the following:

Description	Location	Own	Lease
Indianapolis Main	Indianapolis, IN	✓	
Flint South (own building, lease portion of land, own portion of land)	Flint, MI	✓	✓
Flint West (own building, lease land)	Flint, MI	✓	✓
Holland Operations Center	Holland, MI		✓
Downtown Saginaw	Saginaw, MI	✓	
Tower Building - Office	Akron, OH	✓	
Cascade III (own building, lease land)	Akron, OH	✓	✓
Operations Center	Akron, OH	✓	
Cleveland - Public Square (lease a portion of building)	Cleveland, OH		✓
Easton - HNB Business Service Center	Columbus, OH	✓	
Capitol Square	Columbus, OH	✓	
Gateway Center	Columbus, OH	✓	
Huntington Center (lease a portion of building)	Columbus, OH		✓
Northland Center	Columbus, OH		✓
Huntington Plaza	Columbus, OH	✓	
Crosswoods - Mortgage Group	Columbus, OH		✓
Court Street	Elyria, OH	✓	
Parma NORC	Parma, OH		✓
Toledo Corporate Building	Toledo, OH	✓	
Mahoning Federal Plaza Building	Youngstown, OH	✓	
New Castle Building	New Castle, PA	✓	
Pittsburgh Main (lease a portion of building)	Pittsburgh, PA		✓
Charleston Main	Charleston, WV		✓

The major properties occupied by the Company are used across all of the business segments and for corporate purposes.

Item 3: Legal Proceedings

Information required by this item is set forth in Note 20 of the Notes to Consolidated Financial Statements under the caption "Litigation and Regulatory Matters" and is incorporated into this Item by reference.

Item 4: Mine Safety Disclosures

Not applicable

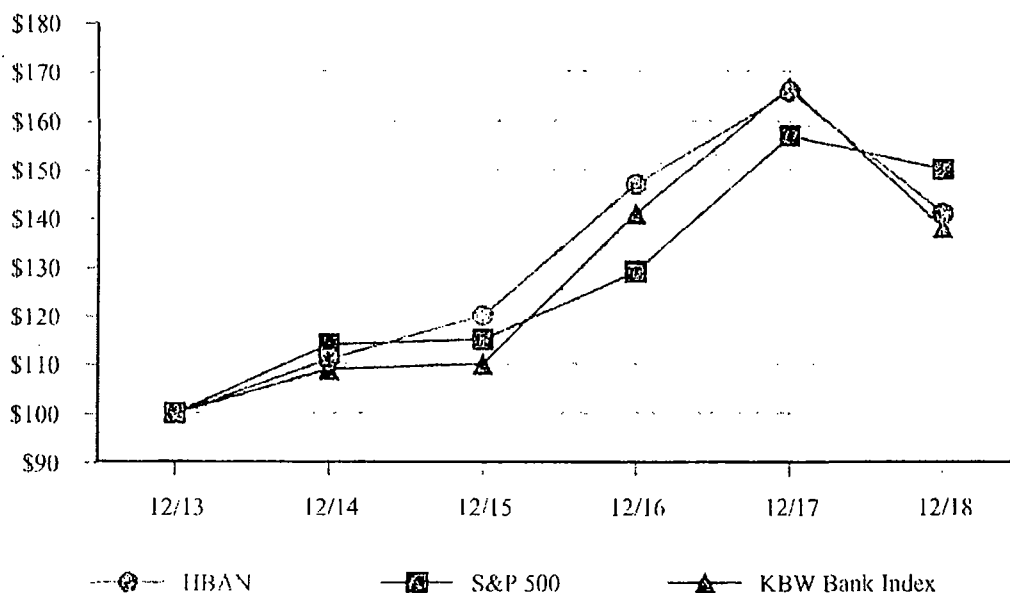
PART II

Item 5: Market for Registrant's Common Equity, Related Shareholder Matters and Issuer Purchases of Equity Securities

The common stock of Huntington Bancshares Incorporated is traded on the NASDAQ Stock Market under the symbol "HBAN". As of January 31, 2019, we had 28,724 shareholders of record.

Information regarding restrictions on dividends, as required by this Item, is set forth in Item 1: Business - Regulatory Matters and in Note 21 of the Notes to Consolidated Financial Statements and incorporated into this Item by reference.

The following graph shows the changes, over the five-year period, in the value of \$100 invested in (i) shares of Huntington's Common Stock; (ii) the Standard & Poor's 500 Stock Index (the S&P 500 Index) and (iii) Keefe, Bruyette & Woods Bank Index, for the period December 31, 2013, through December 31, 2018. The KBW Bank Index is a market capitalization-weighted bank stock index published by Keefe, Bruyette & Woods. The index is composed of the largest banking companies and includes all money center banks and regional banks, including Huntington. An investment of \$100 on December 31, 2013, and the reinvestment of all dividends, are assumed. The plotted points represent the cumulative total return on the last trading day of the fiscal year indicated.



	2013	2014	2015	2016	2017	2018
HBAN	\$100	\$111	\$120	\$147	\$166	\$141
S&P 500	\$100	\$114	\$115	\$129	\$157	\$150
KBW Bank Index	\$100	\$109	\$110	\$141	\$167	\$138

For information regarding securities authorized for issuance under Huntington's equity compensation plans, see Part III, Item 12.

The following table provides information regarding Huntington's purchases of its Common Stock during the three-month period ended December 31, 2018.

Period	Total Number of Shares Purchased (1)	Average Price Paid Per Share	Maximum Number of Shares (or Approximate Dollar Value) that May Yet Be Purchased Under the Plans or Programs (2)
October 1, 2018 to October 31, 2018	7,149,221	\$ 14.55	\$ 273,010,029
November 1, 2018 to November 30, 2018	194,400	14.43	270,204,137
December 1, 2018 to December 31, 2018	7,622,627	12.23	177,010,035
Total	14,966,248	\$ 13.36	\$ 177,010,035

(1) The reported shares were repurchased pursuant to Huntington's publicly-announced share repurchase authorization

(2) The number shown represents, as of the end of each period, the approximate dollar value of Common Stock that may yet be purchased under publicly-announced share repurchase authorizations. The shares may be purchased, from time-to-time, depending on market conditions

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On June 28, 2018, Huntington was notified by the Federal Reserve that it had no objection to Huntington's proposed capital actions included in Huntington's capital plan submitted in the 2018 CCAR. These actions included a 27% increase in quarterly dividend per common share to \$0.14, starting in the third quarter of 2018, the repurchase of up to \$1.068 billion of common stock over the next four quarters (July 1, 2018 through June 30, 2019), and maintaining dividends on the outstanding classes of preferred stock and trust preferred securities. Any capital actions, including those contemplated in the above announced actions, are subject to consideration and evaluation by Huntington's Board of Directors.

On July 17, 2018, the Board authorized the repurchase of up to \$1.068 billion of common shares over the four quarters through the 2019 second quarter. During the 2018 fourth quarter, Huntington repurchased a total of 15 million shares at a weighted average share price of \$13.36.

Item 6: Selected Financial Data

Table 1 - Selected Annual Income Statement Data (1)

(dollar amounts in millions, share amounts in thousands)

	Year Ended December 31,				
	2018	2017	2016	2015	2014
Interest income	\$ 3,949	\$ 3,433	\$ 2,632	\$ 2,115	\$ 1,976
Interest expense	760	431	263	164	139
Net interest income	3,189	3,002	2,369	1,951	1,837
Provision for credit losses	235	201	191	100	81
Net interest income after provision for credit losses	2,954	2,801	2,178	1,851	1,756
Noninterest income	1,321	1,307	1,150	1,039	979
Noninterest expense	2,647	2,714	2,408	1,976	1,882
Income before income taxes	1,628	1,394	920	914	853
Provision for income taxes	235	208	208	221	221
Net income	1,393	1,186	712	693	632
Dividends on preferred shares	70	76	65	32	32
Net income applicable to common shares	\$ 1,323	\$ 1,110	\$ 647	\$ 661	\$ 600
Net income per common share—basic	\$ 1.22	\$ 1.02	\$ 0.72	\$ 0.82	\$ 0.73
Net income per common share—diluted	1.20	1.00	0.70	0.81	0.72
Cash dividends declared per common share	0.50	0.35	0.29	0.25	0.21
Balance sheet highlights					
Total assets (period end)	\$ 108,781	\$ 104,185	\$ 99,714	\$ 71,018	\$ 66,283
Total long-term debt (period end)	8,625	9,206	8,309	7,042	4,321
Total shareholders' equity (period end)	11,102	10,814	10,308	6,595	6,328
Average total assets	104,982	101,021	83,054	68,560	62,483
Average total long-term debt	8,992	8,862	8,048	5,585	3,479
Average total shareholders' equity	11,059	10,611	8,391	6,536	6,270
Key ratios and statistics					
Margin analysis—as a % of average earnings assets					
Interest income (2)	4.12%	3.77%	3.50%	3.41%	3.47%
Interest expense	0.79	0.47	0.34	0.26	0.24
Net interest margin (2)	3.33%	3.30%	3.16%	3.15%	3.23%
Return on average total assets	1.33%	1.17%	0.86%	1.01%	1.01%
Return on average common shareholders' equity	13.4	11.6	8.6	10.7	10.2
Return on average tangible common shareholders' equity (3), (7)	17.9	15.7	10.7	12.4	11.8
Efficiency ratio (4)	56.9	60.9	66.8	64.5	65.1
Dividend payout ratio	41.0	34.3	40.3	30.5	28.8
Average shareholders' equity to average assets	10.53	10.50	10.10	9.53	10.03
Effective tax rate	14.5	14.9	22.6	24.2	25.9
Non-regulatory capital					
Tangible common equity to tangible assets (period end) (5), (7)	7.21	7.34	7.16	7.82	8.17
Tangible equity to tangible assets (period end) (6), (7)	8.34	8.39	8.26	8.37	8.76
Tier 1 common risk-based capital ratio (period end) (7), (8)	N.A.	N.A.	N.A.	N.A.	10.23
Tier 1 leverage ratio (period end) (8)	N.A.	N.A.	N.A.	N.A.	9.74
Tier 1 risk-based capital ratio (period end) (8)	N.A.	N.A.	N.A.	N.A.	11.50
Total risk-based capital ratio (period end) (8)	N.A.	N.A.	N.A.	N.A.	13.56
Capital under current regulatory standards (Basel III)					
CET 1 risk-based capital ratio	9.65%	10.01%	9.56%	9.79%	N.A.
Tier 1 leverage ratio (period end)	9.10	9.09	8.70	8.79	N.A.
Tier 1 risk-based capital ratio (period end)	11.06	11.34	10.92	10.53	N.A.
Total risk-based capital ratio (period end)	12.98	13.39	13.05	12.64	N.A.
Other data					
Full-time equivalent employees (average)	15,693	15,770	13,858	12,243	11,873
Domestic banking offices (period end)	954	966	1,115	777	729

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- (1) Comparisons for presented periods are impacted by a number of factors. Refer to the "Significant Items" in the Discussion of Results of Operations for additional discussion regarding these key factors.
- (2) On an FTE basis assuming a 21% tax rate and a 35% tax rate for periods prior to January 1, 2018.
- (3) Net income applicable to common shares excluding expense for amortization of intangibles for the period divided by average tangible shareholders' equity. Average tangible shareholders' equity equals average total shareholders' equity less average intangible assets and goodwill. Expense for amortization of intangibles and average intangible assets are net of deferred tax.
- (4) Noninterest expense less amortization of intangibles divided by the sum of FTE net interest income and noninterest income excluding securities gains. (Non-GAAP)
- (5) Tangible common equity (total common equity less goodwill and other intangible assets) divided by tangible assets (total assets less goodwill and other intangible assets). Other intangible assets are net of deferred tax.
- (6) Tangible equity (total equity less goodwill and other intangible assets) divided by tangible assets (total assets less goodwill and other intangible assets). Other intangible assets are net of deferred tax.
- (7) Tier 1 common equity, tangible equity, tangible common equity, and tangible assets are non-GAAP financial measures. Additionally, any ratios utilizing these financial measures are also non-GAAP. These financial measures have been included as they are considered to be critical metrics with which to analyze and evaluate financial condition and capital strength. Other companies may calculate these financial measures differently.
- (8) In accordance with applicable regulatory reporting guidance, we are not required to retrospectively update historical filings for newly adopted accounting principles. On January 1, 2015, we became subject to the Basel III capital requirements and the standardized approach for calculating risk-weighted assets in accordance with subpart D of the final capital rule.

Item 7: Management's Discussion and Analysis of Financial Condition and Results of Operations

INTRODUCTION

This MD&A provides information we believe necessary for understanding our financial condition, changes in financial condition, results of operations, and cash flows. The MD&A should be read in conjunction with the Consolidated Financial Statements, Notes to Consolidated Financial Statements, and other information contained in this report. The forward-looking statements in this section and other parts of this report involve assumptions, risks, uncertainties, and other factors, including statements regarding our plans, objectives, goals, strategies, and financial performance. Our actual results could differ materially from the results anticipated in these forward-looking statements as a result of factors set forth under the caption "Forward-Looking Statements" and those set forth in Item 1A.

EXECUTIVE OVERVIEW

2018 Financial Performance Review

In 2018, we reported net income of \$1.4 billion, a 17% increase from the prior year. Earnings per common share on a diluted basis for the year was \$1.20, up 20% from the prior year.

Fully-taxable equivalent net interest income for 2018 increased \$167 million, or 5%, from 2017. This reflected the impact of 4% average earning asset growth, a three basis point increase in the NIM to 3.33%, partially offset by 7% average interest-bearing liability growth. Average earning asset growth included a \$4.4 billion, or 6%, increase in average loans and leases, partially offset by a \$0.4 billion, or 2%, decrease in average securities. The NIM expansion reflected a 35 basis point positive impact from the mix and yield on earning assets and a 10 basis point increase in the benefit from noninterest-bearing funding, partially offset by a 42 basis point increase in funding costs.

The provision for credit losses was \$235 million, up \$34 million, or 17%. The increase in provision expense over the prior year are primarily attributed to loan balance growth across the portfolio.

Noninterest income was \$1.3 billion, up \$14 million, or 1%, from the prior year. Card and payment processing income increased \$18 million, or 9%, due to higher check card interchange income and underlying customer growth. Trust and investment management services increased \$15 million, or 10%, primarily reflecting increased sales production and year over year market growth. Capital markets fees increased \$15 million, or 20%, reflecting increased sales of interest rate, foreign exchange and commodity derivatives as well as fees as a result of the acquisition of Hutchinson, Shockey, Erley & Co. (HSE). Service charges on deposit accounts increased \$11 million, or 3%, due to an increase in both personal and corporate service charges. These increases were partially offset by a \$23 million, or 18% decrease in mortgage banking income, due to lower margin on loans sold, \$17 million, or 425%, increase in securities losses reflecting portfolio repositioning completed in the 2018 fourth quarter and a \$5 million, or 3%, decrease in other income primarily reflecting an unfavorable Visa Class B derivative fair value adjustment.

Noninterest expense was \$2.6 billion, down \$67 million, or 2%, from the prior year. Reported noninterest expense was impacted by FirstMerit acquisition-related expenses totaling \$154 million, offset by branch and facility consolidation-related expenses and personnel costs. Net occupancy expense decreased \$28 million, or 13%, primarily reflecting \$52 million of prior year acquisition-related expense, lower occupancy related expenses and reserves, partially offset by \$28 million of branch and facility consolidation-related expense. Outside data processing and other services decreased \$19 million, or 6%, primarily reflecting \$24 million of acquisition-related expense in the year-ago period, partially offset by higher technology investment costs. Deposit and other insurance expense decreased \$15 million, or 19%, primarily due to the discontinuation of the FDIC surcharge in the 2018 fourth quarter. Other noninterest expense decreased \$14 million, or 6%, reflecting \$9 million of acquisition-related expense in the year-ago period, as well as declines in franchise and other taxes. Professional services decreased \$9 million, or 13%, primarily reflecting \$10 million of acquisition-related expense in the year-ago period. Equipment decreased \$7 million, or 4%, primarily due to \$16 million in acquisition-related costs in the year-ago period, partially offset by \$7 million of branch and facility consolidation-related expense in the 2018 fourth quarter. Marketing decreased \$7 million, or 12%, driven by a decrease in promotional expense, partially offset by an increase in advertising. Partially offsetting these decreases, personnel costs increased \$35 million, or 2%, primarily reflecting higher benefit costs and merit increases.

The tangible common equity to tangible assets ratio was 7.21%, down 13 basis points. The regulatory Common Equity Tier 1 (CET1) risk-based capital ratio was 9.65%, down 36 basis points. The regulatory Tier 1 risk-based capital ratio was 11.06%, down 28 basis points.

Consistent with the 2018 CCAR capital plan, the Company repurchased \$939 million of common stock during 2018 at an average cost of \$15.23 per share. Included in the share repurchase activity, the Company completed a \$400 million ASR which effectively offset the impact of the \$363 million Series A preferred equity conversion in the 2018 first quarter.

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Business Overview

General

Our general business objectives are:

- Consistent organic revenue and balance sheet growth.
- Invest in our businesses, particularly technology and risk management.
- Deliver positive operating leverage.
- Maintain aggregate moderate-to-low risk appetite.
- Disciplined capital management.

Economy

Our view of 2019 from a balance sheet growth perspective remains unchanged, generally consistent with our view of overall economic activity. The underlying fundamentals of our local economies are positive, and businesses are generally performing well and we are optimistic about 2019. Our loan pipelines remain steady, and credit metrics remain strong. We are executing on our new strategic plan and continue to invest to drive organic growth. The plan entails low execution risk and builds on the success of the past two strategic plans. At the same time, given recent market volatility, we are reverting to our historic practice of assuming no interest rate hikes in our revenue expectation and are adjusting our expense expectation as a result. We are focused on what we can control to drive long-term performance.

Legislative and Regulatory

A comprehensive discussion of legislative and regulatory matters affecting us can be found in the Regulatory Matters section included in Item 1 of this Form 10-K.

Table 2 - Selected Annual Income Statements (1)

(dollar amounts in millions, share amounts in thousands)

Year Ended December 31:

	Change from 2017			Change from 2016			2016
	2018	Amount	Percent	2017	Amount	Percent	
Interest income	\$ 3,949	\$ 516	15 %	\$ 3,433	\$ 801	30%	\$ 2,632
Interest expense	763	329	76	431	168	64	263
Net interest income	3,189	187	6	3,002	633	27	2,369
Provision for credit losses	235	34	17	201	10	5	191
Net interest income after provision for credit losses	2,954	153	5	2,801	623	29	2,178
Service charges on deposit accounts	364	11	3	353	29	9	324
Card and payment processing income	224	18	9	206	37	22	169
Trust and investment management services	171	15	10	156	33	27	123
Mortgage banking income	108	(23)	(18)	131	3	2	128
Capital markets fees	91	15	20	76	16	27	60
Insurance income	82	1	1	81	(3)	(4)	84
Bank owned life insurance income	67	—	—	67	9	16	58
Gain on sale of loans and leases	55	(1)	(2)	56	9	19	47
Securities gains (losses)	(21)	(17)	(425)	(4)	(4)	(100)	—
Other income	180	(5)	(3)	185	28	18	157
Total noninterest income	1,321	14	1	1,307	157	14	1,150
Personnel costs	1,559	35	2	1,524	175	13	1,349
Outside data processing and other services	294	(19)	(6)	313	8	3	305
Net occupancy	184	(28)	(13)	212	59	39	153
Equipment	164	(7)	(4)	171	6	4	165
Deposit and other insurance expense	63	(15)	(19)	78	24	44	54
Professional services	60	(9)	(13)	69	(36)	(34)	105
Marketing	53	(7)	(12)	60	(3)	(5)	63
Amortization of intangibles	53	(3)	(5)	56	26	87	30
Other expense	217	(14)	(6)	231	47	26	184
Total noninterest expense	2,647	(67)	(2)	2,714	306	13	2,408
Income before income taxes	1,628	234	17	1,394	474	52	920
Provision for income taxes	235	27	13	208	—	—	208
Net income	1,393	207	17	1,186	474	67	712
Dividends on preferred shares	79	(6)	(8)	76	11	17	65
Net income applicable to common shares	\$ 1,323	\$ 213	19 %	\$ 1,110	\$ 463	72%	\$ 647
Average common shares—basic	1,081,542	(3,144)	— %	1,084,686	180,248	20%	904,438
Average common shares—diluted	1,105,985	(30,201)	(3)	1,136,186	217,396	24	918,790
Per common share:							
Net income—basic	\$ 1.22	\$ 0.20	20 %	\$ 1.02	\$ 0.30	42%	\$ 0.72
Net income—diluted	1.20	0.20	20	1.00	0.30	43	0.70
Cash dividends declared	0.50	0.15	43	0.35	0.06	21	0.29
Revenue—FTE							
Net interest income	\$ 3,189	\$ 187	6 %	\$ 3,002	\$ 633	27%	\$ 2,369
FTE adjustment	30	(20)	(40)	50	7	16	43
Net interest income ⁽¹⁾	3,219	167	5	3,052	640	27	2,412
Noninterest income	1,321	14	1	1,307	157	14	1,150
Total revenue ⁽²⁾	\$ 4,540	\$ 181	4 %	\$ 4,359	\$ 797	22%	\$ 3,562

(1) Comparisons for presented periods are impacted by a number of factors. Refer to "Significant Items" in the Discussion of Results of Operations.

(2) On a fully-taxable equivalent (FTE) basis assuming a 21% tax rate and a 35% tax rate for periods prior to January 1, 2018.

DISCUSSION OF RESULTS OF OPERATIONS

This section provides a review of financial performance from a consolidated perspective. It also includes a “Significant Items” section that summarizes key issues important for a complete understanding of performance trends. Key consolidated balance sheet and income statement trends are discussed. All earnings per share data are reported on a diluted basis. For additional insight on financial performance, please read this section in conjunction with the “Business Segment Discussion.”

Significant Items

Earnings comparisons among the three years ended December 31, 2018, 2017, and 2016 were impacted by a number of Significant Items summarized below

There were no Significant Items in 2018.

Significant Items included in 2017 and 2016 were:

1. **Mergers and Acquisitions.** Significant events relating to mergers and acquisitions, and the impacts of those events on our reported results, were as follows:
 - During 2017, \$154 million of noninterest expense and \$2 million of noninterest income was recorded related to the acquisition of FirstMerit. This resulted in a negative impact of \$0.09 per common share in 2017.
 - During 2016, \$282 million of noninterest expense and \$1 million of noninterest income was recorded related to the acquisition of FirstMerit. This resulted in a negative impact of \$0.20 per common share in 2016.
2. **Federal tax reform-related tax benefit.** Significant events relating to federal tax reform-related tax benefits, and the impacts of those events on our reported results, were as follows:
 - During 2017, \$123 million of federal tax reform-related tax benefit was recorded as provision for income taxes. This resulted in a positive impact of \$0.11 per common share in 2017.
3. **Litigation Reserve.** Significant events relating to our litigation reserve, and the impacts of those events on our reported results, were as follows:
 - During 2016, a \$42 million reduction to litigation reserves was recorded as other noninterest expense. This resulted in a positive impact of \$0.03 per common share in 2016.

The following table reflects the earnings impact of the above-mentioned Significant Items for periods affected by this Results of Operations discussion:

Table 3 - Significant Items Influencing Earnings Performance Comparison

(dollar amounts in millions, except per share data)

	2018		2017		2016	
	Amount	EPS (1)	Amount	EPS (1)	Amount	EPS (1)
Net income	\$ 1,393		\$ 1,186		\$ 712	
Earnings per share, after-tax		\$ 1.20		\$ 1.00		\$ 0.70
Significant items—favorable (unfavorable) impact:	Earnings	EPS	Earnings	EPS	Earnings	EPS
Federal tax reform-related tax benefit	\$ —		\$ —		\$ —	
Tax impact	—		123		—	
Federal tax reform-related tax benefit, after-tax	\$ —	\$ —	\$ 123	\$ 0.11	\$ —	\$ —
Mergers and acquisitions, net expenses	\$ —		\$ (152)		\$ (282)	
Tax impact	—		53		95	
Mergers and acquisitions, after-tax	\$ —	\$ —	\$ (99)	\$ (0.09)	\$ (187)	\$ (0.20)
Litigation reserves	\$ —		\$ —		\$ 42	
Tax impact	—		—		(15)	
Litigation reserves, after-tax	\$ —	\$ —	\$ —	\$ —	\$ 27	\$ 0.03

(1) Based upon the annual average outstanding diluted common shares

Net Interest Income / Average Balance Sheet

Our primary source of revenue is net interest income, which is the difference between interest income from earning assets (primarily loans, securities, and direct financing leases), and interest expense of funding sources (primarily interest-bearing deposits and borrowings). Earning asset balances and related funding sources, as well as changes in the levels of interest rates, impact net interest income. The difference between the average yield on earning assets and the average rate paid for interest-bearing liabilities is the net interest spread. Noninterest-bearing sources of funds, such as demand deposits and shareholders' equity, also support earning assets. The impact of the noninterest-bearing sources of funds, often referred to as "free" funds, is captured in the net interest margin, which is calculated as net interest income divided by average earning assets. Both the net interest margin and net interest spread are presented on a fully-taxable equivalent basis, which means that tax-free interest income has been adjusted to a pretax equivalent income, assuming a 21% tax rate and a 35% tax rate for periods prior to January 1, 2018.

The following table shows changes in fully-taxable equivalent interest income, interest expense, and net interest income due to volume and rate variances for major categories of earning assets and interest-bearing liabilities:

Table 4 - Change in Net Interest Income Due to Changes in Average Volume and Interest Rates (1)

	2018			2017		
	Increase (Decrease) From			Increase (Decrease) From:		
	Previous Year Due To			Previous Year Due To		
<i>(dollar amounts in millions)</i>	Volume	Yield/ Rate	Total	Volume	Yield/ Rate	Total
Fully-taxable equivalent basis (2)						
Loans and leases	\$ 189	\$ 274	\$ 463	\$ 423	\$ 234	\$ 657
Investment securities	(10)	35	25	157	6	163
Other earning assets	5	3	8	(14)	2	(12)
Total interest income from earning assets	184	312	496	566	242	808
Deposits	16	195	211	29	49	78
Short-term borrowings	(2)	25	23	7	13	20
Long-term debt	3	92	95	17	53	70
Total interest expense of interest-bearing liabilities	17	312	329	53	115	168
Net interest income	\$ 167	\$ —	\$ 167	\$ 513	\$ 127	\$ 640

- (1) The change in interest rates due to both rate and volume has been allocated between the factors in proportion to the relationship of the absolute dollar amounts of the change in each.
- (2) Calculated assuming a 21% tax rate and a 35% tax rate for periods prior to January 1, 2018.

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Table 5 - Consolidated Average Balance Sheet and Net Interest Margin Analysis

(dollar amounts in millions)

	Average Balances					
	2018	Change from 2017		2017	Change from 2016	
		Amount	Percent		Amount	Percent
Fully-taxable equivalent basis (1)						
Assets						
Interest-bearing deposits in Federal Reserve Bank (2)	\$ 122	\$ 122	100 %	\$ —	\$ —	—%
Interest-bearing deposits in banks	88	(11)	(11)	99	(1)	(1)
Securities:						
Trading account securities	96	(6)	(6)	102	35	52
Available-for-sale securities:						
Taxable	10,760	(1,203)	(10)	11,903	3,042	34
Tax-exempt	3,463	282	9	3,181	465	17
Total available-for-sale securities	14,163	(921)	(6)	15,084	3,507	30
Held-to-maturity securities—taxable	8,643	535	7	8,108	2,415	42
Other securities	584	—	—	584	167	40
Total securities	23,486	(392)	(2)	23,878	6,124	34
Loans held for sale	635	80	14	555	(499)	(47)
Loans and leases (3)						
Commercial:						
Commercial and industrial	28,887	1,138	4	27,749	4,065	17
Commercial real estate:						
Construction	1,146	(52)	(4)	1,198	110	10
Commercial	6,049	39	1	6,010	1,091	22
Commercial real estate	7,195	(13)	—	7,208	1,201	20
Total commercial	36,082	1,125	3	34,957	5,266	18
Consumer:						
Automobile loans and leases	12,292	773	7	11,519	979	9
Home equity	9,915	(79)	(1)	9,994	936	10
Residential mortgage	9,907	1,662	20	8,245	1,515	23
RV and marine finance	2,847	692	32	2,155	1,462	211
Other consumer	1,203	182	18	1,021	279	38
Total consumer	36,164	3,230	10	32,934	5,171	19
Total loans and leases	72,246	4,355	6	67,891	10,437	18
Allowance for loan and lease losses	(747)	(80)	12	(667)	(53)	9
Net loans and leases	71,499	4,275	6	67,224	10,384	18
Total earning assets	96,577	4,154	4	92,423	16,061	21
Cash and due from banks	1,184	(269)	(19)	1,453	233	19
Intangible assets	2,311	(55)	(2)	2,366	1,007	74
All other assets	5,657	211	4	5,446	719	15
Total assets	\$ 104,982	\$ 3,961	4 %	\$ 101,021	\$ 17,967	22%
Liabilities and Shareholders' Equity						
Deposits:						
Demand deposits—noninterest-bearing	\$ 20,391	\$ (1,308)	(6)%	\$ 21,699	\$ 2,654	14%
Demand deposits—interest-bearing	19,295	1,715	10	17,580	6,595	60
Total demand deposits	39,686	407	1	39,279	9,249	31
Money market deposits	21,446	1,711	9	19,735	666	3
Savings and other domestic deposits	11,083	(614)	(5)	11,697	3,716	47
Core certificates of deposit	4,188	2,069	98	2,119	(181)	(8)
Total core deposits	76,403	3,573	5	72,830	13,450	23
Other domestic time deposits of \$250,000 or more	280	(165)	(37)	445	37	9
Brokered time deposits and negotiable CDs	3,503	(172)	(5)	3,675	176	5
Deposits in foreign offices	—	—	—	—	(204)	(100)
Total deposits	80,186	3,236	4	76,950	13,459	21
Short-term borrowings	2,748	(175)	(6)	2,923	1,393	91
Long-term debt	8,992	130	1	8,862	814	10
Total interest-bearing liabilities	71,535	4,499	7	67,036	13,012	24
All other liabilities	1,997	322	19	1,675	81	5
Shareholders' equity	1,059	448	4	10,611	2,220	26
Total liabilities and shareholders' equity	\$ 104,982	\$ 3,961	4 %	\$ 101,021	\$ 17,967	22%

(1) FTE yields are calculated assuming a 21% tax rate and a 35% tax rate for periods prior to January 1, 2018.

(2) Deposits in Federal Reserve Bank were treated as nonearning assets prior to 4Q 2018.

(3) For purposes of this analysis, nonaccrual loans are reflected in the average balances of loans.

Table 5 - Consolidated Average Balance Sheet and Net Interest Margin Analysis (Continued)

(dollar amounts in millions)

Fully-taxable equivalent basis (1)	Interest Income / Expense			Average Rate (4)		
	2018	2017	2016	2018	2017	2016
Assets						
Interest-bearing deposits in Federal Reserve Bank (2)	\$ 3	\$ —	\$ —	2.33%	—%	—%
Interest-bearing deposits in banks	2	2	—	1.97	1.56%	0.44
Securities						
Trading account securities	1	—	—	0.80	0.18	0.42
Available-for-sale securities						
Taxable	280	283	210	2.61	2.38	2.36
Tax-exempt	122	118	91	3.53	3.71	3.35
Total available-for-sale securities	402	401	301	2.84	2.66	2.60
Held-to-maturity securities—taxable	211	193	138	2.44	2.38	2.43
Other securities	25	20	12	4.34	3.42	2.95
Total securities	639	614	451	2.72	2.57	2.54
Loans held for sale	26	21	35	4.15	3.75	3.27
Loans and leases (3)						
Commercial:						
Commercial and industrial	1,337	1,142	879	4.63	4.12	3.71
Commercial real estate						
Construction	60	52	40	5.26	4.36	3.72
Commercial	283	240	176	4.67	4.00	3.57
Commercial real estate	343	292	216	4.77	4.06	3.60
Total commercial	1,680	1,434	1,095	4.66	4.11	3.69
Consumer						
Automobile loans and leases	456	412	351	3.71	3.58	3.32
Home equity	512	463	381	5.16	4.63	4.21
Residential mortgage	371	301	244	3.74	3.65	3.63
RV and marine finance	145	118	39	5.09	5.46	5.67
Other consumer	145	118	79	12.04	11.53	10.62
Total consumer	1,629	1,412	1,094	4.50	4.28	3.94
Total loans and leases	3,309	2,846	2,189	4.58	4.19	3.81
Total earning assets	\$ 3,979	\$ 3,483	\$ 2,675	4.12%	3.77%	3.50%
Liabilities and Shareholders' Equity						
Deposits						
Demand deposits—noninterest-bearing	\$ —	\$ —	\$ —	—%	—%	—%
Demand deposits—interest-bearing	78	38	11	0.40	0.21	0.10
Total demand deposits	78	38	11	0.20	0.10	0.04
Money market deposits	143	66	46	0.69	0.33	0.24
Savings and other domestic deposits	24	24	15	0.22	0.21	0.19
Core certificates of deposit	72	13	13	1.72	0.60	0.56
Total core deposits	322	141	85	0.57	0.27	0.21
Other domestic time deposits of \$250,000 or more	3	2	2	1.25	0.52	0.40
Brokered time deposits and negotiable CDs	66	37	15	1.88	1.00	0.43
Deposits in foreign offices	—	—	—	—	—	0.13
Total deposits	391	180	102	0.65	0.33	0.23
Short-term borrowings	48	25	5	1.74	0.86	0.34
Long-term debt	321	226	156	3.57	2.56	1.93
Total interest-bearing liabilities	760	431	263	1.06	0.64	0.48
Net interest income	\$ 3,219	\$ 3,052	\$ 2,412			
Net interest rate spread				3.06	3.13	3.02
Impact of noninterest-bearing funds on margin				0.27	0.17	0.14
Net interest margin				3.33%	3.30%	3.16%

(1) FTE yields are calculated assuming a 21% tax rate and a 35% tax rate for periods prior to January 1, 2018.

(2) Deposits in Federal Reserve Bank were treated as nonearning assets prior to 4Q 2018 and associated interest income was not material.

(3) For purposes of this analysis, nonaccrual loans are reflected in the average balances of loans.

(4) Yield/rates and amounts include the effects of hedge and risk management activities associated with the respective asset and liability categories.

2018 versus 2017

FTE net interest income for 2018 increased \$167 million, or 5%, from 2017. This reflected the impact of 4% average earning asset growth, a three basis point increase in the NIM to 3.33%, partially offset by 7% average interest-bearing liability growth. Average earning asset growth included a \$4.4 billion, or 6%, increase in average loans and leases and a \$0.4 billion, or 2%, decrease in average securities. The NIM expansion reflected a 35 basis point positive impact from the mix and yield on earning assets and a 10 basis point increase in the benefit from noninterest-bearing funding, partially offset by a 42 basis point increase in funding costs.

Average earning assets for 2018 increased \$4.2 billion, or 4%, from the prior year, reflecting loan growth of \$4.4 billion, or 6%, partially offset by decline in average securities. Average C&I loans and leases increased \$1.1 billion, or 4%, reflecting broad-based growth. Residential mortgages increased \$1.7 billion, or 20%, driven by increase in lending officers and expansion into the Chicago market. Average RV and marine finance loans increased \$0.7 billion, or 32%, reflecting the success of the expansion of the business over the past two years while maintaining our commitment to super prime originations. Average automobile loans increased \$0.8 billion, or 7%, driven by originations consistent with the current market dynamics and our commitment to high quality borrowers, while optimizing yield and production in a rising rate environment over the past year. Average securities decreased \$0.4 billion, or 2%.

Average total deposits for 2018 increased \$3.2 billion, or 4%, from the prior year, while average total core deposits increased \$3.6 billion, or 5%. Average core CDs increased \$2.1 billion, or 98%, reflecting consumer growth initiatives primarily in the first three quarters of 2018. Average money market deposits increased \$1.7 billion, or 9%, reflecting growth in both commercial and consumer deposits. Average total interest-bearing liabilities increased \$4.5 billion, or 7%, from the prior year as deposits shifted from non-interest bearing to interest bearing with the increase in rates.

2017 versus 2016

FTE net interest income for 2017 increased \$640 million, or 27%, from 2016. This reflected the impact of 21% average earning asset growth, a 14 basis point increase in the NIM to 3.30%, partially offset by 24% average interest-bearing liability growth. Average earning asset growth included a \$10.4 billion, or 18%, increase in average loans and leases and a \$6.1 billion, or 34%, increase in average securities. The NIM expansion reflected a 27 basis point positive impact from the mix and yield on earning assets and a three basis point increase in the benefit from noninterest-bearing funding, partially offset by a 16 basis point increase in funding costs.

Average earning assets for 2017 increased \$16.1 billion, or 21%, from the prior year, primarily reflecting the full year impact of the FirstMerit acquisition. Average loans and leases increased \$10.4 billion, or 18%, including a \$4.1 billion, or 17%, increase in average C&I loans and leases primarily driven by an increase in commercial middle market and specialty banking, a \$1.5 billion, or 23%, increase in residential mortgage loans reflecting the benefit of the ongoing expansion of the home lending business, a \$1.5 billion or 211%, increase in RV and marine finance loans reflecting the success of the expansion of the acquired business into 17 new states over the past year and a \$1.0 billion, or 9%, increase in automobile loans reflecting continued strength in new and used automobile originations across our 23-state auto finance lending footprint. Average securities increased \$6.1 billion, or 34%, which included \$2.9 billion of direct purchase municipal instruments in our commercial banking segment, up from \$2.1 billion in the year-ago period.

Average total deposits for 2017 increased \$13.5 billion, or 21%, from the prior year, while average total core deposits increased \$13.5 billion, or 23%, including a \$9.2 billion, or 31%, increase in average demand deposits and a \$3.7 billion, or 47%, increase in average savings and other domestic deposits. Average total interest-bearing liabilities increased \$13.0 billion, or 24%, from the prior year. These increases primarily reflect the full year impact of the FirstMerit acquisition. Average long-term borrowings increased \$0.8 billion, or 10%, reflecting the issuance of \$1.7 billion and maturity of \$0.8 billion of senior debt during 2017.

Provision for Credit Losses

(This section should be read in conjunction with the Credit Risk section)

The provision for credit losses is the expense necessary to maintain the ALLL and the AULC at levels appropriate to absorb our estimate of credit losses inherent in the loan and lease portfolio and the portfolio of unfunded loan commitments and letters-of-credit.

The provision for credit losses in 2018 was \$235 million, up \$34 million, or 17%, from 2017. The increase in provision expense over the prior year is primarily attributed to loan balance growth across the portfolio.

The provision for credit losses in 2017 was \$201 million, up \$10 million, or 5%, from 2016. The increase in provision expense over the prior year was primarily the result of loan growth.

Noninterest Income

The following table reflects noninterest income for the past three years:

Table 6 - Noninterest Income

	Year Ended December 31,						
<u>(dollar amounts in millions)</u>	Change from 2017			Change from 2016			
	2018	Amount	Percent	2017	Amount	Percent	2016
Service charges on deposit accounts	\$ 364	\$ 11	3%	\$ 353	\$ 29	9%	\$ 324
Card and payment processing income	224	18	9	206	37	22	169
Trust and investment management services	171	15	10	156	33	27	123
Mortgage banking income	108	(23)	(18)	131	3	2	128
Capital markets fees	91	15	20	76	16	27	60
Insurance income	82	1	1	81	(3)	(4)	84
Bank owned life insurance income	67	—	—	67	9	16	58
Gain on sale of loans and leases	55	(1)	(2)	56	9	19	47
Securities gains (losses)	(21)	(17)	(425)	(4)	(4)	(100)	—
Other income	130	(5)	(3)	185	28	18	157
Total noninterest income	\$ 1,321	\$ 14	1%	\$ 1,307	\$ 157	14%	\$ 1,150

2018 versus 2017

Noninterest income for 2018 increased \$14 million, or 1%, from the prior year. Card and payment processing income increased \$18 million, or 9%, due to higher check card interchange income and underlying customer growth. Trust and investment management services increased \$15 million, or 10%, primarily reflecting increased sales production and year over year market growth. Capital markets fees increased \$15 million, or 20%, reflecting increased sales of interest rate, foreign exchange and commodity derivatives as well as fees as a result of the acquisition of HSE. Service charges on deposit accounts increased \$11 million, or 3%, due to an increase in both personal and corporate service charges. These increases were partially offset by a \$23 million, or 18% decrease in mortgage banking income, due to lower margin on loans sold, \$17 million, or 425%, increase in securities losses reflecting portfolio repositioning completed in the 2018 fourth quarter and a \$5 million, or 3%, decrease in other income primarily reflecting an unfavorable Visa Class B derivative fair value adjustment.

2017 versus 2016

Noninterest income for 2017 increased \$157 million, or 14%, from the prior year, reflecting the full year impact of the FirstMerit acquisition. Card and payment processing income increased \$37 million, or 22%, due to higher credit and debit card related income and underlying customer growth. Trust and investment management services increased \$33 million, or 27%, and service charges on deposit accounts increased \$29 million, or 9%, reflecting market growth and ongoing customer acquisition. Other income increased \$28 million, or 18%, primarily reflecting increases in servicing income, mezzanine lending, loan syndication fees and commitment fees. Capital markets fees increased \$16 million, or 27%, reflecting our ongoing strategic focus on expanding the business. Bank owned life insurance increased \$9 million, or 16%. Gain on sale of loans increased \$9 million, or 19%, as a result of continued expansion of our SBA lending business during 2017 which more than offset gains in the prior year from our balance sheet optimization strategy and the auto securitization completed in the 2016 fourth quarter. These increases were partially offset by a \$4 million decline in securities gains and a \$3 million decline in insurance income.

Noninterest Expense

(This section should be read in conjunction with Significant Items section.)

The following table reflects noninterest expense for the past three years:

Table 7 - Noninterest Expense

<i>(dollar amounts in millions)</i>	Year Ended December 31,					
	Change from 2017			Change from 2016		
	2018	Amount	Percent	2017	Amount	Percent
Personnel costs	\$ 1,559	\$ 35	2 %	\$ 1,524	\$ 175	13%
Outside data processing and other services	294	(19)	(6)	313	8	3
Net occupancy	184	(28)	(13)	212	59	39
Equipment	164	(7)	(4)	171	6	4
Deposit and other insurance expense	63	(15)	(19)	78	24	44
Professional services	60	(9)	(13)	69	(36)	(34)
Marketing	53	(7)	(12)	60	(3)	(5)
Amortization of intangibles	53	(3)	(5)	56	26	87
Other expense	217	(14)	(6)	231	47	26
Total noninterest expense	\$ 2,647	\$ (67)	(2)%	\$ 2,714	\$ 306	13%
Number of employees (average full-time equivalent)	15,693	(77)	— %	15,770	1,912	14%
						13,858

Impact of Significant Items:

<i>(dollar amounts in millions)</i>	Year Ended December 31,		
	2018	2017	2016
Personnel costs	\$ —	\$ 42	\$ 76
Outside data processing and other services	—	24	46
Net occupancy	—	52	15
Equipment	—	16	25
Professional services	—	10	58
Marketing	—	1	5
Other expense	—	9	14
Total impact of significant items on noninterest expense	\$ —	\$ 154	\$ 239

Adjusted Noninterest Expense (See Non-GAAP Financial Measures in the Additional Disclosures section):

<i>(dollar amounts in millions)</i>	Year Ended December 31,					
	Change from 2017			Change from 2016		
	2018	Amount	Percent	2017	Amount	Percent
Personnel costs	\$ 1,559	\$ 77	5%	\$ 1,482	\$ 209	16%
Outside data processing and other services	294	5	2	289	30	12
Net occupancy	184	24	15	160	22	16
Equipment	164	9	6	155	15	11
Deposit and other insurance expense	63	(15)	(19)	78	24	44
Professional services	60	1	2	59	12	26
Marketing	53	(6)	(10)	59	1	2
Amortization of intangibles	53	(3)	(5)	56	26	87
Other expense	217	(5)	(2)	222	52	31
Total adjusted noninterest expense (Non-GAAP)	\$ 2,647	\$ 87	3%	\$ 2,560	\$ 391	18%
						2,169

2018 versus 2017

Reported noninterest expense for 2018 decreased \$67 million, or 2%, from the prior year, primarily reflecting the \$154 million of acquisition-related Significant Items in the year-ago period, offset by branch and facility consolidation-related expenses and personnel costs. Net occupancy expense decreased \$28 million, or 13%, primarily reflecting \$52 million of prior year acquisition-related expense, lower occupancy related expenses and reserves, partially offset by \$28 million of branch and facility consolidation-related expense. Outside data processing and other services decreased \$19 million, or 6%, primarily reflecting \$24 million of acquisition-related expense in the year-ago period, partially offset by higher technology investment costs. Deposit and other insurance expense decreased \$15 million, or 19%, primarily due to the discontinuation of the FDIC surcharge in the 2018 fourth quarter. Other noninterest expense decreased \$14 million, or 6%, reflecting \$9 million of acquisition-related expense in the year-ago period, as well as declines in franchise and other taxes. Professional services decreased \$9 million, or 13%, primarily reflecting \$10 million of acquisition-related expense in the year-ago period. Equipment decreased \$7 million, or 4%, primarily due to \$16 million in acquisition-related costs in the year-ago period, partially offset by \$7 million of branch and facility consolidation-related expense in the 2018 fourth quarter. Marketing decreased \$7 million, or 12%, driven by a decrease in promotional expense, partially offset by an increase in advertising. Partially offsetting these decreases, personnel costs increased \$35 million, or 2%, primarily reflecting higher benefit costs and merit increases.

2017 versus 2016

Reported noninterest expense for 2017 increased \$306 million, or 13%, from the prior year, reflecting the full year impact of the First Merit acquisition. Personnel costs increased \$175 million, or 13%, primarily reflecting the full year impact of the addition of colleagues from FirstMerit. Net occupancy expense increased \$59 million, or 39%, primarily reflecting \$52 million of acquisition-related expense. Other expense increased \$47 million, or 26%, reflecting the full impact of FirstMerit. Amortization of intangibles increased \$26 million, or 87%, reflecting the full year impact of amortizing FirstMerit related intangibles. Deposit and other insurance expense increased \$24 million, or 44%, reflecting the increase in the assessment base. Partially offsetting these increases, professional services decreased \$36 million, or 34% reflecting a reduction in legal and consultation fees attributable to acquisition-related expense.

Provision for Income Taxes

(This section should be read in conjunction with Note 1 and Note 16 of the Notes to Consolidated Financial Statements.)

2018 versus 2017

The provision for income taxes was \$235 million for 2018 compared with a provision for income taxes of \$208 million in 2017. Both years included the benefits from tax-exempt income, tax-advantaged investments, general business credits, investments in qualified affordable housing projects, excess tax deductions for stock-based compensation, and capital losses. 2017 also included a \$123 million tax benefit related to the federal tax reform enacted on December 22, 2017, which is primarily attributed to the revaluation of net deferred tax liabilities at the lower statutory federal income tax rate. We completed our provisional estimate related to tax reform during the 2018 fourth quarter. As of December 31, 2018 and 2017 there was no valuation allowance on federal deferred taxes. In 2018 and 2017 there was essentially no change recorded in the provision for state income taxes, net of federal, for the portion of state deferred tax assets and state net operating loss carryforwards that are more likely than not to be realized. At December 31, 2018, we had a net federal deferred tax liability of \$105 million and a net state deferred tax asset of \$41 million.

We file income tax returns with the IRS and various state, city, and foreign jurisdictions. Federal income tax audits have been completed for tax years through 2009. Certain proposed adjustments resulting from the IRS examination of our 2010 through 2011 tax returns have been settled, subject to final approval by the Joint Committee on Taxation of the U.S. Congress. While the statute of limitations remains open for tax years 2012 through 2017, the IRS has advised that tax years 2012 through 2014 will not be audited, and began the examination of the 2015 federal income tax return in second quarter 2018. Various state and other jurisdictions remain open to examination, including Ohio, Kentucky, Indiana, Michigan, Pennsylvania, West Virginia, Wisconsin, and Illinois.

2017 versus 2016

The provision for income taxes was \$208 million for 2017 and 2016. Both years included the benefits from tax-exempt income, tax-advantaged investments, general business credits, investments in qualified affordable housing projects, excess tax deductions for stock-based compensation, and capital losses. 2017 also included a \$123 million tax benefit related to the federal tax reform enacted on December 22, 2017, which is primarily attributed to the revaluation of net deferred tax liabilities at the lower statutory federal income tax rate. As of December 31, 2017 and 2016 there was no valuation allowance on federal deferred taxes. In 2017 and 2016, there was essentially no change recorded in the provision for state income taxes, net of federal taxes, for the portion of state deferred tax assets and state net operating loss carryforwards that are more likely than not to be realized.

RISK MANAGEMENT AND CAPITAL

Risk Governance

We use a multi-faceted approach to risk governance. It begins with the board of directors defining our risk appetite as aggregate moderate-to-low. This does not preclude engagement in select higher risk activities. Rather, the definition is intended to represent an aggregate view of where we want our overall risk to be managed.

Three board committees primarily oversee implementation of this desired risk appetite and monitoring of our risk profile:

- The *Audit Committee* oversees the integrity of the consolidated financial statements, including policies, procedures, and practices regarding the preparation of financial statements, the financial reporting process, disclosures, and internal control over financial reporting. The Audit Committee also provides assistance to the board in overseeing the internal audit division and the independent registered public accounting firm's qualifications and independence; compliance with our Financial Code of Ethics for the chief executive officer and senior financial officers; and compliance with corporate securities trading policies.
- The *Risk Oversight Committee (ROC)* assists the board of directors in overseeing management of material risks, the approval and monitoring of the Company's capital position and plan supporting our overall aggregate moderate-to-low risk profile, the risk governance structure, compliance with applicable laws and regulations, and determining adherence to the board's stated risk appetite. The committee has oversight responsibility with respect to the full range of inherent risks: market, credit, liquidity, legal, compliance/regulatory, operational, strategic, and reputational. The ROC provides assistance to the Board in overseeing the credit review division. This committee also oversees our capital management and planning process, ensures that the amount and quality of capital are adequate in relation to expected and unexpected risks, and that our capital levels exceed "well-capitalized" requirements.
- The *Technology Committee* assists the board of directors in fulfilling its oversight responsibilities with respect to all technology, cyber security, and third-party risk management strategies and plans. The committee is charged with evaluating Huntington's capability to properly perform all technology functions necessary for its business plan, including projected growth, technology capacity, planning, operational execution, product development, and management capacity. The committee provides oversight of technology investments and plans to drive efficiency as well as to meet defined standards for risk, information security, and redundancy. The Committee oversees the allocation of technology costs and ensures that they are understood by the board of directors. The Technology Committee monitors and evaluates innovation and technology trends that may affect the Company's strategic plans, including monitoring of overall industry trends. The Technology Committee reviews and provides oversight of the Company's continuity and disaster recovery planning and preparedness.

The Audit and Risk Oversight Committees routinely hold executive sessions with our key officers engaged in accounting and risk management. On a periodic basis, the two committees meet in joint session to cover matters relevant to both, such as the construct and appropriateness of the ACL, which is reviewed quarterly. All directors have access to information provided to each committee and all scheduled meetings are open to all directors.

Further, through its Compensation Committee, the board of directors seeks to ensure its system of rewards is risk-sensitive and aligns the interests of management, creditors, and shareholders. We utilize a variety of compensation-related tools to induce appropriate behavior, including common stock ownership thresholds for the chief executive officer and certain members of senior management, a requirement to hold until retirement or exit from the Company, a portion of net shares received upon exercise of stock options or release of restricted stock awards (50% for executive officers and 25% for other award recipients), equity deferrals, recoupment provisions, and the right to terminate compensation plans at any time.

Management has implemented an Enterprise Risk Management and Risk Appetite Framework. Critically important is our self-assessment process, in which each business segment produces an analysis of its risks and the strength of its risk controls. The segment analyses are combined with assessments by our risk management organization of major risk sectors (e.g., market, credit, liquidity, legal, compliance/regulatory, operational, strategic, and reputational) to produce an overall enterprise risk assessment. Outcomes of the process include a determination of the quality of the overall control process, the direction of risk, and our position compared to the defined risk appetite.

Management also utilizes a wide series of metrics (key risk indicators) to monitor risk positions throughout the Company. In general, a range for each metric is established, which allows the Company, in aggregate, to operate within an aggregate moderate-to-low risk profile. Deviations from the range will indicate if the risk being measured exceeds desired tolerance, which may then necessitate corrective action.

We also have four executive level committees to manage risk: ALCO, Credit Policy and Strategy, Risk Management, and Capital Management. Each committee focuses on specific categories of risk and is supported by a series of subcommittees that are tactical in nature. We believe this structure helps ensure appropriate escalation of issues and overall communication of strategies.

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Huntington utilizes three lines of defense with regard to risk management: (1) business segments, (2) corporate risk management, and (3) internal audit and credit review. To induce greater ownership of risk within its business segments, segment risk officers have been embedded in the business to identify and monitor risk, elevate and remediate issues, establish controls, perform self-testing, and oversee the self-assessment process. Corporate Risk Management establishes policies, sets operating limits, reviews new or modified products/processes, ensures consistency and quality assurance within the segments, and produces the enterprise risk assessment. The Chief Risk Officer has significant input into the design and outcome of incentive compensation plans as they apply to risk. Internal Audit and Credit Review provide additional assurance that risk-related functions are operating as intended.

A comprehensive discussion of risk management and capital matters affecting us can be found in the Risk Governance section included in Item 1A and the Regulatory Matters section of Item 1 of this Form 10-K.

Some of the more significant processes used to manage and control credit, market, liquidity, operational, and compliance risks are described in the following sections.

Credit Risk

Credit risk is the risk of financial loss if a counterparty is not able to meet the agreed upon terms of the financial obligation. The majority of our credit risk is associated with lending activities, as the acceptance and management of credit risk is central to profitable lending. We also have credit risk associated with our investment securities portfolios (*see Note 4 of the Notes to Consolidated Financial Statements*). We engage with other financial counterparties for a variety of purposes including investing, asset and liability management, mortgage banking, and trading activities. While there is credit risk associated with derivative activity, we believe this exposure is minimal. (*See Note 1 of the Notes to Consolidated Financial Statements.*)

We continue to focus on the identification, monitoring, and management of our credit risk. In addition to the traditional credit risk mitigation strategies of credit policies and processes, market risk management activities, and portfolio diversification, we use quantitative measurement capabilities utilizing external data sources, enhanced modeling technology, and internal stress testing processes. Our portfolio management resources demonstrate our commitment to maintaining an aggregate moderate-to-low risk profile. In our efforts to continue to identify risk mitigation techniques, we have focused on product design features, origination policies, and solutions for delinquent or stressed borrowers.

The maximum level of credit exposure to individual credit borrowers is limited by policy guidelines based on the perceived risk of each borrower or related group of borrowers. All authority to grant commitments is delegated through the independent credit administration function and is closely monitored and regularly updated. Concentration risk is managed through limits on loan type, geography, industry, and loan quality factors. We focus predominantly on extending credit to retail and commercial customers with existing or expandable relationships within our primary banking markets, although we will consider lending opportunities outside our primary markets if we believe the associated risks are acceptable and aligned with strategic initiatives. Although we offer a broad set of products, we continue to develop new lending products and opportunities. Each of these new products and opportunities goes through a rigorous development and approval process prior to implementation to ensure our overall objective of maintaining an aggregate moderate-to-low risk portfolio profile.

The checks and balances in the credit process and the separation of the credit administration and risk management functions are designed to appropriately assess and sanction the level of credit risk being accepted, facilitate the early recognition of credit problems when they occur, and provide for effective problem asset management and resolution. For example, we do not extend additional credit to delinquent borrowers except in certain circumstances that substantially improve our overall repayment or collateral coverage position.

Loan and Lease Credit Exposure Mix

At December 31, 2018, our loans and leases totaled \$74.9 billion, representing a \$4.8 billion, or 7%, increase compared to \$70.1 billion at December 31, 2017.

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Total commercial loans and leases were \$37.4 billion at December 31, 2018, and represented 51% of our total loan and lease credit exposure. Our commercial loan portfolio is diversified by product type, customer size, and geography within our footprint, and is comprised of the following (*see Commercial Credit discussion*):

C&I – C&I loans and leases are made to commercial customers for use in normal business operations to finance working capital needs, equipment purchases, or other projects. The majority of these borrowers are customers doing business within our geographic regions. C&I loans and leases are generally underwritten individually and secured with the assets of the company and/or the personal guarantee of the business owners. The financing of owner occupied facilities is considered a C&I loan even though there is improved real estate as collateral. This treatment is a result of the credit decision process, which focuses on cash flow from operations of the business to repay the debt. The operation, sale, rental, or refinancing of the real estate is not considered the primary repayment source for these types of loans. As we have expanded our C&I portfolio, we have developed a series of “vertical specialties” to ensure that new products or lending types are embedded within a structured, centralized Commercial Lending area with designated, experienced credit officers. These specialties are comprised of either targeted industries (for example, Healthcare, Food & Agribusiness, Energy, etc.) and/or lending disciplines (Equipment Finance, Asset Based Lending, etc.), all of which requires a high degree of expertise and oversight to effectively mitigate and monitor risk. As such, we have dedicated colleagues and teams focused on bringing value added expertise to these specialty clients.

CRE – CRE loans consist of loans to developers and REITs supporting income-producing or for-sale commercial real estate properties. We mitigate our risk on these loans by requiring collateral values that exceed the loan amount and underwriting the loan with projected cash flow in excess of the debt service requirement. These loans are made to finance properties such as apartment buildings, office and industrial buildings, and retail shopping centers, and are repaid through cash flows related to the operation, sale, or refinance of the property. For loans secured by real estate, appropriate appraisals are obtained at origination and updated on an as needed basis in compliance with regulatory requirements.

Construction CRE – Construction CRE loans are loans to developers, companies, or individuals used for the construction of a commercial or residential property for which repayment will be generated by the sale or permanent financing of the property. Our construction CRE portfolio primarily consists of retail, multi-family, office, and warehouse project types. Generally, these loans are for construction projects that have been pre-sold or pre-leased, or have secured permanent financing, as well as loans to real estate companies with significant equity invested in each project. These loans are underwritten and managed by a specialized real estate lending group that actively monitors the construction phase and manages the loan disbursements according to the predetermined construction schedule.

Total consumer loans and leases were \$37.5 billion at December 31, 2018, and represented 49% of our total loan and lease credit exposure. The consumer portfolio is comprised primarily of automobile loans, home equity lines-of-credit, and residential mortgages (*see Consumer Credit discussion*).

Automobile – Automobile loans are comprised primarily of loans made through automotive dealerships and include exposure in selected states outside of our primary banking markets. The exposure outside of our core footprint states represents 21% of the total exposure, with no individual state representing more than 5%. Applications are underwritten using an automated underwriting system that applies consistent policies and processes across the portfolio.

Home equity – Home equity lending includes both home equity loans and lines-of-credit. This type of lending, which is secured by a first-lien or junior-lien on the borrower's residence, allows customers to borrow against the equity in their home or refinance existing mortgage debt. Products include closed-end loans which are generally fixed-rate with principal and interest payments, and variable-rate, interest-only lines-of-credit which do not require payment of principal during the 10-year revolving period. The home equity line of credit converts to a 20-year amortizing structure at the end of the revolving period. Applications are underwritten centrally in conjunction with an automated underwriting system. The home equity underwriting criteria is based on minimum credit scores, debt-to-income ratios, and LTV ratios, with current collateral valuations. The underwriting for the floating rate lines of credit also incorporates a stress analysis for a rising interest rate.

Residential mortgage – Residential mortgage loans represent loans to consumers for the purchase or refinance of a residence. These loans are generally financed over a 15-year to 30-year term, and in most cases, are extended to borrowers to finance their primary residence. Applications are underwritten centrally using consistent credit policies and processes. All residential mortgage loan decisions utilize a full appraisal for collateral valuation. Huntington has not originated or acquired residential mortgages that allow negative amortization or allow the borrower multiple payment options.

RV and marine finance – RV and marine finance loans are loans provided to consumers for the purpose of financing recreational vehicles and boats. Loans are originated on an indirect basis through a series of dealerships across 34 states. The loans are underwritten centrally using an application and decisioning system similar to automobile loans. The current portfolio includes 35% of the balances within our core footprint states.

Other consumer – Other consumer loans primarily consists of consumer loans not secured by real estate, including credit cards, personal unsecured loans, and overdraft balances. We originate these products within our established set of credit policies and guidelines.

The table below provides the composition of our total loan and lease portfolio:

Table 8 - Loan and Lease Portfolio Composition

<u>(dollar amounts in millions)</u>	At December 31,									
	2018		2017		2016		2015		2014	
Commercial:										
Commercial and industrial	\$ 30,605	41%	\$ 28,107	40%	\$ 28,059	42%	\$ 20,560	41%	\$ 19,033	40%
Commercial real estate:										
Construction	1,185	2	1,217	2	1,446	2	1,031	2	875	2
Commercial	5,657	8	6,008	9	5,855	9	4,237	8	4,322	9
Commercial real estate	6,842	10	7,225	11	7,301	11	5,268	10	5,197	11
Total commercial	37,447	51	35,332	51	35,360	53	25,828	51	24,230	51
Consumer:										
Automobile	12,429	16	12,100	17	10,969	16	9,481	19	8,690	18
Home equity	9,722	13	10,099	14	10,106	15	8,471	17	8,491	18
Residential mortgage	10,728	14	9,026	13	7,725	12	5,998	12	5,831	12
RV and marine finance	3,254	4	2,438	3	1,846	3	—	—	—	—
Other consumer	1,320	2	1,122	2	956	1	563	1	414	1
Total consumer	37,453	49	34,785	49	31,602	47	24,513	49	23,426	49
Total loans and leases	<u>\$ 74,900</u>	<u>100%</u>	<u>\$ 70,117</u>	<u>100%</u>	<u>\$ 66,962</u>	<u>100%</u>	<u>\$ 50,341</u>	<u>100%</u>	<u>\$ 47,656</u>	<u>100%</u>

Our loan portfolio is composed of a managed mix of consumer and commercial credits. At the corporate level, we manage the overall credit exposure and portfolio composition via a credit concentration policy. The policy designates specific loan types, collateral types, and loan structures to be formally tracked and assigned maximum exposure limits as a percentage of capital. C&I lending by NAICS categories, specific limits for CRE project types, loans secured by residential real estate, shared national credit exposure, and designated high risk loan definitions represent examples of specifically tracked components of our concentration management process. There are no identified concentrations that exceed the assigned exposure limit. Our concentration management policy is approved by the ROC of the Board and is one of the strategies used to ensure a high quality, well diversified portfolio that is consistent with our overall objective of maintaining an aggregate moderate-to-low risk profile. Changes to existing concentration limits require the approval of the ROC prior to implementation, incorporating specific information relating to the potential impact on the overall portfolio composition and performance metrics.

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The table below provides our total loan and lease portfolio segregated by industry type. The changes in the industry composition from December 31, 2017 are consistent with the portfolio growth metrics.

Table 9 - Loan and Lease Portfolio by Industry Type

<i>(dollar amounts in millions)</i>	December 31, 2018		December 31, 2017	
Commercial loans and leases.				
Real estate and rental and leasing	\$ 6,964	9%	\$ 7,378	11%
Retail trade (1)	5,337	7	4,886	7
Manufacturing	5,140	7	4,791	7
Finance and insurance	3,377	5	3,044	4
Wholesale trade	2,830	4	2,291	3
Health care and social assistance	2,533	3	2,664	4
Accommodation and food services	1,709	2	1,617	2
Professional, scientific, and technical services	1,344	2	1,257	2
Transportation and warehousing	1,320	2	1,243	2
Other services	1,290	2	1,296	2
Mining, quarrying, and oil and gas extraction	1,286	2	694	1
Construction	924	1	976	1
Admin./Support/Waste Mgmt. and Remediation Services	737	1	561	1
Arts, entertainment, and recreation	599	1	593	1
Educational services	473	1	504	1
Utilities	454	1	389	1
Information	441	1	467	1
Public administration	253	—	255	—
Unclassified/Other	174	—	163	—
Agriculture, forestry, fishing and hunting	174	—	172	—
Management of companies and enterprises	88	—	91	—
Total commercial loans and leases by industry category	37,447	51%	35,332	51%
Automobile	12,429	16	12,100	17
Home Equity	9,722	13	10,099	14
Residential mortgage	10,728	14	9,026	13
RV and marine finance	3,254	4	2,438	3
Other consumer loans	1,320	2	1,122	2
Total loans and leases	\$ 74,900	100%	\$ 70,117	100%

(1) Amounts include \$3.6 billion and \$3.2 billion of auto dealer services loans at December 31, 2018 and December 31, 2017, respectively.

Commercial Credit

The primary factors considered in commercial credit approvals are the financial strength of the borrower, assessment of the borrower's management capabilities, cash flows from operations, industry sector trends, type and sufficiency of collateral, type of exposure, transaction structure, and the general economic outlook. While these are the primary factors considered, there are a number of other factors that may be considered in the decision process. We utilize centralized review and loan approval committees, led by our credit officers. The risk rating (*see next paragraph*), size, and complexity of the credit determines the threshold for approval. For loans not requiring loan committee approval, with the exception of small business loans, credit officers who understand each local region and are experienced in the industries and loan structures of the requested credit exposure are involved in all loan decisions and have the primary credit authority. For small business loans, we utilize a centralized loan approval process for standard products and structures. In this centralized decision environment, certain individuals who understand each local region may make credit-extension decisions to preserve our commitment to the communities in which we operate. In addition to disciplined and consistent judgmental factors, a sophisticated credit scoring process is used as a primary evaluation tool in the determination of approving a loan within the centralized loan approval process.

In commercial lending, on-going credit management is dependent on the type and nature of the loan. We monitor all significant exposures on an on-going basis. All commercial credit extensions are assigned internal risk ratings reflecting the borrower's PD and LGD. This two-dimensional rating methodology provides granularity in the portfolio management process. The PD is rated and applied at the borrower level. The LGD is rated and applied based on the specific type of credit extension and the quality and lien

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position associated with the underlying collateral. The internal risk ratings are assessed at origination and updated at each periodic monitoring event. There is also extensive macro portfolio management analysis on an on-going basis. We continually review and adjust our risk-rating criteria based on actual experience, which provides us with the current risk level in the portfolio and is the basis for determining an appropriate allowance for credit losses (ACL) amount for the commercial portfolio. A centralized portfolio management team monitors and reports on the performance of the entire commercial portfolio, including small business loans, to provide consistent oversight.

In addition to the initial credit analysis conducted during the approval process, our Credit Review group performs testing to provide an independent review and assessment of the quality and risk of new loan originations. This group is part of our Risk Management area and conducts portfolio reviews on a risk-based cycle to evaluate individual loans, validate risk ratings, and test the consistency of credit processes.

Our standardized loan grading system considers many components that directly correlate to loan quality and likelihood of repayment, one of which is guarantor support. On an annual basis, or more frequently if warranted, we consider, among other things, the guarantor's reputation and creditworthiness, along with various key financial metrics such as liquidity and net worth, assuming such information is available. Our assessment of the guarantor's credit strength, or lack thereof, is reflected in our risk ratings for such loans, which is directly tied to, and an integral component of, our ACL methodology. When a loan goes to impaired status, viable guarantor support is considered in the determination of a credit loss.

If our assessment of the guarantor's credit strength yields an inherent capacity to perform, we will seek repayment from the guarantor as part of the collection process and have done so successfully.

Substantially all loans categorized as Classified (*see Note 3 of Notes to Consolidated Financial Statements*) are managed by SAD. SAD is a specialized group of credit professionals that handle the day-to-day management of workouts, commercial recoveries, and problem loan sales. Its responsibilities include developing and implementing action plans, assessing risk ratings, and determining the appropriateness of the allowance, the accrual status, and the ultimate collectability of the Classified loan portfolio.

C&I PORTFOLIO

We manage the risks inherent in the C&I portfolio through origination policies, a defined loan concentration policy with established limits, on-going loan-level and portfolio-level reviews, recourse requirements, and continuous portfolio risk management activities. Our origination policies for the C&I portfolio include loan product-type specific policies such as LTV and debt service coverage ratios, as applicable.

The C&I portfolio continues to have solid origination activity while we maintain a focus on high quality originations. Problem loans have trended downward over the last several years, reflecting a combination of proactive risk identification and effective workout strategies implemented by the SAD. We continue to maintain a proactive approach to identifying borrowers that may be facing financial difficulty in order to maximize the potential solutions. Subsequent to the origination of the loan, the Credit Review group provides an independent review and assessment of the quality of the underwriting and risk of new loan originations.

CRE PORTFOLIO

We manage the risks inherent in this portfolio specific to CRE lending, focusing on the quality of the developer and the specifics associated with each project. Generally, we: (1) limit our loans to 80% of the appraised value of the commercial real estate at origination, (2) require net operating cash flows to be 125% of required interest and principal payments, and (3) if the commercial real estate is non-owner occupied, require that at least 50% of the space of the project be pre-leased. We actively monitor both geographic and project-type concentrations and performance metrics of all CRE loan types, with a focus on loans identified as higher risk based on the risk rating methodology. Both macro-level and loan-level stress-test scenarios based on existing and forecast market conditions are part of the on-going portfolio management process for the CRE portfolio.

Dedicated real estate professionals originate and manage the portfolio. The portfolio is diversified by project type and loan size, and this diversification represents a significant portion of the credit risk management strategies employed for this portfolio. Subsequent to the origination of the loan, the Credit Review group provides an independent review and assessment of the quality of the underwriting and risk of new loan originations.

Appraisal values are obtained in conjunction with all originations and renewals, and on an as-needed basis, in compliance with regulatory requirements and to ensure appropriate decisions regarding the on-going management of the portfolio reflect the changing market conditions. Appraisals are obtained from approved vendors and are reviewed by an internal appraisal review group comprised of certified appraisers to ensure the quality of the valuation used in the underwriting process. We continue to perform on-going portfolio level reviews within the CRE portfolio. These reviews generate action plans based on occupancy levels or sales volume associated with the projects being reviewed. This highly individualized process requires working closely with all of our borrowers, as well as an in-depth knowledge of CRE project lending and the market environment.

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Consumer Credit

Consumer credit approvals are based on, among other factors, the financial strength and payment history of the borrower, type of exposure, and transaction structure. Consumer credit decisions are generally made in a centralized environment utilizing decision models. Importantly, certain individuals who understand each local region have the authority to make credit extension decisions to preserve our focus on the local communities in which we operate. Each credit extension is assigned a specific PD and LGD. The PD is generally based on the borrower's most recent credit bureau score (FICO), which we update quarterly, providing an ongoing view of the borrower's PD. The LGD is related to the type of collateral associated with the credit extension, which typically does not change over the course of the loan term. This allows Huntington to maintain a current view of the customer for credit risk management and ACL purposes.

In consumer lending, credit risk is managed from a segment (i.e., loan type, collateral position, geography, etc.) and vintage performance analysis. All portfolio segments are continuously monitored for changes in delinquency trends and other asset quality indicators. We make extensive use of portfolio assessment models to continuously monitor the quality of the portfolio, which may result in changes to future origination strategies. The ongoing analysis and review process results in a determination of an appropriate ACL amount for our consumer loan portfolio. The independent risk management group has a consumer process review component to ensure the effectiveness and efficiency of the consumer credit processes.

Collection actions by our customer assistance team are initiated as needed through a centrally managed collection and recovery function. We employ a series of collection methodologies designed to maintain a high level of effectiveness, while maximizing efficiency. In addition to the consumer loan portfolio, the customer assistance team is responsible for collection activity on all sold and securitized consumer loans and leases. Collection practices include a single contact point for the majority of the residential real estate secured portfolios.

AUTOMOBILE PORTFOLIO

Our strategy in the automobile portfolio continues to focus on high quality borrowers as measured by both FICO and internal custom scores, combined with appropriate LTVs, terms, and profitability. Our strategy and operational capabilities allow us to appropriately manage the origination quality across the entire portfolio, including our newer markets. Although increased origination volume and entering new markets can be associated with increased risk levels, we believe our disciplined strategy and operational processes significantly mitigate these risks.

We have continued to consistently execute our value proposition and take advantage of available market opportunities. Importantly, we have maintained our high credit quality standards while expanding the portfolio.

RESIDENTIAL REAL ESTATE SECURED PORTFOLIOS

The properties securing our residential mortgage and home equity portfolios are primarily located within our geographic footprint. Huntington continues to support our local markets with consistent underwriting across all residential secured products. The residential-secured portfolio originations continue to be of high quality, with the majority of the negative credit impact coming from loans originated prior to the financial crisis. Our portfolio management strategies associated with our Home Savers group allow us to focus on effectively helping our customers with appropriate solutions for their specific circumstances.

Huntington underwrites all residential mortgage applications centrally, with a focus on higher quality borrowers. We do not originate residential mortgages that allow negative amortization or allow the borrower multiple payment options. Residential mortgages are originated based on a completed full appraisal during the credit underwriting process. We update values in compliance with applicable regulations to facilitate our portfolio management, as well as our workout and loss mitigation functions.

We are subject to repurchase risk associated with residential mortgage loans sold in the secondary market. An appropriate level of reserve for representations and warranties related to residential mortgage loans sold has been established to address this repurchase risk inherent in the portfolio.

RV AND MARINE FINANCE PORTFOLIO

Our strategy in the RV and Marine portfolio focuses on high quality borrowers, combined with appropriate LTVs, terms, and profitability. Although entering new markets can be associated with increased risk levels, we believe our disciplined strategy and operational processes significantly mitigate these risks.

Credit Quality

(This section should be read in conjunction with Note 3 of the Notes to Consolidated Financial Statements)

We believe the most meaningful way to assess overall credit quality performance is through an analysis of specific performance ratios. This approach forms the basis of the discussion in the sections immediately following: NPAs, NALs, TDRs, ACL, and NCOs. In addition, we utilize delinquency rates, risk distribution and migration patterns, product segmentation, and origination trends in the analysis of our credit quality performance.

Credit quality performance in 2018 reflected continued overall positive results with low net charge-offs. Total NCOs were \$145 million or 0.20% of average total loans and leases, a decrease from \$159 million or 0.23% in the prior year. There was a 1% decline in NPAs from the prior year. The ALLL to total loans and leases ratio increased by 4 basis points to 1.03%.

NPAs and NALs

NPAs consist of (1) NALs, which represent loans and leases no longer accruing interest, (2) OREO properties, and (3) other NPAs. Any loan in our portfolio may be placed on nonaccrual status prior to the policies described below when collection of principal or interest is in doubt. Also, when a borrower with discharged non-reaffirmed debt in a Chapter 7 bankruptcy is identified and the loan is determined to be collateral dependent, the loan is placed on nonaccrual status.

Commercial loans are placed on nonaccrual status at 90-days past due, or earlier if repayment of principal and interest is in doubt. Of the \$203 million of commercial related NALs at December 31, 2018, \$139 million, or 68%, represented loans that were less than 30-days past due, demonstrating our continued commitment to proactive credit risk management. With the exception of residential mortgage loans guaranteed by government organizations which continue to accrue interest, first lien loans secured by residential mortgage collateral are placed on nonaccrual status at 150-days past due. Junior-lien home equity loans are placed on nonaccrual status at the earlier of 120-days past due or when the related first-lien loan has been identified as nonaccrual. Automobile, RV and marine finance and other consumer loans are generally fully charged-off at 120-days past due.

When loans are placed on nonaccrual, accrued interest income is reversed with current year accruals charged to interest income and prior year amounts generally charged-off as a credit loss. When, in our judgment, the borrower's ability to make required interest and principal payments has resumed and collectability is no longer in doubt, the loan or lease could be returned to accrual status.

The following table reflects period-end NALs and NPAs detail for each of the last five years:

Table 10 - Nonaccrual Loans and Leases and Nonperforming Assets

(dollar amounts in millions)	December 31,				
	2018	2017	2016	2015	2014
Nonaccrual loans and leases (NALs):					
Commercial and industrial	\$ 188	\$ 161	\$ 234	\$ 175	\$ 72
Commercial real estate	15	29	20	29	48
Automobile	5	6	6	7	5
Home equity	62	68	72	66	79
Residential mortgage	69	84	91	95	96
RV and marine finance	1	1	—	—	—
Other consumer	—	—	—	—	—
Total nonaccrual loans and leases	340	349	423	372	300
Other real estate, net:					
Residential	19	24	31	24	29
Commercial	4	9	20	3	6
Total other real estate, net	23	33	51	27	35
Other NPAs (1)	24	7	7	—	3
Total nonperforming assets	\$ 387	\$ 389	\$ 481	\$ 399	\$ 338
Nonaccrual loans and leases as a % of total loans and leases	0.45%	0.50%	0.63%	0.74%	0.63%
NPA ratio (2)	0.52	0.55	0.72	0.79	0.71

(1) Other nonperforming assets at December 31, 2018 includes certain nonaccrual loans held-for-sale. Amounts prior to December 31, 2018 includes certain impaired investment securities.

(2) Nonperforming assets divided by the sum of loans and leases, other real estate owned, and other NPAs.

2018 versus 2017

Total NPAs decreased by \$2 million, or 1%, compared with December 31, 2017. A \$14 million, or 48%, decline in CRE and a \$15 million, or 18%, decline in residential mortgage portfolios, were largely offset by a \$27 million, or 17%, increase in the C&I portfolio. The C&I increase was centered in a small number of credits from diverse industries.

The following table reflects period-end accruing loans and leases 90 days or more past due for each of the last five years:

Table 11 - Accruing Past Due Loans and Leases

<i>(dollar amounts in millions)</i>	December 31,				
	2018	2017	2016	2015	2014
<i>Accruing loans and leases past due 90 days or more:</i>					
Commercial and industrial (1)	\$ 7	\$ 9	\$ 18	\$ 9	\$ 5
Commercial real estate	—	3	17	10	19
Automobile	8	7	10	7	5
Home equity	17	18	12	9	12
Residential mortgage (excluding loans guaranteed by the U.S. Government)	32	21	15	14	33
RV and marine finance	1	1	1	—	—
Other consumer	6	5	4	1	1
Total, excl. loans guaranteed by the U.S. Government	71	64	77	50	75
Add loans guaranteed by U.S. Government	99	51	52	56	55
Total accruing loans and leases past due 90 days or more, including loans guaranteed by the U.S. Government	<u>\$ 170</u>	<u>\$ 115</u>	<u>\$ 129</u>	<u>\$ 106</u>	<u>\$ 130</u>
<i>Ratios:</i>					
Excluding loans guaranteed by the U.S. Government, as a percent of total loans and leases	0.09%	0.09%	0.12%	0.10%	0.16%
Guaranteed by U.S. Government, as a percent of total loans and leases	0.13	0.07	0.08	0.11	0.12
Including loans guaranteed by the U.S. Government, as a percent of total loans and leases	0.23	0.16	0.19	0.21	0.27

(1) Amounts include Huntington Technology Finance administrative lease delinquencies and accruing purchase impaired loans related to acquisitions.

TDR Loans

TDRs are modified loans where a concession was provided to a borrower experiencing financial difficulties. TDRs can be classified as either accruing or nonaccruing loans. Nonaccruing TDRs are included in NALs whereas accruing TDRs are excluded from NALs, as it is probable that all contractual principal and interest due under the restructured terms will be collected. TDRs primarily reflect our loss mitigation efforts to proactively work with borrowers in financial difficulty or to comply with regulations regarding the treatment of certain bankruptcy filing and discharge situations. Over the past five years, the accruing component of the total TDR balance has been consistently over 80%, indicating there is no identified credit loss and the borrowers continue to make their monthly payments. As of December 31, 2018, over 79% of the \$470 million of accruing TDRs secured by residential real estate (Residential mortgage and Home equity in Table 12) are current on their required payments, with over 63% of the accruing pool having had no delinquency in the past 12 months. There is limited migration from the accruing to non-accruing components, and virtually all of the charge-offs within this group of loans come from the non-accruing TDR balances.

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The table below presents our accruing and nonaccruing TDRs at period-end for each of the past five years:

Table 12 - Accruing and Nonaccruing Troubled Debt Restructured Loans

(dollar amounts in millions)

	December 31,				
	2018	2017	2016	2015	2014
TDRs—accruing:					
Commercial and industrial	\$ 269	\$ 300	\$ 210	\$ 236	\$ 117
Commercial real estate	54	78	77	115	177
Automobile	35	30	26	25	26
Home equity	252	265	270	199	252
Residential mortgage	218	224	243	265	265
RV and marine finance	2	1	—	—	—
Other consumer	9	8	4	4	4
Total TDRs—accruing	839	906	830	844	841
TDRs—nonaccruing:					
Commercial and industrial	97	82	107	57	21
Commercial real estate	6	15	5	17	25
Automobile	3	4	5	6	5
Home equity	28	28	28	21	27
Residential mortgage	44	55	59	72	69
RV and marine finance	—	—	—	—	—
Other consumer	—	—	—	—	—
Total TDRs—nonaccruing	178	184	204	173	147
Total TDRs	\$ 1,017	\$ 1,090	\$ 1,034	\$ 1,017	\$ 988

Our strategy is to structure TDRs in a manner that avoids new concessions subsequent to the initial TDR terms. However, there are times when subsequent modifications are required, such as when a loan matures. Often loans are performing in accordance with the TDR terms, and a new note is originated with similar modified terms. These loans are subjected to the normal underwriting standards and processes for similar credit extensions, both new and existing. If the loan is not performing in accordance with the existing TDR terms, typically an individualized approach to repayment is established. In accordance with GAAP, the refinanced note is evaluated to determine if it is considered a new loan or a continuation of the prior loan. A new loan is considered for the removal of the TDR designation. A continuation of the prior note requires the continuation of the TDR designation.

The types of concessions granted include interest rate reductions, amortization or maturity date changes beyond what the collateral supports, and principal forgiveness based on the borrower's specific needs at a point in time. Our policy does not limit the number of times a loan may be modified. A loan may be modified multiple times if it is considered to be in the best interest of both the borrower and us.

Commercial loans are not automatically considered to be accruing TDRs upon the granting of a concession. If the loan is in accruing status and no loss is expected based on the modified terms, the modified TDR remains in accruing status. For loans that are on nonaccrual status before the modification, reasonable assurance of repayment under modified terms and demonstrated repayment performance for a minimum of six months is needed to return to accruing status. This six-month period could extend before or after the restructure date.

Any granted change in terms or conditions that are not readily available in the market for that borrower, requires the designation as a TDR. There are no provisions for the removal of the TDR designation based on payment activity for consumer loans. A loan may be returned to accrual status when all contractually due interest and principal has been paid and the borrower demonstrates the financial capacity to continue to pay as agreed, with the risk of loss diminished.

ACL

Our total credit reserve is comprised of two different components, both of which in our judgment are appropriate to absorb credit losses inherent in our loan and lease portfolio: the ALLL and the AULC. Combined, these reserves comprise the total ACL. Our ACL methodology committee is responsible for developing the methodology, assumptions and estimates used in the calculation, as well as determining the appropriateness of the ACL. The ALLL represents the estimate of incurred losses in the loan portfolio at the reported date. Additions to the ALLL result from recording provision expense for loan losses or increased risk levels resulting from loan risk-rating downgrades or qualitative adjustments, while reductions reflect charge-offs (net of recoveries), decreased risk levels resulting from loan risk-rating upgrades, or the sale of loans. The AULC is determined by applying the same quantitative reserve determination process to the unfunded portion of the loan exposures adjusted by an applicable funding expectation (See Note 1 of the Notes to Consolidated Financial Statements)

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Our ACL evaluation process includes the on-going assessment of credit quality metrics, and a comparison of certain ACL benchmarks to current performance. While the total ACL balance increased year over year, all of the relevant benchmarks remain strong.

The following table reflects activity in the ALLL and AULC for each of the last five years:

Table 13 - Summary of Allowance for Credit Losses

(dollar amounts in millions)

	Year Ended December 31,				
	2018	2017	2016	2015	2014
ALLL, beginning of year	\$ 691	\$ 638	\$ 598	\$ 605	\$ 648
Loan and lease charge-offs					
Commercial:					
Commercial and industrial	(68)	(68)	(77)	(80)	(77)
Commercial real estate:					
Construction	(1)	2	(2)	(2)	(6)
Commercial	(10)	(6)	(14)	(16)	(19)
Commercial real estate	(11)	(4)	(16)	(18)	(25)
Total commercial	(79)	(72)	(93)	(98)	(102)
Consumer:					
Automobile	(58)	(64)	(50)	(36)	(30)
Home equity	(21)	(20)	(26)	(36)	(54)
Residential mortgage	(11)	(11)	(11)	(16)	(26)
RV and marine finance	(14)	(13)	(3)	—	—
Other consumer	(85)	(72)	(44)	(32)	(35)
Total consumer	(189)	(180)	(134)	(120)	(145)
Total charge-offs	(268)	(252)	(227)	(218)	(247)
Recoveries of loan and lease charge-offs					
Commercial:					
Commercial and industrial	36	26	32	52	45
Commercial real estate:					
Construction	2	3	4	3	4
Commercial	27	12	38	31	30
Total commercial real estate	29	15	42	34	34
Total commercial	65	41	74	86	79
Consumer:					
Automobile	24	22	18	16	13
Home equity	15	15	17	16	18
Residential mortgage	5	5	5	6	6
RV and marine finance	5	3	—	—	—
Other consumer	9	7	4	6	6
Total consumer	58	52	44	44	43
Total recoveries	123	93	118	130	122
Net loan and lease charge-offs	(145)	(159)	(109)	(88)	(125)
Provision for loan and lease losses	226	212	169	89	83
Allowance for assets sold and securitized or transferred to loans held for sale	—	—	(20)	(8)	(1)
ALLL, end of year	772	691	638	598	605
AULC, beginning of year	87	98	72	61	63
Provision for (Reduction in) unfunded loan commitments and letters of credit losses	9	(11)	22	11	(2)
AULC recorded at acquisition	—	—	4	—	—
AULC, end of year	96	87	98	72	61
ACL, end of year	\$ 868	\$ 778	\$ 736	\$ 670	\$ 666

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The table below reflects the allocation of our ALLL among our various loan categories and the reported ACL during each of the past five years:

Table 14 - Allocation of Allowance for Credit Losses (1)

(dollar amounts in millions)

<i>(dollar amounts in millions)</i>		December 31,													
		2018		2017		2016		2015		2014					
ACL															
Commercial															
Commercial and industrial	\$	422	41 %	\$	377	40%	\$	356	42%	\$	299	41%	\$	287	40%
Commercial real estate		120	10		105	11		95	11		100	10		103	11
Total commercial		542	51		482	51		451	53		399	51		390	51
Consumer															
Automobile		56	16		53	17		48	16		50	19		33	18
Home equity		55	13		60	14		65	15		84	17		96	18
Residential mortgage		25	14		21	13		33	12		42	12		47	12
RV and marine finance		20	4		15	3		5	3		—	—		—	—
Other consumer		74	2		60	2		36	1		23	1		39	1
Total consumer		230	49		209	49		187	47		199	49		215	49
Total ALLL		772	100 %		691	100%		638	100%		598	100%		605	100%
AUIC		96			87			98			72			61	
Total ACL	\$	868		\$	778		\$	736		\$	670		\$	666	
<i>Total ALLL as % of:</i>															
Total loans and leases			1.03 %			0.99%			0.95%			1.19%			1.27%
Nonaccrual loans and leases			228			198			151			161			202
NPA's			200			178			133			150			179

(1) Percentages represent the percentage of each loan and lease category to total loans and leases.

2018 versus 2017

At December 31, 2018, the ALLL was \$772 million or 1.03% of total loans and leases, compared to \$691 million or 0.99% at December 31, 2017. The \$81 million, or 12%, increase in the ALLL primarily relates to increased reserve levels associated with portfolio loan growth across the portfolio. We believe the ratio is appropriate given the overall moderate-to-low risk profile of our loan portfolio and its coverage levels reflect the quality of our portfolio and the current operating environment. We continue to focus on early identification of loans with changes in credit metrics and have proactive action plans for these loans.

NCOs

A loan in any portfolio may be charged-off prior to the policies described below if a loss confirming event has occurred. Loss confirming events include, but are not limited to, bankruptcy (unsecured), continued delinquency, foreclosure, or receipt of an asset valuation indicating a collateral deficiency where that asset is the sole source of repayment. Additionally, discharged, collateral dependent non-reaffirmed debt in Chapter 7 bankruptcy filings will result in a charge-off to estimated collateral value, less anticipated selling costs at the time of discharge.

Commercial loans are either charged-off or written down to net realizable value by 90-days past due with the exception of administrative small ticket lease delinquencies. Automobile loans, RV and marine finance, and other consumer loans are generally fully charged-off at 120-days past due. First-lien and junior-lien home equity loans are charged-off to the estimated fair value of the collateral, less anticipated selling costs, at 150-days past due and 120-days past due, respectively. Residential mortgages are charged-off to the estimated fair value of the collateral, less anticipated selling costs, at 150-days past due. The remaining balance is in delinquent status until a modification can be completed, or the loan goes through the foreclosure process.

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The following table reflects NCO detail for each of the last five years:

Table 15 - Net Loan and Lease Charge-offs

(dollar amounts in millions)

	Year Ended December 31,				
	2018	2017	2016	2015	2014
Net charge-offs by loan and lease type:					
Commercial:					
Commercial and industrial	\$ 32	\$ 42	\$ 45	\$ 28	\$ 32
Commercial real estate:					
Construction	(1)	(5)	(2)	(1)	2
Commercial	(17)	(6)	(24)	(15)	(11)
Commercial real estate	(18)	(11)	(26)	(16)	(9)
Total commercial	14	31	19	12	23
Consumer:					
Automobile	34	42	32	20	17
Home equity	6	5	9	20	37
Residential mortgage	6	6	6	10	20
RV and marine finance	9	10	2	—	—
Other consumer	76	65	41	26	28
Total consumer	131	128	90	76	102
Total net charge-offs	\$ 145	\$ 159	\$ 109	\$ 88	\$ 125
Net charge-offs - annualized percentages:					
Commercial:					
Commercial and industrial	0.11%	0.15%	0.19%	0.14%	0.18%
Commercial real estate:					
Construction	(0.13)	(0.36)	(0.19)	(0.08)	0.16
Commercial	(0.26)	(0.10)	(0.49)	(0.37)	(0.25)
Commercial real estate	(0.24)	(0.15)	(0.44)	(0.32)	(0.19)
Total commercial	0.04	0.09	0.06	0.05	0.10
Consumer:					
Automobile	0.27	0.36	0.30	0.23	0.23
Home equity	0.06	0.03	0.10	0.23	0.44
Residential mortgage	0.06	0.08	0.09	0.17	0.35
RV and marine finance	0.32	0.48	0.33	—	—
Other consumer	6.27	6.36	5.53	5.44	6.99
Total consumer	0.36	0.39	0.32	0.32	0.46
Net charge-offs as a % of average loans	0.20%	0.23%	0.19%	0.18%	0.27%

In assessing NCO trends, it is helpful to understand the process of how commercial loans are treated as they deteriorate over time. The ALLL is established consistent with the level of risk associated with the commercial portfolio's original underwriting. As a part of our normal portfolio management process for commercial loans, loans within the portfolio are periodically reviewed and the ALLL is increased or decreased based on the updated risk ratings. For TDRs and individually assessed impaired loans, a specific reserve is established based on the discounted projected cash flows or collateral value of the specific loan. Charge-offs, if necessary, are generally recognized in a period after the specific ALLL is established. Consumer loans are treated in much the same manner as commercial loans, with increasing reserve factors applied based on the risk characteristics of the loan, although specific reserves are not identified for consumer loans, except for TDRs. In summary, if loan quality deteriorates, the typical credit sequence would be periods of reserve building, followed by periods of higher NCOs as the previously established ALLL is utilized. Additionally, an increase in the ALLL either precedes or is in conjunction with increases in NALs. When a loan is classified as NAL, it is evaluated for specific ALLL or charge-off. As a result, an increase in NALs does not necessarily result in an increase in the ALLL or an expectation of higher future NCOs.

2018 versus 2017

NCOs decreased \$14 million, or 9%, in 2018. Given the low level of commercial NCOs, we expect some continued volatility on a period-to-period comparison basis.

Market Risk

Market risk refers to potential losses arising from changes in interest rates, foreign exchange rates, equity prices and commodity prices, including the correlation among these factors and their volatility. When the value of an instrument is tied to such external factors, the holder faces market risk. We are primarily exposed to interest rate risk as a result of offering a wide array of financial products to our customers and secondarily to price risk from trading securities, securities owned by our broker-dealer subsidiaries, foreign exchange positions, equity investments, and investments in securities backed by mortgage loans.

Interest Rate Risk

We actively manage interest rate risk, as changes in market interest rates may have a significant impact on reported earnings. Changes in market interest rates may result in changes in the fair market value of our financial instruments, cash flows, and net interest income. We seek to achieve consistent growth in net interest income and capital while managing volatility arising from shifts in market interest rates. The ALCO oversees market risk management, as well as the establishment of risk measures, limits, and policy guidelines for managing the amount of interest rate risk and its effect on net interest income and capital. According to these policies, responsibility for measuring and the management of interest rate risk resides in the treasury group.

Interest rate risk on our balance sheet consists of reprice, option, and basis risks. Reprice risk results from differences in the maturity, or repricing, of asset and liability portfolios. Option risk arises from embedded options present in the investment portfolio and in many financial instruments such as loan prepayment options, deposit early withdrawal options, and interest rate options. These options allow customers opportunities to benefit when market interest rates change, which typically results in higher costs or lower revenue for us. Basis risk refers to the potential for changes in the underlying relationship between market rates or indices, which subsequently result in a narrowing of profit spread on an earning asset or liability. Basis risk is also present in administered rate liabilities, such as interest-bearing checking accounts, savings accounts, and money market accounts where historical pricing relationships to market rates may change due to the level or directional change in market interest rates. The interest rate risk position is measured and monitored using risk management tools, including earnings simulation modeling and EVE sensitivity analysis, which capture both short-term and long-term interest rate risk exposures. Combining the results from these separate risk measurement processes allows a reasonably comprehensive view of our short-term and long-term interest rate risks.

Interest rate risk measurement is calculated and reported to the ALCO monthly and ROC at least quarterly. The reported information includes period-end results and identifies any policy limits exceeded, along with an assessment of the policy limit breach and the action plan and timeline for resolution, mitigation, or assumption of the risk.

We use two approaches to model interest rate risk: Net interest income at risk (NII at risk) and economic value of equity at risk modeling sensitivity analysis (EVE).

NII at risk uses net interest income simulation analysis which involves forecasting net interest earnings under a variety of scenarios including changes in the level of interest rates, the shape of the yield curve, and spreads between market interest rates. The sensitivity of net interest income to changes in interest rates is measured using numerous interest rate scenarios including shocks, gradual ramps, curve flattening, curve steepening as well as forecasts of likely interest rates scenarios. Modeling the sensitivity of net interest earnings to changes in market interest rates is highly dependent on numerous assumptions incorporated into the modeling process. To the extent that actual performance is different than what was assumed, actual net interest earnings sensitivity may be different than projected. The assumptions used in the models are our best estimates based on studies conducted by the treasury group. The treasury group uses a data warehouse to study interest rate risk at a transactional level and uses various ad-hoc reports to continuously refine assumptions. Assumptions and methodologies regarding administered rate liabilities (e.g., savings accounts, money market accounts and interest-bearing checking accounts), balance trends, and repricing relationships reflect our best estimate of expected behavior and these assumptions are reviewed regularly.

We also have longer-term interest rate risk exposure, which may not be appropriately measured by earnings sensitivity analysis. The ALCO uses EVE to study the impact of long-term cash flows on earnings and on capital. EVE involves discounting present values of all cash flows of on and off-balance sheet items under different interest rate scenarios. The discounted present value of all cash flows represents our EVE. The analysis requires modifying the expected cash flows in each interest rate scenario, which will impact the discounted present value. The amount of base-case measurement and its sensitivity to shifts in the yield curve allow us to measure longer-term repricing and option risk in the balance sheet.

Table 16 - Net Interest Income at Risk

Basis point change scenario	Net Interest Income at Risk (%)		
	-100	+100	+200
Board policy limits	-4.0%	-2.0%	-4.0%
December 31, 2018	-2.9%	2.7%	5.8%
December 31, 2017	-2.6%	2.5%	4.8%

The NII at Risk results included in the table above reflect the analysis used monthly by management. It models gradual -100, +100 and +200 basis point parallel shifts in market interest rates, implied by the forward yield curve over the next twelve months. The

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down 100 basis point scenario, included in Table 16, was added as rates have risen sufficiently, such that yields will not reach zero percent, producing meaningful interest rate risk metrics. This replaces the down 25 basis point scenario reported in prior years.

Our NII at Risk is within our Board of Directors' policy limits for the -100, +100 and +200 basis point scenarios. The NII at Risk shows that our balance sheet is asset sensitive at both December 31, 2018 and December 31, 2017.

As of December 31, 2018, we had \$4.9 billion of notional value in receive-fixed fair value swaps, which we use for asset and liability management purposes.

Table 17 - Economic Value of Equity at Risk

Basis point change scenario	Economic Value of Equity at Risk (%)		
	-100	+100	+200
Board policy limits	-6.0%	-6.0%	-12.0%
December 31, 2018	-5.8%	2.3%	3.1%
December 31, 2017	-5.4%	1.9%	1.9%

The EVE results included in the table above reflect the analysis used monthly by management. It models immediate -100, +100 and +200 basis point parallel shifts in market interest rates. The down 100 basis point scenario, included in Table 17, was added as rates have risen sufficiently, such that yields will not reach zero percent, producing meaningful interest rate risk metrics. This replaces the down 25 basis point scenario reported in prior years.

We are within our Board of Directors' policy limits for the -100, +100 and +200 basis point scenarios. The EVE depicts a moderate asset sensitive balance sheet profile.

MSRs

(This section should be read in conjunction with Note 5 of Notes to the Consolidated Financial Statements.)

At December 31, 2018, we had a total of \$221 million of capitalized MSRs representing the right to service \$21 billion in mortgage loans. Of this \$221 million, \$211 million was recorded using the amortization method and \$10 million was recorded using the fair value method.

MSR fair values are sensitive to movements in interest rates as expected future net servicing income depends on the projected outstanding principal balances of the underlying loans, which can be reduced by prepayments. Prepayments usually increase when mortgage interest rates decline and decrease when mortgage interest rates rise. MSRs recorded using the amortization method generally relate to loans originated with historically low interest rates, which may result in a lower probability of prepayments or impairment. We also employ hedging strategies to reduce the risk of MSR fair value changes or impairment. However, volatile changes in interest rates can diminish the effectiveness of these economic hedges. We report changes in the MSR value net of hedge-related trading activity in the mortgage banking income category of noninterest income. Decreases in fair value of the MSR, below amortized costs, would be recognized as a decrease in mortgage banking income. Any increase in the fair value, to the extent of prior impairment, would be recognized as an increase in mortgage banking income.

MSR assets are included in servicing rights and other intangible assets in the Consolidated Financial Statements.

Price Risk

Price risk represents the risk of loss arising from adverse movements in the prices of financial instruments that are carried at fair value and are subject to fair value accounting. We have price risk from trading securities, securities owned by our broker-dealer subsidiaries, foreign exchange positions and equity investments. We have established loss limits on the trading portfolio, on the amount of foreign exchange exposure that can be maintained, and on the amount of marketable equity securities that can be held.

Liquidity Risk

Liquidity risk is the possibility of us being unable to meet current and future financial obligations in a timely manner. Liquidity is managed to ensure stable, reliable, and cost-effective sources of funds to satisfy demand for credit, deposit withdrawals and investment opportunities. We consider core earnings, strong capital ratios, and credit quality essential for maintaining high credit ratings, which allows us cost-effective access to market-based liquidity. We rely on a large, stable core deposit base and a diversified base of wholesale funding sources to manage liquidity risk. The ALCO is appointed by the ROC to oversee liquidity risk management and the establishment of liquidity risk policies and limits. The treasury department is responsible for identifying, measuring, and monitoring our liquidity profile. The position is evaluated daily, weekly, and monthly by analyzing the composition of all funding sources, reviewing projected liquidity commitments by future months, and identifying sources and uses of funds. The overall management of our liquidity position is also integrated into retail and commercial pricing policies to ensure a stable core deposit base. Liquidity risk is reviewed and managed continuously for the Bank and the parent company, as well as its subsidiaries. In addition, liquidity working groups meet regularly to identify and monitor liquidity positions, provide policy guidance, review funding strategies, and oversee the adherence to, and maintenance of, the contingency funding plans.

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Our primary source of liquidity is our core deposit base. Core deposits comprised approximately 96% of total deposits at December 31, 2018. We also have available unused wholesale sources of liquidity, including advances from the FHLB of Cincinnati, issuance through dealers in the capital markets, and access to certificates of deposit issued through brokers. Liquidity is further provided by unencumbered, or unpledged, investment securities that totaled \$17.5 billion as of December 31, 2018. The treasury department also prepares a contingency funding plan that details the potential erosion of funds in the event of a systemic financial market crisis or institutional-specific stress scenario. An example of an institution specific event would be a downgrade in our public credit rating by a rating agency due to factors such as deterioration in asset quality, a large charge to earnings, a decline in profitability or other financial measures, or a significant merger or acquisition. Examples of systemic events unrelated to us that could have an effect on our access to liquidity would be terrorism or war, natural disasters, political events, or the default or bankruptcy of a major corporation, mutual fund or hedge fund. Similarly, market speculation or rumors about us, or the banking industry in general, may adversely affect the cost and availability of normal funding sources. The liquidity contingency plan therefore outlines the process for addressing a liquidity crisis. The plan provides for an evaluation of funding sources under various market conditions. It also assigns specific roles and responsibilities and communication protocols for effectively managing liquidity through a problem period.

Investment securities portfolio

(This section should be read in conjunction with Note 4 of the Notes to Consolidated Financial Statements.)

Our investment securities portfolio is evaluated under established asset/liability management objectives. Changing market conditions could affect the profitability of the portfolio, as well as the level of interest rate risk exposure.

The composition and maturity of the portfolio is presented on the following two tables:

Table 18 - Investment Securities and Other Securities Portfolio Summary

(Dollar amounts in millions)

	At December 31,		
	2018	2017	2016
Available-for-sale securities, at fair value:			
U.S. Treasury, Federal agency, and other agency securities	\$ 9,968	\$ 10,413	\$ 10,752
Municipal securities	3,440	3,878	3,250
Other	372	578	997
Total available-for-sale securities	<u>\$ 13,780</u>	<u>\$ 14,869</u>	<u>\$ 14,999</u>
Held-to-maturity securities, at cost:			
Federal agency and other agency securities	\$ 8,560	\$ 9,086	\$ 7,801
Municipal securities	5	5	6
Total held-to-maturity securities	<u>\$ 8,565</u>	<u>\$ 9,091</u>	<u>\$ 7,807</u>
Other securities:			
Other securities, at cost:			
Non-marketable equity securities (1)	\$ 543	\$ 581	\$ 548
Other securities, at fair value:			
Mutual Funds	20	18	15
Marketable equity securities	2	1	1
Total other securities	<u>\$ 565</u>	<u>\$ 600</u>	<u>\$ 564</u>
Duration in years (2)	<u>4.3</u>	<u>4.3</u>	<u>4.6</u>

(1) Consists of FHLB and FRB restricted stock holding carried at par

(2) The average duration assumes a market driven prepayment rate on securities subject to prepayment

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Table 19 - Investment Securities Portfolio Composition and Maturity

At December 31, 2018

<i>(dollar amounts in millions)</i>	1 year or less		After 1 year through 5 years		After 5 years through 10 years		After 10 years		Total	
	Amount	Yield (1)	Amount	Yield (1)	Amount	Yield (1)	Amount	Yield (1)	Amount	Yield (1)
Available-for-sale securities, at fair value:										
U.S. Treasury	\$ 5	2.59%	\$ —	—%	\$ —	—%	\$ —	—%	\$ 5	2.59%
Federal agencies:										
Residential CMO	—	—	—	—	62	3.05	6,937	2.49	6,999	2.50
Residential MBS	—	—	1	4.04	—	—	1,254	3.42	1,255	3.42
Commercial MBS	—	—	26	1.89	8	1.78	1,549	2.44	1,583	2.43
Other agencies	1	4.06	2	2.65	123	2.52	—	—	126	2.53
Total U.S. Treasury, Federal agencies and other agencies	6	2.85	29	2.04	193	2.66	9,740	2.60	9,968	2.60
Municipal securities	178	4.67	955	4.14	1,577	3.69	730	3.67	3,440	3.86
Asset-backed securities	—	—	10	3.70	21	4.63	284	3.32	315	3.42
Corporate debt	1	2.63	41	3.66	11	4.25	—	—	53	3.77
Other securities/Sovereign debt	—	—	4	2.68	—	—	—	—	4	2.68
Total available-for-sale securities	\$ 185	4.60%	\$ 1,039	4.05%	\$ 1,802	3.59%	\$ 10,754	2.69%	\$ 13,780	2.94%
Held-to-maturity securities, at cost:										
Federal agencies:										
Residential CMO	\$ —	—%	\$ —	—%	\$ 35	3.21%	\$ 2,089	2.55%	\$ 2,124	2.56%
Residential MBS	—	—	—	—	—	—	1,851	3.04	1,851	3.04
Commercial MBS	—	—	—	—	128	2.66	4,107	2.52	4,235	2.52
Other agencies	—	—	11	2.01	199	2.49	140	2.53	350	2.49
Total Federal agencies and other agencies	—	—	11	2.01	362	2.62	8,187	2.64	8,560	2.64
Municipal securities	—	—	—	—	—	—	5	2.63	5	2.63
Total held-to-maturity securities	\$ —	—%	\$ 11	2.01%	\$ 362	2.62%	\$ 8,192	2.64%	\$ 8,565	2.64%

(1) Weighted average yields were calculated using amortized cost on a fully-taxable equivalent basis, assuming a 21% tax rate where applicable.

Bank Liquidity and Sources of Funding

Our primary sources of funding for the Bank are retail and commercial core deposits. At December 31, 2018, these core deposits funded 74% of total assets (108% of total loans). Other sources of liquidity include non-core deposits, FHLB advances, wholesale debt instruments, and securitizations. Demand deposit overdrafts have been reclassified as loan balances and were \$23 million and \$22 million at December 31, 2018 and December 31, 2017, respectively.

The following tables reflect contractual maturities of other domestic time deposits of \$250,000 or more and brokered deposits and negotiable CDs, as well as, other domestic time deposits of \$100,000 or more and brokered deposits and negotiable CDs at December 31, 2018.

Table 20 - Maturity Schedule of time deposits, brokered deposits, and negotiable CDs

<i>(dollar amounts in millions)</i>	At December 31, 2018				
	3 Months or Less	3 Months to 6 Months	6 Months to 12 Months	12 Months or More	Total
Other domestic time deposits of \$250,000 or more and brokered deposits and negotiable CDs	\$ 3,633	\$ 130	\$ 90	\$ —	\$ 3,853
Other domestic time deposits of \$100,000 or more and brokered deposits and negotiable CDs	\$ 3,819	\$ 221	\$ 1,193	\$ 619	\$ 5,852

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The following table reflects deposit composition detail for each of the last three years:

Table 21 - Deposit Composition

<u>(dollar amounts in millions)</u>	At December 31,					
	2018 (1)		2017		2016	
By Type:						
Demand deposits—noninterest-bearing	\$ 21,783	26%	\$ 21,546	28%	\$ 22,836	30%
Demand deposits—interest-bearing	20,042	24	18,001	23	15,676	21
Money market deposits	22,721	27	20,690	27	18,407	24
Savings and other domestic deposits	10,451	12	11,270	15	11,975	16
Core certificates of deposit	5,924	7	1,934	3	2,535	3
Total core deposits:	80,921	96	73,441	96	71,429	94
Other domestic deposits of \$250,000 or more	337	—	239	—	395	1
Brokered deposits and negotiable CDs	3,516	4	3,361	4	3,784	5
Total deposits	\$ 84,774	100%	\$ 77,041	100%	\$ 75,608	100%
Total core deposits:						
Commercial	\$ 37,268	46%	\$ 34,273	47%	\$ 31,887	45%
Consumer	43,653	54	39,168	53	39,542	55
Total core deposits	\$ 80,921	100%	\$ 73,441	100%	\$ 71,429	100%

(1) December 31, 2018 includes \$210 million of noninterest-bearing and \$662 million of interest bearing deposits classified as held-for-sale.

The Bank maintains borrowing capacity at the FHLB and the Federal Reserve Bank Discount Window. The Bank does not consider borrowing capacity from the Federal Reserve Bank Discount Window as a primary source of liquidity. Total loans pledged to the Federal Reserve Discount Window and the FHLB are \$46.5 billion and \$31.7 billion at December 31, 2018 and December 31, 2017, respectively.

To the extent we are unable to obtain sufficient liquidity through core deposits, we may meet our liquidity needs through sources of wholesale funding, asset securitization or sale. Sources of wholesale funding include other domestic deposits of \$250,000 or more, brokered deposits and negotiable CDs, short-term borrowings, and long-term debt. At December 31, 2018, total wholesale funding was \$14.5 billion, a decrease from \$17.9 billion at December 31, 2017. The decrease from prior year-end primarily relates to a decrease in short-term borrowings.

Liquidity Coverage Ratio

At December 31, 2018, we believe the Bank had sufficient liquidity to be in compliance with the LCR requirements and to meet its cash flow obligations for the foreseeable future.

Table 22 - Maturity Schedule of Commercial Loans

<u>(dollar amounts in millions)</u>	At December 31, 2018				
	One Year or Less	One to Five Years	After Five Years	Total	Percent of total
Commercial and industrial	\$ 9,425	\$ 17,554	\$ 3,626	\$ 30,605	82%
Commercial real estate—construction	387	747	51	1,185	3
Commercial real estate—commercial	1,119	3,347	1,191	5,657	15
Total	\$ 10,931	\$ 21,648	\$ 4,868	\$ 37,447	100%
Variable-interest rates	\$ 8,994	\$ 18,080	\$ 3,066	\$ 30,140	80%
Fixed-interest rates	1,937	3,568	1,802	7,307	20
Total	\$ 10,931	\$ 21,648	\$ 4,868	\$ 37,447	100%
Percent of total	29%	58%	13%	100%	

At December 31, 2018, the carrying value of investment securities pledged to secure public and trust deposits, trading account liabilities, U.S. Treasury demand notes, and security repurchase agreements totaled \$4.5 billion. There were no securities of a single issuer, which are not governmental or government-sponsored, that exceeded 10% of shareholders' equity at December 31, 2018.

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Parent Company Liquidity

The parent company's funding requirements consist primarily of dividends to shareholders, debt service, income taxes, operating expenses, funding of nonbank subsidiaries, repurchases of our stock, and acquisitions. The parent company obtains funding to meet obligations from dividends and interest received from the Bank, interest and dividends received from direct subsidiaries, net taxes collected from subsidiaries included in the federal consolidated tax return, fees for services provided to subsidiaries, and the issuance of debt securities.

At December 31, 2018 and December 31, 2017, the parent company had \$2.4 billion and \$1.6 billion, respectively, in cash and cash equivalents.

On January 16, 2019, the Board of Directors declared a quarterly common stock cash dividend of \$0.14 per common share. The dividend is payable on April 1, 2019, to shareholders of record on March 18, 2019. Based on the current quarterly dividend of \$0.14 per common share, cash demands required for common stock dividends are estimated to be approximately \$147 million per quarter. On January 16, 2019, the Board of Directors declared a quarterly Series B, Series C, Series D, and Series E Preferred Stock dividend payable on April 15, 2019 to shareholders of record on April 1, 2019. Cash demands required for Series B Preferred Stock are expected to be less than \$1 million per quarter. Cash demands required for Series C, Series D and Series E are expected to be approximately \$2 million, \$9 million and \$7 million per quarter, respectively.

During 2018, the Bank paid preferred dividends of \$45 million and common stock dividends of \$1.7 billion to the holding company. To meet any additional liquidity needs, the parent company may issue debt or equity securities from time to time.

Off-Balance Sheet Arrangements

In the normal course of business, we enter into various off-balance sheet arrangements. These arrangements include commitments to extend credit, interest rate swaps, financial guarantees contained in standby letters-of-credit issued by the Bank, and commitments by the Bank to sell mortgage loans.

COMMITMENTS TO EXTEND CREDIT

Commitments to extend credit generally have fixed expiration dates, are variable-rate, and contain clauses that permit Huntington to terminate or otherwise renegotiate the contracts in the event of a significant deterioration in the customer's credit quality. These arrangements normally require the payment of a fee by the customer, the pricing of which is based on prevailing market conditions, credit quality, probability of funding, and other relevant factors. Since many of these commitments are expected to expire without being drawn upon, the contract amounts are not necessarily indicative of future cash requirements. The interest rate risk arising from these financial instruments is insignificant as a result of their predominantly short-term, variable-rate nature. *See Note 20 for more information.*

INTEREST RATE SWAPS

Balance sheet hedging activity is arranged to receive hedge accounting treatment and is classified as either fair value or cash flow hedges. Fair value hedges are purchased to convert deposits and long-term debt from fixed-rate obligations to floating rate. Cash flow hedges are also used to convert floating rate loans made to customers into fixed rate loans. *See Note 18 for more information.*

STANDBY LETTERS-OF-CREDIT

Standby letters-of-credit are conditional commitments issued to guarantee the performance of a customer to a third-party. These guarantees are primarily issued to support public and private borrowing arrangements, including commercial paper, bond financing, and similar transactions. Most of these arrangements mature within two years and are expected to expire without being drawn upon. Standby letters-of-credit are included in the determination of the amount of risk-based capital that the parent company and the Bank are required to hold. Through our credit process, we monitor the credit risks of outstanding standby letters-of-credit. When it is probable that a standby letter-of-credit will be drawn and not repaid in full, a loss is recognized in the provision for credit losses. *See Note 20 for more information.*

COMMITMENTS TO SELL LOANS

Activity related to our mortgage origination activity supports the hedging of the mortgage pricing commitments to customers and the secondary sale to third parties. In addition, we have commitments to sell residential real estate loans. These contracts mature in less than one year. *See Note 20 for more information.*

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We believe that off-balance sheet arrangements are properly considered in our liquidity risk management process.

Table 23 - Contractual Obligations (1)

(All dollar amounts in millions)

	At December 31, 2018				
	Less than 1 Year	1 to 3 Years	3 to 5 Years	More than 5 Years	Total
Deposits without a stated maturity	\$ 73,993	\$ —	\$ —	\$ —	\$ 73,993
Certificates of deposit and other time deposits	3,524	4,249	2,887	121	10,781
Short-term borrowings	2,017	—	—	—	2,017
Long-term debt	593	4,211	2,973	1,004	8,781
Operating lease obligations	59	95	62	95	311
Purchase commitments	92	79	21	15	207

(1) Amounts do not include associated interest payments

Operational Risk

Operational risk is the risk of loss due to human error; inadequate or failed internal systems and controls, including the use of financial or other quantitative methodologies that may not adequately predict future results; violations of, or noncompliance with, laws, rules, regulations, prescribed practices, or ethical standards; and external influences such as market conditions, fraudulent activities, disasters, and security risks. We continuously strive to strengthen our system of internal controls to ensure compliance with laws, rules, and regulations, and to improve the oversight of our operational risk. We actively monitor cyberattacks such as attempts related to online deception and loss of sensitive customer data. We evaluate internal systems, processes and controls to mitigate loss from cyber-attacks and, to date, have not experienced any material losses.

Our objective for managing cyber security risk is to avoid or minimize the impacts of external threat events or other efforts to penetrate our systems. We work to achieve this objective by hardening networks and systems against attack, and by diligently managing visibility and monitoring controls within our data and communications environment to recognize events and respond before the attacker has the opportunity to plan and execute on its own goals. To this end we employ a set of defense in-depth strategies, which include efforts to make us less attractive as a target and less vulnerable to threats, while investing in threat analytic capabilities for rapid detection and response. Potential concerns related to cyber security may be escalated to our board-level Technology Committee, as appropriate. As a complement to the overall cyber security risk management, we use a number of internal training methods, both formally through mandatory courses and informally through written communications and other updates. Internal policies and procedures have been implemented to encourage the reporting of potential phishing attacks or other security risks. We also use third-party services to test the effectiveness of our cyber security risk management framework, and any such third parties are required to comply with our policies regarding information security and confidentiality.

To mitigate operational risks, we have an Operational Risk Committee, a Legal, Regulatory, and Compliance Committee, and a Third Party Risk Management Committee. The responsibilities of these committees, among other duties, include establishing and maintaining management information systems to monitor material risks and to identify potential concerns, risks, or trends that may have a significant impact and ensuring that recommendations are developed to address the identified issues. In addition, we have a Model Risk Oversight Committee that is responsible for policies and procedures describing how model risk is evaluated and managed and the application of the governance process to implement these practices throughout the enterprise. These committees report any significant findings and recommendations to the Risk Management Committee. Potential concerns may be escalated to our ROC of the Board, as appropriate. Significant findings or issues are escalated by the Third Party Risk Management Committee to the Technology Committee of the Board, as appropriate.

The goal of this framework is to implement effective operational risk techniques and strategies; minimize operational, fraud, and legal losses; minimize the impact of inadequately designed models and enhance our overall performance.

Compliance Risk

Financial institutions are subject to many laws, rules, and regulations at both the federal and state levels. These broad-based laws, rules, and regulations include, but are not limited to, expectations relating to anti-money laundering, lending limits, client privacy, fair lending, prohibitions against unfair, deceptive or abusive acts or practices, protections for military members as they enter active duty, and community reinvestment. The volume and complexity of recent regulatory changes have increased our overall compliance risk. As such, we utilize various resources to help ensure expectations are met, including a team of compliance experts dedicated to ensuring our conformance with all applicable laws, rules, and regulations. Our colleagues receive training for several broad-based laws and regulations including, but not limited to, anti-money laundering and customer privacy. Additionally, colleagues engaged in lending activities receive training for laws and regulations related to flood disaster protection, equal credit opportunity, fair lending, and/or other courses related to the extension of credit. We set a high standard of expectation for adherence to compliance management and seek to continuously enhance our performance

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Capital

(This section should be read in conjunction with the Regulatory Matters section included in Part I, Item 1 and Note 21 of the Notes to Consolidated Financial Statements.)

Both regulatory capital and shareholders' equity are managed at the Bank and on a consolidated basis. We have an active program for managing capital and maintain a comprehensive process for assessing the Company's overall capital adequacy. We believe our current levels of both regulatory capital and shareholders' equity are adequate.

Regulatory Capital

We are subject to the Basel III capital requirements including the standardized approach for calculating risk-weighted assets in accordance with subpart D of the final capital rule. The following table presents risk-weighted assets and other financial data necessary to calculate certain financial ratios, including CET1, which we use to measure capital adequacy.

Table 24 - Capital Under Current Regulatory Standards (Basel III)

	At December 31,	
	2018	2017
<i>(dollar amounts in millions)</i>		
CET 1 risk-based capital ratio:		
Total shareholders' equity	\$ 11,102	\$ 10,814
Regulatory capital adjustments:		
Shareholders' preferred equity and related surplus	(1,207)	(1,076)
Accumulated other comprehensive loss (income) offset	609	528
Goodwill and other intangibles, net of taxes	(2,200)	(2,200)
Deferred tax assets that arise from tax loss and credit carryforwards	(33)	(25)
CET 1 capital	8,271	8,041
Additional tier 1 capital		
Shareholders' preferred equity	1,207	1,076
Other	—	(7)
Tier 1 capital	9,478	9,110
LTD and other tier 2 qualifying instruments	776	869
Qualifying allowance for loan and lease losses	868	778
Total risk-based capital	\$ 11,122	\$ 10,757
Risk-weighted assets (RWA)	\$ 85,687	\$ 80,340
CET 1 risk-based capital ratio	9.65%	10.01%
Other regulatory capital data:		
Tier 1 risk-based capital ratio	11.06	11.34
Total risk-based capital ratio	12.98	13.39
Tier 1 leverage ratio	9.10	9.09

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Table 25 - Capital Adequacy—Non-Regulatory (Non-GAAP)

(dollar amounts in millions)

	At December 31,	
	2018	2017
Consolidated capital calculations:		
Common shareholders' equity	\$ 9,899	\$ 9,743
Preferred shareholders' equity	1,203	1,071
Total shareholders' equity	11,102	10,814
Goodwill	(1,989)	(1,993)
Other intangible assets (1)	(222)	(273)
Total tangible equity	8,891	8,548
Preferred shareholders' equity	(1,203)	(1,071)
Total tangible common equity	<u>\$ 7,688</u>	<u>\$ 7,477</u>
Total assets	\$ 108,781	\$ 104,185
Goodwill	(1,989)	(1,993)
Other intangible assets (1)	(222)	(273)
Total tangible assets	<u>\$ 106,570</u>	<u>\$ 101,919</u>
Tangible equity / tangible asset ratio	8.34%	8.39%
Tangible common equity / tangible asset ratio	7.21	7.34
Tangible common equity / RWA ratio	8.97	9.31

(1) Other intangible assets are net of deferred tax liability.

The following table presents certain regulatory capital data at both the consolidated and Bank levels for the past two years:

Table 26 - Regulatory Capital Data

(dollar amounts in millions)

		At December 31,	
		Basel III	
		2018	2017
Total risk-weighted assets	Consolidated	\$ 85,687	\$ 80,340
	Bank	85,717	80,383
CET 1 risk-based capital	Consolidated	8,271	8,041
	Bank	8,732	8,856
Tier 1 risk-based capital	Consolidated	9,478	9,110
	Bank	9,611	9,727
Tier 2 risk-based capital	Consolidated	1,644	1,647
	Bank	1,893	1,790
Total risk-based capital	Consolidated	11,122	10,757
	Bank	11,504	11,517
CET 1 risk-based capital ratio	Consolidated	9.65%	10.01%
	Bank	10.19	11.02
Tier 1 risk-based capital ratio	Consolidated	11.06	11.34
	Bank	11.21	12.10
Total risk-based capital ratio	Consolidated	12.98	13.39
	Bank	13.42	14.33
Tier 1 leverage ratio	Consolidated	9.10	9.09
	Bank	9.23	9.70

At December 31, 2018, we maintained Basel III capital ratios in excess of the well-capitalized standards established by the Federal Reserve.

The Company repurchased \$939 million of common stock during 2018 at an average cost of \$15.23 per share. Included in the share repurchase activity, the Company completed the \$400 million ASR which effectively offset the impact of the \$363 million Series A preferred equity conversion in the 2018 first quarter.

Shareholders' Equity

We generate shareholders' equity primarily through the retention of earnings, net of dividends and share repurchases. Other potential sources of shareholders' equity include issuances of common and preferred stock. Our objective is to maintain capital at an amount commensurate with our risk profile and risk tolerance objectives, to meet both regulatory and market expectations, and to provide the flexibility needed for future growth and business opportunities.

Shareholders' equity totaled \$11.1 billion at December 31, 2018, an increase of \$0.3 billion when compared with December 31, 2017.

On June 28, 2018, Huntington was notified by the Federal Reserve that it had no objection to Huntington's proposed capital actions included in Huntington's capital plan submitted in the 2018 CCAR. These actions included a 27% increase in quarterly dividend per common share to \$0.14, starting in the third quarter of 2018, the repurchase of up to \$1.068 billion of common stock over the next four quarters (July 1, 2018 through June 30, 2019), and maintaining dividends on the outstanding classes of preferred stock and trust preferred securities. Any capital actions, including those contemplated in the above announced actions, are subject to consideration and evaluation by Huntington's Board of Directors.

On July 17, 2018, the Board authorized the repurchase of up to \$1.068 billion of common shares over the four quarters through the 2019 second quarter. During 2018, Huntington repurchased a total of 61.6 million shares at a weighted average share price of \$15.23. Purchases of common shares under the authorization may include open market purchases, privately negotiated transactions, and accelerated repurchase programs.

On July 27, 2018, Huntington entered into an accelerated share repurchase agreement for the repurchase of approximately \$400 million of its outstanding common shares. The accelerated share repurchase program enabled Huntington to purchase 20.9 million shares immediately. The accelerated share repurchase program ended in September 2018, resulting in an additional 4.4 million shares being delivered to Huntington.

Dividends

We consider disciplined capital management as a key objective, with dividends representing one component. Our strong capital ratios and expectations for continued earnings growth positions us to continue to actively explore additional capital management opportunities.

Share Repurchases

From time to time the board of directors authorizes the Company to repurchase shares of our common stock. Although we announce when the board of directors authorizes share repurchases, we typically do not give any public notice before we repurchase our shares. Future stock repurchases may be private or open-market repurchases, including block transactions, accelerated or delayed block transactions, forward transactions, and similar transactions. Various factors determine the amount and timing of our share repurchases, including our capital requirements, the number of shares we expect to issue for employee benefit plans and acquisitions, market conditions (including the trading price of our stock), and regulatory and legal considerations, including the Federal Reserve's response to our annual capital plan. There were 61.6 million common shares repurchased during 2018.

BUSINESS SEGMENT DISCUSSION

Overview

Our business segments are based on our internally-aligned segment leadership structure, which is how we monitor results and assess performance. We have four major business segments: Consumer and Business Banking, Commercial Banking, Vehicle Finance, and Regional Banking and The Huntington Private Client Group (RBHPCG). The Treasury / Other function includes technology and operations, other unallocated assets, liabilities, revenue, and expense.

Business segment results are determined based upon our management practices, which assigns balance sheet and income statement items to each of the business segments. The process is designed around our organizational and management structure and, accordingly, the results derived are not necessarily comparable with similar information published by other financial institutions.

Revenue Sharing

Revenue is recorded in the business segment responsible for the related product or service. Fee sharing is recorded to allocate portions of such revenue to other business segments involved in selling to, or providing service to customers. Results of operations for the business segments reflect these fee sharing allocations.

Expense Allocation

The management process that develops the business segment reporting utilizes various estimates and allocation methodologies to measure the performance of the business segments. Expenses are allocated to business segments using a two-phase approach. The first phase consists of measuring and assigning unit costs (activity-based costs) to activities related to product origination and servicing. These activity-based costs are then extended, based on volumes, with the resulting amount allocated to business segments that own the related products. The second phase consists of the allocation of overhead costs to all four business segments from Treasury / Other. We utilize a full-allocation methodology, where all Treasury / Other expenses, except reported Significant Items, and certain other residual expenses, are allocated to the four business segments.

Funds Transfer Pricing (FTP)

We use an active and centralized FTP methodology to attribute appropriate income to the business segments. The intent of the FTP methodology is to transfer interest rate risk from the business segments by providing matched duration funding of assets and liabilities. The result is to centralize the financial impact, management, and reporting of interest rate risk in the Treasury / Other function where it can be centrally monitored and managed. The Treasury / Other function charges (credits) an internal cost of funds for assets held in (or pays for funding provided by) each business segment. The FTP rate is based on prevailing market interest rates for comparable duration assets (or liabilities).

Net Income by Business Segment

Net income by business segment for the past three years is presented in the following table:

Table 27 - Net Income (Loss) by Business Segment

	Year Ended December 31,		
	2018	2017	2016
<i>(dollar amounts in millions)</i>			
Consumer and Business Banking	\$ 463	\$ 344	\$ 303
Commercial Banking	553	439	316
Vehicle Finance	165	147	126
RBHPCG	106	76	68
Treasury / Other	106	180	(101)
Net income	<u>\$ 1,393</u>	<u>\$ 1,186</u>	<u>\$ 712</u>

Treasury / Other

The Treasury / Other function includes revenue and expense related to assets, liabilities, and equity not directly assigned or allocated to one of the four business segments. Assets include investment securities and bank owned life insurance. Net interest income includes the impact of administering our investment securities portfolios, the net impact of derivatives used to hedge interest rate sensitivity as well as the financial impact associated with our FTP methodology, as described above. Noninterest income includes miscellaneous fee income not allocated to other business segments, such as bank owned life insurance income and securities and trading asset gains or losses. Noninterest expense includes certain corporate administrative, and other miscellaneous expenses not allocated to other business segments. The provision for income taxes for the business segments is calculated at a statutory 21% tax rate and a 35% tax rate for periods prior to January 1, 2018, although our overall effective tax rate is lower. As a result, Treasury / Other reflects a credit for income taxes representing the difference between the lower effective tax rate and the statutory tax rate used at the time to allocate income taxes to the business segments.

Consumer and Business Banking

Table 28 - Key Performance Indicators for Consumer and Business Banking

	Year Ended December 31,		Change from 2017		
	2018	2017	Amount	Percent	2016
(dollar amounts in millions unless otherwise noted)					
Net interest income	\$ 1,685	\$ 1,549	\$ 136	9 %	\$ 1,224
Provision for credit losses	141	108	33	31	68
Noninterest income	738	735	3	—	649
Noninterest expense	1,696	1,647	49	3	1,339
Provision for income taxes	123	185	(62)	(34)	163
Net income	\$ 463	\$ 344	\$ 119	35 %	\$ 303
Number of employees (average full-time equivalent)	8,355	8,616	(261)	(3)%	7,466
Total average assets	\$ 26,861	\$ 25,656	\$ 1,205	5	\$ 21,317
Total average loans/leases	21,866	20,744	1,122	5	17,861
Total average deposits	47,827	45,287	2,540	6	36,652
Net interest margin	3.62%	3.52%	0.10%	3	3.42%
NCOs	\$ 108	\$ 104	\$ 4	4	\$ 74
NCOs as a % of average loans and leases	0.50%	0.50%	—%	—	0.42%

2018 versus 2017

Consumer and Business Banking, including Home Lending, reported net income of \$463 million in 2018, an increase of \$119 million, or 35%, compared with net income of \$344 million in 2017. Segment net interest income increased \$136 million, or 9%, primarily due to an increase in total average loans and deposits. The provision for credit losses increased \$33 million, or 31%, driven by an increase in the allowance, primarily related to the other consumer portfolio. Noninterest expense increased \$49 million, or 3%, due to increased personnel costs and allocated expenses.

Home Lending, an operating unit of Consumer and Business Banking, reflects the result of the origination of mortgage loans less referral fees and net interest income for mortgage banking products distributed by the retail branch network and other business segments. Home Lending reported a loss of \$11 million in 2018, compared with net income of \$12 million in the prior year. While total revenues increased largely due to higher residential loan balances, this increase was offset by an increase in noninterest expenses of \$28 million, or 20%, as a result of higher origination volume and higher indirect expense allocations. Income from lower origination spreads was offset by higher origination volume.

2017 versus 2016

Consumer and Business Banking reported net income of \$344 million in 2017, compared with net income of \$303 million in 2016. The \$41 million increase included a \$325 million, or 27%, increase in net interest income and an \$86 million, or 13%, increase in noninterest income, partially offset by a \$308 million, or 23%, increase in noninterest expense, a \$40 million, or 59%, increase in provision for credit losses, and a \$22 million, or 13%, increase in provision for income taxes.

Home Lending reported net income of \$12 million in 2017, a decrease of \$12 million, compared to the year-ago period. While total revenues increased \$5 million, or 3%, this increase was offset by an increase in noninterest expenses of \$18 million, or 15%.

Commercial Banking

Table 29 - Key Performance Indicators for Commercial Banking

	Year Ended December 31,		Change from 2017		
	2018	2017	Amount	Percent	2016
<i>(dollar amounts in millions unless otherwise noted)</i>					
Net interest income	\$ 938	\$ 901	\$ 37	4%	\$ 717
Provision for credit losses	38	30	8	27	79
Noninterest income	313	278	35	13	245
Noninterest expense	513	474	39	8	397
Provision for income taxes	147	236	(89)	(38)	170
Net income	\$ 553	\$ 439	\$ 114	26%	\$ 316
Number of employees (average full-time equivalent)	1,266	1,227	39	3%	1,075
Total average assets	\$ 33,178	\$ 31,322	\$ 1,856	6	\$ 26,894
Total average loans/leases	26,301	25,259	1,042	4	21,278
Total average deposits	22,216	21,175	1,041	5	17,349
Net interest margin	3.26 %	3.34%	(0.08)%	(2)	3.11%
NCOs	\$ (7)	\$ 1	\$ (8)	(800)	\$ 2
NCOs as a % of average loans and leases	(0.03)%	—%	(0.03)%	(100)	0.01%

2018 versus 2017

Commercial Banking reported net income of \$553 million in 2018, an increase of \$114 million, or 26%, compared with net income of \$439 million in 2017. Segment net interest income increased \$37 million, or 4%, primarily due to a 4% growth average loans and leases and a 5% growth in average deposits. Net interest margin decreased eight basis points, primarily driven by a decline in loan and lease spreads, partially offset by an improvement in deposit spreads. The provision for credit losses increased \$8 million, or 27%, primarily due to growth in the portfolio, partially offset by a reduction in NCOs. Noninterest income increased \$35 million, or 13%, largely driven by an increase in capital markets related revenues and loan commitment and other fees. Noninterest expense increased \$39 million, or 8%, primarily due to an increase in personnel expense and allocated overhead, partially offset by a decrease in operating lease expense.

2017 versus 2016

Commercial Banking reported net income of \$439 million in 2017, compared with net income of \$316 million in 2016. The \$123 million increase included a \$184 million, or 26%, increase in net interest income, a \$33 million, or 13% increase in noninterest income, partially offset by a \$77 million, or 19%, increase in noninterest expense and a \$66 million, or 39%, increase in provision for income taxes.

Vehicle Finance

Table 30 - Key Performance Indicators for Vehicle Finance

	Year Ended December 31,		Change from 2017		
	2018	2017	Amount	Percent	2016
<i>(dollar amounts in millions unless otherwise noted)</i>					
Net interest income	\$ 403	\$ 424	\$ (21)	(5)%	\$ 344
Provision (reduction in allowance) for credit losses	55	63	(8)	(13)	47
Noninterest income	10	14	(4)	(29)	15
Noninterest expense	149	149	—	—	118
Provision for income taxes	44	79	(35)	(44)	68
Net income	\$ 165	\$ 147	\$ 18	12 %	\$ 126
Number of employees (average full-time equivalent)	264	253	11	4 %	211
Total average assets	\$ 18,502	\$ 16,966	\$ 1,536	9	\$ 14,369
Total average loans/leases	18,482	16,936	1,546	9	14,089
Total average deposits	337	334	3	1	288
Net interest margin	2.18%	2.51%	(0.33)%	(13)	2.40%
NCOs	\$ 43	\$ 52	\$ (9)	(17)	\$ 34
NCOs as a % of average loans and leases	0.23%	0.31%	(0.08)%	(26)	0.24%

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2018 versus 2017

Vehicle Finance reported net income of \$165 million in 2018, an increase of \$18 million, or 12%, compared with net income of \$147 million in 2017. Results primarily reflect a lower provision for income taxes, as well as, a lower provision for credit losses primarily resulting from a decrease in NCOs compared to the prior year. Segment net interest income decreased \$21 million or 5%, due to the 33 basis point reduction in the net interest margin, which reflects the continued run off of the higher yielding acquired portfolio and, to a lesser degree, lower spreads on new loan production as a result of the rising rate environment during most of 2018. These decreases were partially offset by a 9% increase in average loan balances. Noninterest income was down slightly primarily reflecting lower servicing income due to the run off of securitized loans, while noninterest expense was unchanged.

2017 versus 2016

Vehicle Finance reported net income of \$147 million in 2017, compared with net income of \$126 million in 2016. The \$21 million increase included an \$80 million, or 23%, increase in net interest income, partially offset by a \$31 million, or 26%, increase in noninterest expense, a \$16 million, or 34%, increase in the provision for credit losses and an \$11 million, or 16%, increase in the provision for income taxes.

Regional Banking and The Huntington Private Client Group

Table 31 - Key Performance Indicators for Regional Banking and The Huntington Private Client Group

	Year Ended December 31.		Change from 2017		
	2018	2017	Amount	Percent	2016
<i>(dollar amounts in millions unless otherwise noted)</i>					
Net interest income	\$ 192	\$ 172	\$ 20	12%	\$ 153
Provision (reduction in allowance) for credit losses	1	—	1	100	(3)
Noninterest income	193	188	5	3	177
Noninterest expense	250	243	7	3	229
Provision for income taxes	28	41	(13)	(32)	36
Net income	<u>\$ 106</u>	<u>\$ 76</u>	<u>\$ 30</u>	<u>39%</u>	<u>\$ 68</u>
Number of employees (average full-time equivalent)	1,030	1,023	7	1%	977
Total average assets	\$ 6,149	\$ 5,543	\$ 606	11	\$ 4,615
Total average loans/leases	5,494	4,857	637	13	4,120
Total average deposits	5,862	6,028	(166)	(3)	5,342
Net interest margin	3.33%	2.92%	0.41 %	14	2.90 %
NCOs	\$ —	\$ 2	\$ (2)	(100)	\$ (2)
NCOs as a % of average loans and leases	—%	0.04%	(0.04)%	(100)	(0.05)%
Total assets under management <i>(in billions)—eop</i>	\$ 15.3	\$ 18.3	\$ (3.0)	(16)	\$ 16.9
Total trust assets <i>(in billions)—eop</i>	105.1	110.1	(5.0)	(5)	94.7

eop—End of Period

2018 versus 2017

RBHPCG reported net income of \$106 million in 2018, an increase of \$30 million, or 39%, compared with a net income of \$76 million in 2017. Net interest income increased \$20 million, or 12%, due to an increase in average total loans combined with a 41 basis point increase in net interest margin. The increase in average total loans was due to growth in commercial and portfolio mortgage loans. Noninterest income increased \$5 million, or 3%, primarily reflecting increased trust and investment management revenue as a result of increased sales production and year over year market growth. Noninterest expense increased \$7 million, or 3%, mainly as a result of increased personnel expenses related to the hiring of new sales producers.

2017 versus 2016

RBHPCG reported net income of \$76 million in 2017, compared with a net income of \$68 million in 2016. The \$8 million increase included a \$19 million, or 12%, increase in net interest income and an \$11 million, or 6%, increase in noninterest income, partially offset by a \$14 million, or 6% increase in noninterest expense and a \$5 million, or 14%, increase in provision for income taxes.

RESULTS FOR THE FOURTH QUARTER

Earnings Discussion

In the 2018 fourth quarter, we reported net income of \$334 million, a decrease of \$98 million, or 23%, from the 2017 fourth quarter. Diluted earnings per common share for the 2018 fourth quarter were \$0.29, a decrease of \$0.08 from the year-ago quarter.

Table 32 - Significant Items Influencing Earnings Performance Comparison

(dollar amounts in millions, except per share data)

Three Months Ended:		Amount	EPS (1)
December 31, 2018—Net income		\$ 334	
Earnings per share, after-tax			\$ 0.29
December 31, 2017—Net income		\$ 432	
Earnings per share, after-tax			\$ 0.37
Federal tax reform-related tax benefit		\$ —	
Tax impact		123	
Federal tax reform-related tax benefit, after-tax		\$ 123	\$ 0.11

(1) Based on average outstanding diluted common shares.

Net Interest Income / Average Balance Sheet

FTE net interest income for the 2018 fourth quarter increased \$59 million, or 8%, from the 2017 fourth quarter. This reflected the benefit from the \$3.8 billion, or 4%, increase in average earning assets coupled with an 11 basis point increase in the FTE net interest margin to 3.41%. Average earning asset yields increased 51 basis points year-over-year, driven by a 53 basis point improvement in loan yields. Average interest-bearing liability costs increased 50 basis points, although interest-bearing deposit costs only increased 47 basis points. The cost of short-term borrowings and long-term debt increased 134 basis points and 109 basis points, respectively. The benefit from noninterest-bearing funds increased 10 basis points versus the year-ago quarter. Embedded within these yields and costs, FTE net interest income during the 2018 fourth quarter included \$17 million, or approximately seven basis points, of purchase accounting impact compared to \$24 million, or approximately 10 basis points, in the year-ago quarter. The 2018 fourth quarter included an approximately two basis point impact from higher commercial interest recoveries. On a year-over-year basis, NIM was negatively impacted by two basis points as a result of the impact of federal tax reform on the FTE adjustment.

Table 33 - Average Earning Assets - 2018 Fourth Quarter vs. 2017 Fourth Quarter

(dollar amounts in millions)

	Fourth Quarter		Change	
	2018	2017	Amount	Percent
Loans/Leases				
Commercial and industrial	\$ 29,557	\$ 27,445	\$ 2,112	8%
Commercial real estate	6,944	7,196	(252)	(4)
Total commercial	36,501	34,641	1,860	5
Automobile	12,423	11,963	460	4
Home equity	9,817	10,027	(210)	(2)
Residential mortgage	10,574	8,809	1,765	20
RV and marine finance	3,216	2,405	811	34
Other consumer	1,291	1,095	196	18
Total consumer	37,321	34,299	3,022	9
Total loans/leases	73,822	68,940	4,882	7
Total securities	22,656	24,309	(1,653)	(7)
Loans held-for-sale and other earning assets	1,274	688	586	85
Total earning assets	\$ 97,752	\$ 93,937	\$ 3,815	4%

Average earning assets for the 2018 fourth quarter increased \$3.8 billion, or 4%, from the year-ago quarter, primarily reflecting a \$4.9 billion, or 7%, increase in average total loans and leases. Average C&I loans increased \$2.1 billion, or 8%, reflecting broad-based growth. Average residential mortgage loans increased \$1.8 billion, or 20%, driven by an increase in

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lending officers and expansion into the Chicago market. Average RV and marine finance loans increased \$0.8 billion, or 34%, reflecting the success of the geographic expansion over the past two years, while maintaining our commitment to super prime originations. Average automobile loans increased \$0.5 billion, or 4%, driven by origination volume consistent with current market dynamics and our continued commitment to high quality borrowers while optimizing yield and production in the rising rate environment over the past year. Average securities decreased \$1.7 billion, or 7%, primarily due to runoff in the portfolio, partially offset by continued growth in direct purchase municipal instruments in our commercial banking segment.

Table 34 - Average Interest-Bearing Liabilities - 2018 Fourth Quarter vs. 2017 Fourth Quarter

<i>(dollar amounts in millions)</i>	Fourth Quarter		Change	
	2018	2017	Amount	Percent
Deposits				
Demand deposits: noninterest-bearing	\$ 20,384	\$ 21,745	\$ (1,361)	(6)%
Demand deposits: interest-bearing	19,860	18,175	1,685	9
Total demand deposits	40,244	39,920	324	1
Money market deposits	22,595	20,731	1,864	9
Savings and other domestic deposits	10,534	11,348	(814)	(7)
Core certificates of deposit	5,705	1,947	3,758	193
Total core deposits	79,078	73,946	5,132	7
Other domestic deposits of \$250,000 or more	346	400	(54)	(14)
Brokered deposits and negotiable CDs	3,507	3,391	116	3
Total deposits	82,931	77,737	5,194	7
Short-term borrowings	1,006	2,837	(1,831)	(65)
Long-term debt	8,871	9,232	(361)	(4)
Total interest-bearing liabilities	\$ 72,424	\$ 68,061	\$ 4,363	6 %

Average total deposits increased \$5.2 billion, or 7%, while average total core deposits increased \$5.1 billion, or 7%. Average total interest-bearing liabilities for the 2018 fourth quarter increased \$4.4 billion, or 6%, from the year ago quarter. Average core CDs increased \$3.8 billion, or 193%, reflecting consumer deposit growth initiatives primarily in the first three quarters of 2018. Average money market deposits increased \$1.9 billion, or 9%, primarily reflecting growth in commercial and consumer balances. Savings and other domestic deposits decreased \$0.8 billion, or 7%, primarily reflecting FirstMerit-related balance attrition and continued consumer product mix shift. Average short-term borrowings decreased \$1.8 billion, or 65%, as continued growth in core deposits reduced reliance on wholesale funding.

Provision for Credit Losses

The provision for credit losses decreased to \$60 million in the 2018 fourth quarter compared to \$65 million in the 2017 fourth quarter.

Noninterest Income

Table 35 - Noninterest Income - 2018 Fourth Quarter vs. 2017 Fourth Quarter

<i>(dollar amounts in millions)</i>	Fourth Quarter		Change	
	2018	2017	Amount	Percent
Service charges on deposit accounts	\$ 94	\$ 91	\$ 3	3 %
Card and payment processing income	58	53	5	9
Trust and management investment services	42	41	1	2
Mortgage banking income	23	33	(10)	(30)
Capital markets fees	29	23	6	26
Insurance income	21	21	—	—
Bank owned life insurance income	16	18	(2)	(11)
Gain on sale of loans	16	17	(1)	(6)
Securities (losses) gains	(19)	(4)	(15)	(375)
Other income	49	47	2	4
Total noninterest income	\$ 329	\$ 340	\$ (11)	(3)%

Noninterest income for the 2018 fourth quarter decreased \$11 million, or 3%, from the year-ago quarter. Securities losses were \$19 million compared to \$4 million in the year-ago quarter, reflecting the losses related to the \$1.1 billion portfolio.

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repositioning completed in the 2018 fourth quarter. Mortgage banking income decreased \$10 million, or 30%, primarily reflecting lower spreads on origination volume. Capital markets fees increased \$6 million, or 26%, primarily driven by \$4 million of fees from HSE, which was acquired October 1, 2018. Card and payment processing income increased \$5 million, or 9%, due to underlying customer growth and higher card usage.

Noninterest Expense

Table 36 - Noninterest Expense - 2018 Fourth Quarter vs. 2017 Fourth Quarter

<u>(dollar amounts in millions)</u>	Fourth Quarter		Change	
	2018	2017	Amount	Percent
Personnel costs	\$ 399	\$ 373	\$ 26	7%
Outside data processing and other services	83	71	12	17
Net occupancy	70	36	34	94
Equipment	48	36	12	33
Deposit and other insurance expense	9	19	(10)	(53)
Professional services	17	18	(1)	(6)
Marketing	15	10	5	50
Amortization of intangibles	13	14	(1)	(7)
Other expense	57	56	1	2
Total noninterest expense	<u>\$ 711</u>	<u>\$ 633</u>	<u>\$ 78</u>	<u>12%</u>
Number of employees (average full-time equivalent)	15,657	15,375	282	2%

Reported noninterest expense for the 2018 fourth quarter increased \$78 million, or 12%, from the year-ago quarter. Net occupancy costs increased \$34 million, or 94%, primarily reflecting \$28 million of branch and facility consolidation-related expense in the 2018 fourth quarter. Personnel costs increased \$26 million, or 7%, reflecting annual merit increases, higher benefit costs, and \$3 million of run-rate expense from HSE. Equipment increased \$12 million, or 33%, primarily reflecting \$7 million of branch and facility consolidation-related expense in the 2018 fourth quarter. Outside data processing and other services expense increased \$12 million, or 17%, primarily driven by higher technology investment costs. Marketing increased \$5 million, or 50%, primarily reflecting timing of marketing campaigns. Deposit and other insurance expense decreased \$10 million, or 53%, due to the discontinuation of the FDIC surcharge in the 2018 fourth quarter.

Provision for Income Taxes

(This section should be read in conjunction with Note 1 and Note 16 of the Notes to Consolidated Financial Statements.)

The provision for income taxes in the 2018 fourth quarter was \$57 million compared to a \$20 million benefit in the 2017 fourth quarter. The effective tax rates for the 2018 fourth quarter and 2017 fourth quarter were 14.6% and (4.8%), respectively. Included in the 2017 fourth quarter results is a \$123 million tax benefit related to the TCJA enacted on December 22, 2017, primarily attributed to the revaluation of net deferred tax liabilities at the lower statutory federal income tax rate. We completed our provisional estimate related to tax reform during the 2018 fourth quarter. At December 31, 2018, we had a net federal deferred tax liability of \$105 million and a net state deferred tax asset of \$41 million.

Credit Quality

NCOs

Net charge-offs increased \$9 million to \$50 million. The increase was primarily centered in the C&I portfolio, with no segment or geographic concentration. Consumer charge-offs have remained consistent over the past year. NCOs represented an annualized 0.27% of average loans and leases in the current quarter, up from 0.16% in the prior quarter and up from 0.24% in the year-ago quarter.

NALs

Overall asset quality performance remained consistent with prior periods and our expectations. The consumer portfolio metrics continue to reflect the results associated with our focus on high quality borrowers, with an expected modest seasonal impact evident across the portfolios. The commercial portfolios have performed consistently, with some quarter-to-quarter volatility as a result of the absolute low level of problem loans.

Nonaccrual loans and leases decreased \$9 million, or 3%, from the year-ago quarter to \$340 million, or 0.45% of total loans and leases. The year-over-year decline was centered in the commercial real estate and residential mortgage portfolios, partially offset by an increase in the commercial portfolio. OREO balances decreased \$10 million, or 30%, from the year-ago quarter. The decline in OREO assets reflected reductions in both commercial and residential properties. NPAs decreased to \$387 million, or

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0.52% of total loans and leases and OREO. On a linked quarter basis, NALs decreased \$30 million, or 8%, while NPAs decreased \$16 million, or 4%.

ACL

(This section should be read in conjunction with Note 3 of the Notes to Consolidated Financial Statements.)

The period-end ALLL as a percentage of total loans and leases increased to 1.03% compared to 0.99% a year ago, while the ALLL as a percentage of period-end total NALs increased to 228% from 198% over the same period. The increase in the ALLL is primarily the result of loan growth. We believe the level of the ALLL and ACL are appropriate given the low level of problem loans and the current composition of the overall loan and lease portfolio.

Table 37 - Selected Quarterly Financial Information (1)

(dollar amounts in millions, share amounts in thousands)

	Three Months Ended			
	December 31, 2018	September 30, 2018	June 30, 2018	March 31, 2018
Interest income	\$ 1,056	\$ 1,007	\$ 972	\$ 914
Interest expense	223	205	188	144
Net interest income	833	802	784	770
Provision for credit losses	60	53	56	66
Net interest income after provision for credit losses	773	749	728	704
Total noninterest income	329	342	336	314
Total noninterest expense	711	651	652	633
Income before income taxes	391	440	412	385
Provision (benefit) for income taxes	57	62	57	59
Net income	334	378	355	326
Dividends on preferred shares	19	18	21	12
Net income applicable to common shares	\$ 315	\$ 360	\$ 334	\$ 314
Common shares outstanding				
Average—basic	1,054,460	1,084,536	1,103,337	1,083,836
Average—diluted (2)	1,073,055	1,103,740	1,122,612	1,124,778
Ending	1,046,767	1,061,529	1,104,227	1,101,796
Book value per common share	\$ 9.46	\$ 9.17	\$ 9.30	\$ 9.17
Tangible book value per common share (3)	7.34	7.06	7.27	7.12
Per common share				
Net income—basic	\$ 0.30	\$ 0.33	\$ 0.30	\$ 0.29
Net income—diluted	0.29	0.33	0.30	0.28
Return on average total assets	1.25%	1.42%	1.36%	1.27%
Return on average common shareholders' equity	12.9	14.3	13.2	13.0
Return on average tangible common shareholders' equity (4)	17.3	19.0	17.6	17.5
Efficiency ratio (5)	58.7	55.3	56.6	56.8
Effective tax rate	14.6	14.1	13.8	15.3
Margin analysis—as a % of average earning assets (6)				
Interest income (6)	4.34%	4.16%	4.07%	3.91%
Interest expense	0.93	0.84	0.78	0.61
Net interest margin (6)	3.41%	3.32%	3.29%	3.30%
Revenue—FTE				
Net interest income	\$ 833	\$ 802	\$ 784	\$ 770
FTE adjustment	8	8	7	7
Net interest income (6)	841	810	791	777
Noninterest income	329	342	336	314
Total revenue (6)	\$ 1,170	\$ 1,152	\$ 1,127	\$ 1,091

Table 38 - Selected Quarterly Capital Data (1)

<i>Capital adequacy (Basel III)</i>	2018			
	December 31,	September 30,	June 30,	March 31,
Total risk-weighted assets	\$ 85,687	\$ 83,580	\$ 82,951	\$ 81,365
Tier 1 leverage ratio (period end)	9.10%	9.14%	9.65%	9.53%
CET 1 risk-based capital ratio	9.65	9.89	10.53	10.45
Tier 1 risk-based capital ratio (period end)	11.06	11.33	11.99	11.94
Total risk-based capital ratio (period end)	12.98	13.36	13.97	13.92
Tangible common equity / tangible asset ratio (7) (9)	7.21	7.25	7.78	7.70
Tangible equity / tangible asset ratio (8) (9)	8.34	8.41	8.95	8.88
Tangible common equity / risk-weighted assets ratio (9)	8.97	8.97	9.67	9.65

- (1) Comparisons for presented periods are impacted by a number of factors. Refer to the Significant Items section for additional discussion regarding these items.
- (2) Weighted average diluted shares outstanding for the quarterly period ending March 31, 2018, includes the impact of the convertible preferred stock issued in April of 2008.
- (3) Other intangible assets are net of deferred tax liability.
- (4) Net income applicable to common shares excluding expense for amortization of intangibles for the period divided by average tangible shareholders' equity. Average tangible shareholders' equity equals average total shareholders' equity less average intangible assets and goodwill. Expense for amortization of intangibles and average intangible assets are net of deferred tax liability.
- (5) Noninterest expense less amortization of intangibles and goodwill impairment divided by the sum of FTE net interest income and noninterest income excluding securities gains (losses).
- (6) Presented on a FTE basis assuming a 21% tax rate.
- (7) Tangible common equity (total common equity less goodwill and other intangible assets) divided by tangible assets (total assets less goodwill and other intangible assets). Other intangible assets are net of deferred tax.
- (8) Tangible equity (total equity less goodwill and other intangible assets) divided by tangible assets (total assets less goodwill and other intangible assets). Other intangible assets are net of deferred tax.
- (9) Tangible equity, tangible common equity, and tangible assets are non-GAAP financial measures. Additionally, any ratios utilizing these financial measures are also non-GAAP. These financial measures have been included as they are considered to be critical metrics with which to analyze and evaluate financial condition and capital strength. Other companies may calculate these financial measures differently.

Table 39 - Selected Quarterly Financial Information (1)

(dollar amounts in millions, share amounts in thousands)

	Three Months Ended			
	December 31, 2017	September 30, 2017	June 30, 2017	March 31, 2017
Interest income	\$ 894	\$ 873	\$ 846	\$ 820
Interest expense	124	115	101	91
Net interest income	770	758	745	729
Provision for credit losses	65	43	25	68
Net interest income after provision for credit losses	705	715	720	661
Total noninterest income	340	330	325	312
Total noninterest expense	633	680	694	707
Income before income taxes	412	365	351	266
Provision (benefit) for income taxes	(20)	90	79	59
Net income	432	275	272	207
Dividends on preferred shares	19	19	19	19
Net income applicable to common shares	\$ 413	\$ 256	\$ 253	\$ 188
Common shares outstanding				
Average—basic	1,077,397	1,086,038	1,088,934	1,086,374
Average—diluted (2)	1,130,117	1,106,491	1,108,527	1,108,617
Ending	1,072,027	1,080,946	1,090,016	1,087,120
Book value per share	\$ 9.09	\$ 8.91	\$ 8.79	\$ 8.62
Tangible book value per share (3)	6.97	6.85	6.74	6.55
Per common share				
Net income—basic	\$ 0.38	\$ 0.24	\$ 0.23	\$ 0.17
Net income—diluted	0.37	0.23	0.23	0.17
Return on average total assets	1.67%	1.08%	1.09%	0.84%
Return on average common shareholders' equity	17.0	10.5	10.6	8.2
Return on average tangible common shareholders' equity (4)	22.7	14.1	14.4	11.3
Efficiency ratio (5)	54.9	60.5	62.9	65.7
Effective tax rate	(4.8)	24.7	22.4	22.2
Margin analysis—as a % of average earning assets (6)				
Interest income (6)	3.83%	3.78%	3.75%	3.70%
Interest expense	0.53	0.49	0.44	0.40
Net interest margin (6)	3.30%	3.29%	3.31%	3.30%
Revenue—FTE				
Net interest income	\$ 770	\$ 758	\$ 745	\$ 729
FTE adjustment	12	13	12	13
Net interest income (6)	782	771	757	742
Noninterest income	340	330	325	312
Total revenue (6)	\$ 1,122	\$ 1,101	\$ 1,082	\$ 1,054

Table 40 - Selected Quarterly Capital Data (1)

Capital adequacy (Basel III)	2017			
	December 31,	September 30,	June 30,	March 31,
Total risk-weighted assets	\$ 80,340	\$ 78,631	\$ 78,366	\$ 77,559
Tier 1 leverage ratio	9.09%	8.96%	8.98%	8.76%
Tier 1 risk-based capital ratio	10.01	9.94	9.88	9.74
Total risk-based capital ratio	11.34	11.30	11.24	11.11
Tier 1 common risk-based capital ratio	13.39	13.39	13.33	13.26
Tangible common equity / tangible asset ratio (7)(9)	7.34	7.42	7.41	7.28
Tangible equity / tangible asset ratio (8)(9)	8.39	8.49	8.49	8.38
Tangible common equity / risk-weighted assets ratio (9)	9.31	9.41	9.37	9.18

- (1) Comparisons for presented periods are impacted by a number of factors. Refer to the Significant Items section for additional discussion regarding these items.
- (2) For all quarterly periods presented prior to December 31, 2017, the impact of the convertible preferred stock issued in April of 2008 was excluded from the diluted share calculation because the result would have been higher than basic earnings per common share (anti-dilutive) for the periods.
- (3) Other intangible assets are net of deferred tax.
- (4) Net income applicable to common shares excluding expense for amortization of intangibles for the period divided by average tangible shareholders' equity. Average tangible shareholders' equity equals average total shareholders' equity less average intangible assets and goodwill. Expense for amortization of intangibles and average intangible assets are net of deferred tax.
- (5) Noninterest expense less amortization of intangibles and goodwill impairment divided by the sum of FTE net interest income and noninterest income excluding securities gains (losses).
- (6) Presented on a FTE basis assuming a 35% tax rate.
- (7) Tangible common equity (total common equity less goodwill and other intangible assets) divided by tangible assets (total assets less goodwill and other intangible assets). Other intangible assets are net of deferred tax.
- (8) Tangible equity (total equity less goodwill and other intangible assets) divided by tangible assets (total assets less goodwill and other intangible assets). Other intangible assets are net of deferred tax.
- (9) Tangible equity, tangible common equity, and tangible assets are non-GAAP financial measures. Additionally, any ratios utilizing these financial measures are also non-GAAP. These financial measures have been included as they are considered to be critical metrics with which to analyze and evaluate financial condition and capital strength. Other companies may calculate these financial measures differently.

ADDITIONAL DISCLOSURES

Forward-Looking Statements

This report, including MD&A, contains certain forward-looking statements, including, but not limited to, certain plans, expectations, goals, projections, and statements, which are not historical facts and are subject to numerous assumptions, risks, and uncertainties. Statements that do not describe historical or current facts, including statements about beliefs and expectations, are forward-looking statements. Forward-looking statements may be identified by words such as expect, anticipate, believe, intend, estimate, plan, target, goal, or similar expressions, or future or conditional verbs such as will, may, might, should, would, could, or similar variations. The forward-looking statements are intended to be subject to the safe harbor provided by Section 27A of the Securities Act of 1933, Section 21E of the Securities Exchange Act of 1934, and the Private Securities Litigation Reform Act of 1995.

While there is no assurance that any list of risks and uncertainties or risk factors is complete, below are certain factors which could cause actual results to differ materially from those contained or implied in the forward-looking statements: changes in general economic, political, or industry conditions; uncertainty in U.S. fiscal and monetary policy, including the interest rate policies of the Federal Reserve Board; volatility and disruptions in global capital and credit markets; movements in interest rates; competitive pressures on product pricing and services; success, impact, and timing of our business strategies, including market acceptance of any new products or services implementing our "Fair Play" banking philosophy; the nature, extent, timing, and results of governmental actions, examinations, reviews, reforms, regulations, and interpretations, including those related to the Dodd-Frank Wall Street Reform and Consumer Protection Act and the Basel III regulatory capital reforms, as well as those involving the OCC, Federal Reserve, FDIC, and CFPB; and other factors that may affect our future results.

All forward-looking statements speak only as of the date they are made and are based on information available at that time. We do not assume any obligation to update forward-looking statements to reflect circumstances or events that occur after the date the forward-looking statements were made or to reflect the occurrence of unanticipated events except as required by federal securities laws. As forward-looking statements involve significant risks and uncertainties, caution should be exercised against placing undue reliance on such statements.

Non-GAAP Financial Measures

This document contains GAAP financial measures and non-GAAP financial measures where management believes it to be helpful in understanding Huntington's results of operations or financial position. Where non-GAAP financial measures are used, the comparable GAAP financial measure, as well as the reconciliation to the comparable GAAP financial measure, can be found herein.

Significant Items

From time-to-time, revenue, expenses, or taxes are impacted by items judged by us to be outside of ordinary banking activities and/or by items that, while they may be associated with ordinary banking activities, are so unusually large that their outsized impact is believed by us at that time to be infrequent or short-term in nature. We refer to such items as Significant Items. Most often, these Significant Items result from factors originating outside the Company; e.g., regulatory actions / assessments, windfall gains, one-time tax assessments / refunds, litigation actions, etc. In other cases, they may result from our decisions associated with significant corporate actions outside of the ordinary course of business; e.g., merger / restructuring charges, recapitalization actions, goodwill impairment, etc.

Even though certain revenue and expense items are naturally subject to more volatility than others due to changes in market and economic environment conditions, as a general rule volatility alone does not define a Significant Item. For example, changes in the provision for credit losses, gains / losses from investment activities, asset valuation writedowns, etc., reflect ordinary banking activities and are, therefore, typically excluded from consideration as a Significant Item.

We believe the disclosure of Significant Items provides a better understanding of our performance and trends to ascertain which of such items, if any, to include or exclude from an analysis of our performance; i.e., within the context of determining how that performance differed from expectations, as well as how, if at all, to adjust estimates of future performance accordingly. To this end, we adopted a practice of listing Significant Items in our external disclosure documents; e.g., earnings press releases, investor presentations, Forms 10-Q and 10-K.

Significant Items for any particular period are not intended to be a complete list of items that may materially impact current or future period performance.

Fully-Taxable Equivalent Basis

Interest income, yields, and ratios on a FTE basis are considered non-GAAP financial measures. Management believes net interest income on a FTE basis provides an insightful picture of the interest margin for comparison purposes. The FTE basis also allows management to assess the comparability of revenue arising from both taxable and tax-exempt sources. The FTE basis assumes a federal statutory tax rate of 21 percent for the year ended 2018 and 35 percent for all prior periods. We encourage readers to consider the consolidated financial statements and other financial information contained in this Form 10-K in their entirety, and not to rely on any single financial measure.

Non-Regulatory Capital Ratios

In addition to capital ratios defined by banking regulators, the Company considers various other measures when evaluating capital utilization and adequacy, including:

- Tangible common equity to tangible assets,
- Tangible equity to tangible assets, and
- Tangible common equity to risk-weighted assets using Basel III definitions.

These non-regulatory capital ratios are viewed by management as useful additional methods of reflecting the level of capital available to withstand unexpected market conditions. Additionally, presentation of these ratios allows readers to compare the Company's capitalization to other financial services companies. These ratios differ from capital ratios defined by banking regulators principally in that the numerator excludes goodwill and other intangible assets, the nature and extent of which varies among different financial services companies. These ratios are not defined in GAAP or federal banking regulations. As a result, these non-regulatory capital ratios disclosed by the Company are considered non-GAAP financial measures.

Because there are no standardized definitions for these non-regulatory capital ratios, the Company's calculation methods may differ from those used by other financial services companies. Also, there may be limits in the usefulness of these measures to investors. As a result, the Company encourages readers to consider the consolidated financial statements and other financial information contained in this Form 10-K in their entirety, and not to rely on any single financial measure.

Risk Factors

More information on risk is discussed in the Risk Factors section included in Item 1A of this report. Additional information regarding risk factors can also be found in the Risk Management and Capital discussion of this report, as well as the Regulatory Matters section included in Item 1 of this report.

Critical Accounting Policies and Use of Significant Estimates

Our Consolidated Financial Statements are prepared in accordance with GAAP. The preparation of financial statements in conformity with GAAP requires us to establish accounting policies and make estimates that affect amounts reported in our Consolidated Financial Statements. Note 1 of the Notes to Consolidated Financial Statements, which is incorporated by reference into this MD&A, describes the significant accounting policies we used in our Consolidated Financial Statements.

An accounting estimate requires assumptions and judgments about uncertain matters that could have a material effect on the Consolidated Financial Statements. Estimates are made under facts and circumstances at a point in time, and changes in those facts and circumstances could produce results substantially different from those estimates. Our most significant accounting policies and estimates and their related application are discussed below.

Allowance for Credit Losses

Our ACL of \$868 million at December 31, 2018, represents our estimate of probable credit losses inherent in our loan and lease portfolio and our unfunded loan commitments and letters of credit. We regularly review our ACL for appropriateness by performing on-going evaluations of the loan and lease portfolio. In doing so, we consider factors such as the differing economic risk associated with each loan category, the financial condition of specific borrowers, the level of delinquent loans, the value of any collateral and, where applicable, the existence of any guarantees or other documented support. We also evaluate the impact of changes in interest rates and overall economic conditions on the ability of borrowers to meet their financial obligations when quantifying our exposure to credit losses and assessing the appropriateness of our ACL at each reporting date. There is no certainty that our ACL will be appropriate over time to cover losses in the portfolio because of unanticipated adverse changes in the economy, market conditions, or events adversely affecting specific customers, industries, or markets. If the credit quality of our customer base materially deteriorates, the risk profile of a market, industry, or group of customers changes materially, or if the ACL is not appropriate, our net income and capital could be materially adversely affected which, in turn, could have a material adverse effect on our financial condition and results of operations. *For more information, see Note 3 - Loans / Leases and Allowance for Credit Losses.*

Fair Value Measurement

Certain assets and liabilities are measured at fair value on a recurring basis and include trading securities, available-for-sale securities, other securities, loans held for sale, loans held for investment, MSRs and derivative instruments. At December 31, 2018, approximately \$14.8 billion of our assets and \$0.2 billion of our liabilities were recorded at fair value on a recurring basis. In addition to assets and liabilities subject to recurring fair value measurement, we measure certain other assets such as impaired loans, loans held for sale and other real estate owned at fair value on a non-recurring basis. Assets and liabilities carried at fair value inherently include subjectivity and may require use of significant assumptions, adjustments and judgment. A significant change in assumptions may result in a significant change in fair value, which in turn, may result in a higher degree of financial statement volatility.

Significant adjustments and assumptions used in determining fair value include, but are not limited to, market liquidity and credit quality, where appropriate. Valuations of products using models or other techniques are sensitive to assumptions used for the significant inputs. The type and level of judgment required is largely dependent on the amount of observable market information available. Where available, we use quoted market prices to determine fair value. If quoted market prices are not available, fair value is determined based on inputs that are either directly observable or derived from market data using either internally developed or independent third-party valuation models. These inputs include, but are not limited to, interest rate yield curves, credit spreads, option volatilities, and option-adjusted spreads. Where neither quoted market prices nor observable market data are available, fair value is determined using valuation models that feature one or more significant unobservable inputs based on management's expectation of what market participants would use in determining the fair value of the asset or liability. Inputs to valuation models are considered unobservable if they are supported by little or no market activity. In periods of extreme volatility, lessened liquidity or in illiquid markets, there may be more variability in market pricing or a lack of market data to use in the valuation process.

A significant portion of our assets and liabilities that are reported at fair value are measured based on quoted market prices or observable market / independent inputs and are classified within levels 1 and 2. Instruments valued using internally developed valuation models and other valuation techniques that use significant unobservable inputs are classified within level 3 of the valuation hierarchy. *For more information, see Note 17 - Fair Value of Assets and Liabilities.*

Income Taxes

The calculation of our provision for income taxes requires the use of estimates and judgments. We have two accruals for income taxes: (1) our income tax payable represents the estimated net amount currently due to the federal, state, and local taxing jurisdictions, net of any reserve for potential audit issues and any tax refunds; (2) our deferred federal and state income tax and related valuation accounts, represents the estimated impact of temporary differences between how we recognize our assets and liabilities under GAAP, and how such assets and liabilities are recognized under federal and state tax law. The net receivable

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balance and deferred tax accounts are presented as components of other assets or other liabilities in accordance with the asset or liability balance of the account.

In the ordinary course of business, we operate in various taxing jurisdictions and are subject to income and non-income taxes. The effective tax rate is based in part on our interpretation of the relevant current tax laws. We believe the aggregate liabilities related to taxes are appropriately reflected in the consolidated financial statements. We review the appropriate tax treatment of all transactions taking into consideration statutory, judicial, and regulatory guidance in the context of our tax positions. In addition, we rely on various tax opinions, recent tax audits, and historical experience.

From time-to-time, we engage in business transactions that may affect our tax liabilities. Where appropriate, we obtain opinions of outside experts and assess the relative merits and risks of the appropriate tax treatment of business transactions taking into account statutory, judicial, and regulatory guidance in the context of the tax position. However, changes to our estimates of accrued taxes can occur due to changes in tax rates, implementation of new business strategies, resolution of issues with taxing authorities regarding previously taken tax positions, and newly enacted statutory, judicial, and regulatory guidance. Such changes could affect the amount of our accrued taxes and could be material to our financial position and / or results of operations. *For more information, see Note 16 - Income Taxes.*

Goodwill and Intangible Assets

The acquisition method of accounting requires that acquired assets and liabilities are recorded at their fair values as of the date of acquisition. This often involves estimates based on third party valuations or internal valuations based on discounted cash flow analyses or other valuation techniques, all of which are inherently subjective. Acquisitions typically result in goodwill, the amount by which the cost of net assets acquired in a business combination exceeds their fair value, which is subject to impairment testing at least annually. The amortization of identified intangible assets recognized in a business combination is based upon the estimated economic benefits to be received over their economic life, which is also subjective. Customer attrition rates that are based on historical experience are used to determine the estimated economic life of certain intangibles assets, including but not limited to, customer deposit intangibles. *Refer to Note 6 of the Notes to Consolidated Financial Statements for further information regarding these items.*

Recent Accounting Pronouncements and Developments

Note 2 of the Notes to Consolidated Financial Statements discusses new accounting pronouncements adopted during 2018 and the expected impact of accounting pronouncements recently issued but not yet required to be adopted. To the extent the adoption of new accounting standards materially affect financial condition, results of operations, or liquidity, the impacts are discussed in the applicable section of this MD&A and the Notes to Consolidated Financial Statements.

Item 7A: Quantitative and Qualitative Disclosures About Market Risk

Information required by this item is set forth under the heading of "Market Risk" in Item 7 (MD&A), which is incorporated by reference into this item.

Item 8: Financial Statements and Supplementary Data

Information required by this item is set forth in the Reports of Independent Registered Public Accounting Firm, Consolidated Financial Statements and Notes, and Selected Quarterly Income Statements, which is incorporated by reference into this item.

REPORT OF MANAGEMENT'S EVALUATION OF DISCLOSURE CONTROLS AND PROCEDURES

The Management of Huntington Bancshares Incorporated (Huntington or the Company) is responsible for the financial information and representations contained in the Consolidated Financial Statements and other sections of this report. The Consolidated Financial Statements have been prepared in conformity with accounting principles generally accepted in the United States. In all material respects, they reflect the substance of transactions that should be included based on informed judgments, estimates, and currently available information. Management maintains a system of internal accounting controls, which includes the careful selection and training of qualified personnel, appropriate segregation of responsibilities, communication of written policies and procedures, and a broad program of internal audits. The costs of the controls are balanced against the expected benefits. During 2018, the audit committee of the board of directors met regularly with Management, Huntington's internal auditors, and the independent registered public accounting firm, PricewaterhouseCoopers LLP, to review the scope of their audits and to discuss the evaluation of internal accounting controls and financial reporting matters. The independent registered public accounting firm and the internal auditors have free access to, and meet confidentially with, the audit committee to discuss appropriate matters. Also, Huntington maintains a disclosure review committee. This committee's purpose is to design and maintain disclosure controls and procedures to ensure that material information relating to the financial and operating condition of Huntington is properly reported to its chief executive officer, chief financial officer, chief auditor, and the audit committee of the board of directors in connection with the preparation and filing of periodic reports and the certification of those reports by the chief executive officer and the chief financial officer.

REPORT OF MANAGEMENT'S ASSESSMENT OF INTERNAL CONTROL OVER FINANCIAL REPORTING

Management is responsible for establishing and maintaining adequate internal control over financial reporting as such term is defined in Rules 13a-15(f) and 15d-15(f) of the Securities Exchange Act of 1934, as amended. Huntington's Management assessed the effectiveness of the Company's internal control over financial reporting as of December 31, 2018. In making this assessment, Management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in *Internal Control—Integrated Framework (2013)*. Based on that assessment, Management concluded that, as of December 31, 2018, the Company's internal control over financial reporting is effective based on those criteria. The Company's internal control over financial reporting as of December 31, 2018 has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in their report appearing on the next page.



Stephen D. Steinour – Chairman, President, and Chief Executive Officer



Howell D. McCullough III – Senior Executive Vice President and Chief Financial Officer

February 15, 2019

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareholders of
Huntington Bancshares Incorporated

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of Huntington Bancshares Incorporated and its subsidiaries (the "Company") as of December 31, 2018 and 2017, and the related consolidated statements of income, comprehensive income, changes in shareholders' equity and cash flows for each of the three years in the period ended December 31, 2018, including the related notes (collectively referred to as the "consolidated financial statements"). We also have audited the Company's internal control over financial reporting as of December 31, 2018, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2018 and 2017, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2018 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2018, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the COSO.

Basis for Opinions

The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Report of Management's Assessment of Internal Control over Financial Reporting. Our responsibility is to express opinions on the Company's consolidated financial statements and on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company, and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

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Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

PricewaterhouseCoopers LLP

Columbus, Ohio
February 15, 2019

We have served as the Company's auditor since 2015.

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Huntington Bancshares Incorporated Consolidated Balance Sheets

(dollar amounts in millions)

Assets

Cash and due from banks	\$	1,108	\$	1,212
Interest-bearing deposits at Federal Reserve Bank		1,564		308
Interest-bearing deposits in banks		53		47
Trading account securities		105		86
Available-for-sale securities		13,780		14,869
Held-to-maturity securities		8,565		9,091
Other securities		565		600
Loans held for sale (includes \$613 and \$413 respectively, measured at fair value)(1)		804		488
Loans and leases (includes \$79 and \$93 respectively, measured at fair value)(1)		74,900		70,117
Allowance for loan and lease losses		(772)		(691)
Net loans and leases		74,128		69,426
Bank owned life insurance		2,507		2,466
Premises and equipment		790		864
Goodwill		1,989		1,993
Servicing rights and other intangible assets		535		584
Other assets		2,288		2,151
Total assets	\$	108,781	\$	104,185

Liabilities and shareholders' equity

Liabilities

Deposits in domestic offices

Demand deposits—noninterest-bearing (includes \$210 classified as held-for-sale at December 31, 2018)

Interest-bearing (includes \$662 classified as held-for-sale at December 31, 2018)

Deposits	\$	21,783	\$	21,546
Short-term borrowings		62,991		55,495
Long-term debt		84,774		77,041
Other liabilities		2,017		5,056
Total liabilities		8,625		9,206
		2,263		2,068
		97,679		93,371

Commitments and contingencies (Note 20)

Shareholders' equity

Preferred stock		1,203		1,071
Common stock		11		11
Capital surplus		9,181		9,707
Less treasury shares, at cost		(45)		(35)
Accumulated other comprehensive loss		(609)		(528)
Retained earnings		1,361		588
Total shareholders' equity		11,102		10,814
Total liabilities and shareholders' equity	\$	108,781	\$	104,185
Common shares authorized (par value of \$0.01)		1,500,000,000		1,500,000,000
Common shares outstanding		1,016,767,252		1,072,026,681
Treasury shares outstanding		3,817,385		3,268,265
Preferred stock, authorized shares		6,617,808		6,617,808
Preferred shares outstanding		740,500		1,098,006

(1) Amounts represent loans for which Huntington has elected the fair value option. See Note 17.

See Notes to Consolidated Financial Statements

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Huntington Bancshares Incorporated Consolidated Statements of Income

(dollar amounts in millions, share amounts in thousands)

	Year Ended December 31.		
	2018	2017	2016
Interest and fee income			
Loans and leases	\$ 3,305	\$ 2,838	\$ 2,178
Available-for-sale securities			
Taxable	279	283	211
Tax-exempt	97	77	59
Held-to-maturity securities-taxable	211	193	138
Other securities-taxable	25	20	12
Other interest income	32	22	34
Total interest income	3,949	3,433	2,632
Interest expense			
Deposits	391	180	102
Short-term borrowings	48	25	5
Long-term debt	321	226	156
Total interest expense	760	431	263
Net interest income	3,189	3,002	2,369
Provision for credit losses	235	201	191
Net interest income after provision for credit losses	2,954	2,801	2,178
Service charges on deposit accounts	364	353	324
Card and payment processing income	224	206	169
Trust and investment management services	171	156	123
Mortgage banking income	108	131	128
Capital markets fees	91	76	60
Insurance income	82	81	84
Bank owned life insurance income	67	67	58
Gain on sale of loans and leases	55	56	47
Net (losses) gains on sales of securities	(21)	—	2
Impairment losses recognized in earnings on available-for-sale securities (a)	—	(4)	(2)
Other income	180	185	157
Total noninterest income	1,321	1,307	1,150
Personnel costs	1,559	1,524	1,349
Outside data processing and other services	294	313	305
Net occupancy	184	212	153
Equipment	164	171	165
Deposit and other insurance expense	63	78	54
Professional services	60	69	105
Marketing	53	60	63
Amortization of intangibles	53	56	30
Other expense	217	231	184
Total noninterest expense	2,647	2,714	2,408
Income before income taxes	1,628	1,394	920
Provision for income taxes	235	208	208
Net income	1,393	1,186	712
Dividends on preferred shares	70	76	65
Net income applicable to common shares	\$ 1,323	\$ 1,110	\$ 647
Average common shares—basic	1,081,542	1,084,686	904,438
Average common shares—diluted	1,105,935	1,136,186	918,790
Per common share:			
Net income—basic	\$ 1.22	\$ 1.02	\$ 0.72
Net income—diluted	1.20	1.00	0.70

(a) The following OTTI losses are included in securities losses for the periods presented

Total OTTI losses	\$ —	\$ (4)	\$ (6)
Noncredit-related portion of loss recognized in OCI	—	—	4
Net impairment credit losses recognized in earnings	\$ —	\$ (4)	\$ (2)

See Notes to Consolidated Financial Statements

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Huntington Bancshares Incorporated **Consolidated Statements of Comprehensive Income**

(dollar amounts in millions)

	Year Ended December 31,		
	2018	2017	2016
Net income	\$ 1,393	\$ 1,186	\$ 712
Other comprehensive income, net of tax:			
Unrealized gains (losses) on available-for-sale and other securities:			
Non-credit-related impairment recoveries on debt securities not expected to be sold	—	2	1
Unrealized net gains (losses) on available-for-sale and other securities arising during the period, net of reclassification for net realized gains and losses	(84)	(39)	(202)
Total unrealized gains (losses) on available-for-sale securities	(84)	(37)	(201)
Unrealized gains on cash flow hedging derivatives, net of reclassifications to income	—	3	1
Change in accumulated unrealized gains (losses) for pension and other post-retirement obligations	4	—	25
Other comprehensive loss, net of tax	(80)	(34)	(175)
Comprehensive income	\$ 1,313	\$ 1,152	\$ 537

See Notes to Consolidated Financial Statements

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Huntington Bancshares Incorporated
Consolidated Statements of Changes in Shareholders' Equity

	Preferred Stock		Common Stock		Capital	Treasury Stock		Accumulated Other Comprehensive	Retained Earnings	
<i>(dollar amounts in millions, share amounts in thousands)</i>	Amount	Shares	Amount	Surplus	Shares	Amount	Loss	(Deficit)	Total	
Year Ended December 31, 2018										
Balance, beginning of year	\$ 1,071	1,075,295	\$ 11	\$ 9,707	(3,268)	\$ (35)	\$ (528)	\$ 588	\$ 10,814	
Cumulative-effect adjustment (ASU 2016-01)							(1)	1	—	
Net income								1,393	1,393	
Other comprehensive income (loss)							(80)		(80)	
Net proceeds from issuance of Preferred Series E Stock	495								495	
Repurchases of common stock		(61,644)	—	(939)					(939)	
Cash dividends declared										
Common (\$0.50 per share)								(541)	(541)	
Preferred Series B (\$49.11 per share)								(3)	(3)	
Preferred Series C (\$58.76 per share)								(6)	(6)	
Preferred Series D (\$62.50 per share)								(37)	(37)	
Preferred Series E (\$4,892.50 per share)								(24)	(24)	
Conversion of Preferred Series A Stock to Common Stock	(353)	30,330		363					—	
Recognition of the fair value of share-based compensation				78					78	
Other share-based compensation activity		6,603	—	(31)				(10)	(31)	
Other		—	—	3	(549)	(10)		—	(7)	
Balance, end of year	\$ 1,203	1,050,584	\$ 11	\$ 9,181	(3,817)	\$ (45)	\$ (609)	\$ 1,361	\$ 11,102	

See Notes to Consolidated Financial Statements

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Huntington Bancshares Incorporated Consolidated Statements of Changes in Shareholders' Equity

<i>(Dollar amounts in millions, share amounts in thousands)</i>	Preferred Stock	Common Stock		Capital	Treasury Stock		Accumulated Other Comprehensive	Retained Earnings	Total
	Amount	Shares	Amount	Surplus	Shares	Amount	Loss	(Deficit)	
Year Ended December 31, 2017									
Balance, beginning of year	\$ 1,071	1,088,641	\$ 11	\$ 9,881	(2,953)	\$ (27)	\$ (401)	\$ (227)	\$ 10,308
Net income								1,186	1,186
Other comprehensive income (loss)							(34)		(34)
Repurchase of common stock		(19,430)	—	(260)					(260)
Cash dividends declared:									
Common (\$0.35 per share)								(379)	(379)
Preferred Series A (\$\$5.00 per share)								(31)	(31)
Preferred Series B (\$39.11 per share)								(1)	(1)
Preferred Series C (\$58.76 per share)								(6)	(6)
Preferred Series D (\$62.50 per share)								(38)	(38)
Recognition of the fair value of share-based compensation				92					92
Other share-based compensation activity		5,923	—	(10)				(9)	(19)
TCJA, Reclassification from accumulated OCI to retained earnings							(93)	93	—
Other		161		4	(315)	(8)			(4)
Balance, end of year	\$ 1,071	1,075,295	\$ 11	\$ 9,707	(3,268)	\$ (35)	\$ (528)	\$ 588	\$ 10,814

See Notes to Consolidated Financial Statements

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Huntington Bancshares Incorporated Consolidated Statements of Changes in Shareholders' Equity

	Preferred Stock		Common Stock		Capital	Treasury Stock		Accumulated Other Comprehensive	Retained Earnings (Deficit)	Total
<i>(dollar amounts in millions, share amounts in thousands)</i>	Amount	Shares	Amount	Shares	Surplus	Shares	Amount	Loss		
Year Ended December 31, 2016										
Balance, beginning of year	\$ 386	796,970	\$ 8		\$ 7,039	(2,041)	\$ (18)	\$ (226)	\$ (594)	\$ 6,595
Net income									712	712
Other comprehensive income (loss)								(175)		(175)
FirstMerit Acquisition:										
Issuance of common stock		285,425	3		2,764					2,767
Issuance of Preferred Series C Stock	100				4					104
Net proceeds from issuance of Preferred Series D Stock	585									585
Cash dividends declared:										
Common (\$0.29 per share)									(275)	(275)
Preferred Series A (\$85.00 per share)									(31)	(31)
Preferred Series B (\$34.03 per share)									(1)	(1)
Preferred Series C (\$26.28 per share)									(3)	(3)
Preferred Series D (\$51.04 per share)									(31)	(31)
Recognition of the fair value of share-based compensation					66					66
Other share-based compensation activity		5,924	—		5				(4)	1
Other		322	—		3	(912)	(9)			(6)
Balance, end of year	\$ 1,071	1,088,641	\$ 11		\$ 9,881	(2,953)	\$ (27)	\$ (401)	\$ (227)	\$ 10,308

See Notes to Consolidated Financial Statements

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Huntington Bancshares Incorporated Consolidated Statements of Cash Flows

(All amounts in millions)

Operating activities

Net income

Adjustments to reconcile net income to net cash provided by (used in) operating activities

Provision for credit losses

Depreciation and amortization

Share-based compensation expense

Deferred income tax expense

Net losses (gains) on sales of securities

Impairment losses recognized in earnings on available-for-sale securities

Net change in

Trading account securities

Loans held for sale

Other assets

Other liabilities

Other, net

Net cash provided by (used in) operating activities

Investing activities

Change in interest bearing deposits in banks

Cash paid for acquisition of a business, net of cash received

Proceeds from

Maturities and calls of available-for-sale securities

Maturities and calls of held-to-maturity securities

Sales of available-for-sale securities

Maturities, calls, and sales of other securities

Purchases of available-for-sale securities

Purchases of held-to-maturity securities

Purchases of other securities

Net proceeds from sales of portfolio loans

Net loan and lease activity, excluding sales and purchases

Purchases of premises and equipment

Purchases of loans and leases

Net cash paid for branch divestiture

Other, net

Net cash provided by (used in) investing activities

Financing activities

Increase (decrease) in deposits

Increase (decrease) in short-term borrowings

Net proceeds from issuance of long-term debt

Maturity/redemption of long-term debt

Dividends paid on preferred stock

Dividends paid on common stock

Repurchases of common stock

Net proceeds from issuance of preferred stock

Payments related to tax-withholding for share based compensation awards

Other, net

Net cash provided by (used for) financing activities

Increase (decrease) in cash and cash equivalents

Cash and cash equivalents at beginning of period

Cash and cash equivalents at end of period

Year Ended December 31,		
2018	2017	2016
\$ 1,393	\$ 1,186	\$ 712
235	201	191
493	413	380
78	92	66
63	168	165
21	---	(2)
---	4	2
(11)	47	(96)
(301)	12	(123)
(235)	(420)	(96)
22	233	4
(32)	18	12
1,726	1,954	1,215
90	39	26
(15)	---	(133)
2,109	1,994	2,346
743	1,054	1,212
1,419	2,490	6,154
42	(48)	(233)
(2,485)	(5,429)	(10,905)
(338)	(1,356)	---
(7)	11	17
697	603	2,981
(5,333)	(3,680)	(3,951)
(110)	(194)	(120)
(542)	(405)	(411)
---	---	(480)
67	55	52
(3,663)	(4,866)	(3,445)
7,733	1,433	(292)
(3,025)	1,371	1,900
2,229	1,891	2,128
(2,798)	(948)	(1,275)
(70)	(76)	(54)
(514)	(349)	(245)
(939)	(260)	---
495	---	585
(27)	(26)	---
5	11	21
3,089	3,047	2,768
1,152	135	538
1,520	1,385	847
\$ 2,672	\$ 1,520	\$ 1,385

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(dollar amounts in millions)

Supplemental disclosures:

Interest paid

Income taxes (refunded) paid

Non-cash activities:

Common stock issued to acquire FirstMerit

Preferred stock issued to acquire FirstMerit

Loans transferred to held-for-sale from portfolio

Loans transferred to portfolio from held-for-sale

Transfer of loans to OREO

Transfer of securities from held-to-maturity to available-for-sale

Transfer of securities from available-for-sale to held-to-maturity

Year Ended December 31,					
2018		2017		2016	
\$	742	\$	409	\$	241
	(52)		84		5
	—		—		2,767
	—		—		104
	818		660		3,437
	51		12		482
	20		29		79
	2,833		—		—
	2,707		993		2,870

Huntington Bancshares Incorporated
Notes to Consolidated Financial Statements

1. SIGNIFICANT ACCOUNTING POLICIES

Nature of Operations — Huntington Bancshares Incorporated (Huntington or the Company) is a multi-state diversified regional bank holding company organized under Maryland law in 1966 and headquartered in Columbus, Ohio. Through its subsidiaries, including its bank subsidiary, The Huntington National Bank (the Bank), Huntington is engaged in providing full-service commercial, small business, consumer banking services, mortgage banking services, automobile financing, recreational vehicle and marine financing, equipment leasing, investment management, trust services, brokerage services, customized insurance programs, and other financial products and services. Huntington's banking offices are located in Ohio, Illinois, Michigan, Pennsylvania, Indiana, West Virginia, Wisconsin and Kentucky. Select financial services and other activities are also conducted in various other states. International banking services are available through the headquarters office in Columbus, Ohio.

Basis of Presentation — The Consolidated Financial Statements include the accounts of Huntington and its majority-owned subsidiaries and are presented in accordance with GAAP. All intercompany transactions and balances have been eliminated in consolidation. Entities in which Huntington holds a controlling financial interest are consolidated. For a voting interest entity, a controlling financial interest is generally where Huntington holds, directly or indirectly, more than 50 percent of the outstanding voting shares. For a variable interest entity (VIE), a controlling financial interest is where Huntington has the power to direct the activities of an entity that most significantly impact the entity's economic performance and has an obligation to absorb losses or the right to receive benefits from the VIE. These losses or benefits, which could potentially be significant to the VIE, are consolidated. For consolidated entities where Huntington holds less than a 100% interest, Huntington recognizes non-controlling interest (included in shareholders' equity) for the equity held by minority shareholders and non-controlling profit or loss (included in noninterest expense) for the portion of the entity's earnings attributable to minority interests. Investments in companies that are not consolidated are accounted for using the equity method when Huntington has the ability to exert significant influence. Investments in nonmarketable equity securities for which Huntington does not have the ability to exert significant influence are generally accounted for using the cost method adjusted for change in observable prices. Investments in private investment partnerships that are accounted for under the equity method or the cost method are included in other assets and Huntington's earnings in equity investments are included in other noninterest income. Investments accounted for under the cost and equity methods are periodically evaluated for impairment.

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that significantly affect amounts reported in the Consolidated Financial Statements. Huntington utilizes processes that involve the use of significant estimates and the judgments of management in determining the amount of its allowance for credit losses, income taxes, as well as fair value measurements of investment securities, derivative instruments, goodwill, other intangible assets, pension assets and liabilities, short-term borrowings, mortgage servicing rights, and loans held for sale. As with any estimate, actual results could differ from those estimates.

For statements of cash flows purposes, cash and cash equivalents are defined as the sum of cash and due from banks and interest-bearing deposits at Federal Reserve Bank.

Certain prior period amounts have been reclassified to conform to the current year's presentation.

Resale and Repurchase Agreements — Securities purchased under agreements to resell and securities sold under agreements to repurchase are treated as collateralized financing transactions and are recorded at the amounts at which the securities were acquired or sold plus accrued interest. The fair value of collateral either received from or provided to a third-party is monitored and additional collateral is obtained or requested to be returned to Huntington in accordance with the agreement.

Securities — Securities purchased with the intention of recognizing short-term profits or which are actively bought and sold are classified as trading account securities and reported at fair value. The unrealized gains or losses on trading account securities are recorded in other noninterest income, except for gains and losses on trading account securities used to economically hedge the fair value of MSRs, which are included in mortgage banking income. Debt securities purchased in which Huntington has the positive intent and ability to hold to their maturity are classified as held-to-maturity securities. Held-to-maturity securities are recorded at amortized cost. All other debt and equity securities are classified as available-for-sale or other securities. Unrealized gains or losses on available-for-sale are reported as a separate component of accumulated OCI in the Consolidated Statements of Changes in Shareholders' Equity. Credit-related declines in the value of debt securities that are considered OTTI are recorded in noninterest income.

Huntington evaluates its investment securities portfolio on a quarterly basis for indicators of OTTI. Huntington assesses whether OTTI has occurred when the fair value of a debt security is less than the amortized cost basis at the balance sheet date. Management reviews the amount of unrealized loss, the length of time the security has been in an unrealized loss position, the credit rating history, market trends of similar security classes, time remaining to maturity, and the source of both interest and principal payments to identify securities which could potentially be impaired. For those debt securities that Huntington intends to sell or is more likely than not

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required to sell, before the recovery of their amortized cost bases, the difference between fair value and amortized cost is considered to be OTTI and is recognized in noninterest income. For those debt securities that Huntington does not intend to sell or is not more likely than not required to sell, prior to expected recovery of amortized cost bases, the credit portion of the OTTI is recognized in noninterest income while the noncredit portion is recognized in OCI. In determining the credit portion, Huntington uses a discounted cash flow analysis, which includes evaluating the timing and amount of the expected cash flows. Non-credit-related OTTI results from other factors, including increased liquidity spreads and higher interest rates. Presentation of OTTI is made in the Consolidated Statements of Income on a gross basis with a reduction for the amount of OTTI recognized in OCI.

Securities transactions are recognized on the trade date (the date the order to buy or sell is executed). The carrying value plus any related accumulated OCI balance of sold securities is used to compute realized gains and losses. Interest on securities, including amortization of premiums and accretion of discounts using the effective interest method over the period to maturity, are included in interest income.

Non-marketable equity securities include stock held for membership and regulatory purposes, such as FHLB stock and FRB stock. These securities are accounted for at cost, evaluated for impairment, and are included in other securities. Other securities also include mutual funds and other marketable equity securities. These securities are carried at fair value, with changes in fair value recognized in other noninterest income.

Loans and Leases — Loans and direct financing leases for which Huntington has the intent and ability to hold for the foreseeable future, or until maturity or payoff, are classified in the Consolidated Balance Sheets as loans and leases. Except for purchase credit impaired loans and loans for which the fair value option has been elected, loans and leases are carried at the principal amount outstanding, net of charge-offs, unamortized deferred loan origination fees and costs, premiums and discounts, and unearned income. Direct financing leases are reported at the aggregate of lease payments receivable and estimated residual values, net of unearned and deferred income, and any initial direct costs incurred to originate these leases. Interest income is accrued as earned using the interest method. Huntington defers the fees it receives from the origination of loans and leases, as well as the direct costs of those activities. Huntington also acquires loans at a premium and at a discount to their contractual values. Huntington amortizes loan discounts, premiums, and net loan origination fees and costs over the contractual lives of the related loans using the effective interest method.

Troubled debt restructurings are loans for which the original contractual terms have been modified to provide a concession to a borrower experiencing financial difficulties. Loan modifications are considered TDRs when the concessions provided are not available to the borrower through either normal channels or other sources. However, not all loan modifications are TDRs. Modifications resulting in troubled debt restructurings may include changes to one or more terms of the loan, including but not limited to, a change in interest rate, an extension of the repayment period, a reduction in payment amount, and partial forgiveness or deferment of principal or accrued interest.

Impairment of the residual values of direct financing leases is evaluated quarterly, with those determined to be other than temporary recognized by writing the leases down to fair value with a charge to other noninterest expense. Residual value impairment arises when the expected fair value is less than the carrying amount, net of estimated amounts reimbursable by the lessee. Beginning January 1, 2019, as a result of the implementation of ASC 842, lessors will assess net investments in leases (including residual values) for impairment, and recognize any impairment losses in accordance with the impairment guidance for financial instruments. As such, net investments in leases may be reduced by a recognized allowance for credit losses, with changes recognized as provision expense.

For leased equipment, the residual component of a direct financing lease represents the estimated fair value of the leased equipment at the end of the lease term. Huntington uses industry data, historical experience, and independent appraisals to establish these residual value estimates. Additional information regarding product life cycle, product upgrades, as well as insight into competing products are obtained through relationships with industry contacts and are factored into residual value estimates where applicable.

Loans Held for Sale — Loans in which Huntington does not have the intent and ability to hold for the foreseeable future are classified as loans held for sale. Loans held for sale are carried at (a) the lower of cost or fair value less cost to sell, or (b) fair value where the fair value option is elected. The fair value option is generally elected for mortgage loans held for sale to facilitate hedging of the loans. The fair value of such loans is estimated based on the inputs that include prices of mortgage backed securities adjusted for other variables such as, interest rates, expected credit defaults and market discount rates. The adjusted value reflects the price we expect to receive from the sale of such loans.

Nonaccrual and Past Due Loans — Loans are considered past due when the contractual amounts due with respect to principal and interest are not received within 30 days of the contractual due date.

Any loan in any portfolio may be placed on nonaccrual status prior to the policies described below when collection of principal or interest is in doubt. When a borrower with debt is discharged in a Chapter 7 bankruptcy and not reaffirmed by the borrower, the loan is determined to be collateral dependent and placed on nonaccrual status, unless there is a co-borrower or the repayment is likely to occur based on objective evidence.

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All classes within the C&I and CRE portfolios are placed on nonaccrual status at 90-days past due. First-lien home equity loans are placed on nonaccrual status at 150-days past due. Junior-lien home equity loans are placed on nonaccrual status at the earlier of 120-days past due or when the related first-lien loan has been identified as nonaccrual. Automobile, RV and marine finance and other consumer loans are placed on non-accrual, if not charged off, when the loan is 120-days past due. Residential mortgage loans are placed on nonaccrual status at 150-days past due, with the exception of residential mortgages guaranteed by government agencies which continue to accrue interest at the rate guaranteed by the government agency.

For all classes within all loan portfolios, when a loan is placed on nonaccrual status, any accrued interest income, to the extent it is recognized in the current year, is reversed and charged to interest income, and prior year amounts in interest accrued are charged-off as a credit loss.

For all classes within all loan portfolios, cash receipts on NALs are applied against principal until the loan or lease has been collected in full, including the charged-off portion, after which time any additional cash receipts are recognized as interest income. However, for secured non-reaffirmed debt in a Chapter 7 bankruptcy, payments are applied to principal and interest when the borrower has demonstrated a capacity to continue payment of the debt and collection of the debt is reasonably assured. For unsecured non-reaffirmed debt in a Chapter 7 bankruptcy where the carrying value has been fully charged-off, payments are recorded as loan recoveries.

Within the C&I and CRE portfolios, the determination of a borrower's ability to make the required principal and interest payments is based on an examination of the borrower's current financial statements, industry, management capabilities, and other qualitative measures. For all classes within the consumer loan portfolio, the determination of a borrower's ability to make the required principal and interest payments is based on multiple factors, including number of days past due and, in some instances, an evaluation of the borrower's financial condition. When, in management's judgment, the borrower's ability to make required principal and interest payments resumes and collectability is no longer in doubt, supported by sustained repayment history, the loan is returned to accrual status. For these loans that have been returned to accrual status, cash receipts are applied according to the contractual terms of the loan.

Allowance for Credit Losses — Huntington maintains two reserves, both of which reflect management's judgment regarding the appropriate level necessary to absorb credit losses inherent in our loan and lease portfolio: the ALLL and the AULC. Combined, these reserves comprise the total ACL. *The determination of the ACL requires significant estimates, including the timing and amounts of expected future cash flows on impaired loans and leases, consideration of current economic conditions, and historical loss experience pertaining to pools of homogeneous loans and leases, all of which may be susceptible to change.*

The appropriateness of the ACL is based on management's current judgments about the credit quality of the loan portfolio. These judgments consider on-going evaluations of the loan and lease portfolio, including such factors as the differing economic risks associated with each loan category, the financial condition of specific borrowers, the level of delinquent loans, the value of any collateral and, where applicable, the existence of any guarantees or other documented support. Further, management evaluates the impact of changes in interest rates and overall economic conditions on the ability of borrowers to meet their financial obligations when quantifying our exposure to credit losses and assessing the appropriateness of our ACL at each reporting date.

The ALLL consists of two components: (1) the transaction reserve and (2) the general reserve. The transaction reserve component includes both (1) an estimate of loss based on pools of commercial and consumer loans and leases with similar characteristics and (2) an estimate of loss based on an impairment review of each impaired C&I and CRE loan where obligor balance is greater than \$1 million. For the C&I and CRE portfolios, the estimate of loss based on pools of loans and leases with similar characteristics is made by applying PD and LGD factors to each individual loan based on a regularly updated loan grade, using a standardized loan grading system. The PD and LGD factors are determined for each loan grade using statistical models based on historical performance data. The PD factor considers on-going reviews of the financial performance of the specific borrower, including cash flow, debt-service coverage ratio, earnings power, debt level, and equity position, in conjunction with an assessment of the borrower's industry and future prospects. The LGD factor considers analysis of the type of collateral and the relative LTV ratio. These reserve factors are developed based on credit migration models that track historical movements of loans between loan ratings over time and a combination of long-term average loss experience of our own portfolio and external industry data.

In the case of more homogeneous portfolios, such as automobile loans, home equity loans, and residential mortgage loans, the determination of the transaction reserve also incorporates PD and LGD factors. The estimate of loss is based on pools of loans and leases with similar characteristics. The PD factor considers current credit scores unless the account is delinquent, in which case a higher PD factor is used driven by the associated delinquency status. The credit score provides a basis for understanding the borrower's past and current payment performance, and this information is used to estimate expected losses over the emergence period. The performance of first-lien loans ahead of our junior-lien loans is available to use as part of our updated score process. The LGD factor considers analysis of the type of collateral and the relative LTV ratio. Credit scores, models, analyses, and other factors used to determine both the PD and LGD factors are updated frequently to capture the recent behavioral characteristics of the subject portfolios, as well as any changes in loss mitigation or credit origination strategies, and adjustments to the reserve factors are made as required.

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The general reserve consists of various risk-profile reserve components. The risk-profile components consider items unique to our structure, policies, processes, and portfolio composition, as well as qualitative measurements and assessments of the loan portfolios including, but not limited to, concentrations, portfolio composition, industry comparisons, and internal review functions.

The estimate for the AULC is determined using the same procedures and methodologies as used for the ALLL. The loss factors used in the AULC are the same as the loss factors used in the ALLL while also considering historical utilization of unused commitments. The AULC is recorded in other liabilities in the Consolidated Balance Sheets.

Charge-off of Uncollectible Loans — Any loan in any portfolio may be charged-off prior to the policies described below if a loss confirming event has occurred. Loss confirming events include, but are not limited to, bankruptcy (unsecured), continued delinquency, foreclosure, or receipt of an asset valuation indicating a collateral deficiency and that asset is the sole source of repayment. Additionally, discharged, collateral dependent non-reaffirmed debt in Chapter 7 bankruptcy filings will result in a charge-off to estimated collateral value, less anticipated selling costs, unless the repayment is likely to occur based on objective evidence.

C&I and CRE loans are generally either charged-off or written down to net realizable value at 90-days past due. Automobile, RV and marine finance and other consumer loans are generally charged-off at 120-days past due. First-lien and junior-lien home equity loans are charged-off to the estimated fair value of the collateral, less anticipated selling costs, at 150-days past due and 120-days past due, respectively. Residential mortgages are charged-off to the estimated fair value of the collateral at 150-days past due.

Impaired Loans — For all classes within the C&I and CRE portfolios, loans with an obligor balance of \$1 million or greater are evaluated on a quarterly basis for impairment. Except for TDRs, consumer loans within any class are generally not individually evaluated on a regular basis for impairment. All TDRs, regardless of the outstanding balance amount, are also considered to be impaired. Loans acquired with evidence of deterioration in credit quality since origination for which it is probable at acquisition that all contractually required payments will not be collected are also considered to be impaired.

Once a loan has been identified for an assessment of impairment, the loan is considered impaired when, based on current information and events, it is probable that all amounts due according to the contractual terms of the loan agreement will not be collected. This determination requires significant judgment and use of estimates, and the eventual outcome may differ significantly from those estimates.

When a loan in any class has been determined to be impaired, the amount of the impairment is measured using the present value of expected future cash flows discounted at the loan's effective interest rate or, as a practical expedient, the observable market price of the loan, or the fair value of the collateral, less anticipated selling costs, if the loan is collateral dependent. A specific reserve is established as a component of the ALLL when a loan has been determined to be impaired. Subsequent to the initial measurement of impairment, if there is a significant change to the impaired loan's expected future cash flows, or if actual cash flows are significantly different from the cash flows previously estimated, Huntington recalculates the impairment and appropriately adjusts the specific reserve. Similarly, if Huntington measures impairment based on the observable market price of an impaired loan or the fair value of the collateral of an impaired collateral dependent loan, Huntington will adjust the specific reserve as appropriate.

When a loan within any class is impaired, the accrual of interest income is discontinued unless the receipt of principal and interest is no longer in doubt. Interest income on TDRs is accrued when all principal and interest is expected to be collected under the post-modification terms. Cash receipts on nonaccruing impaired loans within any class are generally applied entirely against principal until the loan has been collected in full (including any portion charged-off) or the loan is deemed current, after which time any additional cash receipts are recognized as interest income. Cash receipts on accruing impaired loans within any class are applied in the same manner as accruing loans that are not considered impaired.

Collateral — We pledge assets as collateral as required for various transactions including security repurchase agreements, public deposits, loan notes, derivative financial instruments, short-term borrowings and long-term borrowings. Assets that have been pledged as collateral, including those that can be sold or repledged by the secured party, continue to be reported on our Consolidated Balance Sheets.

We also accept collateral, primarily as part of various transactions including derivative instruments and security resale agreements. Collateral accepted by us, including collateral that we can sell or repledge, is excluded from our Consolidated Balance Sheets.

The market value of collateral we have accepted or pledged is regularly monitored and additional collateral is obtained or provided as necessary to ensure appropriate collateral coverage in these transactions.

Premises and Equipment — Premises and equipment are stated at cost, less accumulated depreciation and amortization. Depreciation is computed principally by the straight-line method over the estimated useful lives of the related assets. Buildings and building improvements are depreciated over an average of 30 to 40 years and 10 to 30 years, respectively. Land improvements and furniture and fixtures are depreciated over an average of 5 to 20 years, while equipment is depreciated over a range of 3 to 10 years. Leasehold improvements are amortized over the lesser of the asset's useful life or the lease term, including any renewal periods for which renewal is reasonably assured. Maintenance and repairs are charged to expense as incurred, while improvements that extend the useful life of an asset are capitalized and depreciated over the remaining useful life. Amounts in premises and equipment may

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include items classified as held-for-sale, which are carried at lower of cost or fair value, less costs to sell. Premises and equipment is evaluated for impairment whenever events or changes in circumstances indicate that the carrying amount of the asset may not be recoverable.

Mortgage Servicing Rights — Huntington recognizes the rights to service mortgage loans as an asset when servicing is contractually separated from the underlying mortgage loans by sale or securitization of the loans with servicing rights retained or when purchased. MSR's are included in servicing rights and other intangible assets in the Consolidated Balance Sheets.

For loan sales with servicing retained, a servicing asset is recorded on the day of the sale at fair value for the right to service the loans sold. To determine the fair value of a MSR, Huntington uses an option adjusted spread cash flow analysis incorporating market implied forward interest rates to estimate the future direction of mortgage and market interest rates. The forward rates utilized are derived from the current yield curve for U.S. dollar interest rate swaps and are consistent with pricing of capital markets instruments. The current and projected mortgage interest rate influences the prepayment rate and, therefore, the timing and magnitude of the cash flows associated with the MSR. Servicing revenues on mortgage loans are included in mortgage banking income.

At the time of initial capitalization, MSR's may be grouped into servicing classes based on the availability of market inputs used in determining fair value and the method used for managing the risks of the servicing assets. MSR assets are recorded using the fair value method or the amortization method. The election of the fair value or amortization method is made at the time each servicing class is established. All newly created MSR's since 2009 were recorded using the amortization method. Any change in the fair value of MSR's carried under the fair value method, as well as amortization and impairment of MSR's under the amortization method, during the period is recorded in mortgage banking income. Huntington economically hedges the value of certain MSR's using derivative instruments and trading securities. Changes in fair value of these derivatives and trading securities are reported as a component of mortgage banking income.

Goodwill and Other Intangible Assets — Under the acquisition method of accounting, the net assets of entities acquired by Huntington are recorded at their estimated fair value at the date of acquisition. The excess cost of consideration paid over the fair value of net assets acquired is recorded as goodwill. Other intangible assets with finite useful lives are amortized either on an accelerated or straight-line basis over their estimated useful lives. Goodwill is evaluated for impairment on an annual basis at October 1st of each year or whenever events or changes in circumstances indicate that the carrying value may not be recoverable. Other intangible assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of the asset may not be recoverable.

Derivative Financial Instruments — A variety of derivative financial instruments, principally interest rate swaps, caps, floors, and collars, are used in asset and liability management activities to protect against the risk of adverse price or interest rate movements. These instruments provide flexibility in adjusting Huntington's sensitivity to changes in interest rates without exposure to loss of principal and higher funding requirements.

Huntington also uses derivatives, principally loan sale commitments, in hedging its mortgage loan interest rate lock commitments and its mortgage loans held for sale. Mortgage loan sale commitments and the related interest rate lock commitments are carried at fair value on the Consolidated Balance Sheets with changes in fair value reflected in mortgage banking income. Huntington also uses certain derivative financial instruments to offset changes in value of its MSR's. These derivatives consist primarily of forward interest rate agreements and forward mortgage contracts. The derivative instruments used are not designated as qualifying hedges. Accordingly, such derivatives are recorded at fair value with changes in fair value reflected in mortgage banking income.

Derivative financial instruments are recorded in the Consolidated Balance Sheets as either an asset or a liability (in other assets or other liabilities, respectively) and measured at fair value. On the date a derivative contract is entered into, we designate it as either:

- a qualifying hedge of the fair value of a recognized asset or liability or of an unrecognized firm commitment (fair value hedge);
- a qualifying hedge of the variability of cash flows to be received or paid related to a recognized asset liability or forecasted transaction (cash flow hedge); or
- a trading instrument or a non-qualifying (economic) hedge.

Changes in the fair value of a derivative that has been designated and qualifies as a fair value hedge, along with the changes in the fair value of the hedged asset or liability that is attributable to the hedged risk, are recorded in current period earnings. Changes in the fair value of a derivative that has been designated and qualifies as a cash flow hedge are recorded in accumulated other comprehensive income, net of income taxes, and reclassified into earnings in the period during which the hedged item affects earnings. Changes in the fair value of derivatives held for trading purposes or which do not qualify for hedge accounting are reported in current period earnings.

For those derivatives to which hedge accounting is applied, Huntington formally documents the hedging relationship and the risk management objective and strategy for undertaking the hedge. This documentation identifies the hedging instrument, the hedged item or transaction, the nature of the risk being hedged, and, unless the hedge meets all of the criteria to assume there is no ineffectiveness, the method that will be used to assess the effectiveness of the hedging instrument and how ineffectiveness will be

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measured. The methods utilized to assess retrospective hedge effectiveness, as well as the frequency of testing, vary based on the type of item being hedged and the designated hedge period. For specifically designated fair value hedges of certain fixed-rate debt, Huntington utilizes the short-cut method when certain criteria are met. For other fair value hedges of fixed-rate debt, Huntington utilizes the regression method to evaluate hedge effectiveness on a quarterly basis.

Hedge accounting is discontinued prospectively when:

- the derivative is no longer effective or expected to be effective in offsetting changes in the fair value or cash flows of a hedged item (including firm commitments or forecasted transactions);
- the derivative expires or is sold, terminated, or exercised;
- the forecasted transaction is no longer probable of occurring;
- the hedged firm commitment no longer meets the definition of a firm commitment; or
- the designation of the derivative as a hedging instrument is removed.

When hedge accounting is discontinued and the derivative no longer qualifies as an effective fair value or cash flow hedge, the derivative continues to be carried on the balance sheet at fair value.

In the case of a discontinued fair value hedge of a recognized asset or liability, as long as the hedged item continues to exist on the balance sheet, the hedged item will no longer be adjusted for changes in fair value. The basis adjustment that had previously been recorded to the hedged item during the period from the hedge designation date to the hedge discontinuation date is recognized as an adjustment to the yield of the hedged item over the remaining life of the hedged item.

In the case of a discontinued cash flow hedge of a recognized asset or liability, as long as the hedged item continues to exist on the balance sheet, the changes in fair value of the hedging derivative will no longer be recorded to other comprehensive income. The balance applicable to the discontinued hedging relationship will be recognized in earnings over the remaining life of the hedged item as an adjustment to yield. If the discontinued hedged item was a forecasted transaction that is not expected to occur, any amounts recorded on the balance sheet related to the hedged item, including any amounts recorded in accumulated other comprehensive income, are immediately reclassified to current period earnings.

In the case of either a fair value hedge or a cash flow hedge, if the previously hedged item is sold or extinguished, the basis adjustment to the underlying asset or liability or any remaining unamortized AOCI balance will be recognized in the current period earnings.

In all other situations in which hedge accounting is discontinued, the derivative will be carried at fair value on the consolidated balance sheets, with changes in its fair value recognized in current period earnings unless re-designated as a qualifying hedge.

Like other financial instruments, derivatives contain an element of credit risk, which is the possibility that Huntington will incur a loss because the counterparty fails to meet its contractual obligations. Notional values of interest rate swaps and other off-balance sheet financial instruments significantly exceed the credit risk associated with these instruments and represent contractual balances on which calculations of amounts to be exchanged are based. Credit exposure is limited to the sum of the aggregate fair value of positions that have become favorable to Huntington, including any accrued interest receivable due from counterparties. Potential credit losses are mitigated through careful evaluation of counterparty credit standing, selection of counterparties from a limited group of high quality institutions, collateral agreements, and other contract provisions. Huntington considers the value of collateral held and collateral provided in determining the net carrying value of derivatives.

Huntington offsets the fair value amounts recognized for derivative instruments and the fair value for the right to reclaim cash collateral or the obligation to return cash collateral arising from derivative instrument(s) recognized at fair value executed with the same counterparty under a master netting arrangement.

Fair Value Measurements — The Company records or discloses certain of its assets and liabilities at fair value. Fair value is defined as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. Fair value measurements are classified within one of three levels in a valuation hierarchy based upon the observability of inputs to the valuation of an asset or liability as of the measurement date. The three levels are defined as follows:

- *Level 1* — inputs to the valuation methodology are quoted prices (unadjusted) for identical assets or liabilities in active markets.
- *Level 2* — inputs to the valuation methodology include quoted prices for similar assets and liabilities in active markets, and inputs that are observable for the asset or liability, either directly or indirectly, for substantially the full term of the financial instrument.
- *Level 3* — inputs to the valuation methodology are unobservable and significant to the fair value measurement.

A financial instrument's categorization within the valuation hierarchy is based upon the lowest level of input that is significant to the fair value measurement.

Bank Owned Life Insurance — Huntington's bank owned life insurance policies are recorded at their cash surrender value. Huntington recognizes tax-exempt income from the periodic increases in the cash surrender value of these policies and from death

benefits. A portion of the cash surrender value is supported by holdings in separate accounts. Book value protection for the separate accounts is provided by the insurance carriers and a highly rated major bank.

Transfers of Financial Assets and Securitizations — Transfers of financial assets in which we have surrendered control over the transferred assets are accounted for as sales. In assessing whether control has been surrendered, we consider whether the transferee would be a consolidated affiliate, the existence and extent of any continuing involvement in the transferred financial assets, and the impact of all arrangements or agreements made contemporaneously with, or in contemplation of, the transfer, even if they were not entered into at the time of transfer. Control is generally considered to have been surrendered when (i) the transferred assets have been legally isolated from us or any of our consolidated affiliates, even in bankruptcy or other receivership, (ii) the transferee (or, if the transferee is an entity whose sole purpose is to engage in securitization or asset-backed financing that is constrained from pledging or exchanging the assets it receives, each third-party holder of its beneficial interests) has the right to pledge or exchange the assets (or beneficial interests) it received without any constraints that provide more than a trivial benefit to us, and (iii) neither we nor our consolidated affiliates and agents have (a) both the right and obligation under any agreement to repurchase or redeem the transferred assets before their maturity, (b) the unilateral ability to cause the holder to return specific financial assets that also provides us with a more-than-trivial benefit (other than through a cleanup call) or (c) an agreement that permits the transferee to require us to repurchase the transferred assets at a price so favorable that it is probable that it will require us to repurchase them.

If the sale criteria are met, the transferred financial assets are removed from our balance sheet and a gain or loss on sale is recognized. If the sale criteria are not met, the transfer is recorded as a secured borrowing in which the assets remain on our balance sheet and the proceeds from the transaction are recognized as a liability. For the majority of financial asset transfers, it is clear whether or not we have surrendered control. For other transfers, such as in the case of complex transactions or where we have continuing involvement, we generally obtain a legal opinion as to whether the transfer results in a true sale by law.

Gains and losses on the loans and leases sold and servicing rights associated with loan and lease sales are determined when the related loans or leases are sold to either a securitization trust or third-party. For loan or lease sales with servicing retained, a servicing asset is recorded at fair value for the right to service the loans sold.

Pension and Other Postretirement Benefits — Huntington recognizes the funded status of the postretirement benefit plans on the Consolidated Balance Sheets. Net postretirement benefit cost charged to current earnings related to these plans is predominantly based on various actuarial assumptions regarding expected future experience.

Certain employees are participants in various defined contribution and other non-qualified supplemental retirement plans. Contributions to defined contribution plans are charged to current earnings.

In addition, we maintain a 401(k) plan covering substantially all employees. Employer contributions to the plan are charged to current earnings.

Noninterest Income — Huntington recognizes revenue when the performance obligations related to the transfer of goods or services under the terms of a contract are satisfied. Some obligations are satisfied at a point in time while others are satisfied over a period of time. Revenue is recognized as the amount of consideration to which Huntington expects to be entitled to in exchange for transferring goods or services to a customer. When consideration includes a variable component, the amount of consideration attributable to variability is included in the transaction price only to the extent it is probable that significant revenue recognized will not be reversed when uncertainty associated with the variable consideration is subsequently resolved. Generally, the variability relating to the consideration is explicitly stated in the contracts, but may also arise from Huntington's customer business practice, for example, waiving certain fees related to customer's deposit accounts such as NSF fees. Huntington's contracts generally do not contain terms that require significant judgement to determine the variability impacting the transaction price.

Revenue is segregated based on the nature of product and services offered as part of contractual arrangements. Revenue from contracts with customers is broadly segregated as follows:

- *Service charges on deposit accounts* include fees and other charges Huntington receives to provide various services, including but not limited to, maintaining an account with a customer, providing overdraft services, wire transfer, transferring funds, and accepting and executing stop-payment orders. The consideration includes both fixed (e.g., account maintenance fee) and transaction fees (e.g., wire-transfer fee). The fixed fee is recognized over a period of time while the transaction fee is recognized when a specific service (e.g., execution of wire-transfer) is rendered to the customer. Huntington may, from time to time, waive certain fees (e.g., NSF fee) for customers but generally does not reduce the transaction price to reflect variability for future reversals due to the insignificance of the amounts. Waiver of fees reduces the revenue in the period the waiver is granted to the customer.
- *Card and payment processing income* includes interchange fees earned on debit cards and credit cards. All other fees (e.g., annual fees), and interest income are recognized in accordance with ASC 310. Huntington recognizes interchange fees for services performed related to authorization and settlement of a cardholder's transaction with a merchant. Revenue is recognized when a cardholder's transaction is approved and settled. The revenue may be constrained due to inherent uncertainty related to cardholder's right to return goods and services but as the uncertainty is resolved within a short period of time (generally within 30 days) interchange revenue is reduced by the amount of returns in the period the return is made by the customer.

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Certain volume or transaction based interchange expenses (net of rebates) paid to the payment network reduce the interchange revenue and are presented net on the income statement. Similarly, rewards payable under a reward program to cardholders are recognized as a reduction of the transaction price and are presented net against the interchange revenue.

- *Trust and investment management services* includes fee income generated from personal, corporate and institutional customers. Huntington also provides investment management services, cash management services and tax reporting to customers. Services are rendered over a period of time, over which revenue is recognized. Huntington may also recognize revenue from referring a customer to outside third-parties including mutual fund companies that pay distribution (12b-1) fees and other expenses. 12b-1 fees are received upon initially placing account holder's funds with a mutual fund company as well as in the future periods as long as the account holder (i.e., the fund investor), remains invested in the fund. The transaction price includes variable consideration which is considered constrained as it is not probable that a significant revenue reversal in the amount of cumulative revenue recognized will not occur. Accordingly, those fees are recognized as revenue when the uncertainty associated with the variable consideration is subsequently resolved, that is, initial fees are recognized in the initial period while the future fees are recognized in future periods.
- *Insurance income* includes agency commissions that are recognized when Huntington sells insurance policies to customers. Huntington is also entitled to renewal commissions and, in some cases, profit sharing which are recognized in subsequent periods. The initial commission is recognized when the insurance policy is sold to a customer. Renewal commission is variable consideration and is recognized in subsequent periods when the uncertainty around variable consideration is subsequently resolved (i.e., when customer renews the policy). Profit sharing is also a variable consideration that is not recognized until the variability surrounding realization of revenue is resolved (i.e., Huntington has reached a minimum volume of sales). Another source of variability is the ability of the policy holder to cancel the policy anytime. In such cases, Huntington may be required, under the terms of the contract, to return part of the commission received. A policy cancellation reserve is established for such expected cancellations.
- *Other noninterest income* includes a variety of other revenue streams including capital markets revenue, miscellaneous consumer fees and marketing allowance revenue. Revenue is recognized when, or as, a performance obligation is satisfied. Inherent variability in the transaction price is not recognized until the uncertainty affecting the variability is resolved.

Control is transferred to a customer either at a point in time or over time. A performance obligation is deemed satisfied when the control over goods or services is transferred to the customer. To determine when control is transferred at a point in time, Huntington considers indicators, including but not limited to the right to payment for the asset, transfer of significant risk and rewards of ownership of the asset and acceptance of the asset by the customer. When control is transferred over a period of time, for different performance obligations, either the input or output method is used to determine the progress. The measure of progress used to assess completion of the performance obligation varies between performance obligations and may be based on time throughout the period of service or on the value of goods and services transferred to the customer. As each distinct service or activity is performed, Huntington transfers control to the customer based on the services performed as the customer simultaneously receives the benefits of those services. This timing of revenue recognition aligns with the resolution of any uncertainty related to variable consideration. Costs to obtain a revenue producing contract are expensed when incurred as a practical expedient as the contractual period for majority of contracts is one year or less.

Revenue is recorded in the business segment responsible for the related product or service. Fee sharing arrangements exist to allocate portions of such revenue to other business segments involved in selling to, or providing service to, customers. Business segment results are determined based upon management's reporting system, which assigns balance sheet and income statement items to each of the business segments. The process is designed around Huntington's organizational and management structure and, accordingly, the results derived are not necessarily comparable with similar information published by other financial institutions.

Income Taxes — Income taxes are accounted for under the asset and liability method. Accordingly, deferred tax assets and liabilities are recognized for the future book and tax consequences attributable to temporary differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. Deferred tax assets and liabilities are determined using enacted tax rates expected to apply in the year in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income at the time of enactment of such change in tax rates.

Any interest or penalties due for payment of income taxes are included in the provision for income taxes. To the extent we do not consider it more likely than not that a deferred tax asset will be recovered, a valuation allowance is recorded. All positive and negative evidence is reviewed when determining how much of a valuation allowance is recognized on a quarterly basis. In determining the requirements for a valuation allowance, sources of possible taxable income are evaluated including future reversals of existing taxable temporary differences, future taxable income exclusive of reversing temporary differences and carryforwards, taxable income in appropriate carryback years, and tax-planning strategies. Huntington applies a more likely than not recognition threshold for all tax uncertainties.

Share-Based Compensation — Huntington uses the fair value based method of accounting for awards of HIBAN stock granted to employees under various share-based compensation plans. Share-based compensation costs are recognized prospectively for all

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new awards granted under these plans. Compensation expense relating to stock options is calculated using a methodology that is based on the underlying assumptions of the Black-Scholes option pricing model and is charged to expense over the requisite service period (e.g., vesting period). Compensation expense relating to restricted stock awards is based upon the fair value of the awards on the date of grant and is charged to earnings over the requisite service period (e.g., vesting period) of the award.

Stock Repurchases — Acquisitions of Huntington stock are recorded at cost.

Segment Results — Accounting policies for the business segments are the same as those used in the preparation of the Consolidated Financial Statements with respect to activities specifically attributable to each business segment. However, the preparation of business segment results requires management to establish methodologies to allocate funding costs and benefits, expenses, and other financial elements to each business segment, which are described in Note 23.

2. ACCOUNTING STANDARDS UPDATE

Accounting standards adopted in current period

Standard	Summary of guidance	Effects on financial statements
ASU 2014-09 - Revenue from Contracts with Customers (Topic 606). Issued May 2014	<ul style="list-style-type: none"> - Topic 606 supersedes the revenue recognition requirements in Topic 605, Revenue Recognition, and most industry-specific guidance. - Requires an entity to recognize revenue upon the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. - Also requires additional qualitative and quantitative disclosures relating to the nature, amount, timing and uncertainty of revenue and cash flows arising from contracts with customers. - Guidance sets forth a five step approach for revenue recognition. 	<ul style="list-style-type: none"> - Huntington adopted the new guidance on January 1, 2018 using the modified retrospective approach. - The update did not have a material impact on Huntington's Consolidated Financial Statements. - See Note 13 for further detail impact on adoption
ASU 2016-01 - Recognition and Measurement of Financial Assets and Financial Liabilities. Issued January 2016	<ul style="list-style-type: none"> - Makes targeted improvements related to certain aspects of recognition, measurement, presentation and disclosures for financial instruments including requiring an entity to: <ol style="list-style-type: none"> (a) Measure its equity investments with changes in the fair value recognized in the income statement (b) Present separately in OCI the portion of the total change in the fair value of a liability resulting from a change in the instrument-specific credit risk when the entity has elected to measure the liability at fair value in accordance with the fair value option for financial instruments (i.e., FVO liability). (c) Use the exit price notion when measuring the fair value of financial instruments for disclosure purposes. (d) Assess deferred tax assets related to a net unrealized loss on AFS securities in combination with the entity's other deferred tax assets. 	<ul style="list-style-type: none"> - Huntington adopted the new guidance on January 1, 2018 using the modified retrospective approach. - Amendments were applied as a cumulative-effect adjustment to the balance sheet as of January 1, 2018. - Huntington reclassified \$19 million of equity securities from AFS Securities to Other Securities on the Consolidated Balance Sheets and reclassified unrealized gains of \$1 million from AOCI to Retained Earnings. Prior periods have been adjusted to present these securities as Other Securities to facilitate comparison.
ASU 2016-15 - Classification of Certain Cash Receipts and Cash Payments. Issued August 2016	<ul style="list-style-type: none"> - Clarifies guidance on the classification of certain cash receipts and payments in the statement of cash flows. - Provides consistent principles for evaluating the classification of cash payments and receipts in the statement of cash flows to reduce diversity in practice with respect to several types of cash flows. 	<ul style="list-style-type: none"> - Huntington adopted the new guidance on January 1, 2018. - The update did not have a material impact on Huntington's Consolidated Financial Statements.
ASU 2017-07 - Improving the Presentation of Net Periodic Pension Cost and Periodic Postretirement Benefit Cost. Issued March 2017	<ul style="list-style-type: none"> - Requires that an employer report the service cost component of the pension cost and postretirement benefit cost in the same line items as other compensation costs arising from services rendered by the pertinent employees during the period. - Other components of the net benefit cost should be presented or disclosed separately from the service cost component in the income statement. 	<ul style="list-style-type: none"> - Huntington adopted the new guidance on January 1, 2018. - The update did not have a material impact on Huntington's Consolidated Financial Statements.

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Standard	Summary of guidance	Effects on financial statements
ASU 2017-09 - Stock Compensation Modification Accounting. Issued May 2017	<ul style="list-style-type: none"> - Reduces the current diversity in practice and provides explicit guidance pertaining to the provisions of modification accounting - Clarifies that an entity should account for effects of modification unless the fair value, vesting conditions and the classification of the modified award are the same as the original awards immediately before the original award is modified. 	<ul style="list-style-type: none"> - Huntington adopted the new guidance on January 1, 2018. - The update did not have a material impact on Huntington's Consolidated Financial Statements.
ASU 2017-12 - Derivatives and Hedging - Targeted Improvements to Accounting for Hedging Activities. Issued August 2017	<ul style="list-style-type: none"> - Aligns the entity's risk management activities and financial reporting for hedging relationships. - Requires an entity to present the earnings effect of the hedging instrument in the same income statement line item in which the earnings effect of the hedged item is reported. - Refines measurement techniques for hedges of benchmark interest rate risk. - Eliminates the separate measurement and reporting of hedge ineffectiveness. - Allows stated amount of assets in a closed portfolio to be fair value hedged by excluding proportion of hedged item related to prepayments, defaults and other events. - Eases hedge effectiveness testing including an option to perform qualitative testing. 	<ul style="list-style-type: none"> - For cash flow and net investment hedges, the cumulative-effect adjustment related to eliminating the separate measurement of ineffectiveness should be recognized in AOCI with a corresponding adjustment to retained earnings. - Huntington adopted the new guidance on January 1, 2018. Except as mentioned in the paragraph below, the update did not have a material impact on Huntington's Consolidated Financial Statements. - Huntington reclassified \$2.8 billion securities eligible to be hedged under the last-of-layer method from held-to-maturity to available-for-sale and recognized \$26 million of fair value loss (net of tax) within OCI.
ASU 2018-13 - Fair Value Measurement (Topic 820). Issued August 2018	<ul style="list-style-type: none"> - Modifies the disclosure requirements on fair value measurements. - Removes disclosures for transfers between Level 1 and Level 2, the policy for timing of transfers between levels, and the valuation processes for Level 3 fair value measurements. - Clarifies that the information about uncertainty in measurement in uncertainty disclosure should be as of the reporting date. - Adds disclosures related to (a) changes in unrealized gains/losses in OCI for Level 3 fair value measurements for assets held at the end of the reporting period, and (b) the process of calculating weighted average for significant unobservable inputs used to develop Level 3 fair value measurements 	<ul style="list-style-type: none"> - Effective for fiscal years beginning after December 15, 2019 and interim periods within those fiscal years with early adoption permitted. - Huntington early adopted the guidance effective 4Q 2018. The amendment did not have a material impact on Huntington's Consolidated Financial Statements.
ASU 2018-14 - Compensation - Retirement Benefits - Defined Benefit Plans. Issued August 2018	<ul style="list-style-type: none"> - Modifies the disclosure requirements for defined benefit pension plans. - Removes disclosures pertaining to (a) the amounts of AOCI expected to be recognized as pension costs over the next fiscal year, (b) the amount and timing of plan assets expected to be returned to the employer, and (c) the effect of one-percentage-point change in the assumed health care trends on (i) service and interest cost and (ii) postretirement health care benefit obligation. - Adds a new disclosure requiring an explanation of the reasons for significant gains and losses related to changes in the benefit obligation for the period. 	<ul style="list-style-type: none"> - Effective retrospectively for fiscal years beginning after December 15, 2020 and interim periods within those fiscal years with early adoption permitted. - Huntington early adopted the guidance effective 4Q 2018. The amendment did not have a material impact on the Huntington's Consolidated Financial Statements.

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Standard	Summary of guidance	Effects on financial statements
ASU 2018-15 - Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract. Issued August 2018	<ul style="list-style-type: none"> - Aligns the requirements for capitalizing implementation costs incurred in a hosting arrangement that is a service contract with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use software as well as with hosting arrangements that include an internal-use software license. - Requires the entity to expense the capitalized implementation costs of a hosting arrangement over the term of the hosting arrangement. - Requires the entity to present the expense related to implementation costs in the same statement of income line and statement of cash flows line where the fees for the service contract is recognized for respective statements. 	<ul style="list-style-type: none"> - Effective for fiscal years beginning after December 15, 2019 and interim periods within those fiscal years with early adoption permitted. - Huntington early adopted the guidance effective 3Q 2018. The update did not have a material impact on Huntington's Consolidated Financial Statements as the guidance was consistent with Huntington's existing accounting treatment for such arrangements.

Accounting standards yet to be adopted

Standard	Summary of guidance	Effects on financial statements
ASU 2016-02 - Leases. Issued February 2016	<ul style="list-style-type: none"> - New lease accounting model for lessees and lessors. For lessees, virtually all leases will be required to be recognized on the balance sheet by recording a right-of-use asset and lease liability. Subsequent accounting for leases varies depending on whether the lease is classified as an operating lease or a finance lease. Impact to the income statement is not expected to be material. - Accounting applied by a lessor is largely unchanged from that applied under the existing guidance. - Requires additional qualitative and quantitative disclosures with the objective of enabling users of financial statements to assess the amount, timing, and uncertainty of cash flows arising from leases. 	<ul style="list-style-type: none"> - Effective for the fiscal period beginning after December 15, 2018, with early application permitted. - Management adopted the guidance on January 1, 2019, and elected certain practical expedients offered by the FASB, including foregoing the restatement of comparative periods upon adoption. Management also excluded short-term leases from the recognition of right-of-use asset and lease liabilities. Additionally, Huntington elected the transition relief allowed by FASB in foregoing the reassessment of the following: whether any existing contracts were or contained leases, the classification of existing leases, and the determination of initial direct costs for existing leases. - Huntington expects to recognize right-of-use assets and lease liabilities of approximately \$225 million, representing substantially all of its operating lease commitments. This estimate is based, primarily, on the present value of unpaid future minimum lease payments. Additionally, that amount is impacted by assumptions around renewals and/or extensions, and the interest rate used to discount those future lease obligations. - Existing sale and leaseback guidance, including the detailed guidance applicable to sale-leasebacks of real estate, was replaced with a new model applicable to all assets, which will apply equally to both lessees and lessors. Under the new standard, if the transaction meets sale criteria, the seller-lessee will recognize the sale based on the new revenue recognition standard when control transfers to the buyer-lessor, derecognizing the asset sold and replacing it with a right-of-use asset and lease liability for the leaseback. If the transaction is at fair value, the seller-lessee shall recognize a gain or loss on sale at that time. - Costs related to exiting an operating lease before the end of its contractual term have been historically accounted for pursuant to ASC 420, with the recognition of a liability measured at the present value of remaining lease payments reduced by any expected sublease income upon the exit of that space. ASC 842 changed the accounting for such costs, with entities evaluating the impairment of right-of-use assets using the guidance in ASC 360. Such an impairment analysis would occur once the entity commits to a plan to abandon the space, and thus may accelerate the timing of these costs. - The new standard defines initial direct costs as those that would not have been incurred if the lease had not been obtained. Certain incremental costs previously eligible for capitalization, such as internal overhead, will now be expensed.
ASU 2016-13 - Financial Instruments - Credit Losses. Issued June 2016	<ul style="list-style-type: none"> - Eliminates the probable recognition threshold for credit losses on financial assets measured at amortized cost. - Requires those financial assets to be presented at the net amount expected to be collected (i.e., net of expected credit losses). - Measurement of expected credit losses should be based on relevant information including historical experience, current conditions, and reasonable and supportable forecasts that affect the collectibility of the reported amount. 	<ul style="list-style-type: none"> - Effective for fiscal years beginning after December 15, 2019, including interim periods within those fiscal years. Early adoption is permitted for fiscal years beginning after December 15, 2018. - Adoption will be applied through a cumulative-effect adjustment to retained earnings as of the beginning of the first reporting period in which the guidance is effective. - Management intends to adopt the guidance on January 1, 2020 and has a working group comprised of teams from different disciplines including credit, finance, and risk management to evaluate the requirements of the new standard and the impact it will have on our processes. - Huntington is currently in the process of developing credit models as well as accounting, reporting, and governance processes to comply with the new credit reserve requirements.

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ASU 2017-04 - Simplifying the Test for Goodwill Impairment. Issued January 2017	<ul style="list-style-type: none"> - Simplifies the goodwill impairment test by eliminating Step 2 of the goodwill impairment process, which requires an entity to determine the implied fair value of its goodwill by assigning fair value to all its assets and liabilities. - Entities will instead recognize an impairment charge for the amount by which the carrying amount exceeds the reporting unit's fair value. - Entities will still have the option to perform the qualitative assessment for a reporting unit to determine if the quantitative impairment test is necessary. 	<ul style="list-style-type: none"> - Effective for annual and interim goodwill tests performed in fiscal years beginning after December 15, 2019. Early adoption is permitted - The amendment is not expected to have a material impact on Huntington's Consolidated Financial Statements
ASU 2018-16 - Derivatives and Hedging - Inclusion of SOFR as Benchmark Interest Rate for Hedge Accounting Purposes. Issued October 2018	<ul style="list-style-type: none"> - Permits use of the OIS rate based on SOFR as a U.S. benchmark interest rate for hedge accounting purposes under Topic 815 in addition to the U.S. Treasury, the LIBOR swap rate, the OIS rate based on the Fed Funds Effective Rate, and the SIFMA Municipal Swap Rate. 	<ul style="list-style-type: none"> - For public business entities that already have adopted the amendments in ASU 2017-12, the amendments are effective for fiscal years beginning after December 15, 2018, and interim periods within those fiscal years. - The amendments should be adopted on a prospective basis for qualifying new or redesignated hedging relationships entered into on or after the date of adoption. - Huntington will evaluate its risk management and may determine to hedge risk associated with OIS based on SOFR on case-to-case basis.
ASU 2018-20 - Narrow-Scope Improvements for Lessors Issued December 2018	<ul style="list-style-type: none"> - The amendments create a lessor practical expedient applicable to sales and other similar taxes incurred in connection with a lease, and simplify lessor accounting for lessor costs paid by the lessee. - Permits lessors, as an entity-wide accounting policy election, to present sales and other similar taxes that arise from a specific leasing transaction on a net basis. - Requires lessors to present lessor costs paid by the lessee directly to a third party on a net basis – regardless of whether the lessor knows, can determine or can reliably estimate those costs. - Requires lessors to present lessor costs paid by the lessee to the lessor (e.g. through direct reimbursement or as part of the fixed lease payments) on a gross basis 	<ul style="list-style-type: none"> - Effective date coincides with the effective date of ASU 2016-02 for Huntington (fiscal period beginning after December 15, 2018) - Huntington elected to present sales and other similar taxes that arise from specific leasing transactions on a net basis. - Management will present property taxes on a gross basis where such taxes are paid by Huntington and reimbursed by the lessee, and has assessed the impact of that change to Huntington's consolidated financial statements. - The amendment does not have a material impact on Huntington's Consolidated Financial Statements.

3. LOANS / LEASES AND ALLOWANCE FOR CREDIT LOSSES

Loans and leases which Huntington has the intent and ability to hold for the foreseeable future, or until maturity or payoff, are classified in the Consolidated Balance Sheets as loans and leases. The total balance that is recognized against loans and leases pertaining to unamortized premiums, discounts, fees, and costs, was a net premium of \$428 million and \$334 million at December 31, 2018 and 2017, respectively.

Loan and Lease Portfolio Composition

The following table provides a detailed listing of Huntington's loan and lease portfolio at December 31, 2018 and December 31, 2017.

	At December 31,	
	2018	2017
<i>(dollar amounts in millions)</i>		
Loans and leases:		
Commercial and industrial	\$ 30,605	\$ 28,107
Commercial real estate	6,842	7,225
Automobile	12,429	12,100
Home equity	9,722	10,099
Residential mortgage	10,728	9,026
RV and marine finance	3,254	2,438
Other consumer	1,320	1,122
Loans and leases	74,900	70,117
Allowance for loan and lease losses	(772)	(691)
Net loans and leases	<u>\$ 74,128</u>	<u>\$ 69,426</u>

During the fourth quarter of 2018, Huntington announced the sale of its Wisconsin branch banking operations. As a result, \$121 million of loans were transferred to loans held-for-sale on the Consolidated Balance Sheet. The sale is expected to close in the first half of 2019.

Direct Financing Leases

Huntington's loan and lease portfolio includes lease financing receivables consisting of direct financing leases on equipment, which are included in C&I loans. Net investments in lease financing receivables by category at December 31, 2018 and 2017 were as follows:

	At December 31,	
	2018	2017
<i>(dollar amounts in millions)</i>		
Commercial and industrial:		
Lease payments receivable	\$ 1,747	\$ 1,645
Estimated residual value of leased assets	726	755
Gross investment in commercial lease financing receivables	2,473	2,400
Deferred origination costs	20	18
Deferred fees	(250)	(225)
Total net investment in commercial lease financing receivables	<u>\$ 2,243</u>	<u>\$ 2,193</u>

The future lease rental payments due from customers on direct financing leases at December 31, 2018, totaled \$1.7 billion and were due as follows: \$0.6 billion in 2019, \$0.4 billion in 2020, \$0.3 billion in 2021, \$0.2 billion in 2022, \$0.1 billion in 2023, and \$0.1 billion thereafter.

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Nonaccrual and Past Due Loans

The following table presents NALs by loan class at December 31, 2018 and 2017:

<i>(dollar amounts in millions)</i>	December 31,	
	2018	2017
Commercial and industrial	\$ 188	\$ 161
Commercial real estate	15	29
Automobile	5	6
Home equity	62	68
Residential mortgage	69	84
RV and marine finance	1	1
Other consumer	—	—
Total nonaccrual loans	\$ 340	\$ 349

The amount of interest that would have been recorded under the original terms for total NAL loans was \$22 million, \$21 million, and \$24 million for 2018, 2017, and 2016, respectively. The total amount of interest recorded to interest income for these loans was \$12 million, \$18 million, and \$17 million in 2018, 2017, and 2016, respectively.

The following table presents an aging analysis of loans and leases, including past due loans and leases, by loan class at December 31, 2018 and 2017 (1):

<i>(dollar amounts in millions)</i>	December 31, 2018								
	Past Due (1)				Current	Loans Accounted for Under FVO	Total Loans and Leases	90 or more days past due and accruing	
	30-59 Days	60-89 Days	90 or more days	Total					
Commercial and industrial	\$ 72	\$ 17	\$ 51	\$ 140	\$ 30,465	\$ —	\$ 30,605	\$ 7	(2)
Commercial real estate	10	—	5	15	6,827	—	6,842	—	
Automobile	95	19	10	124	12,305	—	12,429	8	
Home equity	51	21	56	128	9,593	1	9,722	17	
Residential mortgage	108	47	168	323	10,327	78	10,728	131	(3)
RV and marine finance	12	3	2	17	3,237	—	3,254	1	
Other consumer	14	7	6	27	1,293	—	1,320	6	
Total loans and leases	\$ 362	\$ 114	\$ 298	\$ 774	\$ 74,047	\$ 79	\$ 74,900	\$ 170	

<i>(dollar amounts in millions)</i>	December 31, 2017								
	Past Due (1)				Current	Purchased Credit Impaired	Loans Accounted for Under FVO	Total Loans and Leases	90 or more days past due and accruing
	30-59 Days	60-89 Days	90 or more days	Total					
Commercial and industrial	\$ 35	\$ 14	\$ 65	\$ 114	\$ 27,954	39	—	\$ 28,107	\$ 9 (2)
Commercial real estate	10	1	11	22	7,201	2	—	7,225	3
Automobile	89	18	10	117	11,982	—	1	12,100	7
Home equity	49	19	60	128	9,969	—	2	10,099	18
Residential mortgage	129	48	118	295	8,642	—	89	9,026	72 (3)
RV and marine finance	11	3	2	16	2,421	—	1	2,438	1
Other consumer	12	5	5	22	1,100	—	—	1,122	5
Total loans and leases	\$ 335	\$ 108	\$ 271	\$ 714	\$ 69,269	\$ 41	\$ 93	\$ 70,117	\$ 115

- (1) NALs are included in this aging analysis based on the loan's past due status.
(2) Amounts include Huntington Technology Finance administrative lease delinquencies
(3) Amounts include mortgage loans insured by U.S. government agencies

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Allowance for Credit Losses

The following table presents ALLL and AULC activity by portfolio segment for the years ended December 31, 2018, 2017, and 2016:

(dollar amounts in millions)

Year ended December 31, 2018:

	Commercial	Consumer	Total
ALLL balance, beginning of period	\$ 482	\$ 209	\$ 691
Loan charge-offs	(79)	(189)	(268)
Recoveries of loans previously charged-off	65	58	123
Provision for loan and lease losses	74	152	226
ALLL balance, end of period	\$ 542	\$ 230	\$ 772
AULC balance, beginning of period	\$ 84	\$ 3	\$ 87
Provision (reduction in allowance) for unfunded loan commitments and letters of credit	10	(1)	9
AULC balance, end of period	\$ 94	\$ 2	\$ 96
ACL balance, end of period	\$ 636	\$ 232	\$ 868

Year ended December 31, 2017:

ALLL balance, beginning of period	\$ 451	\$ 187	\$ 638
Loan charge-offs	(72)	(180)	(252)
Recoveries of loans previously charged-off	41	52	93
Provision for loan and lease losses	62	150	212
ALLL balance, end of period	\$ 482	\$ 209	\$ 691
AULC balance, beginning of period	\$ 87	\$ 11	\$ 98
Provision (reduction in allowance) for unfunded loan commitments and letters of credit	(3)	(8)	(11)
AULC balance, end of period	\$ 84	\$ 3	\$ 87
ACL balance, end of period	\$ 566	\$ 212	\$ 778

Year ended December 31, 2016:

ALLL balance, beginning of period	\$ 399	\$ 199	\$ 598
Loan charge-offs	(92)	(135)	(227)
Recoveries of loans previously charged-off	73	45	118
Provision for loan and lease losses	85	84	169
Allowance for loans sold or transferred to loans held for sale	(14)	(6)	(20)
ALLL balance, end of period	\$ 451	\$ 187	\$ 638
AULC balance, beginning of period	\$ 64	\$ 8	\$ 72
Provision (reduction in allowance) for unfunded loan commitments and letters of credit	19	3	22
AULC recorded at acquisition	4	—	4
AULC balance, end of period	\$ 87	\$ 11	\$ 98
ACL balance, end of period	\$ 538	\$ 198	\$ 736

Credit Quality Indicators

To facilitate the monitoring of credit quality for commercial loans, and for purposes of determining an appropriate ACL level for these loans, Huntington utilizes the following internally defined categories of credit grades:

- *Pass* - Higher quality loans that do not fit any of the other categories described below.
- *OLEM* - The credit risk may be relatively minor yet represents a risk given certain specific circumstances. If the potential weaknesses are not monitored or mitigated, the loan may weaken or the collateral may be inadequate to protect Huntington's position in the future. For these reasons, Huntington considers the loans to be potential problem loans.
- *Substandard* - Inadequately protected loans by the borrower's ability to repay, equity, and/or the collateral pledged to secure the loan. These loans have identified weaknesses that could hinder normal repayment or collection of the debt. It is likely Huntington will sustain some loss if any identified weaknesses are not mitigated.
- *Doubtful* - Loans that have all of the weaknesses inherent in those loans classified as Substandard, with the added elements of the full collection of the loan is improbable and that the possibility of loss is high.

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Loans are generally assigned a category of "Pass" rating upon initial approval and subsequently updated as appropriate based on the borrower's financial performance.

Commercial loans categorized as OLEM, Substandard, or Doubtful are considered Criticized loans. Commercial loans categorized as Substandard or Doubtful are both considered Classified loans.

For all classes within consumer loan portfolios, loans are assigned pool level PD factors based on the FICO range within which the borrower's most recent credit bureau score falls. A credit bureau score is a credit score developed by FICO based on data provided by the credit bureaus. The credit bureau score is widely accepted as the standard measure of consumer credit risk used by lenders, regulators, rating agencies, and consumers. The higher the credit bureau score, the higher likelihood of repayment and therefore, an indicator of higher credit quality.

Huntington assesses the risk in the loan portfolio by utilizing numerous risk characteristics. The classifications described above, and also presented in the table below, represent one of those characteristics that are closely monitored in the overall credit risk management processes.

The following table presents each loan and lease class by credit quality indicator at December 31, 2018 and 2017:

		December 31, 2018				
		Credit Risk Profile by UCS Classification				
		Pass	OLEM	Substandard	Doubtful	Total
<i>(dollar amounts in millions)</i>						
Commercial and industrial	\$	28,807	\$ 518	\$ 1,269	\$ 11	\$ 30,605
Commercial real estate		6,586	181	74	1	6,842
		Credit Risk Profile by FICO Score (1), (2)				
		750+	650-749	<650	Other (3)	Total
Automobile		6,254	4,520	1,373	282	\$ 12,429
Home equity		6,098	2,975	591	56	9,720
Residential mortgage		7,159	2,801	612	78	10,650
RV and marine finance		2,074	990	105	85	3,254
Other consumer		501	633	129	57	1,320
		December 31, 2017				
		Credit Risk Profile by UCS Classification				
		Pass	OLEM	Substandard	Doubtful	Total
<i>(dollar amounts in millions)</i>						
Commercial and industrial	\$	26,268	\$ 694	\$ 1,116	\$ 29	\$ 28,107
Commercial real estate		6,909	200	115	1	7,225
		Credit Risk Profile by FICO Score (1), (2)				
		750+	650-749	<650	Other (3)	Total
Automobile		6,102	4,312	1,390	295	\$ 12,099
Home equity		6,352	3,024	617	104	10,097
Residential mortgage		5,697	2,581	605	54	8,937
RV and marine finance		1,433	863	96	45	2,437
Other consumer		428	540	143	11	1,122

(1) Excludes loans accounted for under the fair value option

(2) Reflects updated customer credit scores.

(3) Reflects deferred fees and costs, loans in process, etc

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Impaired Loans

The following tables present the balance of the ALLL attributable to loans by portfolio segment individually and collectively evaluated for impairment and the related loan and lease balance for the years ended December 31, 2018 and 2017:

(dollar amounts in millions)

ALLL at December 31, 2018

Portion of ALLL balance:

Attributable to loans individually evaluated for impairment

Attributable to loans collectively evaluated for impairment

Total ALLL balance

Loan and Lease Ending Balances at December 31, 2018 (1)

Portion of loan and lease ending balance:

Individually evaluated for impairment

Collectively evaluated for impairment

Total loans and leases evaluated for impairment

(1) Excludes loans accounted for under the fair value option.

Commercial	Consumer	Total
\$ 33	\$ 10	\$ 43
509	220	729
<u>\$ 542</u>	<u>\$ 230</u>	<u>\$ 772</u>
516	591	1,107
36,931	36,783	73,714
<u>\$ 37,447</u>	<u>\$ 37,374</u>	<u>\$ 74,821</u>

(dollar amounts in millions)

ALLL at December 31, 2017

Portion of ALLL balance:

Attributable to loans individually evaluated for impairment

Attributable to loans collectively evaluated for impairment

Total ALLL balance:

Loan and Lease Ending Balances at December 31, 2017 (1)

Portion of loan and lease ending balances:

Attributable to purchased credit-impaired loans

Individually evaluated for impairment

Collectively evaluated for impairment

Total loans and leases evaluated for impairment

(1) Excludes loans accounted for under the fair value option.

Commercial	Consumer	Total
\$ 32	\$ 9	\$ 41
450	200	650
<u>\$ 482</u>	<u>\$ 209</u>	<u>\$ 691</u>
41	—	41
607	616	1,223
34,684	34,076	68,760
<u>\$ 35,332</u>	<u>\$ 34,692</u>	<u>\$ 70,024</u>

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The following tables present by class the ending, unpaid principal balance, and the related ALLL, along with the average balance and interest income recognized only for impaired loans and leases for the years ended December 31, 2018 and 2017 (1):

	December 31, 2018			Year Ended December 31, 2018	
	Ending Balance	Unpaid Principal Balance (6)	Related Allowance (7)	Average Balance	Interest Income Recognized
<i>(dollar amounts in millions)</i>					
With no related allowance recorded:					
Commercial and industrial	\$ 224	\$ 261	\$ —	\$ 256	\$ 22
Commercial real estate	36	45	—	47	8
With an allowance recorded:					
Commercial and industrial	221	240	31	272	11
Commercial real estate	35	39	2	45	2
Automobile	38	42	2	37	2
Home equity	314	356	10	326	14
Residential mortgage	287	323	4	297	11
RV and marine finance	2	3	—	2	—
Other consumer	9	9	3	8	—
Total					
Commercial and industrial (3)	445	501	31	528	33
Commercial real estate (4)	71	84	2	92	10
Automobile (2)	38	42	2	37	2
Home equity (5)	314	356	10	326	14
Residential mortgage (5)	287	323	4	297	11
RV and marine finance (2)	2	3	—	2	—
Other consumer (2)	9	9	3	8	—

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	December 31, 2017			Year Ended December 31, 2017	
	Ending Balance	Unpaid Principal Balance (6)	Related Allowance (7)	Average Balance	Interest Income Recognized
<i>(dollar amounts in millions)</i>					
With no related allowance recorded:					
Commercial and industrial	\$ 284	\$ 311	\$ —	\$ 206	\$ 12
Commercial real estate	56	81	—	64	8
With an allowance recorded:					
Commercial and industrial	257	280	29	292	16
Commercial real estate	51	51	3	52	2
Automobile	36	40	2	33	2
Home equity	334	385	14	329	15
Residential mortgage	308	338	4	325	12
RV and marine finance	2	3	—	1	—
Other consumer	8	8	2	5	—
Total					
Commercial and industrial (3)	541	591	29	498	28
Commercial real estate (4)	107	132	3	116	10
Automobile (2)	36	40	2	33	2
Home equity (5)	334	385	14	329	15
Residential mortgage (5)	308	338	4	325	12
RV and marine finance (2)	2	3	—	1	—
Other consumer (2)	8	8	2	5	—

(1) These tables do not include loans fully charged-off.

(2) All automobile, RV and marine finance and other consumer impaired loans included in these tables are considered impaired due to their status as a TDR.

(3) At December 31, 2018 and December 31, 2017, C&I loans of \$366 million and \$382 million, respectively, were considered impaired due to their status as a TDR.

(4) At December 31, 2018 and December 31, 2017, CRE loans of \$60 million and \$93 million, respectively, were considered impaired due to their status as a TDR.

(5) Includes home equity and residential mortgages considered impaired due to collateral dependent designation associated with their non-accrual status as well as home equity and mortgage loans considered impaired due to their status as a TDR.

(6) The differences between the ending balance and unpaid principal balance amounts primarily represent partial charge-offs.

(7) Impaired loans in the consumer portfolio are evaluated in pools and not at the loan level. Thus, these loans do not have an individually assigned allowance and as such all are classified as with an allowance recorded in the tables above.

TDR Loans

The amount of interest that would have been recorded under the original terms for total accruing TDR loans was \$51 million, \$49 million, and \$49 million for 2018, 2017, and 2016, respectively. The total amount of actual interest recorded to interest income for these loans was \$48 million, \$45 million, and \$40 million for 2018, 2017, and 2016, respectively.

TDR Concession Types

The Company's standards relating to loan modifications consider, among other factors, minimum verified income requirements, cash flow analyses, and collateral valuations. Each potential loan modification is reviewed individually and the terms of the loan are modified to meet a borrower's specific circumstances at a point in time. All commercial TDRs are reviewed and approved by our SAD.

Following is a description of TDRs by the different loan types:

Commercial loan TDRs – Our strategy involving commercial TDR borrowers includes working with these borrowers to allow them to refinance elsewhere, as well as allow them time to improve their financial position and remain a Huntington customer through refinancing their notes according to market terms and conditions in the future. A subsequent refinancing or modification of a loan may occur when either the loan matures according to the terms of the TDR-modified agreement or the borrower requests a change to the loan agreements. At that time, the loan is evaluated to determine if the borrower is creditworthy. It is subjected to the normal underwriting standards and processes for other similar credit extensions, both new and existing. The refinanced note is evaluated to determine if it is considered a new loan or a continuation of the prior loan. A new loan is considered for removal of the TDR designation, whereas a continuation of the prior note requires a continuation of the TDR designation. In order for a TDR designation to be removed, the borrower must no longer be experiencing financial difficulties and the terms of the refinanced loan must not represent a concession.

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Consumer loan TDRs – Residential mortgage TDRs represent loan modifications associated with traditional first-lien mortgage loans in which a concession has been provided to the borrower. The primary concessions given to residential mortgage borrowers are amortization or maturity date changes and interest rate reductions. Residential mortgages identified as TDRs involve borrowers unable to refinance their mortgages through the Company's normal mortgage origination channels or through other independent sources. Some, but not all, of the loans may be delinquent. The Company may make similar interest rate, term, and principal concessions for Automobile, Home Equity, RV and Marine Finance and Other Consumer loan TDRs:

TDR Impact on Credit Quality

Huntington's ALLL is largely determined by risk ratings assigned to commercial loans, updated borrower credit scores on consumer loans, and borrower delinquency history in both the commercial and consumer portfolios. These risk ratings and credit scores consider the default history of the borrower, including payment redefaults. As such, the provision for credit losses is impacted primarily by changes in borrower payment performance rather than the TDR classification. TDRs can be classified as either accrual or nonaccrual loans. Nonaccrual TDRs are included in NALs whereas accruing TDRs are excluded from NALs as it is probable that all contractual principal and interest due under the restructured terms will be collected.

The Company's TDRs may include multiple concessions and the disclosure classifications are presented based on the primary concession provided to the borrower. The majority of the concessions for the C&I and CRE portfolios are the extension of the maturity date, but could also include an increase in the interest rate. In these instances, the primary concession is the maturity date extension.

TDR concessions may also result in the reduction of the ALLL within the C&I and CRE portfolios. This reduction is derived from payments and the resulting application of the reserve calculation within the ALLL. The transaction reserve for non-TDR C&I and CRE loans is calculated based upon several estimated factors, such as PD and LGD. Upon the occurrence of a TDR in the C&I and CRE portfolios, the reserve is measured based on discounted expected cash flows or collateral value, less anticipated selling costs, of the modified loan in accordance with ASC 310-10. The resulting TDR ALLL calculation often results in a lower ALLL amount because (1) the discounted expected cash flows or collateral value, less anticipated selling costs, indicate a lower estimated loss, (2) if the modification includes a rate increase, the discounting of the cash flows on the modified loan, using the pre-modification interest rate, exceeds the carrying value of the loan, or (3) payments may occur as part of the modification. Alternatively, the ALLL for C&I and CRE loans may increase as a result of the modification, as the discounted cash flow analysis may indicate additional reserves are required.

TDR concessions on consumer loans may increase the ALLL. The concessions made to these borrowers often include interest rate reductions, and therefore, the TDR ALLL calculation results in a greater ALLL compared with the non-TDR calculation as the reserve is measured based on the estimation of the discounted expected cash flows or collateral value, less anticipated selling costs, on the modified loan in accordance with ASC 310-10. The resulting TDR ALLL calculation often results in a higher ALLL amount because (1) the discounted expected cash flows or collateral value, less anticipated selling costs, indicate a higher estimated loss or, (2) due to the rate decrease, the discounting of the cash flows on the modified loan, using the pre-modification interest rate, indicates a reduction in the present value of expected cash flows or collateral value, less anticipated selling costs. However, in certain instances, the ALLL may decrease as a result of payments made in connection with the modification.

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The following table presents, by class and modification type, the number of contracts, post-modification outstanding balance, and the financial effects of the modification for the years ended December 31, 2018 and 2017.

New Troubled Debt Restructurings (1)						
Year Ended December 31, 2018						
<i>(dollar amounts in millions)</i>	Number of Contracts	Post-modification Outstanding Recorded Investment (2)				Total
		Interest rate reduction	Amortization or maturity date change	Chapter 7 bankruptcy	Other	
Commercial and industrial	725	\$ —	\$ 352	\$ —	\$ —	\$ 352
Commercial real estate	102	—	82	—	—	82
Automobile	2,867	—	15	8	—	23
Home equity	602	—	25	11	—	36
Residential mortgage	345	—	34	3	—	37
RV and marine finance	117	—	—	1	—	1
Other consumer	1,633	8	—	—	—	8
Total new TDRs	6,391	\$ 8	\$ 508	\$ 23	\$ —	\$ 539

Year Ended December 31, 2017						
<i>(dollar amounts in millions)</i>	Number of Contracts	Post-modification Outstanding Recorded Investment (2)				Total
		Interest rate reduction	Amortization or maturity date change	Chapter 7 bankruptcy	Other	
Commercial and industrial	1,047	\$ 1	\$ 600	\$ —	\$ —	\$ 601
Commercial real estate	111	—	122	—	—	122
Automobile	2,741	—	15	8	—	23
Home equity	922	2	33	11	4	50
Residential mortgage	453	—	40	7	2	49
RV and marine finance	131	—	1	1	—	2
Other consumer	1,340	—	6	—	—	6
Total new TDRs	6,745	\$ 3	\$ 817	\$ 27	\$ 6	\$ 853

(1) TDRs may include multiple concessions. The disclosure classifications are based on the primary concession provided to the borrower.

(2) Post-modification balances approximate pre-modification balances. The aggregate amount of charge-offs as a result of a restructuring are not significant.

The financial effects of modification represent the financial impact via provision (recovery) for loan and lease losses as a result of the modification and were \$(15) million and \$(13) million at December 31, 2018 and December 31, 2017, respectively.

Pledged Loans and Leases

The Bank has access to the Federal Reserve's discount window and advances from the FHLB of Cincinnati. As of December 31, 2018 and 2017, these borrowings and advances are secured by \$46.5 billion and \$31.7 billion of loans and securities, respectively.

4. INVESTMENT SECURITIES AND OTHER SECURITIES

Debt securities purchased in which Huntington has the positive intent and ability to hold to their maturity are classified as held-to-maturity securities. All other debt and equity securities are classified as available-for-sale or other securities.

The following tables provide amortized cost, fair value, and gross unrealized gains and losses by investment category at December 31, 2018 and 2017:

	Amortized Cost	Unrealized		Fair Value
		Gross Gains	Gross Losses	
<i>(dollar amounts in millions)</i>				
December 31, 2018				
Available-for-sale securities:				
U.S. Treasury	\$ 5	\$ —	\$ —	\$ 5
Federal agencies:				
Residential CMO	7,185	15	(201)	6,999
Residential MBS	1,261	9	(15)	1,255
Commercial MBS	1,641	—	(58)	1,583
Other agencies	128	—	(2)	126
Total U.S. Treasury, federal agency and other agency securities	10,220	24	(276)	9,968
Municipal securities	3,512	6	(78)	3,440
Asset-backed securities	318	1	(4)	315
Corporate debt	54	—	(1)	53
Other securities/Sovereign debt	4	—	—	4
Total available-for-sale securities	\$ 14,108	\$ 31	\$ (359)	\$ 13,780
Held-to-maturity securities:				
Federal agencies:				
Residential CMO	\$ 2,124	\$ —	\$ (47)	\$ 2,077
Residential MBS	1,851	2	(42)	1,811
Commercial MBS	4,235	—	(186)	4,049
Other agencies	350	—	(6)	344
Total federal agency and other agency securities	8,560	2	(281)	8,281
Municipal securities	5	—	—	5
Total held-to-maturity securities	\$ 8,565	\$ 2	\$ (281)	\$ 8,286
Other securities, at cost:				
Non-marketable equity securities:				
Federal Home Loan Bank stock	\$ 248	\$ —	\$ —	\$ 248
Federal Reserve Bank stock	295	—	—	295
Other securities, at fair value				
Mutual funds	20	—	—	20
Marketable equity securities	1	1	—	2
Total other securities	\$ 564	\$ 1	\$ —	\$ 565

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(dollar amounts in millions)

December 31, 2017

Available-for-sale securities:

	Amortized Cost	Unrealized		Fair Value
		Gross Gains	Gross Losses	
U.S. Treasury	\$ 5	\$ —	\$ —	\$ 5
Federal agencies:				
Residential CMO	6,661	1	(178)	6,484
Residential MBS	1,371	1	(5)	1,367
Commercial MBS	2,539	—	(52)	2,487
Other agencies	69	1	—	70
Total U.S. Treasury, federal agency and other agency securities	10,645	3	(235)	10,413
Municipal securities	3,892	21	(35)	3,878
Asset-backed securities	482	1	(16)	467
Corporate debt	106	3	—	109
Other securities/Sovereign debt	2	—	—	2
Total available-for-sale securities	\$ 15,127	\$ 28	\$ (286)	\$ 14,869

Held-to-maturity securities:

Federal agencies:				
Residential CMO	\$ 3,714	\$ 1	\$ (58)	\$ 3,657
Residential MBS	1,049	2	(7)	1,044
Commercial MBS	3,791	—	(55)	3,736
Other agencies	532	1	(4)	529
Total federal agency and other agency securities	9,086	4	(124)	8,966
Municipal securities	5	—	—	5
Total held-to-maturity securities	\$ 9,091	\$ 4	\$ (124)	\$ 8,971

Other securities, at cost:

Non-marketable equity securities:				
Federal Home Loan Bank stock	\$ 287	\$ —	\$ —	\$ 287
Federal Reserve Bank stock	294	—	—	294
Other securities, at fair value				
Mutual funds	18	—	—	18
Marketable equity securities	1	—	—	1
Total other securities	\$ 600	\$ —	\$ —	\$ 600

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The following table provides the amortized cost and fair value of securities by contractual maturity at December 31, 2018. Expected maturities may differ from contractual maturities as issuers may have the right to call or prepay obligations with or without incurring penalties

	2018	
	Amortized Cost	Fair Value
<i>(dollar amounts in millions)</i>		
Available-for-sale securities:		
Under 1 year	\$ 186	\$ 185
After 1 year through 5 years	1,057	1,039
After 5 years through 10 years	1,838	1,802
After 10 years	11,027	10,754
Total available-for-sale securities	<u>\$ 14,108</u>	<u>\$ 13,780</u>
Held-to-maturity securities:		
Under 1 year	\$ —	\$ —
After 1 year through 5 years	11	11
After 5 years through 10 years	362	356
After 10 years	8,192	7,919
Total held-to-maturity securities	<u>\$ 8,565</u>	<u>\$ 8,286</u>

The following tables provide detail on investment securities with unrealized losses aggregated by investment category and the length of time the individual securities have been in a continuous loss position at December 31, 2018 and 2017:

	Less than 12 Months		Over 12 Months		Total	
	Fair Value	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses
<i>(dollar amounts in millions)</i>						
December 31, 2018						
Available-for-sale securities:						
Federal agencies:						
Residential CMO	\$ 425	\$ (3)	\$ 5,943	\$ (198)	\$ 6,368	\$ (201)
Residential MBS	259	(6)	319	(9)	578	(15)
Commercial MBS	10	—	1,573	(58)	1,583	(58)
Other agencies	—	—	124	(2)	124	(2)
Total federal agency and other agency securities	694	(9)	7,959	(267)	8,653	(276)
Municipal securities	1,425	(24)	1,602	(54)	3,027	(78)
Asset-backed securities	95	(2)	117	(2)	212	(4)
Corporate debt	40	—	1	(1)	41	(1)
Total temporarily impaired securities	<u>\$ 2,254</u>	<u>\$ (35)</u>	<u>\$ 9,679</u>	<u>\$ (324)</u>	<u>\$ 11,933</u>	<u>\$ (359)</u>
Held-to-maturity securities:						
Federal agencies:						
Residential CMO	\$ 12	\$ —	\$ 2,004	\$ (47)	\$ 2,016	\$ (47)
Residential MBS	16	—	1,457	(42)	1,473	(42)
Commercial MBS	—	—	4,041	(186)	4,041	(186)
Other agencies	113	(2)	205	(4)	318	(6)
Total federal agency and other agency securities	141	(2)	7,707	(279)	7,848	(281)
Municipal securities	—	—	4	—	4	—
Total temporarily impaired securities	<u>\$ 141</u>	<u>\$ (2)</u>	<u>\$ 7,711</u>	<u>\$ (279)</u>	<u>\$ 7,852</u>	<u>\$ (281)</u>

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	Less than 12 Months		Over 12 Months		Total	
	Fair Value	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses
<i>(dollar amounts in millions)</i>						
December 31, 2017						
Available-for-sale securities:						
Federal agencies:						
Residential CMO	\$ 1,660	\$ (19)	\$ 4,520	\$ (159)	\$ 6,180	\$ (178)
Residential MBS	1,078	(5)	11	—	1,089	(5)
Commercial MBS	960	(15)	1,527	(37)	2,487	(52)
Other agencies	39	—	—	—	39	—
Total federal agency and other agency securities	3,737	(39)	6,058	(196)	9,795	(235)
Municipal securities	1,681	(21)	497	(14)	2,178	(35)
Asset-backed securities	127	(1)	173	(15)	300	(16)
Total temporarily impaired securities	\$ 5,545	\$ (61)	\$ 6,728	\$ (225)	\$ 12,273	\$ (286)
Held-to-maturity securities:						
Federal agencies:						
Residential CMO	\$ 2,369	\$ (26)	\$ 1,019	\$ (32)	\$ 3,388	\$ (58)
Residential MBS	974	(7)	—	—	974	(7)
Commercial MBS	3,456	(49)	253	(6)	3,709	(55)
Other agencies	249	(2)	139	(2)	388	(4)
Total federal agency and other agency securities	7,048	(84)	1,411	(40)	8,459	(124)
Municipal securities	—	—	5	—	5	—
Total temporarily impaired securities	\$ 7,048	\$ (84)	\$ 1,416	\$ (40)	\$ 8,464	\$ (124)

Upon adoption of ASU 2017-12, Huntington transferred \$2.8 billion of securities eligible to be hedged under the last-of-layer method from the HTM portfolio to the AFS portfolio. At the time of the transfer, \$26 million of unrealized losses were recognized in OCI. Concurrently, Huntington transferred \$2.7 billion of securities from the AFS portfolio to the HTM portfolio. At the time of the transfer, AOCI included \$56 million of unrealized losses attributed to these securities. This loss will be amortized into interest income over the remaining life of the securities.

At December 31, 2018, the carrying value of investment securities pledged to secure public and trust deposits, trading account liabilities, U.S. Treasury demand notes, and security repurchase agreements totaled \$4.5 billion. There were no securities of a single issuer, which are not governmental or government-sponsored, that exceeded 10% of shareholders' equity at December 31, 2018.

The following table is a summary of realized securities gains and losses for the years ended December 31, 2018, 2017, and 2016:

	Year Ended December 31,		
	2018	2017	2016
<i>(dollar amounts in millions)</i>			
Gross gains on sales of securities	\$ 7	\$ 10	\$ 23
Gross (losses) on sales of securities	(28)	(10)	(21)
Net gain (loss) on sales of securities	\$ (21)	\$ —	\$ 2
OTTI recognized in earnings	—	(4)	(2)
Net securities (losses)	\$ (21)	\$ (4)	\$ —

Security Impairment

Huntington evaluates the securities portfolio for impairment on a quarterly basis. As of December 31, 2018, the Company has evaluated available-for-sale and held-to-maturity securities with gross unrealized losses for impairment and concluded no OTTI is required.

Other securities that are carried at cost are reviewed at least annually for impairment, with valuation adjustments recognized in other noninterest income. As of December 31, 2018, the Company concluded no impairment is required.

5. MORTGAGE LOAN SALES AND SERVICING RIGHTS

Residential Mortgage Portfolio

The following table summarizes activity relating to residential mortgage loans sold with servicing retained for the years ended December 31, 2018, 2017, and 2016:

<i>(dollar amounts in millions)</i>	Year Ended December 31,		
	2018	2017	2016
Residential mortgage loans sold with servicing retained	\$ 3,846	\$ 3,985	\$ 3,632
Pretax gains resulting from above loan sales (1)	87	99	97

(1) Recorded in mortgage banking income.

The following table summarizes the changes in MSRs recorded using the amortization method for the years ended December 31, 2018 and 2017:

<i>(dollar amounts in millions)</i>	2018	2017
Carrying value, beginning of year	\$ 191	\$ 172
New servicing assets created	44	44
Impairment recovery (charge)	6	1
Amortization and other	(30)	(26)
Carrying value, end of year	\$ 211	\$ 191
Fair value, end of year	\$ 212	\$ 191
Weighted-average life (years)	6.7	7.1

MSRs do not trade in an active, open market with readily observable prices. Therefore, the fair value of MSRs is estimated using a discounted future cash flow model. Changes in the assumptions used may have a significant impact on the valuation of MSRs. MSR values are highly sensitive to movement in interest rates as expected future net servicing income depends on the projected outstanding principal balances of the underlying loans, which can be greatly impacted by the level of prepayments.

For MSRs under the amortization method, a summary of key assumptions and the sensitivity of the MSR value to changes in these assumptions at December 31, 2018, and 2017 follows:

<i>(dollar amounts in millions)</i>	December 31, 2018			December 31, 2017		
	Actual	Decline in fair value due to		Actual	Decline in fair value due to	
		10% adverse change	20% adverse change		10% adverse change	20% adverse change
Constant prepayment rate (annualized)	9.40 %	\$ (6)	\$ (12)	8.30 %	\$ (5)	\$ (10)
Spread over forward interest rate swap rates	934 bps	(7)	(13)	1,049 bps	(7)	(13)

Additionally, Huntington held MSRs recorded using the fair value method of \$10 million and \$11 million at December 31, 2018 and 2017, respectively. The change in fair value representing time decay, payoffs and changes in valuation inputs and assumptions for the years ended December 31, 2018 and 2017 was \$1 million and \$3 million, respectively.

Total servicing, late and other ancillary fees included in mortgage banking income was \$60 million, \$56 million, and \$50 million for the years ended December 31, 2018, 2017, and 2016, respectively. The unpaid principal balance of residential mortgage loans serviced for third parties was \$21.0 billion, \$19.8 billion, and \$18.9 billion at December 31, 2018, 2017, and 2016, respectively.

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6. GOODWILL AND OTHER INTANGIBLE ASSETS

Business segments are based on segment leadership structure, which reflects how segment performance is monitored and assessed. We have four major business segments: Consumer and Business Banking, Commercial Banking, Vehicle Finance, and Regional Banking and The Huntington Private Client Group (RBHPCG). The Treasury / Other function includes technology and operations, other unallocated assets, liabilities, revenue, and expense.

A rollforward of goodwill by business segment for the years ended December 31, 2018 and 2017, is presented in the table below:

<i>(dollar amounts in millions)</i>	Consumer & Business Banking	Commercial Banking	Vehicle Finance	RBHPCG	Treasury/ Other	Huntington Consolidated
Balance, January 1, 2017	\$ 1,398	\$ 453	\$ —	\$ 142	\$ —	\$ 1,993
Adjustments	—	(28)	—	28	—	—
Balance, December 31, 2017	1,398	425	—	170	—	1,993
Goodwill acquired during the period	—	1	—	—	—	1
Adjustments	(5)	—	—	—	—	(5)
Balance, December 31, 2018	\$ 1,393	\$ 426	\$ —	\$ 170	\$ —	\$ 1,989

Huntington announced a change in its executive leadership team, which became effective at the end of 2017. As a result, Commercial Real Estate is now included as an operating unit in the Commercial Banking segment. During the 2017 second quarter, the previously reported Home Lending segment was included as an operating unit within the Consumer and Business Banking segment, and the Insurance operating unit previously included in Commercial Banking was realigned to RBHPCG. As a result of these changes, Huntington reclassified a net \$28 million of goodwill from the Commercial Banking segment to the RBHPCG segment.

On October 1, 2018, Huntington completed its acquisition of HSE. As part of the transaction, Huntington recorded \$1 million of goodwill.

During the fourth quarter of 2018, Huntington reclassified \$5 million of goodwill in the Consumer & Business Banking segment related to the held for sale disposal group.

Goodwill is not amortized but is evaluated for impairment on an annual basis at October 1 of each year or whenever events or changes in circumstances indicate the carrying value may not be recoverable. No impairment was recorded in 2018 or 2017.

At December 31, 2018 and 2017, Huntington's other intangible assets consisted of the following:

<i>(dollar amounts in millions)</i>	Gross Carrying Amount	Accumulated Amortization	Net Carrying Value
December 31, 2018			
Core deposit intangible	\$ 314	\$ (93)	\$ 221
Customer relationship	182	(122)	60
Total other intangible assets	\$ 496	\$ (215)	\$ 281
December 31, 2017			
Core deposit intangible	\$ 325	\$ (61)	\$ 264
Customer relationship	190	(108)	82
Total other intangible assets	\$ 515	\$ (169)	\$ 346

The estimated amortization expense of other intangible assets for the next five years is as follows:

<i>(dollar amounts in millions)</i>	Amortization Expense
2019	\$ 49
2020	41
2021	38
2022	36
2023	34

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7. PREMISES AND EQUIPMENT

Premises and equipment were comprised of the following at December 31, 2018 and 2017:

<i>(dollar amounts in millions)</i>	At December 31,	
	2018	2017
Land and land improvements	\$ 188	\$ 193
Buildings	579	563
Leasehold improvements	199	240
Equipment	739	746
Total premises and equipment	1,705	1,742
Less accumulated depreciation and amortization	(915)	(878)
Net premises and equipment	\$ 790	\$ 864

Depreciation and amortization charged to expense and rental income credited to net occupancy expense for the three years ended December 31, 2018, 2017, and 2016 were:

<i>(dollar amounts in millions)</i>	2018	2017	2016
Total depreciation and amortization of premises and equipment	\$ 130	\$ 123	\$ 126
Rental income credited to occupancy expense	13	14	13

8. SHORT-TERM BORROWINGS

Borrowings with original maturities of one year or less are classified as short-term and were comprised of the following at December 31, 2018 and 2017:

<i>(dollar amounts in millions)</i>	At December 31,	
	2018	2017
Federal funds purchased and securities sold under agreements to repurchase	\$ 2,004	\$ 1,318
Federal Home Loan Bank advances	—	3,725
Other borrowings	13	13
Total short-term borrowings	\$ 2,017	\$ 5,056

Other borrowings consist of borrowings from the U.S. Treasury and other notes payable.

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9. LONG-TERM DEBT

Huntington's long-term debt consisted of the following:

	At December 31,	
	2018	2017
<i>(dollar amounts in millions)</i>		
The Parent Company:		
Senior Notes:		
3.19% Huntington Bancshares Incorporated medium-term notes due 2021	\$ 969	\$ 969
2.33% Huntington Bancshares Incorporated senior notes due 2022	946	953
4.00% Huntington Bancshares Incorporated senior notes due 2025	507	—
2.64% Huntington Bancshares Incorporated senior notes due 2018	—	399
Subordinated Notes:		
7.00% Huntington Bancshares Incorporated subordinated notes due 2020	305	312
3.55% Huntington Bancshares Incorporated subordinated notes due 2023	239	245
Sky Financial Capital Trust IV 4.20% junior subordinated debentures due 2036 (1)	74	74
Sky Financial Capital Trust III 4.20% junior subordinated debentures due 2036 (1)	72	72
Huntington Capital I Trust Preferred 3.50% junior subordinated debentures due 2027 (2)	69	69
Huntington Capital II Trust Preferred 3.42% junior subordinated debentures due 2028 (3)	31	31
Camco Financial Statutory Trust I 4.13% due 2037 (4)	4	4
Total notes issued by the parent	3,216	3,128
The Bank:		
Senior Notes:		
3.55% Huntington National Bank senior notes due 2023	756	—
3.25% Huntington National Bank senior notes due 2021	750	—
2.47% Huntington National Bank senior notes due 2020	692	694
2.55% Huntington National Bank senior notes due 2022	672	685
2.23% Huntington National Bank senior notes due 2019	498	497
2.43% Huntington National Bank senior notes due 2020	493	498
2.97% Huntington National Bank senior notes due 2020	491	492
3.31% Huntington National Bank senior notes due 2020 (5)	300	300
2.24% Huntington National Bank senior notes due 2018	—	844
2.10% Huntington National Bank senior notes due 2018	—	748
1.75% Huntington National Bank senior notes due 2018	—	496
5.04% Huntington National Bank medium-term notes due 2018	—	35
Subordinated Notes:		
3.86% Huntington National Bank subordinated notes due 2026	229	238
5.45% Huntington National Bank subordinated notes due 2019	76	77
6.67% Huntington National Bank subordinated notes due 2018	—	129
Total notes issued by the bank	4,957	5,733
FHLB Advances:		
3.12% weighted average rate, varying maturities greater than one year	6	7
Other:		
Huntington Technology Finance nonrecourse debt, 4.19% effective interest rate, varying maturities	322	263
4.68% Huntington Preferred Capital II - Class F securities (6)	74	75
4.68% Huntington Preferred Capital II - Class G securities (6)	50	—
Total other	446	338
Total long-term debt	\$ 8,625	\$ 9,206

- (1) Variable effective rate at December 31, 2018, based on three-month LIBOR + 1.40%
- (2) Variable effective rate at December 31, 2018, based on three-month LIBOR + 0.70%
- (3) Variable effective rate at December 31, 2018, based on three-month LIBOR + 0.625%
- (4) Variable effective rate at December 31, 2018, based on three-month LIBOR + 1.33%
- (5) Variable effective rate at December 31, 2018, based on three-month LIBOR + 0.51%
- (6) Variable effective rate at December 31, 2018, based on three-month LIBOR + 1.88%

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Amounts above are net of unamortized discounts and adjustments related to hedging with derivative financial instruments. The derivative instruments, principally interest rate swaps, are used to hedge interest rate risk of certain fixed-rate debt by converting the debt to a variable rate. See Note 18 for more information regarding such financial instruments.

In May 2018, Huntington issued \$500 million of senior notes at 99.686% of face value. The senior notes mature on May 15, 2025 and have a fixed coupon rate of 4.00%.

In May 2018, the Bank issued \$750 million of senior notes at 99.774% of face value. The senior notes mature on May 14, 2021 and have a fixed coupon rate of 3.25%.

In August 2018, the Bank issued \$750 million of senior notes at 99.780% of face value. The senior notes mature on October 6, 2023 and have a fixed coupon rate of 3.55%.

In March 2017, the Bank issued \$700 million of senior notes at 99.994% of face value. The senior notes mature on March 10, 2020 and have a fixed coupon rate of 2.375%. The senior notes may be redeemed one month prior to the maturity date at 100% of principal plus accrued and unpaid interest. Also, in March 2017, the Bank issued \$300 million of senior notes at 100% of face value.

In August 2017, the Bank issued \$700 million of senior notes at 99.762% of face value. The senior notes mature on August 7, 2022 and have a fixed coupon rate of 2.50%.

Long-term debt maturities for the next five years and thereafter are as follows:

<i>(dollar amounts in millions)</i>	2019	2020	2021	2022	2023	Thereafter	Total
The Parent Company:							
Senior notes	\$ —	\$ —	\$ 1,000	\$ 1,000	\$ —	\$ 500	\$ 2,500
Subordinated notes	—	300	—	—	250	253	803
The Bank:							
Senior notes	500	2,000	750	700	750	—	4,700
Subordinated notes	76	—	—	—	—	250	326
FHLB Advances	1	2	—	1	1	1	6
Other	16	74	85	163	108	—	446
Total	\$ 593	\$ 2,376	\$ 1,835	\$ 1,864	\$ 1,109	\$ 1,004	\$ 8,781

These maturities are based upon the par values of the long-term debt.

The terms of the long-term debt obligations contain various restrictive covenants including limitations on the acquisition of additional debt in excess of specified levels, dividend payments, and the disposition of subsidiaries. As of December 31, 2018, Huntington was in compliance with all such covenants.

10. OTHER COMPREHENSIVE INCOME

The components of Huntington's OCI in the three years ended December 31, 2018, 2017, and 2016, were as follows:

<i>(dollar amounts in millions)</i>	2018		
	Pretax	Tax (expense) Benefit	After-tax
Unrealized holding gains (losses) on available-for-sale debt securities arising during the period	\$ (151)	\$ 35	\$ (116)
Less: Reclassification adjustment for net losses (gains) included in net income	41	(9)	32
Net change in unrealized holding gains (losses) on available-for-sale debt securities	(110)	26	(84)
Net change in pension and other post-retirement obligations	4	—	4
Total other comprehensive income (loss)	\$ (106)	\$ 26	\$ (80)

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	2017		
	Pretax	Tax (expense) Benefit	After-tax
<i>(dollar amounts in millions)</i>			
Noncredit-related impairment recoveries (losses) on debt securities not expected to be sold	\$ 4	\$ (2)	\$ 2
Unrealized holding gains (losses) on available-for-sale debt securities arising during the period	(87)	31	(56)
Less: Reclassification adjustment for net losses (gains) included in net income	26	(9)	17
Net change in unrealized holding gains (losses) on available-for-sale debt securities	(57)	20	(37)
Net change in unrealized holding gains (losses) on available-for-sale equity securities	1	(1)	—
Unrealized gains (losses) on derivatives used in cash flow hedging relationships arising during the period	3	(1)	2
Less: Reclassification adjustment for net (gains) losses included in net income	1	—	1
Net change in unrealized gains (losses) on derivatives used in cash flow hedging relationships	4	(1)	3
Net change in pension and other post-retirement obligations	—	—	—
Total other comprehensive income (loss)	\$ (52)	\$ 18	\$ (34)

	2016		
	Pretax	Tax (expense) Benefit	After-tax
<i>(dollar amounts in millions)</i>			
Noncredit-related impairment recoveries (losses) on debt securities not expected to be sold	\$ 1	\$ —	\$ 1
Unrealized holding gains (losses) on available-for-sale debt securities arising during the period	(203)	70	(133)
Less: Reclassification adjustment for net gains (losses) included in net income	(107)	38	(69)
Net change in unrealized holding gains (losses) on available-for-sale debt securities	(309)	108	(201)
Unrealized gains and losses on derivatives used in cash flow hedging relationships arising during the period	2	(1)	1
Net change in unrealized gains (losses) on derivatives used in cash flow hedging relationships	2	(1)	1
Net change in pension and post-retirement obligations	38	(13)	25
Total other comprehensive income (loss)	\$ (269)	\$ 94	\$ (175)

Activity in accumulated OCI for the two years ended December 31, 2018 and 2017 were as follows:

	Unrealized gains (losses) on debt securities (1)	Unrealized gains (losses) on cash flow hedging derivatives	Unrealized gains (losses) for pension and other post-retirement obligations	Total
<i>(dollar amounts in millions)</i>				
December 31, 2016	\$ (193)	\$ (3)	\$ (205)	\$ (401)
Other comprehensive income before reclassifications	(54)	2	(10)	(62)
Amounts reclassified from accumulated OCI to earnings	17	1	10	28
Period change	(37)	3	—	(34)
TCJA, Reclassification from accumulated OCI to retained earnings	(48)	—	(45)	(93)
December 31, 2017	(278)	—	(250)	(528)
Cumulative-effect adjustments (ASU 2016-01)	(1)	—	—	(1)
Other comprehensive income before reclassifications	(116)	—	—	(116)
Amounts reclassified from accumulated OCI to earnings	32	—	4	36
Period change	(84)	—	4	(80)
December 31, 2018	\$ (363)	\$ —	\$ (246)	\$ (609)

- (1) AOCI amounts at December 31, 2018, 2017, and 2016 include \$137 million, \$95 million, and \$82 million of net unrealized losses (before any deferred tax benefits) on securities transferred from the available-for-sale securities portfolio to the held-to-maturity securities portfolio. The net unrealized losses will be recognized in earnings over the remaining life of the security using the effective interest method.

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The following table presents the reclassification adjustments out of accumulated OCI included in net income and the impacted line items as listed on the Consolidated Statements of Income for the years ended December 31, 2018 and 2017:

Accumulated OCI components (dollar amounts in millions)	Reclassifications out of accumulated OCI		Location of net gain (loss) reclassified from accumulated OCI into earnings
	Amounts reclassified from accumulated OCI		
	2018	2017	
Gains (losses) on debt securities:			
Amortization of unrealized (losses)	\$ (13)	\$ (8)	Interest income—held-to-maturity securities—taxable
Realized (loss) on sale of securities	(28)	(14)	Noninterest income—net gains (losses) on sale of securities
OTTI recorded	—	(4)	Noninterest income—Impairment losses recognized in earnings on available-for-sale securities
Total before tax	(41)	(26)	
Tax benefit	9	9	
Net of tax	<u>\$ (32)</u>	<u>\$ (17)</u>	
Gains (losses) on cash flow hedging relationships:			
Interest rate contracts	\$ —	\$ (1)	Interest and fee income—loans and leases
Total before tax	—	(1)	
Tax benefit	—	—	
Net of tax	<u>\$ —</u>	<u>\$ (1)</u>	
Amortization of defined benefit pension and post-retirement items:			
Actuarial losses	\$ (13)	\$ (18)	Noninterest income / expense (1)
Net periodic benefit costs	4	2	Noninterest income / expense (1)
Total before tax	(9)	(16)	
Tax benefit	2	6	
Net of tax	<u>\$ (7)</u>	<u>\$ (10)</u>	

(1) The activity for 2018 and 2017 is recorded in Noninterest Income - other income and Noninterest Expense - personnel costs, respectively, on the Consolidated Statements of Income.

11. SHAREHOLDERS' EQUITY

The following is a summary of Huntington's non-cumulative, non-voting, perpetual preferred stock outstanding as of December 31, 2018.

(dollar amounts in millions, share amounts in thousands)

Series	Issuance Date	Total Shares Outstanding	Carrying Amount	Dividend Rate	Earliest Redemption Date
Series B	12/28/2011	35,500	\$ 23	3-mo. LIBOR + 270 bps	1/15/2017
Series D	3/21/2016	400,000	386	6.25%	7/15/2021
Series D	5/5/2016	200,000	199	6.25%	7/15/2021
Series C	8/16/2016	100,000	100	5.875%	1/15/2022
Series E	2/27/2018	5,000	495	5.70%	4/15/2023
Total		<u>740,500</u>	<u>\$ 1,203</u>		

Series B, D, and C of preferred stock has a liquidation value and redemption price per share of \$1,000, plus any declared and unpaid dividends. Series E preferred stock has a liquidation value and redemption price per share of \$100,000, plus any declared and unpaid dividends. All preferred stock has no stated maturity and redemption is solely at the option of the Company. Under current rules, any redemption of the preferred stock is subject to prior approval of the FRB.

Preferred A Stock conversion

On February 21, 2018, Huntington elected to effect the conversion of all of its outstanding 8.50% Series A Non-Cumulative Perpetual Convertible Preferred Stock into common stock pursuant to the terms of the Series A Preferred Stock. On February 22, 2018, each share of Series A Preferred Stock was converted into 83.668 shares of Common Stock. Upon conversion, the Series A Preferred Stock is no longer outstanding and all rights with respect to the Series A Preferred Stock were ceased and terminated, except the right to receive the number of whole shares and any required cash-in-lieu of fractional shares of Common Stock. Following the conversion, the Series A Preferred Stock shares were delisted from trading on NASDAQ.

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Preferred E Stock issued and outstanding

On February 27, 2018, Huntington issued \$500 million of preferred stock. Huntington issued 500,000 depositary shares, each depositary shares representing a 1/100th ownership interest in a share of 5.70% Series E Fixed-to-Floating Non-Cumulative Perpetual Preferred Stock (Preferred E Stock), par value \$0.01 per share, with a liquidation preference of \$100,000 per share (equivalent to \$1,000 per depositary share). Each holder of a depositary share will be entitled to all proportional rights and preferences of the Preferred E Stock (including dividend, voting, redemption, and liquidation rights). Costs of \$5 million related to the issuance of the Preferred E Stock are reported as a direct deduction from the face amount of the stock.

Dividends on the Preferred E Stock will be non-cumulative and payable quarterly in arrears, when, and if, authorized by the Company's board of directors or a duly authorized committee of the board and declared by the Company, at an annual rate of 5.70% per year on the liquidation preference of \$100,000 per share, equivalent to \$1,000 per depositary share. The dividend payment dates are the fifteenth day of each January, April, July and October, which commenced on July 15, 2018.

The Preferred E Stock has no maturity date. Huntington may redeem the Preferred E Stock at its option, (i) in whole or in part, from time to time, on any dividend payment date on or after April 15, 2023 or (ii) in whole but not in part, within 90 days following a change in laws or regulations, in each case, at a redemption price equal to \$100,000 per share (equivalent to \$1,000 per depositary share), plus any declared and unpaid dividends, without regard to any undeclared dividends on the Series E Preferred Stock prior to the date fixed for redemption. If Huntington redeems the Preferred E Stock, the depositary will redeem a proportional number of depositary shares. Neither the holders of Preferred E Stock nor holders of depositary shares will have the right to require the redemption or repurchase of the Preferred E Stock or the depositary shares.

12. EARNINGS PER SHARE

Basic earnings per share is the amount of earnings (adjusted for dividends declared on preferred stock) available to each share of common stock outstanding during the reporting period. Diluted earnings per share is the amount of earnings available to each share of common stock outstanding during the reporting period adjusted to include the effect of potentially dilutive common shares. Potentially dilutive common shares include incremental shares issued for stock options, restricted stock units and awards, distributions from deferred compensation plans, and the conversion of the Company's convertible preferred stock. Potentially dilutive common shares are excluded from the computation of diluted earnings per share in periods in which the effect would be antidilutive.

On February 22, 2018, Huntington converted all its outstanding 8.50% Series A Non-Cumulative Perpetual Convertible Preferred Stock to 30.3 million shares of common stock. Following the conversion, the additional shares were included in average common shares issued and outstanding. The 2018 and 2017 total diluted average common shares issued and outstanding was impacted by using the if-converted method. The calculation of basic and diluted earnings per share for each of the three years ended December 31 was as follows:

	Year Ended December 31,		
	2018	2017	2016
<i>(Dollar amounts in millions, except per share data, share count in thousands)</i>			
Basic earnings per common share:			
Net income	\$ 1,393	\$ 1,186	\$ 712
Preferred stock dividends	(70)	(76)	(65)
Net income available to common shareholders	\$ 1,323	\$ 1,110	\$ 647
Average common shares issued and outstanding	1,081,542	1,084,686	904,438
Basic earnings per common share	\$ 1.22	\$ 1.02	\$ 0.72
Diluted earnings per common share:			
Net income available to common shareholders	\$ 1,323	\$ 1,110	\$ 647
Effect of assumed preferred stock conversion	—	31	—
Net income applicable to diluted earnings per share	\$ 1,323	\$ 1,141	\$ 647
Average common shares issued and outstanding	1,081,542	1,084,686	904,438
Dilutive potential common shares			
Stock options and restricted stock units and awards	16,529	17,883	11,728
Shares held in deferred compensation plans	3,511	3,160	2,486
Dilutive impact of Preferred Stock	4,403	30,330	—
Other	—	127	138
Dilutive potential common shares	24,443	51,500	14,352
Total diluted average common shares issued and outstanding	1,105,985	1,136,186	918,790
Diluted earnings per common share	\$ 1.20	\$ 1.00	\$ 0.70

There were approximately 2.3 million, 1.0 million, and 3.1 million options to purchase shares of common stock not included in the computation of diluted earnings per share because the effect would be antidilutive at December 31, 2018, 2017, and 2016, respectively.

13. NONINTEREST INCOME

Huntington earns a variety of revenue including interest and fees from customers as well as revenues from non-customers. Certain sources of revenue are recognized within interest or fee income and are outside of the scope of ASC Topic 606, Revenue from Contracts with Customers ("ASC 606"). Other sources of revenue fall within the scope of ASC 606 and are generally recognized within noninterest income. These revenues are included within various sections of the Consolidated Financial Statements. The following table shows Huntington's total noninterest income segregated between contracts with customers within the scope of ASC 606 and those within the scope of other GAAP Topics.

	Year Ended December 31, 2018
<i>(dollar amounts in millions)</i>	
Noninterest income	
Noninterest income from contracts with customers	\$ 881
Noninterest income within the scope of other GAAP topics	440
Total noninterest income	<u>\$ 1,321</u>

The following table illustrates the disaggregation by operating segment and major revenue stream and reconciles disaggregated revenue to segment revenue presented in Note 23:

	Year Ended December 31, 2018					
<i>(dollar amounts in millions)</i>	Consumer & Business Banking	Commercial Banking	Vehicle Finance	RBI/PCG	Treasury / Other	Huntington Consolidated
Major Revenue Streams						
Service charges on deposit accounts	\$ 290	\$ 64	\$ 5	\$ 4	\$ —	\$ 363
Card and payment processing income	198	11	—	—	—	209
Trust and investment management services	28	4	—	139	—	171
Insurance income	34	5	—	41	2	82
Other income	38	6	3	8	1	56
Net revenue from contracts with customers	<u>\$ 588</u>	<u>\$ 90</u>	<u>\$ 8</u>	<u>\$ 192</u>	<u>\$ 3</u>	<u>\$ 881</u>
Noninterest income within the scope of other GAAP topics	150	223	2	1	64	440
Total noninterest income	<u>\$ 738</u>	<u>\$ 313</u>	<u>\$ 10</u>	<u>\$ 193</u>	<u>\$ 67</u>	<u>\$ 1,321</u>

Huntington generally provides services for customers in which it acts as principal. Payment terms and conditions vary amongst services and customers, and thus impact the timing and amount of revenue recognition. Some fees may be paid before any service is rendered and accordingly, such fees are deferred until the obligations pertaining to those fees are satisfied. Most Huntington contracts with customers are cancelable by either party without penalty or they are short-term in nature, with a contract duration of less than one year. Accordingly, most revenue deferred for the reporting period ended December 31, 2018 is expected to be earned within one year. Huntington does not have significant balances of contract assets or contract liabilities and any change in those balances during the reporting period ended December 31, 2018 was determined to be immaterial.

14. SHARE-BASED COMPENSATION

Huntington sponsors nonqualified and incentive share based compensation plans. These plans provide for the granting of stock options and other awards to officers, directors, and other employees. Compensation costs are included in personnel costs on the Consolidated Statements of Income. Stock options and awards are granted at the closing market price on the date of the grant. Options granted typically vest ratably over four years or when other conditions are met. Stock options, which represented a portion of the grant values, have no intrinsic value until the stock price increases. Options granted on or after May 1, 2015 have a contractual term of ten years. All options granted on or before April 30, 2015 have a contractual term of seven years.

2018 Long-Term Incentive Plan

In 2018, shareholders approved the Huntington Bancshares Incorporated 2018 Long-Term Incentive Plan (the 2018 Plan). Shares remaining under the 2015 Long-Term Incentive Plan have been incorporated into the 2018 Plan. Accordingly, the total number of shares authorized for awards under the 2018 Plan is 33 million shares. At December 31, 2018, 26 million shares from the Plan were available for future grants.

Huntington issues shares to fulfill stock option exercises and restricted stock unit and award vesting from available authorized common shares. At December 31, 2018, Huntington believes there are adequate authorized common shares to satisfy anticipated stock option exercises and restricted stock unit and award vesting in 2019.

The following table presents total share-based compensation expense and related tax benefit for the three years ended December 31, 2018, 2017, and 2016:

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(dollar amounts in millions)

	2018	2017	2016
Share-based compensation expense	\$ 78	\$ 92	\$ 66
Tax benefit	14	32	22

Huntington uses the Black-Scholes option pricing model to value options in determining the share-based compensation expense. Forfeitures are estimated at the date of grant based on historical rates, and updated as necessary, and reduce the compensation expense recognized. The risk-free interest rate is based on the U.S. Treasury yield curve in effect at the date of grant. The expected dividend yield is based on the dividend rate and stock price at the date of the grant. Expected volatility is based on the estimated volatility of Huntington's stock over the expected term of the option.

The following table presents the weighted average assumptions used in the option-pricing model at the grant date for options granted in the three years ended December 31, 2018, 2017, and 2016:

Assumptions	2018	2017	2016
Risk-free interest rate	2.88%	2.04%	1.63%
Expected dividend yield	3.71	3.31	3.18
Expected volatility of Huntington's common stock	24.0	29.5	30.0
Expected option term (years)	6.5	6.5	6.5
Weighted-average grant date fair value per share	\$ 2.58	\$ 2.81	\$ 2.17

Huntington's stock option activity and related information for the year ended December 31, 2018, was as follows:

(dollar amounts in millions, except per share and options amounts in thousands)	Options	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Life (Years)	Aggregate Intrinsic Value
Outstanding at January 1, 2018	13,918	\$ 8.21		
Granted	2,538	14.81		
Exercised	(5,775)	6.57		
Forfeited/expired	(64)	13.31		
Outstanding at December 31, 2018	10,617	\$ 10.64	5.4	\$ 22
Expected to vest (1)	4,503	\$ 13.36	8.6	\$ 2
Exercisable at December 31, 2018	5,981	\$ 8.52	3.0	\$ 21

(1) The number of options expected to vest reflects an estimate of 133,000 shares expected to be forfeited.

The aggregate intrinsic value represents the amount by which the fair value of underlying stock exceeds the "in-the-money" option exercise price. The total intrinsic value of options exercised for the years ended December 31, 2018, 2017, and 2016 were \$52 million, \$16 million and \$11 million, respectively. For the years ended December 31, 2018, 2017, and 2016, cash received for the exercises of stock options was \$5 million, \$11 million and \$14 million, respectively. The tax benefit realized for the tax deductions from option exercises totaled \$10 million, \$5 million and \$3 million in 2018, 2017, and 2016, respectively.

Huntington also grants restricted stock awards, restricted stock units, performance share units, and other stock-based awards. Restricted stock units and awards are issued at no cost to the recipient, and can be settled only in shares at the end of the vesting period. Restricted stock awards provide the holder with full voting rights and cash dividends during the vesting period. Restricted stock units do not provide the holder with voting rights or cash dividends during the vesting period, but do accrue a dividend equivalent that is paid upon vesting, and are subject to certain service restrictions. Performance share units are payable contingent upon Huntington achieving certain predefined performance objectives over the three-year measurement period. The fair value of these awards reflects the closing market price of Huntington's common stock on the grant date.

The following table summarizes the status of Huntington's restricted stock awards, units, and performance share units as of December 31, 2018, and activity for the year ended December 31, 2018:

	Restricted Stock Awards		Restricted Stock Units		Performance Share Units	
(amounts in thousands, except per share amounts)	Quantity	Weighted-Average Grant Date Fair Value Per Share	Quantity	Weighted-Average Grant Date Fair Value Per Share	Quantity	Weighted-Average Grant Date Fair Value Per Share
Nonvested at January 1, 2018	448	\$ 9.68	16,159	\$ 11.26	3,018	\$ 10.67
Granted	—	—	4,743	15.01	691	14.81
Vested	(227)	9.68	(4,948)	10.56	(719)	10.89
Forfeited	(20)	9.68	(474)	12.32	(32)	12.27
Nonvested at December 31, 2018	201	\$ 9.68	15,480	\$ 12.51	2,958	\$ 11.75

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The weighted-average fair value at grant date of nonvested shares granted for the years ended December 31, 2018, 2017, and 2016 were \$14.98, \$11.13, and \$9.59, respectively. The total fair value of awards vested during the years ended December 31, 2018, 2017, and 2016 was \$62 million, \$53 million, and \$31 million, respectively. As of December 31, 2018, the total unrecognized compensation cost related to nonvested shares was \$96 million with a weighted-average expense recognition period of 2.3 years.

15. BENEFIT PLANS

Huntington sponsors a non-contributory defined benefit pension plan covering substantially all employees hired or rehired prior to January 1, 2010. The plan, which was modified in 2013, no longer accrues service benefits to participants and provides benefits based upon length of service and compensation levels. Huntington's funding policy is to contribute an annual amount that is at least equal to the minimum funding requirements but not more than the amount deductible under the Internal Revenue Code. There were no required minimum contributions during 2018.

The following table shows the weighted-average assumptions used to determine the benefit obligation at December 31, 2018 and 2017, and the net periodic benefit cost for the years then ended:

	Pension Benefits	
	2018	2017
Weighted-average assumptions used to determine benefit obligations		
Discount rate	4.41%	3.73%
Weighted-average assumptions used to determine net periodic benefit cost		
Discount rate	3.73	4.38
Expected return on plan assets	5.75	6.50

The expected long-term rate of return on plan assets is an assumption reflecting the average rate of earnings expected on the funds invested or to be invested to provide for the benefits included in the projected benefit obligation. The expected long-term rate of return is established at the beginning of the plan year based upon historical returns and projected returns on the underlying mix of invested assets.

The following table reconciles the beginning and ending balances of the benefit obligation of the Plan with the amounts recognized in the consolidated balance sheets at December 31:

	Pension Benefits	
	2018	2017
<i>(dollar amounts in millions)</i>		
Projected benefit obligation at beginning of measurement year	\$ 900	\$ 851
Changes due to:		
Service cost	3	3
Interest cost	29	30
Benefits paid	(26)	(27)
Settlements	(18)	(31)
Actuarial assumptions and gains (losses)	(67)	74
Total changes	(79)	49
Projected benefit obligation at end of measurement year	\$ 821	\$ 900

The following table reconciles the beginning and ending balances of the fair value of Plan assets at the December 31, 2018 and 2017 measurement dates:

	Pension Benefits	
	2018	2017
<i>(dollar amounts in millions)</i>		
Fair value of plan assets at beginning of measurement year	\$ 903	\$ 841
Changes due to:		
Actual return on plan assets	(30)	118
Settlements	(19)	(29)
Benefits paid	(26)	(27)
Total changes	(75)	62
Fair value of plan assets at end of measurement year	\$ 828	\$ 903

As of December 31, 2018, the difference between the accumulated benefit obligation and the fair value of Huntington's plan assets was \$7 million and is recorded in other liabilities.

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The following table shows the components of net periodic benefit costs recognized in the three years ended December 31, 2018:

<i>(dollar amounts in millions)</i>	Pension Benefits (1)		
	2018	2017	2016
Service cost	\$ 3	\$ 3	\$ 5
Interest cost	29	30	30
Expected return on plan assets	(49)	(55)	(45)
Amortization of loss	9	7	7
Settlements	7	11	(8)
Benefit costs	<u>\$ (1)</u>	<u>\$ (4)</u>	<u>\$ (11)</u>

(1) The pension costs for 2018 were recorded in noninterest income - other income. For 2017 and 2016 the costs were recorded in noninterest expense - personnel costs, in the Consolidated Statements of Income.

Included in benefit costs above are \$2 million, \$2 million, and \$2 million of plan expenses that were recognized in each of the three years ended December 31, 2018, 2017, and 2016. It is Huntington's policy to recognize settlement gains and losses as incurred. Assuming no cash contributions are made to the Plan during 2019, Huntington expects net periodic pension benefit, excluding any expense of settlements, to approximate \$3 million for 2019.

At December 31, 2018 and 2017, The Huntington National Bank, as trustee, held all Plan assets. The Plan assets consisted of investments in a variety of corporate and government fixed income investments, money market funds, and mutual funds as follows:

<i>(dollar amounts in millions)</i>	Fair Value			
	2018		2017	
Cash equivalents:				
Mutual funds-money market	\$ 4	—%	\$ 14	2%
U.S. Treasury bills	4	1	5	1
Fixed income:				
Corporate obligations	272	33	293	32
U.S. Government obligations	298	36	216	24
U.S. Government agencies	22	3	23	3
Equities:				
Mutual funds-equities	64	8	118	13
Common stock	98	12	158	17
Preferred stock	5	1	5	1
Exchange traded funds	45	5	58	6
Limited Partnerships	16	1	13	1
Fair value of plan assets	<u>\$ 828</u>	<u>100%</u>	<u>\$ 903</u>	<u>100%</u>

Investments of the Plan are accounted for at cost on the trade date and are reported at fair value. The valuation methodologies used to measure the fair value of pension plan assets vary depending on the type of asset. At December 31, 2018, cash equivalent money market funds and U.S. Treasury bills are valued at the closing price reported from an actively traded exchange and are classified as Level 1. Mutual funds and exchange traded funds are valued at quoted market prices that represent the net asset value of shares held by the Plan at year-end. The mutual funds held by the Plan are actively traded and are classified as Level 1. Fixed income investments are valued using unadjusted quoted prices from active markets for similar assets are classified as Level 2. Common and preferred stock are valued using the year-end closing price as determined by a national securities exchange and are classified as Level 1. The investment in the limited partnerships is reported at net asset value per share as determined by the general partners of each limited partnership, based on their proportionate share of the partnership's fair value as recorded in the partnership's audited financial statements.

The investment objective of the Plan is to maximize the return on Plan assets over a long-time period, while meeting the Plan obligations. At December 31, 2018, Plan assets were invested 1% in cash equivalents, 27% in equity investments, and 72% in bonds, with an average duration of 12.7 years on bond investments. The estimated life of benefit obligations was 12.4 years. Although it may fluctuate with market conditions, Huntington has targeted a long-term allocation of Plan assets of 20% to 50% in equity investments and 80% to 50% in bond investments. The allocation of Plan assets between equity investments and fixed income investments will change from time to time.

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At December 31, 2018, the following table shows when benefit payments were expected to be paid:

<i>(dollar amounts in millions)</i>	Pension Benefits
2019	\$ 49
2020	49
2021	48
2022	48
2023	48
2024 through 2028	238

Huntington also sponsors an unfunded defined benefit post-retirement plan as well as other nonqualified retirement plans, the most significant being the SRIP and FirstMerit SERP. The SRIP and FirstMerit SERP plans provide certain former officers and directors, with defined pension benefits in excess of limits imposed by federal tax law.

The following table presents the amounts recognized in the Consolidated Balance Sheets at December 31, 2018 and 2017, for all defined benefit and nonqualified retirement plans:

<i>(dollar amounts in millions)</i>	2018	2017
Other liabilities	\$ 63	\$ 78

The following tables present the amounts recognized in OCI as of December 31, 2018, 2017, and 2016, and the changes in accumulated OCI for the years ended December 31, 2018, 2017, and 2016:

<i>(dollar amounts in millions)</i>	2018	2017	2016
Net actuarial loss	\$ (257)	\$ (264)	\$ (217)
Prior service cost	11	14	12
Defined benefit pension plans	<u>\$ (246)</u>	<u>\$ (250)</u>	<u>\$ (205)</u>

<i>(dollar amounts in millions)</i>	2018		
	Pretax	Tax (expense) Benefit	After-tax
Net actuarial (loss) gain:			
Amounts arising during the year	\$ (5)	\$ 2	\$ (3)
Amortization included in net periodic benefit costs	13	(3)	10
Prior service cost:			
Amounts arising during the year	—	—	—
Amortization included in net periodic benefit costs	(4)	1	(3)
Total recognized in OCI	<u>\$ 4</u>	<u>\$ —</u>	<u>\$ 4</u>

<i>(dollar amounts in millions)</i>	2017		
	Pretax	Tax (expense) Benefit	After-tax (1)
Net actuarial (loss) gain:			
Amounts arising during the year	\$ (16)	\$ 6	\$ (10)
Amortization included in net periodic benefit costs	18	(7)	11
Prior service cost:			
Amounts arising during the year	—	—	—
Amortization included in net periodic benefit costs	(2)	1	(1)
Total recognized in OCI	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>

(1) TCJA reclassification from AOCI to retained earnings recorded during 2017 was \$45 million

<i>(dollar amounts in millions)</i>	2016		
	Pretax	Tax (expense) Benefit	After-tax
Net actuarial (loss) gain:			
Amounts arising during the year	\$ 38	\$ (13)	\$ 25
Amortization included in net periodic benefit costs	2	(1)	1
Prior service cost:			
Amounts arising during the year	—	—	—
Amortization included in net periodic benefit costs	(2)	1	(1)
Total recognized in OCI	<u>\$ 38</u>	<u>\$ (13)</u>	<u>\$ 25</u>

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Huntington has a defined contribution plan that is available to eligible employees. Beginning January 1, 2018, Huntington increased the company match such that Huntington matches participant contributions 150% of the first 2% of base pay and 100% of the next 2%. Huntington's expense related to the defined contribution plans for the years ended December 31, 2018, 2017, and 2016 was \$46 million, \$35 million, and \$36 million, respectively. For 2018, the discretionary contribution was not made.

The following table shows the number of shares, market value, and dividends received on shares of Huntington stock held by the defined contribution plan:

	December 31,	
	2018	2017
<i>(dollar amounts in millions, share amounts in thousands)</i>		
Shares in Huntington common stock	11,635	13,566
Market value of Huntington common stock	\$ 139	\$ 198
Dividends received on shares of Huntington stock	6	4

16. INCOME TAXES

The Company's deferred federal and state income tax and related valuation accounts represents the estimated impact of temporary differences between how we recognize our assets and liabilities under GAAP and how such assets and liabilities are recognized under federal and state tax law. Deferred tax assets and liabilities are determined based on the difference between the financial statement and tax bases of assets and liabilities as measured by the enacted tax rates which will be in effect when these differences reverse. As a result of the reduction in the U.S. corporate income tax rate from 35% to 21% under the TCJA, the Company revalued its ending net deferred tax liabilities at December 31, 2017. The Company recognized a \$123 million tax benefit in the Company's Consolidated Statement of Income for the year ended December 31, 2017, as a result of the TCJA, of which the benefit recognized is primarily attributable to the revaluation of net deferred tax liabilities. The Company completed its provisional estimate related to tax reform during 2018, recognizing an additional immaterial benefit during the 2018 third quarter.

The Company and its subsidiaries file income tax returns in the U.S. federal jurisdiction and various state, city, and foreign jurisdictions. Federal income tax audits have been completed for tax years through 2009. Certain proposed adjustments resulting from the IRS examination of our 2010 through 2011 tax returns have been settled, subject to final approval by the Joint Committee on Taxation of the U.S. Congress. While the statute of limitations remains open for tax years 2012 through 2017, the IRS has advised that tax years 2012 through 2014 will not be audited, and began the examination of the 2015 federal income tax return in second quarter 2018. Various state and other jurisdictions remain open to examination, including Ohio, Kentucky, Indiana, Michigan, Pennsylvania, West Virginia, Wisconsin, and Illinois.

The following table provides a reconciliation of the beginning and ending amounts of gross unrecognized tax benefits:

	2018	2017
<i>(dollar amounts in millions)</i>		
Unrecognized tax benefits at beginning of year	\$ 50	\$ 24
Gross increases for tax positions taken during prior years	—	26
Gross decreases for tax positions taken during prior years	(12)	—
Settlements with taxing authorities	(38)	—
Unrecognized tax benefits at end of year	\$ —	\$ 50

Any interest and penalties on income tax assessments or income tax refunds are recognized in the Consolidated Statements of Income as a component of provision for income taxes. Total interest accrued was less than \$1 million at December 31, 2018 and 2017. All of the gross unrecognized tax benefits would impact the Company's effective tax rate if recognized.

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The following is a summary of the provision (benefit) for income taxes:

	Year Ended December 31,		
	2018	2017	2016
<i>(dollar amounts in millions)</i>			
Current tax provision (benefit)			
Federal	\$ 152	\$ 41	\$ 40
State	20	(1)	3
Total current tax provision	172	40	43
Deferred tax provision (benefit)			
Federal	71	151	161
State	(8)	17	4
Total deferred tax provision	63	168	165
Provision for income taxes	\$ 235	\$ 208	\$ 208

The following is a reconciliation for provision for income taxes:

	Year Ended December 31,		
	2018	2017	2016
<i>(dollar amounts in millions)</i>			
Provision for income taxes computed at the statutory rate	\$ 342	\$ 488	\$ 322
Increases (decreases):			
Tax-exempt income	(23)	(31)	(27)
Tax-exempt bank owned life insurance income	(14)	(23)	(20)
General business credits	(80)	(71)	(64)
Capital loss	(60)	(67)	(46)
Impact from TCJA	(3)	(123)	—
Affordable housing investment amortization, net of tax benefits	64	46	37
State income taxes, net	10	11	5
Stock based compensation	(14)	(13)	(4)
Other	13	(9)	5
Provision for income taxes	\$ 235	\$ 208	\$ 208

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The significant components of deferred tax assets and liabilities at December 31, were as follows.

	At December 31,	
	2018	2017
<i>(dollar amounts in millions)</i>		
Deferred tax assets:		
Allowances for credit losses	\$ 184	\$ 162
Fair value adjustments	173	142
Net operating and other loss carryforward	95	108
Accrued expense/prepaid	16	17
Pension and other employee benefits	14	—
Market discount	6	10
Partnership investments	5	7
Tax credit carryforward	—	153
Other assets	6	6
Total deferred tax assets	499	605
Deferred tax liabilities:		
Lease financing	262	249
Loan origination costs	148	116
Operating assets	69	53
Mortgage servicing rights	45	39
Purchase accounting adjustments	25	68
Securities adjustments	6	6
Deferred dividend income	—	77
Pension and other employee benefits	—	5
Other liabilities	2	18
Total deferred tax liabilities	557	631
Net deferred tax (liability) asset before valuation allowance	(58)	(26)
Valuation allowance	(6)	(6)
Net deferred tax (liability) asset	\$ (64)	\$ (32)

At December 31, 2018, Huntington's net deferred tax asset related to loss and other carryforwards was \$95 million. This was comprised of federal net operating loss carryforwards of \$51 million, which will begin expiring in 2030, \$44 million of state net operating loss carryforwards, which will begin expiring in 2019, and an alternative minimum tax credit carryforward of less than \$1 million, which will be fully utilized or refunded by 2022.

The state valuation allowance was \$6 million at both December 31, 2018 and December 31, 2017, as the Company believes that it is more likely than not, portions of the state deferred tax assets and state net operating loss carryforwards will not be realized.

At December 31, 2018, retained earnings included approximately \$12 million of base year reserves of acquired thrift institutions, for which no deferred federal income tax liability has been recognized. Under current law, if these bad debt reserves are used for purposes other than to absorb bad debt losses, they will be subject to federal income tax at the corporate tax rate enacted at the time. The amount of unrecognized deferred tax liability relating to the cumulative bad debt deduction was approximately \$3 million at December 31, 2018.

17. FAIR VALUES OF ASSETS AND LIABILITIES

Following is a description of the valuation methodologies used for instruments measured at fair value, as well as the general classification of such instruments pursuant to the valuation hierarchy.

Loans held for sale

Huntington has elected to apply the fair value option for mortgage loans originated with the intent to sell which are included in loans held for sale. Mortgage loans held for sale are classified as Level 2 and are estimated using security prices for similar product types.

Loans held for investment

Certain mortgage loans originated with the intent to sell for which the FVO was elected have been reclassified to mortgage loans held for investment. These loans continue to be measured at fair value. The fair value is determined using fair value of similar mortgage-backed securities adjusted for loan specific variables.

Huntington elected the fair value option for consumer loans with deteriorated credit quality acquired from FirstMerit. These consumer loans are classified as Level 3. The key assumption used to determine the fair value of the consumer loans is discounted cash flows.

Available-for-sale securities and trading account securities

Securities accounted for at fair value include both the available-for-sale and trading portfolios. Huntington determines the fair value of securities utilizing quoted market prices obtained for identical or similar assets, third-party pricing services, third-party valuation specialists and other observable inputs such as recent trade observations. AFS and trading securities are classified as Level 1 using quoted market prices (unadjusted) in active markets for identical securities that Huntington has the ability to access at the measurement date. Less than 1% of the positions in these portfolios are Level 1, and consist of U.S. Treasury securities and money market mutual funds. When quoted market prices are not available, fair values are classified as Level 2 using quoted prices for similar assets in active markets, quoted prices of identical or similar assets in markets that are not active, and inputs that are observable for the asset, either directly or indirectly, for substantially the full term of the financial instrument. Level 2 represents 77% of the positions in these portfolios, which consists of U.S. Government and agency debt securities, agency mortgage backed securities, private-label asset-backed securities, certain municipal securities and other securities. For Level 2 securities Huntington primarily uses prices obtained from third-party pricing services to determine the fair value of securities. Huntington independently evaluates and corroborates the fair value received from pricing services through various methods and techniques, including references to dealer or other market quotes, by reviewing valuations of comparable instruments, and by comparing the prices realized on the sale of similar securities. If relevant market prices are limited or unavailable, valuations may require significant management judgment or estimation to determine fair value, in which case the fair values are classified as Level 3 which represent 23% of the positions. The Level 3 positions consist of direct purchase municipal securities. A significant change in the unobservable inputs for these securities may result in a significant change in the ending fair value measurement of these securities.

The direct purchase municipal securities are classified as Level 3 and require significant estimates to determine fair value which results in greater subjectivity. The fair value is determined by utilizing a discounted cash flow valuation technique employed by a third-party valuation specialist. The third-party specialist uses assumptions related to yield, prepayment speed, conditional default rates and loss severity based on certain factors such as, credit worthiness of the counterparty, prevailing market rates, and analysis of similar securities. Huntington evaluates the fair values provided by the third-party specialist for reasonableness.

MSRs

MSRs do not trade in an active, open market with readily observable prices. Accordingly, the fair value of these assets is classified as Level 3. Huntington determines the fair value of MSRs using a discounted cash flow model based upon the month-end interest rate curve and prepayment assumptions. The model utilizes assumptions to estimate future net servicing income cash flows, including estimates of time decay, payoffs, and changes in valuation inputs and assumptions. Servicing brokers and other sources of information (e.g. discussion with other mortgage servicers and industry surveys) are used to obtain information on market practice and assumptions. On at least a quarterly basis, third-party marks are obtained from at least one servicing broker. Huntington reviews the valuation assumptions against this market data for reasonableness and adjusts the assumptions if deemed appropriate. Any recommended change in assumptions and/or inputs are presented for review to the Mortgage Price Risk Subcommittee for final approval.

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Derivative assets and liabilities

Derivatives classified as Level 2 consist of foreign exchange and commodity contracts, which are valued using exchange traded swaps and futures market data. In addition, Level 2 includes interest rate contracts, which are valued using a discounted cash flow method that incorporates current market interest rates. Level 2 also includes exchange traded options and forward commitments to deliver mortgage-backed securities, which are valued using quoted prices.

Derivatives classified as Level 3 consist of interest rate lock agreements related to mortgage loan commitments and Visa® shares swap. The determination of fair value includes assumptions related to the likelihood that a commitment will ultimately result in a closed loan, which is a significant unobservable assumption. A significant increase or decrease in the external market price would result in a significantly higher or lower fair value measurement.

Assets and Liabilities measured at fair value on a recurring basis

Assets and liabilities measured at fair value on a recurring basis at December 31, 2018 and 2017 are summarized below:

	Fair Value Measurements at Reporting Date Using			Netting Adjustments (1)	December 31, 2018
<i>(dollar amounts in millions)</i>	Level 1	Level 2	Level 3		
Assets					
Trading account securities:					
Municipal securities	\$ 1	\$ 27	\$ —	\$ —	\$ 28
Other securities	77	—	—	—	77
	<u>78</u>	<u>27</u>	<u>—</u>	<u>—</u>	<u>105</u>
Available-for-sale securities:					
U.S. Treasury securities	5	—	—	—	5
Residential CMOs	—	6,999	—	—	6,999
Residential MBS	—	1,255	—	—	1,255
Commercial MBS	—	1,583	—	—	1,583
Other agencies	—	126	—	—	126
Municipal securities	—	275	3,165	—	3,440
Asset-backed securities	—	315	—	—	315
Corporate debt	—	53	—	—	53
Other securities/Sovereign debt	—	4	—	—	4
	<u>5</u>	<u>10,610</u>	<u>3,165</u>	<u>—</u>	<u>13,780</u>
Other securities	\$ 22	\$ —	\$ —	\$ —	\$ 22
Loans held for sale	—	613	—	—	613
Loans held for investment	—	49	30	—	79
MSRs	—	—	10	—	10
Derivative assets	21	474	5	(291)	209
Liabilities					
Derivative liabilities	11	390	3	(217)	187

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	Fair Value Measurements at Reporting Date Using			Netting	December 31,
<i>(dollar amounts in millions)</i>	Level 1	Level 2	Level 3	Adjustments (1)	2017
Assets					
Trading account securities:					
Other securities	83	3	—	—	86
	83	3	—	—	86
Available-for-sale securities:					
U.S. Treasury securities	5	—	—	—	5
Residential CMOs	—	6,484	—	—	6,484
Residential MBS	—	1,367	—	—	1,367
Commercial MBS	—	2,487	—	—	2,487
Other agencies	—	70	—	—	70
Municipal securities	—	711	3,167	—	3,878
Asset-backed securities	—	443	24	—	467
Corporate debt	—	109	—	—	109
Other securities/Sovereign debt	—	2	—	—	2
	5	11,673	3,191	—	14,869
Other securities	19	—	—	—	19
Loans held for sale	—	413	—	—	413
Loans held for investment	—	55	38	—	93
MSRs	—	—	11	—	11
Derivative assets	—	316	6	(190)	132
Liabilities					
Derivative liabilities	—	326	5	(245)	86

(1) Amounts represent the impact of legally enforceable master netting agreements that allow the Company to settle positive and negative positions and cash collateral held or placed with the same counterparties.

The tables below present a rollforward of the balance sheet amounts for the years ended December 31, 2018, 2017, and 2016 for financial instruments measured on a recurring basis and classified as Level 3. The classification of an item as Level 3 is based on the significance of the unobservable inputs to the overall fair value measurement. However, Level 3 measurements may also include observable components of value that can be validated externally. Accordingly, the gains and losses in the table below include changes in fair value due in part to observable factors that are part of the valuation methodology.

<i>(dollar amounts in millions)</i>	Level 3 Fair Value Measurements Year Ended December 31, 2018				
	MSRs	Derivative instruments	Municipal securities	Asset- backed securities	Loans held for investment
Opening balance	\$ 11	\$ (1)	\$ 3,167	\$ 24	\$ 38
Transfers out of Level 3 (1)	—	(35)	—	—	—
Total gains/losses for the period:					
Included in earnings	(1)	35	(3)	(2)	—
Included in OCI	—	—	(52)	11	—
Purchases/originations	—	—	658	—	—
Sales	—	—	—	(33)	—
Repayments	—	—	—	—	(8)
Settlements	—	3	(605)	—	—
Closing balance	\$ 10	\$ 2	\$ 3,165	\$ —	\$ 30
Change in unrealized gains or losses for the period included in earnings for assets held at end of the reporting date	\$ (1)	\$ —	\$ —	\$ —	\$ —
Change in unrealized gains or losses for the period included in other comprehensive income for assets held at the end of the reporting period	\$ —	\$ —	\$ (52)	\$ —	\$ —

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(dollar amounts in millions)

Level 3 Fair Value Measurements Year Ended December 31, 2017					
	Available-for-sale securities				
	MSRs	Derivative instruments	Municipal securities	Asset- backed securities	Loans held for investment
Opening balance	\$ 14	\$ (2)	\$ 2,798	\$ 76	\$ 48
Transfers out of Level 3 (1)	—	(15)	—	—	—
Total gains/losses for the period:					
Included in earnings	(3)	16	(2)	(5)	1
Included in OCI	—	—	(8)	14	—
Purchases/originations	—	—	787	—	—
Sales	—	—	—	(60)	—
Repayments	—	—	—	—	(11)
Settlements	—	—	(408)	(1)	—
Closing balance	\$ 11	\$ (1)	\$ 3,167	\$ 24	\$ 38
Change in unrealized gains or losses for the period included in earnings (or changes in net assets) for assets held at end of the reporting date	\$ (3)	\$ —	\$ —	\$ (4)	\$ —

(dollar amounts in millions)

Level 3 Fair Value Measurements Year Ended December 31, 2016					
	Available-for-sale securities				
	MSRs	Derivative instruments	Municipal securities	Asset- backed securities	Loans held for investment
Opening balance	\$ 18	\$ 6	\$ 2,095	\$ 100	\$ 2
Transfers out of Level 3 (1)	—	(7)	—	—	—
Total gains/losses for the period:					
Included in earnings	(4)	(1)	7	(2)	(2)
Included in OCI	—	—	(28)	6	—
Purchases/originations	—	—	1,399	—	56
Sales	—	—	(37)	(25)	—
Repayments	—	—	—	—	(8)
Settlements	—	—	(638)	(3)	—
Closing balance	\$ 14	\$ (2)	\$ 2,798	\$ 76	\$ 48
Change in unrealized gains or losses for the period included in earnings (or changes in net assets) for assets held at end of the reporting date	\$ (4)	\$ (1)	\$ (33)	\$ 4	\$ —

(1) Transfers out of Level 3 represent the settlement value of the derivative instruments (i.e. interest rate lock agreements) that are transferred to loans held for sale, which is classified as Level 2.

The tables below summarize the classification of gains and losses due to changes in fair value, recorded in earnings for Level 3 assets and liabilities for the years ended December 31, 2018, 2017, and 2016:

(dollar amounts in millions)

Level 3 Fair Value Measurements Year Ended December 31, 2018				
	Available-for-sale securities			
	MSRs	Derivative instruments	Municipal securities	Asset- backed securities
Classification of gains and losses in earnings:				
Mortgage banking income	\$ (1)	\$ 35	\$ —	\$ —
Securities gains (losses)	—	—	—	(2)
Interest and fee income	—	—	(3)	—
Total	\$ (1)	\$ 35	\$ (3)	\$ (2)

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(dollar amounts in millions)

Classification of gains and losses in earnings:

Mortgage banking income
Securities gains (losses)
Interest and fee income
Noninterest income

Total

Level 3 Fair Value Measurements Year Ended December 31, 2017

MSRs	Derivative instruments	Available-for-sale securities			Loans held for investment
		Municipal securities	Asset- backed securities		
\$ (3)	\$ 16	\$ —	\$ —	\$ —	—
—	—	—	(5)	—	—
—	—	(2)	—	—	—
—	—	—	—	—	1
<u>\$ (3)</u>	<u>\$ 16</u>	<u>\$ (2)</u>	<u>\$ (5)</u>		<u>1</u>

Level 3 Fair Value Measurements Year Ended December 31, 2016

MSRs	Derivative instruments	Available-for-sale securities			Loans held for investment
		Municipal securities	Asset- backed securities		
\$ (4)	\$ (1)	\$ —	\$ —	\$ —	—
—	—	1	(2)	—	—
—	—	6	—	—	(2)
<u>\$ (4)</u>	<u>\$ (1)</u>	<u>\$ 7</u>	<u>\$ (2)</u>		<u>(2)</u>

(dollar amounts in millions)

Classification of gains and losses in earnings:

Mortgage banking income (loss)
Securities gains (losses)
Noninterest income

Total

Assets and liabilities under the fair value option

The following table presents the fair value and aggregate principal balance of certain assets and liabilities under the fair value option:

December 31, 2018

Total Loans			Loans that are 90 or more days past due		
Fair value carrying amount	Aggregate unpaid principal	Difference	Fair value carrying amount	Aggregate unpaid principal	Difference
\$ 613	\$ 594	\$ 19	\$ —	\$ —	\$ —
79	87	(8)	6	7	(1)

(dollar amounts in millions)

Assets

Loans held for sale
Loans held for investment

December 31, 2017

Total Loans			Loans that are 90 or more days past due		
Fair value carrying amount	Aggregate unpaid principal	Difference	Fair value carrying amount	Aggregate unpaid principal	Difference
\$ 413	\$ 400	\$ 13	\$ 1	\$ 1	\$ —
93	102	(9)	10	11	(1)

(dollar amounts in millions)

Assets

Loans held for sale
Loans held for investment

The following tables present the net gains (losses) from fair value changes for the years ended December 31, 2018, 2017, and 2016:

Net gains (losses) from fair value changes Year Ended December 31.

(dollar amounts in millions)

Assets

Loans held for sale
Loans held for investment

2018	2017	2016
\$ 5	\$ 8	\$ 7
—	—	—

Assets and Liabilities measured at fair value on a nonrecurring basis

Certain assets and liabilities may be required to be measured at fair value on a nonrecurring basis in periods subsequent to their initial recognition. These assets and liabilities are not measured at fair value on an ongoing basis; however, they are subject to fair value adjustments in certain circumstances, such as when there is evidence of impairment. The amounts presented represent the fair value on the various measurement dates throughout the period. The gains(losses) represent the amounts recorded during the period regardless of whether the asset is still held at period end.

The amounts measured at fair value on a nonrecurring basis at December 31, 2018 were as follows:

<i>(dollar amounts in millions)</i>	Fair Value Measurements Using				Total Gains/(Losses) Year Ended December 31, 2018
	Fair Value	Quoted Prices In Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Other Unobservable Inputs (Level 3)	
Impaired loans	33	—	—	33	(1)
Other real estate owned	20	—	—	20	(7)
Loans held for sale	145	—	—	145	(11)

Huntington records nonrecurring adjustments of collateral-dependent loans measured for impairment when establishing the ALLL. Such amounts are generally based on the fair value of the underlying collateral supporting the loan. Appraisals are generally obtained to support the fair value of the collateral and incorporate measures such as recent sales prices for comparable properties and cost of construction. Periodically, in cases where the carrying value exceeds the fair value of the collateral less cost to sell, an impairment charge is recognized.

Other real estate owned properties are included in other assets and valued based on appraisals and third-party price opinions.

The appraisals supporting the fair value of the collateral to recognize loan impairment or unrealized loss on other real estate owned properties may not have been obtained as of December 31, 2018.

Loans held for sale are measured at lower of cost or fair value less costs to sell. The fair value of loans held for sale is determined based on discounted cash flows or based on the fair value of the underlying collateral supporting the loan.

Significant unobservable inputs for assets and liabilities measured at fair value on a recurring and nonrecurring basis

The table below presents quantitative information about the significant unobservable inputs for assets and liabilities measured at fair value on a recurring and nonrecurring basis at December 31, 2018 and 2017:

Quantitative Information about Level 3 Fair Value Measurements at December 31, 2018					
<i>(dollar amounts in millions)</i>	Fair Value	Valuation Technique	Significant Unobservable Input	Range	Weighted Average
Measured at fair value on a recurring basis:					
MSRs	\$ 10	Discounted cash flow	Constant prepayment rate	6 % - 54%	8%
			Spread over forward interest rate swap rates	5 % - 11%	8%
Derivative assets	5	Consensus Pricing	Net market price	(5)% - 23%	2%
			Estimated Pull through %	1 % - 100%	92%
Derivative liabilities	3	Discounted cash flow	Estimated conversion factor		163%
			Estimated growth rate of Visa Class A shares		7%
			Discount rate		4%
			Timing of the resolution of the litigation		6/30/2020
Municipal securities	3,165	Discounted cash flow	Discount rate	4 % - 4%	4%
			Cumulative default	— % - 39%	3%
			Loss given default	5 % - 90%	25%
Loans held for investment	30	Discounted cash flow	Discount rate	7 % - 9%	9%
			Constant prepayment rate	9 % - 9%	9%
Measured at fair value on a nonrecurring basis:					
Impaired loans	33	Appraisal value	NA		NA
Other real estate owned	20	Appraisal value	NA		NA
Loans held for sale	121	Discounted cash flow	Discount rate	5 % - 6%	5%
	24	Appraisal value	NA		N/A

Quantitative Information about Level 3 Fair Value Measurements at December 31, 2017					
<i>(dollar amounts in millions)</i>	Fair Value	Valuation Technique	Significant Unobservable Input	Range	Weighted Average
Measured at fair value on a recurring basis:					
MSRs	\$ 11	Discounted cash flow	Constant prepayment rate	8 % - 33%	12%
			Spread over forward interest rate swap rates	8 % - 10%	8%
Derivative assets	6	Consensus Pricing	Net market price	(5)% - 20%	2%
			Estimated Pull through %	3 % - 100%	75%
Derivative liabilities	5	Discounted cash flow	Estimated conversion factor		165%
			Estimated growth rate of Visa Class A shares		7%
			Discount rate		3%
			Timing of the resolution of the litigation	12/31/2017 - 06/30/2020	
Municipal securities	3,167	Discounted cash flow	Discount rate	— % - 10%	4%
			Cumulative default	— % - 64%	3%
			Loss given default	5 % - 90%	24%
Asset-backed securities	24	Discounted cash flow	Discount rate	7 % - 7%	7%
			Cumulative prepayment rate	— % - 72%	7%
			Cumulative default	3 % - 53%	7%
			Loss given default	90 % - 100%	98%
			Cure given deferral	50 % - 50%	50%
Loans held for investment	38	Discounted cash flow	Discount rate	7 % - 18%	8%
			Constant prepayment rate	2 % - 22%	9%

The following provides a general description of the impact of a change in an unobservable input on the fair value measurement and the interrelationship between unobservable inputs, where relevant/significant. Interrelationships may also exist between observable and unobservable inputs. Such relationships have not been included in the discussion below.

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Credit loss estimates, such as probability of default, constant default, cumulative default, loss given default, cure given deferral, and loss severity, are driven by the ability of the borrowers to pay their loans and the value of the underlying collateral and are impacted by changes in macroeconomic conditions, typically increasing when economic conditions worsen and decreasing when conditions improve. An increase in the estimated prepayment rate typically results in a decrease in estimated credit losses and vice versa. Higher credit loss estimates generally result in lower fair values. Credit spreads generally increase when liquidity risks and market volatility increase and decrease when liquidity conditions and market volatility improve.

Discount rates and spread over forward interest rate swap rates typically increase when market interest rates increase and/or credit and liquidity risks increase, and decrease when market interest rates decline and/or credit and liquidity conditions improve. Higher discount rates and credit spreads generally result in lower fair market values.

Net market price and pull through percentages generally increase when market interest rates increase and decline when market interest rates decline. Higher net market price and pull through percentages generally result in higher fair values.

Fair values of financial instruments

The following table provides the carrying amounts and estimated fair values of Huntington's financial instruments at December 31, 2018 and December 31, 2017:

<i>(dollar amounts in millions)</i>	December 31, 2018				
	Amortized Cost	Lower of Cost or Market	Fair Value or Fair Value Option	Total Carrying Amount	Estimated Fair Value
Financial Assets					
Cash and short-term assets	2,725	—	—	2,725	2,725
Trading account securities	—	—	105	105	105
Available-for-sale securities	—	—	13,780	13,780	13,780
Held-to-maturity securities	8,565	—	—	8,565	8,286
Other securities	543	—	22	565	565
Loans held for sale	—	191	613	804	806
Net loans and leases (1)	74,049	—	79	74,128	73,668
Derivatives	—	—	209	209	209
Financial Liabilities					
Deposits	84,774	—	—	84,774	84,731
Short-term borrowings	2,017	—	—	2,017	2,017
Long-term debt	8,625	—	—	8,625	8,718
Derivatives	—	—	187	187	187
<i>(dollar amounts in millions)</i>	December 31, 2017				
	Amortized Cost	Lower of Cost or Market	Fair Value or Fair Value Option	Total Carrying Amount	Estimated Fair Value
Financial Assets					
Cash and short-term assets	1,567	—	—	\$ 1,567	\$ 1,567
Trading account securities	—	—	86	86	86
Available-for-sale securities	—	—	14,869	14,869	14,869
Held-to-maturity securities	9,091	—	—	9,091	8,971
Other securities	581	—	19	600	600
Loans held for sale	—	75	413	488	491
Net loans and leases (1)	69,333	—	93	69,426	69,146
Derivatives	—	—	132	132	132
Financial Liabilities					
Deposits	77,041	—	—	77,041	77,010
Short-term borrowings	5,056	—	—	5,056	5,056
Long-term debt	9,206	—	—	9,206	9,402
Derivatives	—	—	86	86	86

(1) Includes collateral-dependent loans measured for impairment

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The following table presents the level in the fair value hierarchy for the estimated fair values at December 31, 2018 and December 31, 2017:

	Estimated Fair Value Measurements at Reporting Date Using			
<i>(dollar amounts in millions)</i>	Level 1	Level 2	Level 3	December 31, 2018
Financial Assets				
Trading account securities	\$ 78	\$ 27	\$ —	\$ 105
Available-for-sale securities	5	10,610	3,165	13,780
Held-to-maturity securities	—	8,286	—	8,286
Other securities (1)	22	—	—	22
Loans held for sale	—	613	193	806
Net loans and direct financing leases	—	49	73,619	73,668
Financial Liabilities				
Deposits	—	76,922	7,809	84,731
Short-term borrowings	1	—	2,016	2,017
Long-term debt	—	8,158	560	8,718

	Estimated Fair Value Measurements at Reporting Date Using			
<i>(dollar amounts in millions)</i>	Level 1	Level 2	Level 3	December 31, 2017
Financial Assets				
Trading account securities	\$ 83	\$ 3	\$ —	\$ 86
Available-for-sale securities	5	11,673	3,191	14,869
Held-to-maturity securities	—	8,971	—	8,971
Other securities (1)	19	—	—	19
Loans held for sale	—	413	78	491
Net loans and direct financing leases	—	—	69,146	69,146
Financial Liabilities				
Deposits	—	73,975	3,035	77,010
Short-term borrowings	—	—	5,056	5,056
Long-term debt	—	8,944	458	9,402

(1) Excludes securities without readily determinable fair values

The short-term nature of certain assets and liabilities result in their carrying value approximating fair value. These include trading account securities, customers' acceptance liabilities, short-term borrowings, bank acceptances outstanding, FHLB advances, and cash and short-term assets, which include cash and due from banks, interest-bearing deposits in banks, interest-bearing deposits at Federal Reserve Bank, federal funds sold, and securities purchased under resale agreements. Loan commitments and letters-of-credit generally have short-term, variable-rate features and contain clauses that limit Huntington's exposure to changes in customer credit quality. Accordingly, their carrying values, which are immaterial at the respective balance sheet dates, are reasonable estimates of fair value.

Certain assets, the most significant being operating lease assets, bank owned life insurance, and premises and equipment, do not meet the definition of a financial instrument and are excluded from this disclosure. Similarly, mortgage and nonmortgage servicing rights, deposit base, and other customer relationship intangibles are not considered financial instruments and are not included above. Accordingly, this fair value information is not intended to, and does not, represent Huntington's underlying value. Many of the assets and liabilities subject to the disclosure requirements are not actively traded, requiring fair values to be estimated by Management. These estimations necessarily involve the use of judgment about a wide variety of factors, including but not limited to, relevancy of market prices of comparable instruments, expected future cash flows, and appropriate discount rates.

18. DERIVATIVE FINANCIAL INSTRUMENTS

Derivative financial instruments are recorded in the Consolidated Balance Sheets as either an asset or a liability (in other assets or other liabilities, respectively) and measured at fair value.

Derivative financial instruments can be designated as accounting hedges under GAAP. Designating a derivative as an accounting hedge allows Huntington to recognize gains and losses, less any ineffectiveness, in the income statement within the same period that the hedged item affects earnings. Gains and losses on derivatives that are not designated to an effective hedge relationship under GAAP immediately impact earnings within the period they occur.

The following table presents the fair values of all derivative instruments included in the Consolidated Balance Sheets at December 31, 2018 and December 31, 2017. Amounts in the table below are presented gross without the impact of any net collateral arrangements.

	December 31, 2018		December 31, 2017	
	Asset	Liability	Asset	Liability
<i>(dollar amounts in millions)</i>				
Derivatives designated as Hedging Instruments				
Interest rate contracts	\$ 44	\$ 42	\$ 22	\$ 121
Derivatives not designated as Hedging Instruments				
Interest rate contracts	261	165	187	100
Foreign exchange contracts	23	19	18	18
Commodities contracts	172	168	92	87
Equity contracts	—	10	3	5
Total Contracts	\$ 500	\$ 404	\$ 322	\$ 331

The following table presents the amount of gain or loss recognized in income for derivatives not designated as hedging instruments under ASC Subtopic 815-10 in the Condensed Consolidated Income Statement for the year ended December 31, 2018.

	Location of Gain or (Loss) Recognized in Income on Derivative	Amount of Gain or (Loss) Recognized in Income on Derivative
		Year Ended December 31,
<i>(dollar amounts in millions)</i>		
Interest rate contracts:		
Customer	Capital markets fees	\$ 41
Mortgage Banking	Mortgage banking income	(19)
Foreign exchange contracts	Capital markets fees	27
Commodities contracts	Capital markets fees	6
Equity contracts	Other noninterest expense	4
Total		\$ 59

Derivatives used in Asset and Liability Management Activities

Huntington engages in balance sheet hedging activity, principally for asset liability management purposes, to convert fixed rate assets or liabilities into floating rate or vice versa. Balance sheet hedging activity is arranged to receive hedge accounting treatment and is classified as either fair value or cash flow hedges. Fair value hedges are executed to convert fixed-rate liabilities to floating rate. Cash flow hedges are also used to convert floating rate assets into fixed rate assets.

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The following table presents the gross notional values of derivatives used in Huntington's asset and liability management activities at December 31, 2018 and December 31, 2017, identified by the underlying interest rate-sensitive instruments:

<i>(dollar amounts in millions)</i>	December 31, 2018		
	Fair Value Hedges	Cash Flow Hedges	Total
Instruments associated with:			
Investment securities	—	12	12
Long-term debt	4,865	—	4,865
Total notional value at December 31, 2018	\$ 4,865	\$ 12	\$ 4,877

<i>(dollar amounts in millions)</i>	December 31, 2017		
	Fair Value Hedges	Cash Flow Hedges	Total
Instruments associated with:			
Long-term debt	8,375	—	8,375
Total notional value at December 31, 2017	\$ 8,375	\$ —	\$ 8,375

The following table presents additional information about the interest rate swaps used in Huntington's asset and liability management activities at December 31, 2018 and December 31, 2017:

<i>(dollar amounts in millions)</i>	December 31, 2018				
	Notional Value	Average Maturity (years)	Fair Value	Weighted-Average Rate	
				Receive	Pay
Asset conversion swaps					
Receive fixed—generic	\$ 12	1.2	\$ —	2.20%	2.46%
Liability conversion swaps					
Receive fixed—generic	4,865	2.6	2	2.24	2.54
Total swap portfolio at December 31, 2018	\$ 4,877	2.6	\$ 2	2.24%	2.54%

<i>(dollar amounts in millions)</i>	December 31, 2017				
	Notional Value	Average Maturity (years)	Fair Value	Weighted-Average Rate	
				Receive	Pay
Liability conversion swaps					
Receive fixed—generic	8,375	2.5	(99)	1.56%	1.44%
Total swap portfolio at December 31, 2017	\$ 8,375	2.5	\$ (99)		

These derivative financial instruments were entered into for the purpose of managing the interest rate risk of assets and liabilities. Consequently, net amounts receivable or payable on contracts hedging either interest earning assets or interest bearing liabilities were accrued as an adjustment to either interest income or interest expense. The net amounts resulted in an increase (decrease) to net interest income of \$(36) million, \$23 million, and \$72 million for the years ended December 31, 2018, 2017, and 2016, respectively.

During the second quarter of 2018, Huntington terminated \$2.9 billion (notional value) of liability conversion swaps subsequent to de-designating these swaps as fair value hedges. The adjusted basis of the hedged item at termination was recorded as a loss of \$149 million, which is being amortized over the remaining life of the long-term debt using the effective yield method. Cash payments to counterparties resulting from termination of interest rate swaps are classified as operating activities in our Consolidated Statement of Cash Flows.

Fair Value Hedges

The changes in fair value of the fair value hedges are recorded through earnings and offset against changes in the fair value of the hedged item.

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The following table presents the change in fair value for derivatives designated as fair value hedges as well as the offsetting change in fair value on the hedged item:

<i>(dollar amounts in millions)</i>	Year Ended December 31,		
	2018	2017	2016
Interest rate contracts			
Change in fair value of interest rate swaps hedging long-term debt (1)	112	(53)	(122)
Change in fair value of hedged long term debt (1)	(104)	54	112

(1) Recognized in Interest expense—long-term debt in the Consolidated Statements of Income.

As of December 31, 2018, the following amounts were recorded on the balance sheet related to cumulative basis adjustments for fair value hedges.

<i>(dollar amounts in millions)</i>	Carrying Amount of the Hedged Liabilities	Cumulative Amount of Fair Value Hedging Adjustment To Hedged Liabilities
	December 31, 2018	December 31, 2018
Long-term debt	\$ 4,845	\$ (12)

The cumulative amount of fair value hedging adjustments remaining for any hedged assets and liabilities for which hedge accounting has been discontinued is \$(127) million at December 31, 2018.

Derivatives used in mortgage banking activities

Huntington's mortgage origination hedging activity is related to the hedging of the mortgage pricing commitments to customers and the secondary sale to third parties. The value of a newly originated mortgage is not firm until the interest rate is committed or locked. Forward commitments to sell economically hedge the possible loss on interest rate lock commitments due to interest rate change. The net asset (liability) position of these derivatives at December 31, 2018 and December 31, 2017 are \$(4) million and \$7 million, respectively. At December 31, 2018 and 2017, Huntington had commitments to sell securities collateralized by mortgage loans of \$0.8 billion and \$0.7 billion, respectively. These contracts mature in less than one year.

Derivatives used in municipal bond underwriting

Interest rate futures contracts are used to offset interest rate exposure of the broker-dealer underwriting inventory. These derivative financial instruments are recorded on the consolidated balance sheets as trading account securities and the related net gain associated is recorded in capital market fees on the Consolidated Statement of Income. These derivatives are not designated as hedging instruments. The total notional of these derivative financial instruments at December 31, 2018 was \$11 million and had a fair value of less than \$1 million.

Derivatives used in customer related activities

Various derivative financial instruments are offered to enable customers to meet their financing and investing objectives and for their risk management purposes. Derivative financial instruments used in trading activities consist of commodity, interest rate, and foreign exchange contracts. Huntington enters into offsetting third-party contracts with approved, reputable counterparties with substantially matching terms and currencies in order to economically hedge significant exposure related to derivatives used in trading activities.

The interest rate or price risk of customer derivatives is mitigated by entering into similar derivatives having offsetting terms with other counterparties. The credit risk to these customers is evaluated and included in the calculation of fair value. Foreign currency derivatives help the customer hedge risk and reduce exposure to fluctuations in exchange rates. Transactions are primarily in liquid currencies with Canadian dollars and Euros comprising a majority of all transactions. Commodity derivatives help the customer hedge risk and reduce exposure to fluctuations in the price of various commodities. Hedging of energy-related products and base metals comprise the majority of all transactions.

The net fair values of these derivative financial instruments, for which the gross amounts are included in other assets or other liabilities at December 31, 2018 and December 31, 2017, were \$92 million and \$88 million, respectively. The total notional values of derivative financial instruments used by Huntington on behalf of customers, including offsetting derivatives, were \$26 billion and \$22 billion at December 31, 2018 and December 31, 2017, respectively. Huntington's credit risk from customer derivatives was \$132 million and \$119 million at the same dates, respectively.

Visa®-related Swaps

In connection with the sale of Huntington's Class B Visa® shares, Huntington entered into a swap agreement with the purchaser of the shares. The swap agreement adjusts for dilution in the conversion ratio of Class B shares resulting from changes in the Visa® litigation. In connection with the FirstMerit acquisition, Huntington acquired an additional Visa® related swap agreement. At December 31, 2018, the combined fair value of the swap liabilities of \$3 million is an estimate of the exposure liability based upon Huntington's assessment of the potential Visa® litigation losses and timing of the litigation settlement.

Financial assets and liabilities that are offset in the Consolidated Balance Sheets

Huntington records derivatives at fair value as further described in Note 17.

Derivative balances are presented on a net basis taking into consideration the effects of legally enforceable master netting agreements. Additionally, collateral exchanged with counterparties is also netted against the applicable derivative fair values. Huntington enters into derivative transactions with two primary groups: broker-dealers and banks, and Huntington's customers. Different methods are utilized for managing counterparty credit exposure and credit risk for each of these groups.

Huntington enters into transactions with broker-dealers and banks for various risk management purposes. These types of transactions generally are high dollar volume. Huntington enters into collateral and master netting agreements with these counterparties, and routinely exchanges cash and high quality securities collateral. Huntington enters into transactions with customers to meet their financing, investing, payment and risk management needs. These types of transactions generally are low dollar volume. Huntington enters into master netting agreements with customer counterparties, however collateral is generally not exchanged with customer counterparties.

At December 31, 2018 and December 31, 2017, aggregate credit risk associated with derivatives, net of collateral that has been pledged by the counterparty, was \$37 million and \$30 million, respectively. The credit risk associated with interest rate swaps is calculated after considering master netting agreements with broker-dealers and banks.

At December 31, 2018, Huntington pledged \$45 million of investment securities and cash collateral to counterparties, while other counterparties pledged \$144 million of investment securities and cash collateral to Huntington to satisfy collateral netting agreements. In the event of credit downgrades, Huntington would not be required to provide additional collateral.

The following tables present the gross amounts of these assets and liabilities with any offsets to arrive at the net amounts recognized in the Consolidated Balance Sheets at December 31, 2018 and December 31, 2017:

Offsetting of Derivative Assets

		Gross amounts of recognized assets	Gross amounts offset in the consolidated balance sheets	Net amounts of assets presented in the consolidated balance sheets	Gross amounts not offset in the condensed consolidated balance sheets		Net amount
					Financial instruments	Cash collateral received	
December 31, 2018	Derivatives	\$ 500	\$ (291)	\$ 209	\$ (4)	\$ (53)	\$ 152
December 31, 2017	Derivatives	322	(190)	132	(11)	(18)	103

Offsetting of Derivative Liabilities

		Gross amounts of recognized liabilities	Gross amounts offset in the consolidated balance sheets	Net amounts of liabilities presented in the consolidated balance sheets	Gross amounts not offset in the condensed consolidated balance sheets		Net amount
					Financial instruments	Cash collateral delivered	
December 31, 2018	Derivatives	\$ 404	\$ (217)	\$ 187	\$ —	\$ (12)	\$ 175
December 31, 2017	Derivatives	331	(245)	86	—	(21)	65

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19. VIEs

Unconsolidated VIEs

The following tables provide a summary of the assets and liabilities included in Huntington's Consolidated Financial Statements, as well as the maximum exposure to losses, associated with its interests related to unconsolidated VIEs for which Huntington holds an interest, but is not the primary beneficiary, to the VIE at December 31, 2018, and 2017:

	December 31, 2018		
	Total Assets	Total Liabilities	Maximum Exposure to Loss
<i>(dollar amounts in millions)</i>			
Trust Preferred Securities	14	252	—
Affordable Housing Tax Credit Partnerships	708	357	708
Other Investments	126	53	126
Total	<u>\$ 848</u>	<u>\$ 662</u>	<u>\$ 834</u>

	December 31, 2017		
	Total Assets	Total Liabilities	Maximum Exposure to Loss
<i>(dollar amounts in millions)</i>			
Trust Preferred Securities	14	252	—
Affordable Housing Tax Credit Partnerships	636	335	636
Other Investments	125	53	125
Total	<u>\$ 775</u>	<u>\$ 640</u>	<u>\$ 761</u>

Trust-Preferred Securities

Huntington has certain wholly-owned trusts whose assets, liabilities, equity, income, and expenses are not included within Huntington's Consolidated Financial Statements. These trusts have been formed for the sole purpose of issuing trust-preferred securities, from which the proceeds are then invested in Huntington junior subordinated debentures, which are reflected in Huntington's Consolidated Balance Sheet as long-term debt. The trust securities are the obligations of the trusts, and as such, are not consolidated within Huntington's Consolidated Financial Statements.

A list of trust-preferred securities outstanding at December 31, 2018 follows:

<i>(dollar amounts in millions)</i>	Rate	Principal amount of subordinated note/debenture issued to trust (1)	Investment in unconsolidated subsidiary
Huntington Capital I	3.50% (2)	\$ 70	\$ 6
Huntington Capital II	3.42 (3)	32	3
Sky Financial Capital Trust III	4.20 (4)	72	2
Sky Financial Capital Trust IV	4.20 (4)	74	2
Camco Financial Trust	4.13 (5)	4	1
Total		<u>\$ 252</u>	<u>\$ 14</u>

(1) Represents the principal amount of debentures issued to each trust, including unamortized original issue discount.

(2) Variable effective rate at December 31, 2018, based on three-month LIBOR + 0.70%.

(3) Variable effective rate at December 31, 2018, based on three-month LIBOR + 0.625%.

(4) Variable effective rate at December 31, 2018, based on three-month LIBOR + 1.40%.

(5) Variable effective rate at December 31, 2018, based on three month LIBOR + 1.33%.

Each issue of the junior subordinated debentures has an interest rate equal to the corresponding trust securities distribution rate. Huntington has the right to defer payment of interest on the debentures at any time, or from time-to-time for a period not exceeding five years provided that no extension period may extend beyond the stated maturity of the related debentures. During any such extension period, distributions to the trust securities will also be deferred and Huntington's ability to pay dividends on its common stock will be restricted. Periodic cash payments and payments upon liquidation or redemption with respect to trust securities are guaranteed by Huntington to the extent of funds held by the trusts. The guarantee ranks subordinate and junior in right of payment to all indebtedness of the Company to the same extent as the junior subordinated debt. The guarantee does not place a limitation on the amount of additional indebtedness that may be incurred by Huntington.

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Affordable Housing Tax Credit Partnerships

Huntington makes certain equity investments in various limited partnerships that sponsor affordable housing projects utilizing the LIHTC pursuant to Section 42 of the Internal Revenue Code. The purpose of these investments is to achieve a satisfactory return on capital, to facilitate the sale of additional affordable housing product offerings, and to assist in achieving goals associated with the Community Reinvestment Act. The primary activities of the limited partnerships include the identification, development, and operation of multi-family housing that is leased to qualifying residential tenants. Generally, these types of investments are funded through a combination of debt and equity.

Huntington uses the proportional amortization method to account for a majority of its investments in these entities. These investments are included in other assets. Investments that do not meet the requirements of the proportional amortization method are accounted for using the equity method. Investment losses related to these investments are included in noninterest income in the Consolidated Statements of Income.

The following table presents the balances of Huntington's affordable housing tax credit investments and related unfunded commitments at December 31, 2018 and 2017.

<i>(dollar amounts in millions)</i>	December 31, 2018	December 31, 2017
Affordable housing tax credit investments	\$ 1,147	\$ 996
Less: amortization	(439)	(360)
Net affordable housing tax credit investments	<u>\$ 708</u>	<u>\$ 636</u>
Unfunded commitments	<u>\$ 357</u>	<u>\$ 335</u>

The following table presents other information relating to Huntington's affordable housing tax credit investments for the years ended December 31, 2018, 2017, and 2016:

<i>(dollar amounts in millions)</i>	Year Ended December 31,		
	2018	2017	2016
Tax credits and other tax benefits recognized	\$ 92	\$ 91	\$ 80
Proportional amortization method			
Tax credit amortization expense included in provision for income taxes	79	70	53
Equity method			
Tax credit investment losses included in noninterest income	—	—	1

There were no material sales of affordable housing tax credit investments in 2018, 2017 or 2016. Huntington recognized immaterial impairment losses for the years ended December 31, 2018, 2017 and 2016. The impairment losses recognized related to the fair value of the tax credit investments that were less than carrying value.

Other Investments

Other investments determined to be VIE's include investments in Small Business Investment Companies, Historic Tax Credit Investments, certain equity method investments, automobile securitizations and other miscellaneous investments.

20. COMMITMENTS AND CONTINGENT LIABILITIES

Commitments to extend credit

In the ordinary course of business, Huntington makes various commitments to extend credit that are not reflected in the Consolidated Financial Statements. The contract amounts of these financial agreements at December 31, 2018, and December 31, 2017 were as follows:

<i>(dollar amounts in millions)</i>	At December 31,	
	2018	2017
Contract amount representing credit risk		
Commitments to extend credit:		
Commercial	\$ 17,149	\$ 16,219
Consumer	14,974	13,384
Commercial real estate	1,188	1,366
Standby letters of credit	676	510
Commercial letters-of-credit	14	21

Commitments to extend credit generally have fixed expiration dates, are variable-rate, and contain clauses that permit Huntington to terminate or otherwise renegotiate the contracts in the event of a significant deterioration in the customer's credit

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quality. These arrangements normally require the payment of a fee by the customer, the pricing of which is based on prevailing market conditions, credit quality, probability of funding, and other relevant factors. Since many of these commitments are expected to expire without being drawn upon, the contract amounts are not necessarily indicative of future cash requirements. The interest rate risk arising from these financial instruments is insignificant as a result of their predominantly short-term, variable-rate nature.

Standby letters-of-credit are conditional commitments issued to guarantee the performance of a customer to a third-party. These guarantees are primarily issued to support public and private borrowing arrangements, including commercial paper, bond financing, and similar transactions. Most of these arrangements mature within two years. The carrying amount of deferred revenue associated with these guarantees was \$13 million and \$10 million at December 31, 2018 and December 31, 2017, respectively.

Commercial letters-of-credit represent short-term, self-liquidating instruments that facilitate customer trade transactions and generally have maturities of no longer than 90 days. The goods or cargo being traded normally secure these instruments.

Litigation and Regulatory Matters

In the ordinary course of business, Huntington is routinely a defendant in or party to pending and threatened legal and regulatory actions and proceedings.

In view of the inherent difficulty of predicting the outcome of such matters, particularly where the claimants seek very large or indeterminate damages or where the matters present novel legal theories or involve a large number of parties, Huntington generally cannot predict what the eventual outcome of the pending matters will be, what the timing of the ultimate resolution of these matters will be, or what the eventual loss, fines or penalties related to each matter may be.

Huntington establishes an accrued liability when those matters present loss contingencies that are both probable and estimable. In such cases, there may be an exposure to loss in excess of any amounts accrued. Huntington thereafter continues to monitor the matter for further developments that could affect the amount of the accrued liability that has been previously established.

For certain matters, Huntington is able to estimate a range of possible loss. In cases in which Huntington possesses information to estimate a range of possible loss, that estimate is aggregated and disclosed below. There may be other matters for which a loss is probable or reasonably possible but such an estimate of the range of possible loss may not be possible. For those matters where an estimate of the range of possible loss is possible, management currently estimates the aggregate range of possible loss is \$0 to \$30 million at December 31, 2018 in excess of the accrued liability (if any) related to those matters. This estimated range of possible loss is based upon currently available information and is subject to significant judgment and a variety of assumptions, and known and unknown uncertainties. The matters underlying the estimated range will change from time to time, and actual results may vary significantly from the current estimate. The estimated range of possible loss does not represent Huntington's maximum loss exposure.

Based on current knowledge, management does not believe that loss contingencies arising from pending matters will have a material adverse effect on the consolidated financial position of Huntington. Further, management believes that amounts accrued are adequate to address Huntington's contingent liabilities. However, in light of the inherent uncertainties involved in these matters, some of which are beyond Huntington's control, and the large or indeterminate damages sought in some of these matters, an adverse outcome in one or more of these matters could be material to Huntington's results of operations for any particular reporting period.

Commitments under Operating Lease Obligations

At December 31, 2018, Huntington and its subsidiaries were obligated under noncancelable leases for land, buildings, and equipment. Many of these leases contain renewal options and certain leases provide options to purchase the leased property during or at the expiration of the lease period at specified prices. Some leases contain escalation clauses calling for rentals to be adjusted for increased real estate taxes and other operating expenses or proportionately adjusted for increases in the consumer or other price indices.

The future minimum rental payments required under operating leases that have initial or remaining noncancelable lease terms in excess of one year as of December 31, 2018, were as follows: \$59 million in 2019, \$55 million in 2020, \$40 million in 2021, \$35 million in 2022, \$27 million in 2023, and \$95 million thereafter. At December 31, 2018, total minimum lease payments have not been reduced by minimum sublease rentals of \$4 million due in the future under noncancelable subleases. At December 31, 2018, the future minimum sublease rental payments that Huntington expects to receive were as follows: \$2 million in 2019, \$2 million in 2020, and less than \$1 million thereafter. The rental expense for all operating leases was \$70 million, \$76 million, and \$65 million for 2018, 2017, and 2016, respectively. Huntington had no material obligations under capital leases.

21. OTHER REGULATORY MATTERS

Huntington and the Bank are subject to certain risk-based capital and leverage ratio requirements under the U.S. Basel III capital rules adopted by the Federal Reserve, for Huntington, and by the OCC, for the Bank. These rules implement the Basel III international regulatory capital standards in the United States, as well as certain provisions of the Dodd-Frank Act. These quantitative calculations are minimums, and the Federal Reserve and OCC may determine that a banking organization, based on its size, complexity or risk profile, must maintain a higher level of capital in order to operate in a safe and sound manner.

Under the U.S. Basel III capital rules, Huntington's and the Bank's assets, exposures and certain off-balance sheet items are subject to risk weights used to determine the institutions' risk-weighted assets. These risk-weighted assets are used to calculate the following minimum capital ratios for Huntington and the Bank:

CET1 Risk-Based Capital Ratio, equal to the ratio of CET1 capital to risk-weighted assets. CET1 capital primarily includes common shareholders' equity subject to certain regulatory adjustments and deductions, including with respect to goodwill, intangible assets, certain deferred tax assets, and AOCI. Certain of these adjustments and deductions were subject to phase-in periods that began on January 1, 2015, and was scheduled to end on January 1, 2018. Together with the FDIC, the Federal Reserve and OCC have issued proposed rules that would simplify the capital treatment of certain capital deductions and adjustments, and the final phase-in period for these capital deductions and adjustments has been indefinitely delayed. In addition, in December 2018, the U.S. federal banking agencies finalized rules that would permit BHCs and banks to phase-in, for regulatory capital purposes, the day-one impact of the new current expected credit loss accounting rule on retained earnings over a period of three years. For further discussion of the new current expected credit loss accounting rule, see Note 2 of the Notes to Consolidated Financial Statements.

Tier 1 Risk-Based Capital Ratio, equal to the ratio of Tier 1 capital to risk-weighted assets. Tier 1 capital is primarily comprised of CET1 capital, perpetual preferred stock and certain qualifying capital instruments.

Total Risk-Based Capital Ratio, equal to the ratio of total capital, including CET1 capital, Tier 1 capital and Tier 2 capital, to risk-weighted assets. Tier 2 capital primarily includes qualifying subordinated debt and qualifying ALLL. Tier 2 capital also includes, among other things, certain trust preferred securities.

Tier 1 Leverage Ratio, equal to the ratio of Tier 1 capital to quarterly average assets (net of goodwill, certain other intangible assets and certain other deductions).

The total minimum regulatory capital ratios and well-capitalized minimum ratios are reflected on the following page. The Federal Reserve has not yet revised the well-capitalized standard for BHCs to reflect the higher capital requirements imposed under the U.S. Basel III capital rules. For purposes of the Federal Reserve's Regulation Y, including determining whether a BHC meets the requirements to be an FHC, BHCs, such as Huntington, must maintain a Tier 1 Risk-Based Capital Ratio of 6.0% or greater and a Total Risk-Based Capital Ratio of 10.0% or greater. If the Federal Reserve were to apply the same or a very similar well-capitalized standard to BHCs as that applicable to the Bank, Huntington's capital ratios as of December 31, 2018 would exceed such revised well-capitalized standard. The Federal Reserve may require BHCs, including Huntington, to maintain capital ratios substantially in excess of mandated minimum levels, depending upon general economic conditions and a BHC's particular condition, risk profile and growth plans.

Failure to be well-capitalized or to meet minimum capital requirements could result in certain mandatory and possible additional discretionary actions by regulators that, if undertaken, could have an adverse material effect on our operations or financial condition. Failure to be well-capitalized or to meet minimum capital requirements could also result in restrictions on Huntington's or the Bank's ability to pay dividends or otherwise distribute capital or to receive regulatory approval of applications.

In addition to meeting the minimum capital requirements, under the U.S. Basel III capital rules Huntington and the Bank must also maintain the required Capital Conservation Buffer to avoid becoming subject to restrictions on capital distributions and certain discretionary bonus payments to management. The Capital Conservation Buffer is calculated as a ratio of CET1 capital to risk-weighted assets, and it effectively increases the required minimum risk-based capital ratios. The Capital Conservation Buffer requirement was phased in over a three-year period that began on January 1, 2016. The phase-in period ended on January 1, 2019, and the Capital Conservation Buffer is now at its fully phased-in level of 2.5%. Throughout 2018, the required Capital Conservation Buffer was 1.875%. The Tier 1 Leverage Ratio is not impacted by the Capital Conservation Buffer, and a banking institution may be considered well-capitalized while remaining out of compliance with the Capital Conservation Buffer. In April 2018, the Federal Reserve issued a proposal that would, among other things, replace the Capital Conservation Buffer with stress buffer requirements for certain large BHCs, including Huntington. Please refer to the Proposed Stress Buffer Requirements section in the Item 1: Business for further details.

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As of December 31, 2018, Huntington's and the Bank's regulatory capital ratios were above the well-capitalized standards and met the then-applicable Capital Conservation Buffer. Please refer to the table below for a summary of Huntington's and the Bank's regulatory capital ratios as of December 31, 2018, calculated using the regulatory capital methodology applicable during 2018.

		Minimum Regulatory Capital Ratios	Minimum Ratio+ Capital Conservation Buffer	Well- Capitalized Minimums	Basel III			
					December 31,			
					2018		2017	
					Ratio	Amount	Ratio	Amount
<i>(dollar amounts in millions)</i>								
CET 1 risk-based capital	Consolidated	4.50	6.375%	N/A	9.65	8,271	10.01	8,041
	Bank	4.50	6.375	6.50	10.19	8,732	11.02	8,856
Tier 1 risk-based capital	Consolidated	6.00	7.875	6.00	11.06	9,478	11.34	9,110
	Bank	6.00	7.875	8.00	11.21	9,611	12.10	9,727
Total risk-based capital	Consolidated	8.00	9.875	10.00	12.98	11,122	13.39	10,757
	Bank	8.00	9.875	10.00	13.42	11,504	14.33	11,517
Tier 1 leverage	Consolidated	4.00%	N/A	N/A	9.10%	\$ 9,478	9.09%	\$ 9,110
	Bank	4.00	N/A	5.00%	9.23	9,611	9.70	9,727

Huntington and its subsidiaries are also subject to various regulatory requirements that impose restrictions on cash, debt, and dividends. The Bank is required to maintain cash reserves based on the level of certain of its deposits. This reserve requirement may be met by holding cash in banking offices or on deposit at the FRB. During 2018 and 2017, the average balances of these deposits were \$0.4 billion and \$0.4 billion, respectively.

Under current Federal Reserve regulations, the Bank is limited as to the amount and type of loans it may make to the parent company and nonbank subsidiaries. At December 31, 2018, the Bank could lend \$1.2 billion to a single affiliate, subject to the qualifying collateral requirements defined in the regulations.

Dividends from the Bank are one of the major sources of funds for the Company. These funds aid the Company in the payment of dividends to shareholders, expenses, and other obligations. Payment of dividends and/or return of capital to the parent company is subject to various legal and regulatory limitations. During 2018, the Bank paid dividends of \$1.7 billion to the holding company. Also, there are statutory and regulatory limitations on the ability of national banks to pay dividends or make other capital distributions.

22. PARENT-ONLY FINANCIAL STATEMENTS

The parent-only financial statements, which include transactions with subsidiaries, are as follows:

Balance Sheets

(dollar amounts in millions)

Assets

	December 31,	
	2018	2017
Cash and due from banks	\$ 2,352	\$ 1,618
Due from The Huntington National Bank	739	798
Due from non-bank subsidiaries	40	58
Investment in The Huntington National Bank	11,493	11,696
Investment in non-bank subsidiaries	142	111
Accrued interest receivable and other assets	239	252
Total assets	<u>\$ 15,005</u>	<u>\$ 14,533</u>

Liabilities and shareholders' equity

Long-term borrowings	\$ 3,216	\$ 3,128
Dividends payable, accrued expenses, and other liabilities	687	591
Total liabilities	<u>3,903</u>	<u>3,719</u>
Shareholders' equity (1)	<u>11,102</u>	<u>10,814</u>
Total liabilities and shareholders' equity	<u>\$ 15,005</u>	<u>\$ 14,533</u>

(1) See Consolidated Statements of Changes in Shareholders' Equity

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Statements of Income

(dollar amounts in millions)

Income

Dividends from:

The Huntington National Bank

Non-bank subsidiaries

Interest from:

The Huntington National Bank

Non-bank subsidiaries

Other

Total income

Expense

Personnel costs

Interest on borrowings

Other

Total expense

Income before income taxes and equity in undistributed net income of subsidiaries

Provision (benefit) for income taxes

Income before equity in undistributed net income of subsidiaries

Increase (decrease) in undistributed net income (loss) of:

The Huntington National Bank

Non-bank subsidiaries

Net income

Other comprehensive income (loss) (1)

Comprehensive income

Year Ended December 31

	2018	2017	2016
Dividends from:			
The Huntington National Bank	\$ 1,722	\$ 298	\$ 188
Non-bank subsidiaries	—	14	11
Interest from:			
The Huntington National Bank	27	20	14
Non-bank subsidiaries	2	2	3
Other	(2)	4	—
Total income	1,749	338	216
Expense			
Personnel costs	2	19	12
Interest on borrowings	124	91	59
Other	118	115	123
Total expense	244	225	194
Income before income taxes and equity in undistributed net income of subsidiaries	1,505	113	22
Provision (benefit) for income taxes	(48)	(56)	(56)
Income before equity in undistributed net income of subsidiaries	1,553	169	78
Increase (decrease) in undistributed net income (loss) of:			
The Huntington National Bank	(186)	1,015	629
Non-bank subsidiaries	26	2	5
Net income	\$ 1,393	\$ 1,186	\$ 712
Other comprehensive income (loss) (1)	(80)	(34)	(175)
Comprehensive income	\$ 1,313	\$ 1,152	\$ 537

(1) See Consolidated Statements of Comprehensive Income for other comprehensive income (loss) detail.

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Statements of Cash Flows

(dollar amounts in millions)

	Year Ended December 31,		
	2018	2017	2016
Operating activities			
Net income	\$ 1,393	\$ 1,186	\$ 712
Adjustments to reconcile net income to net cash provided by operating activities:			
Equity in undistributed net income of subsidiaries	197	(997)	(634)
Depreciation and amortization	(2)	4	(1)
Other, net	121	(37)	(24)
Net cash (used for) provided by operating activities	1,709	156	53
Investing activities			
Repayments from subsidiaries	21	442	464
Advances to subsidiaries	(13)	(29)	(1,758)
Proceeds from sale of securities available-for-sale	—	1	(2)
Cash paid for acquisitions, net of cash received	(15)	—	(133)
Net cash (used for) provided by investing activities	(7)	414	(1,429)
Financing activities			
Net proceeds from issuance of medium-term notes	501	—	—
Net proceeds from issuance of long-term borrowings	—	—	1,990
Payment of medium-term notes	(400)	—	—
Payment of long-term debt	—	—	(65)
Dividends paid on common stock	(584)	(425)	(299)
Repurchases of common stock	(939)	(260)	—
Net proceeds from issuance of preferred stock	495	—	585
Other, net	(41)	(20)	1
Net cash provided by (used for) financing activities	(968)	(705)	2,212
Increase (decrease) in cash and cash equivalents	734	(135)	836
Cash and cash equivalents at beginning of year	1,618	1,753	917
Cash and cash equivalents at end of year	\$ 2,352	\$ 1,618	\$ 1,753
Supplemental disclosure:			
Interest paid	\$ 126	\$ 90	\$ 36

23. SEGMENT REPORTING

Huntington's business segments are based on the internally-aligned segment leadership structure, which is how management monitors results and assesses performance. The Company has four major business segments: Consumer and Business Banking, Commercial Banking, Vehicle Finance, Regional Banking and The Huntington Private Client Group (RBHPCG). The Treasury / Other function includes technology and operations, other unallocated assets, liabilities, revenue, and expense.

Business segment results are determined based upon Huntington's management reporting system, which assigns balance sheet and income statement items to each of the business segments. The process is designed around the organizational and management structure and, accordingly, the results derived are not necessarily comparable with similar information published by other financial institutions. Additionally, because of the interrelationships of the various segments, the information presented is not indicative of how the segments would perform if they operated as independent entities.

Revenue is recorded in the business segment responsible for the related product or service. Fee sharing is recorded to allocate portions of such revenue to other business segments involved in selling to, or providing service to customers. Results of operations for the business segments reflect these fee sharing allocations.

The management accounting process that develops the business segment reporting utilizes various estimates and allocation methodologies to measure the performance of the business segments. Expenses are allocated to business segments using a two-phase approach. The first phase consists of measuring and assigning unit costs (activity-based costs) to activities related to product origination and servicing. These activity-based costs are then extended, based on volumes, with the resulting amount allocated to business segments that own the related products. The second phase consists of the allocation of overhead costs to all four business segments from Treasury / Other. Huntington utilizes a full-allocation methodology, where all Treasury / Other expenses, except reported Significant Items, and a small amount of other residual unallocated expenses, are allocated to the four business segments.

The management accounting policies and processes utilized in compiling segment financial information are highly subjective and, unlike financial accounting, are not based on authoritative guidance similar to GAAP. As a result, reported segment results are not necessarily comparable with similar information reported by other financial institutions. Furthermore, changes in management

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structure or allocation methodologies and procedures result in changes in reported segment financial data. Accordingly, certain amounts have been reclassified to conform to the current period presentation.

Huntington uses an active and centralized FTP methodology to attribute appropriate net interest income to the business segments. The intent of the FTP methodology is to transfer interest rate risk from the business segments by providing matched duration funding of assets and liabilities. The result is to centralize the financial impact, management, and reporting of interest rate risk in the Treasury / Other function where it can be centrally monitored and managed. The Treasury / Other function charges (credits) an internal cost of funds for assets held in (or pays for funding provided by) each business segment. The FTP rate is based on prevailing market interest rates for comparable duration assets (or liabilities).

Consumer and Business Banking - The Consumer and Business Banking segment, including Home Lending, provides a wide array of financial products and services to consumer and small business customers including but not limited to checking accounts, savings accounts, money market accounts, certificates of deposit, mortgage loans, consumer loans, credit cards, and small business loans and investment products. Other financial services available to consumer and small business customers include insurance, interest rate risk protection, foreign exchange, and treasury management. Business Banking is defined as serving companies with revenues up to \$20 million. Home Lending supports origination and servicing of consumer loans and mortgages for customers who are generally located in our primary banking markets across all segments.

Commercial Banking - Through a relationship banking model, this segment provides a wide array of products and services to the middle market, corporate, real estate and government public sector customers located primarily within our geographic footprint. The segment is divided into six business units: Middle Market, Specialty Banking, Asset Finance, Capital Markets/Institutional Corporate Banking, Commercial Real Estate, and Treasury Management.

Vehicle Finance - Our products and services include providing financing to consumers for the purchase of automobiles, light-duty trucks, recreational vehicles, and marine craft at franchised and other select dealerships, and providing financing to franchised dealerships for the acquisition of new and used inventory. Products and services are delivered through highly specialized relationship-focused bankers and product partners.

Regional Banking and The Huntington Private Client Group - The core business of The Huntington Private Client Group is The Huntington Private Bank, which consists of Private Banking, Wealth & Investment Management, and Retirement Plan Services. The Huntington Private Bank provides high net-worth customers with deposit, lending (including specialized lending options), and banking services. The Huntington Private Bank also delivers wealth management and legacy planning through investment and portfolio management, fiduciary administration, and trust services. This group also provides retirement plan services to corporate businesses. The Huntington Private Client Group provides corporate trust services and institutional and mutual fund custody services.

Listed below is certain financial information reconciled to Huntington's December 31, 2018, December 31, 2017, and December 31, 2016, reported results by business segment:

Income Statements (dollar amounts in millions)	Consumer & Business Banking	Commercial Banking	Vehicle Finance	RBHPCG	Treasury / Other	Huntington Consolidated
2018						
Net interest income	\$ 1,685	\$ 938	\$ 403	\$ 192	\$ (29)	\$ 3,189
Provision (benefit) for credit losses	141	38	55	1	—	235
Noninterest income	738	313	10	193	67	1,321
Noninterest expense	1,696	513	149	250	39	2,647
Provision (benefit) for income taxes	123	147	44	28	(107)	235
Net income (loss)	<u>\$ 463</u>	<u>\$ 553</u>	<u>\$ 165</u>	<u>\$ 106</u>	<u>\$ 106</u>	<u>\$ 1,393</u>
2017						
Net interest income	\$ 1,549	\$ 901	\$ 424	\$ 172	\$ (44)	\$ 3,002
Provision (benefit) for credit losses	108	30	63	—	—	201
Noninterest income	735	278	14	188	92	1,307
Noninterest expense	1,647	474	149	243	201	2,714
Provision (benefit) for income taxes	185	236	79	41	(333)	208
Net income (loss)	<u>\$ 344</u>	<u>\$ 439</u>	<u>\$ 147</u>	<u>\$ 76</u>	<u>\$ 180</u>	<u>\$ 1,186</u>
2016						
Net interest income	\$ 1,224	\$ 717	\$ 344	\$ 153	\$ (69)	\$ 2,369
Provision (benefit) for credit losses	68	79	47	(3)	—	191
Noninterest income	649	245	15	177	64	1,150
Noninterest expense	1,339	397	118	229	325	2,408
Provision (benefit) for income taxes	163	170	68	36	(229)	208
Net income (loss)	<u>\$ 303</u>	<u>\$ 316</u>	<u>\$ 126</u>	<u>\$ 68</u>	<u>\$ (101)</u>	<u>\$ 712</u>

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	Assets at December 31,		Deposits at December 31,	
	2018	2017	2018	2017
<i>(dollar amounts in millions)</i>				
Consumer & Business Banking	\$ 27,486	\$ 26,262	\$ 50,300	\$ 45,427
Commercial Banking	34,818	32,067	23,185	21,286
Vehicle Finance	19,435	17,865	346	381
RBHPCG	6,540	5,829	6,809	6,202
Treasury / Other	20,502	22,162	4,134	3,745
Total	\$ 108,781	\$ 104,185	\$ 84,774	\$ 77,041

Supplementary Data

Quarterly Results of Operations (unaudited)

The following is a summary of the quarterly results of operations, for the years ended December 31, 2018 and 2017:

	Three Months Ended			
	December 31,	September 30,	June 30,	March 31,
	2018	2018	2018	2018
<i>(dollar amounts in millions, except per share data)</i>				
Interest income	\$ 1,056	\$ 1,007	\$ 972	\$ 914
Interest expense	223	205	188	144
Net interest income	833	802	784	770
Provision for credit losses	60	53	56	66
Noninterest income	329	342	336	314
Noninterest expense	711	651	652	633
Income before income taxes	391	440	412	385
Provision for income taxes	57	62	57	59
Net income	334	378	355	326
Dividends on preferred shares	19	18	21	12
Net income applicable to common shares	\$ 315	\$ 360	\$ 334	\$ 314
Net income per common share — Basic	\$ 0.30	\$ 0.33	\$ 0.30	\$ 0.29
Net income per common share — Diluted	0.29	0.33	0.30	0.28

	Three Months Ended			
	December 31,	September 30,	June 30,	March 31,
	2017	2017	2017	2017
<i>(dollar amounts in millions, except per share data)</i>				
Interest income	\$ 894	\$ 873	\$ 846	\$ 820
Interest expense	124	115	101	91
Net interest income	770	758	745	729
Provision for credit losses	65	43	25	68
Noninterest income	340	330	325	312
Noninterest expense	633	680	694	707
Income before income taxes	412	365	351	266
Provision (benefit) for income taxes	(20)	90	79	59
Net income	432	275	272	207
Dividends on preferred shares	19	19	19	19
Net income applicable to common shares	\$ 413	\$ 256	\$ 253	\$ 188
Net income per common share — Basic	\$ 0.38	\$ 0.24	\$ 0.23	\$ 0.17
Net income per common share — Diluted	0.37	0.23	0.23	0.17

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Item 9: Changes In and Disagreements With Accountants on Accounting and Financial Disclosure

None.

Item 9A: Controls and Procedures

Disclosure Controls and Procedures

Huntington maintains disclosure controls and procedures designed to ensure that the information required to be disclosed in the reports that it files or submits under the Securities Exchange Act of 1934, as amended (the Exchange Act), are recorded, processed, summarized, and reported within the time periods specified in the Commission's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by an issuer in the reports that it files or submits under the Exchange Act is accumulated and communicated to the issuer's management, including its principal executive and principal financial officers, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure. Huntington's Management, with the participation of its Chief Executive Officer and the Chief Financial Officer, evaluated the effectiveness of Huntington's disclosure controls and procedures (as such term is defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act) as of December 31, 2018. Based upon such evaluation, Huntington's Chief Executive Officer and Chief Financial Officer have concluded that, as of December 31, 2018, Huntington's disclosure controls and procedures were effective.

Internal Control Over Financial Reporting

Information required by this item is set forth in the Report of Management's Assessment of Internal Control over Financial Reporting and the Report of Independent Registered Public Accounting Firm.

Changes in Internal Control Over Financial Reporting

There have not been any changes in our internal control over financial reporting (as such term is defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) during the quarter ended December 31, 2018, that have materially affected, or are reasonably likely to materially affect, internal control over financial reporting.

Item 9B: Other Information

Not applicable.

PART III

We refer in Part III of this report to relevant sections of our 2019 Proxy Statement for the 2019 annual meeting of shareholders, which will be filed with the SEC pursuant to Regulation 14A within 120 days of the close of our 2018 fiscal year. Portions of our 2019 Proxy Statement, including the sections we refer to in this report, are incorporated by reference into this report.

Item 10: Directors, Executive Officers and Corporate Governance

Information required by this item is set forth under the captions Election of Directors, Corporate Governance, Our Executive Officers, Board Meetings and Committee Information, Report of the Audit Committee, and Section 16(a) Beneficial Ownership Reporting Compliance of our 2019 Proxy Statement, which is incorporated by reference into this item.

Item 11: Executive Compensation

Information required by this item is set forth under the captions Compensation of Executive Officers of our 2019 Proxy Statement, which is incorporated by reference into this item.

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Item 12: Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

The following table sets forth information about Huntington common stock authorized for issuance under Huntington's existing equity compensation plans as of December 31, 2018

Plan Category (1)	Number of securities to be issued upon exercise of outstanding options, warrants, and rights (2) (a)	Weighted-average exercise price of outstanding options, warrants, and rights (3) (b)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)) (4) (c)
Equity compensation plans approved by security holders	29,252,019	\$ 3.86	26,185,301
Equity compensation plans not approved by security holders	3,290	6.08	--
Total	29,255,309	\$ 3.86	26,185,301

- (1) All equity compensation plan authorizations for shares of common stock provide for the number of shares to be adjusted for stock splits, stock dividends, and other changes in capitalization. The Huntington Investment and Tax Savings Plan, a broad-based plan qualified under Code Section 401(a) which includes Huntington common stock as one of a number of investment options available to participants, is excluded from the table.
- (2) The numbers in this column (a) reflect shares of common stock to be issued upon exercise of outstanding stock options and the vesting of outstanding awards of RSUs, and PSUs and the release of DSUs. The shares of common stock to be issued upon exercise or vesting under equity compensation plans not approved by shareholders include an inducement grant issued outside of the Company's stock plans, and awards granted under the following plans which are no longer active and for which Huntington has not reserved the right to make subsequent grants or awards: employee and director stock plans of Unizan Financial Corp., Camco Financial Corporation, and FirstMerit Corporation assumed in the acquisitions of these companies.
- (3) The weighted-average exercise prices in this column are based on outstanding options and do not take into account unvested awards of RSUs, RSAs and PSUs and unreleased DSUs as these awards do not have an exercise price.
- (4) The number of shares in this column (c) reflects the number of shares remaining available for future issuance under Huntington's 2018 Plan, excluding shares reflected in column (a). The number of shares in this column (c) does not include shares of common stock to be issued under the following compensation plans: the Executive Deferred Compensation Plan, which provides senior officers designated by the Compensation Committee the opportunity to defer up to 90% of base salary, annual bonus compensation and certain equity awards, and up to 90% of long-term incentive awards; the Supplemental Plan under which voluntary participant contributions made by payroll deduction are used to purchase shares; the Deferred Compensation for Huntington Bancshares Incorporated Directors under which directors may defer their director compensation and such amounts may be invested in shares of common stock; and the Deferred Compensation Plan for directors (now inactive) under which directors of selected subsidiaries may defer their director compensation and such amounts may be invested in shares of Huntington common stock. These plans do not contain a limit on the number of shares that may be issued under them.

Additional information required by this item is set forth under the captions Ownership of Voting Stock of our 2019 Proxy Statement, which is incorporated by reference into this item.

Item 13: Certain Relationships and Related Transactions, and Director Independence

Information required by this item is set forth under the captions Independence of Directors and Review, Approval or Ratification of Transactions with Related Persons of our 2019 Proxy Statement, which are incorporated by reference into this item.

Item 14: Principal Accountant Fees and Services

Information required by this item is set forth under the caption Proposal to Ratify the Appointment of Independent Registered Public Accounting Firm of our 2019 Proxy Statement which is incorporated by reference into this item.

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PART IV

Item 15: Exhibits and Financial Statement Schedules

Financial Statements and Financial Statement Schedules

Our consolidated financial statements required in response to this Item are incorporated by reference from Item 8 of this Report.

Exhibits

Our exhibits listed on the Exhibit Index of this Form 10-K are filed with this Report or are incorporated herein by reference.

Item 16: 10-K Summary

Not applicable.

Exhibit Index

This report incorporates by reference the documents listed below that we have previously filed with the SEC. The SEC allows us to incorporate by reference information in this document. The information incorporated by reference is considered to be a part of this document, except for any information that is superseded by information that is included directly in this document.

The SEC maintains an Internet web site that contains reports, proxy statements, and other information about issuers, like us, who file electronically with the SEC. The address of the site is <http://www.sec.gov>. The reports and other information filed by us with the SEC are also available free of charge at our Internet web site. The address of the site is <http://www.huntington.com>. Except as specifically incorporated by reference into this Annual Report on Form 10-K, information on those web sites is not part of this report. You also should be able to inspect reports, proxy statements, and other information about us at the offices of the NASDAQ National Market at 33 Whitehall Street, New York, New York 10004

Exhibit Number	Document Description	Report or Registration Statement	SEC File or Registration Number	Exhibit Reference
3.1	<u>Articles Supplementary of Huntington Bancshares Incorporated, as of January 18, 2019</u>	<u>Current Report on Form 8-K dated January 16, 2019</u>	<u>001-34073</u>	<u>3.1</u>
3.2	<u>Articles of Restatement of Huntington Bancshares Incorporated, as of January 18, 2019</u>	<u>Current Report on Form 8-K dated January 16, 2019</u>	<u>001-34073</u>	<u>3.2</u>
3.3	<u>Bylaws of Huntington Bancshares Incorporated, as amended and restated, on January 16, 2019</u>	<u>Current Report on Form 8-K dated January 16, 2019</u>	<u>001-34073</u>	<u>3.3</u>
4.1	Instruments defining the Rights of Security Holders — reference is made to Articles Fifth, Eighth, and Tenth of Articles of Restatement of Charter, as amended and supplemented. Instruments defining the rights of holders of long-term debt will be furnished to the Securities and Exchange Commission upon request.			
10.1	<u>* Form of Executive Agreement for certain executive officers</u>	<u>Current Report on Form 8-K, dated November 28, 2012</u>	<u>001-34073</u>	<u>10.3</u>
10.2	<u>* Management Incentive Plan for Covered Officers as amended and restated effective for plan years beginning on or after January 1, 2016</u>	<u>Definitive Proxy Statement for the 2016 Annual Meeting of Shareholders</u>	<u>001-34073</u>	<u>A</u>
10.3	<u>* Huntington Supplemental Retirement Income Plan, amended and restated, effective December 31, 2013</u>	<u>Annual Report on Form 10-K for the year ended December 31, 2013</u>	<u>001-34073</u>	<u>10.3</u>
10.4(P)	* Deferred Compensation Plan and Trust for Directors	Post-Effective Amendment No. 2 to Registration Statement on Form S-8 filed on January 28, 1991.	33-10546	4(a)
10.7	<u>* Executive Deferred Compensation Plan, as amended and restated on January 1, 2012</u>	<u>Annual Report on Form 10-K for the year ended December 31, 2012</u>	<u>001-34073</u>	<u>10.8</u>
10.8	<u>* The Huntington Supplemental Stock Purchase and Tax Savings Plan and Trust, amended and restated, effective January 1, 2014</u>	<u>Annual Report on Form 10-K for the year ended December 31, 2013</u>	<u>001-34073</u>	<u>10.8</u>
10.9	<u>* Form of Employment Agreement between Stephen D. Stennour and Huntington Bancshares Incorporated effective December 1, 2012</u>	<u>Current Report on Form 8-K dated November 28, 2012</u>	<u>001-34073</u>	<u>10.1</u>
10.10	<u>* Form of Executive Agreement between Stephen D. Stennour and Huntington Bancshares Incorporated effective December 1, 2012</u>	<u>Current Report on Form 8-K dated November 28, 2012</u>	<u>001-34073</u>	<u>10.2</u>
10.11	<u>* Restricted Stock Unit Grant Notice with three year vesting</u>	<u>Current Report on Form 8-K dated July 24, 2006</u>	<u>000-02525</u>	<u>99.1</u>
10.12	<u>* Restricted Stock Unit Grant Notice with six month vesting</u>	<u>Current Report on Form 8-K dated July 24, 2006</u>	<u>000-02525</u>	<u>99.2</u>
10.13	<u>* Restricted Stock Unit Deferral Agreement</u>	<u>Current Report on Form 8-K dated July 24, 2006</u>	<u>000-02525</u>	<u>99.3</u>
10.14	<u>* Director Deferred Stock Award Notice</u>	<u>Current Report on Form 8-K dated July 24, 2006</u>	<u>000-02525</u>	<u>99.4</u>
10.15	<u>* Huntington Bancshares Incorporated 2007 Stock and Long-Term Incentive Plan</u>	<u>Definitive Proxy Statement for the 2007 Annual Meeting of Stockholders</u>	<u>000-02525</u>	<u>G</u>
10.16	<u>* First Amendment to the 2007 Stock and Long-Term Incentive Plan</u>	<u>Quarterly Report on Form 10-Q for the quarter ended September 30, 2007</u>	<u>000-02525</u>	<u>10.7</u>
10.17	<u>* Second Amendment to the 2007 Stock and Long-Term Incentive Plan</u>	<u>Definitive Proxy Statement for the 2010 Annual Meeting of Shareholders</u>	<u>001-34073</u>	<u>A</u>
10.18	<u>* 2009 Stock Option Grant Notice to Stephen D. Stennour</u>	<u>Quarterly Report on Form 10-Q for the quarter ended March 31, 2009</u>	<u>001-34073</u>	<u>10.1</u>
10.19	<u>* Form of Consolidated 2012 Stock Grant Agreement for Executive Officers Pursuant to Huntington's 2012 Long-Term Incentive Plan</u>	<u>Quarterly Report on Form 10-Q for the quarter ended June 30, 2012</u>	<u>001-34073</u>	<u>10.2</u>
10.20	<u>* Form of 2014 Restricted Stock Unit Grant Agreement for Executive Officers</u>	<u>Quarterly Report on Form 10-Q for the quarter ended June 30, 2014</u>	<u>001-34073</u>	<u>10.1</u>
10.21	<u>* Form of 2014 Stock Option Grant Agreement for Executive Officers</u>	<u>Quarterly Report on Form 10-Q for the quarter ended June 30, 2014</u>	<u>001-34073</u>	<u>10.2</u>

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10.22	<u>* Form of 2014 Performance Stock Unit Grant Agreement for Executive Officers</u>	Quarterly Report on Form 10-Q for the quarter ended June 30, 2014.	001-34073	10.3
10.23	<u>* Form of 2014 Restricted Stock Unit Grant Agreement for Executive Officers, Version II</u>	Quarterly Report on Form 10-Q for the quarter ended June 30, 2014.	001-34073	10.4
10.24	<u>* Form of 2014 Stock Option Grant Agreement for Executive Officers, Version II</u>	Quarterly Report on Form 10-Q for the quarter ended June 30, 2014.	001-34073	10.5
10.25	<u>* Form of 2014 Performance Stock Unit Grant Agreement for Executive Officers, Version II</u>	Quarterly Report on Form 10-Q for the quarter ended June 30, 2014.	001-34073	10.6
10.26	<u>*Huntington Bancshares Incorporated 2012 Long-Term Incentive Plan</u>	Definitive Proxy Statement for the 2012 Annual Meeting of Shareholders.	001-34073	A
10.27	<u>*Huntington Bancshares Incorporated 2015 Long-Term Incentive Plan</u>	Definitive Proxy Statement for the 2015 Annual Meeting of Shareholders.	001-34073	Δ
10.28	<u>*Form of 2015 Stock Option Grant Agreement</u>	Quarterly Report on Form 10-Q for the quarter ended June 30, 2015.	001-34073	10.2
10.29	<u>*Form of 2015 Restricted Stock Unit Grant Agreement</u>	Quarterly Report on Form 10-Q for the quarter ended June 30, 2015.	001-34073	10.3
10.30	<u>*Form of 2015 Performance Share Unit Grant Agreement</u>	Quarterly Report on Form 10-Q for the quarter ended June 30, 2015.	001-34073	10.4
10.31	<u>*Huntington Bancshares Incorporated Restricted Stock Unit Grant Agreement</u>	Quarterly Report on Form 10-Q for the quarter ended March 31, 2015.	001-34073	10.1
10.32	<u>* Deferred Compensation Plan and Trust for Directors</u>	Annual Report on Form 10-K for the year ended December 31, 2017.	001-34073	10.32
10.33	<u>* Amended and Restated Deferred Compensation Plan and Trust for Huntington Bancshares Incorporated Directors</u>	Annual Report on Form 10-K for the year ended December 31, 2017.	001-34073	10.33
10.34	<u>* First Amendment to the 2015 Long-Term Incentive Plan</u>	Quarterly Report on Form 10-Q for the quarter ended March 31, 2017.	001-34073	10.1
10.35	<u>*Huntington Bancshares Incorporated 2018 Long-Term Incentive Plan</u>	Definitive Proxy Statement for 2018 Annual Meeting of Shareholders.	001-34073	Δ
10.36	<u>*Form of 2018 Stock Option Grant Agreement</u>	Quarterly Report on Form 10-Q for the quarter ended June 30, 2018.	001-34073	10.2
10.37	<u>*Form of 2018 Restricted Stock Unit Agreement</u>	Quarterly Report on Form 10-Q for the quarter ended June 30, 2018.	001-34073	10.3
10.38	<u>*Form of 2018 Performance Share Unit Grant Agreement</u>	Quarterly Report on Form 10-Q for the quarter ended June 30, 2018.	001-34073	10.4
10.39	<u>*Executive Deferred Compensation Plan, as amended and restated on April 18, 2018</u>	Quarterly Report on Form 10-Q for the quarter ended September 30, 2018.	001-34073	10.1
10.40	<u>*Huntington Supplemental 401(k) Plan (63/a Huntington Supplemental Stock Purchase and Savings Plan and Trust), as amended and restated effective January 1, 2019</u>			
14.1(P)	Code of Business Conduct and Ethics dated January 14, 2003 and revised on January 24, 2018 and Financial Code of Ethics for Chief Executive Officer and Senior Financial Officers, adopted January 18, 2003 and revised on October 20, 2015, are available on our website at http://www.huntington.com/About-Us/corporate-governance			
21.1	<u>Subsidiaries of the Registrant</u>			
23.1	<u>Consent of PricewaterhouseCoopers LLP, Independent Registered Public Accounting Firm</u>			
24.1	<u>Power of Attorney</u>			
31.1	<u>Rule 13a-14(m) Certification – Chief Executive Officer</u>			
31.2	<u>Rule 13a-14(m) Certification – Chief Financial Officer</u>			
32.1	<u>Section 1350 Certification – Chief Executive Officer</u>			
32.2	<u>Section 1350 Certification – Chief Financial Officer</u>			
101	The following material from Huntington's Form 10-K Report for the year ended December 31, 2018, formatted in XBRL: (1) Consolidated Balance Sheets, (2) Consolidated Statements of Income, (3) Consolidated Statements of Comprehensive Income, (4) Consolidated Statements of Changes in Shareholders' Equity, (5) Consolidated Statements of Cash Flows, and (6) the Notes to the Consolidated Financial Statements. * Denotes management contract or compensatory plan or arrangement			

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Signatures

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized, on the 15th day of February, 2019.

HUNTINGTON BANCSHARES INCORPORATED
(Registrant)

By: /s/ Stephen D. Steinour
Stephen D. Steinour
Chairman, President, Chief Executive
Officer, and Director (Principal Executive Officer)

By: /s/ Howell D. McCullough III
Howell D. McCullough III
Chief Financial Officer
(Principal Financial Officer)

By: /s/ Nancy E. Maloney
Nancy E. Maloney
Executive Vice President, Controller
(Principal Accounting Officer)

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the Registrant and in the capacities indicated on the 15th day of February, 2019.

Lizabeth Ardisana *
Lizabeth Ardisana
Director

Ann B. Crane *
Ann B. Crane
Director

Robert S. Cubbin *
Robert S. Cubbin
Director

Steven G. Elliott *
Steven G. Elliott
Director

Gina D. France *
Gina D. France
Director

J. Michael Hochschwender *
J. Michael Hochschwender
Director

John C. Inglis *
John C. Inglis
Director

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Peter J. Kight *

Peter J. Kight

Director

Richard W. Neu *

Richard W. Neu

Director

David L. Porteous *

David L. Porteous

Director

Kathleen H. Ransier *

Kathleen H. Ransier

Director

*/s/ Jana J. Litsey

Jana J. Litsey

Attorney-in-fact for each of the persons indicated

HUNTINGTON
SUPPLEMENTAL 401(K) PLAN

Effective as of January 1, 2019

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HUNTINGTON BANCSHARES INCORPORATED

SUPPLEMENTAL 401(K) PLAN

The Huntington Supplemental Stock Purchase and Tax Savings Plan is hereby amended, restated and renamed as the Huntington Supplemental 401(k) Plan (the "Plan"), effective as of January 1, 2019, by Huntington Bancshares Incorporated, a Maryland corporation (the "Company"), for the benefit of a select group of the management and highly compensated employees of the Company and of its affiliated entities that participate in this Plan with the consent of the Company.

Background Information

A. The Company desires to continue the Plan in accordance with this amended and restated plan document in order to provide certain of its highly compensated and management employees with the opportunity to defer a portion of the "Compensation" (as defined in the Qualified Plan) otherwise payable to them. The purpose is to provide this supplemental savings opportunity to Eligible Employees whose contributions and benefits under the Qualified Plan are affected by the limits imposed on tax-qualified retirement plans under the Code or by limits imposed under the terms of the Qualified Plan.

B. The Company also desires to provide certain matching contributions to the Plan on behalf of eligible employees.

C. The Company intends for the Plan to continue to be an unfunded, non-qualified deferred compensation arrangement as provided under the Employee Retirement Income Security Act of 1974, as amended ("ERISA"), and to satisfy the requirements of a "top hat" plan thereunder and under Labor Reg. Sec. 2520.104-23.

D. The Plan is also intended to comply with the requirements of Section 409A of the Internal Revenue Code of 1986, as amended ("Code"), and final regulations and other rulings issued by the Internal Revenue Service ("IRS") thereunder

ARTICLE I

DEFINITIONS AND GENERAL PROVISIONS

1.1 Definitions. Unless the context requires otherwise, the terms defined in this Article shall have the meanings set forth below unless the context clearly requires another meaning. When the defined meaning is intended, the term is capitalized:

(a) Account. The bookkeeping account for each Participant under Section 3.5. Each account may include subaccounts for different categories of deferrals under the Plan and the earnings that are credited thereto on behalf of a Participant, as described in Article III.

(b) Administrator or Committee. The Company's Investment and Administrative Committee ("IAC") or such other committee of at least three persons appointed by the Company to oversee the administration of the Plan.

(c) Beneficiary. The person(s) entitled to receive any distribution hereunder upon the death of a Participant. The Beneficiary (and any contingent Beneficiary) for benefits payable under this Plan shall be the persons designated by the Participant in accordance with procedures established by the Committee as of the Participant's date of death. In the absence of any such designation, any death benefit shall be payable to the Participant's surviving spouse, or if none, to the Participant's estate.

(d) Change in Control. For purposes of the Plan, a Change in Control means a change in control of the Company as defined in Treasury Regulations Section 1.409A-3(i)(5), issued under Code Section 409A. The term "Change in Control" is intended to comply with Code Section 409A and shall be interpreted such that a Change in Control (1) shall occur for purposes of the Plan in any circumstance that would constitute a "Change in Control Event" (within the meaning of Treasury Regulations under Code Section 409A) and (2) shall not occur for purposes of the Plan in any circumstance that would not constitute such a Change in Control Event.

(e) Code. The Internal Revenue Code of 1986, as amended from time to time, and regulations issued thereunder.

(f) Common Stock. The common stock of the Company, or any security of the Company issued in substitution, exchange or lieu thereof.

(g) Company. Huntington Bancshares Incorporated, a Maryland corporation.

(h) Compensation. Amounts paid or payable by the Company to an Eligible Employee for a Plan Year in cash which are includable in income for federal tax purposes and which are treated as compensation under the Qualified Plan, but also including any cash amounts deferred under this Plan or the Qualified Plan. In addition, the dollar limit on compensation under the Qualified Plan does not apply to this Plan.

(i) Compensation Committee. The Compensation Committee of the Company's Board of Directors.

(j) Compensation Deferral Contribution. An amount of Compensation payable to an Eligible Employee for a Plan Year that he elects to defer in accordance with the rules and procedures of this Plan.

(k) Distribution Options. A single lump sum is the only form of payment permitted under the Plan.

(l) Effective Date. January 1, 2019, the date this amended and restated Plan is effective.

(m) Eligibility Effective Date. Employees who are eligible to participate in the Plan as of the Effective Date of this amended and restated Plan shall continue to be eligible as of the Effective Date unless otherwise determined by the Compensation Committee. Thereafter, the Eligibility Effective Date will occur for newly Eligible Employees as of the first January 1 after the date the Employee is designated as an Eligible Employee and receives the enrollment materials from the Company or its agent. Enrollment and deferral elections of employees may be made prior to their

Eligibility Effective Date provided that no deferrals shall occur from Compensation prior to the applicable Eligibility Effective Date or such later date that is administratively practicable, as determined by the Company.

(n) Eligible Employee. Any individual who is (A) among a select group of management or highly compensated employees (within the meaning of Sections 201(2), 301(a)(3) and 401(a)(1) of ERISA) and (B) designated by the Company, in its sole discretion, as eligible to participate in the Plan. Such designation may be made through action of the Compensation Committee to designate Eligible Employees by name, job title, job level or other methodology, and need not be memorialized through a formal resolution. An employee shall be considered an Eligible Employee upon his notification of eligibility by the Committee.

(o) Employer. The Company and any affiliate thereof or successor thereto which adopts and participates in the Plan. Any affiliate that has U.S. employees and is a member of a controlled group of corporations or other business entities within the meaning of Code Sections 414(b) and (c) that includes the Company shall participate in the Plan unless determined otherwise by the Company. Such participation in the Plan shall continue only so long as the affiliate remains a member of a controlled group of corporations or other business entities within the meaning of Code Sections 414(b) and (c) that includes the Company.

(p) Employer Matching Contribution. An Employer contribution to the Plan that is based on the Participant's Compensation Deferral Contribution for the Plan Year.

(q) ERISA. The Employee Retirement Income Security Act of 1974, as amended from time to time.

(r) Excess Compensation. The amount, if any, of an Eligible Employee's Compensation for the Plan Year that exceeds (i) the limitation under Code Section 401(a)(17) for that Plan Year, or (ii) if less than the limitation under Code Section 401(a)(17), the portion of Compensation that is taken into account under the terms of the Qualified Plan after deducting any Compensation Deferrals to this Plan.

(s) Fair Market Value. The closing sales price of the Common Stock, as reported on the NASDAQ on the relevant date, or if no sale of shares is reported for a date, on the most recent previous date on which trading occurred.

(t) Participant. Any Eligible Employee who meets the eligibility requirements for participation in the Plan as set forth in Article II and who earns benefits under the Plan.

(u) Plan. The Huntington Supplemental 401(k) Plan (formerly known as the Huntington Supplemental Stock Purchase and Tax Savings Plan), as set forth herein, and as such Plan may be amended from time to time hereafter.

(v) Plan Year. The fiscal year of the Plan, which is the 12 consecutive month period beginning January 1 and ending December 31.

(w) Qualified Plan. The Huntington 401(k) Plan, as amended from time to time.

(x) Reporting Person. Eligible Employees who are subject to Section 16 of the Securities Exchange Act of 1934, as amended.

(y) Separation from Service. An Eligible Employee separates from service with the Employer if the Eligible Employee dies, retires or otherwise has a termination of employment with the Employer. Whether a termination of employment has occurred is determined based on whether the facts and circumstances indicate that the Employer and the Eligible Employee reasonably anticipated that no further services would be performed after a certain date or that the level of bona fide services the Eligible Employee would perform after such date (as an employee or independent contractor) would permanently decrease to no more than 20 percent of the average level of bona fide services performed over the immediately preceding 36-month period (or the full period in which the Eligible Employee provided services to the Employer if the Eligible Employee has been providing services for less than 36 months). An Eligible Employee will not be deemed to have experienced a Separation from Service if such Eligible Employee is on military leave, sick leave, or other bona fide leave of absence, to the extent such leave does not exceed a period of six months or, if longer,

such longer period of time during which a right to re-employment is protected by either statute or contract. If the period of leave exceeds six months and the individual does not retain a right to re-employment under an applicable statute or by contract, the employment relationship is deemed to terminate on the first date immediately following such six-month period.

(z) Valuation Date. Each business day of the Plan Year that the NASDAQ National Market is open for trading or such other date or dates deemed necessary or appropriate by the Administrator.

1.2 General Provisions. Singular and plural forms are interchangeable and the masculine gender shall be deemed to include the feminine, and vice versa. Certain terms of more limited application have been defined in the provisions to which they are principally applicable. The division of the Plan into Articles and Sections with captions is for convenience only and is not to be taken as limiting or extending the meaning of any of its provisions.

ARTICLE II

ELIGIBILITY AND PARTICIPATION

2.1 General Eligibility Conditions. For an employee to become eligible to participate in the Plan, the employee must be an Eligible Employee who is designated by the Compensation Committee as eligible to receive any applicable Employer contributions and to make Compensation Deferral Contributions under the Plan. In order to receive a benefit under the Plan, a Participant must also meet the requirements of Sections 2.2 and 2.3. An Eligible Employee shall be considered eligible to participate in the Plan effective as of his Eligibility Effective Date.

2.2 Specific Conditions for Active Participation. To participate actively in the Plan (i.e., to make deferrals hereunder), a Participant must execute or acknowledge an agreement to make Compensation Deferral Contributions in accordance with procedures, including electronic enrollment, as are established by the Committee from time to time. A Participant's initial agreement to make a permitted deferral to the Plan shall be maintained by or on behalf of the Committee and must be executed, acknowledged, filed or submitted electronically within the following time limitations, as applicable: (i) in advance of the beginning of the calendar year during which such Compensation is expected to be earned; (ii) within 30 days of his initial Eligibility Effective Date; or (iii) at such other time or times as may be required or permitted by regulations issued under Code Section 409A and administrative procedures established by the Committee.

2.3 Suspension of Active Participation. Any Participant not selected as an Eligible Employee for a given Plan Year shall cease to have any right to defer Compensation for such Plan Year or to receive Employer Matching Contributions for such Plan Year. However, any amounts credited to the Account of a Participant whose participation is suspended shall otherwise continue to be maintained under the Plan in accordance with its terms. If an Eligible Employee has ceased being eligible to participate in the Plan (other than the accrual of earnings on his Account, if any), regardless of whether all amounts deferred under the Plan have yet been paid, and subsequently becomes eligible to participate in the Plan again, the Eligible Employee may be treated as being initially eligible to participate in the Plan if he has not been eligible to participate in the Plan (other than the accrual of earnings on his Account, if any) at any time during the 24-month period ending on the date the employee again becomes an Eligible Employee under the Plan. If the period of ineligibility is less than 24 months, he shall only be eligible to re-enroll and make a Compensation Deferral election effective no earlier than the next following January 1.

2.4 Termination of Participation. Once an Eligible Employee becomes a Participant, such individual shall continue to be a Participant until such individual (i) ceases to be described as an Eligible Employee, and (ii) ceases to have any vested interest in the Plan (as a result of distributions made to such Participant or his Beneficiary, if applicable, or otherwise).

2.5 Participation by Other Employers. Each corporation or other entity with U.S. employees that is a member of the same controlled group as the Company (within the meaning of Code Sections 414(b) and (c)) shall be a participating employer under the Plan unless determined otherwise by the Company. Participating affiliates that cease

to be a member of the same controlled group as the Company within the meaning of Code Sections 414(b) and (c) are no longer eligible to participate in the Plan effective as of the date that they cease to qualify as a controlled group member. Participants of such an employer shall no longer be eligible to participate effective as of the date that their employer becomes ineligible. Such a Participant who continues in the employ of the former controlled group member shall be eligible for a distribution from the Plan only if this change in status of the participating employer is treated as causing a Separation from Service under the Code.

ARTICLE III

DEFERRED COMPENSATION CREDITS and ACCOUNTS

3.1 Deferred Compensation Credits. Pursuant to the provisions of Article II and this Article III, Deferred Compensation Credits for a Participant under the Plan may include Compensation Deferral Contributions and Employer Matching Contributions.

3.2 Compensation Deferral Contributions. A Participant who is an Eligible Employee may elect to defer a percentage of his Compensation to the Plan. The Company may, in its discretion, establish and change from time to time the minimum and maximum amount (as a percentage of Compensation or an absolute dollar amount) that may be so deferred. Elections shall be made in accordance with procedures established by the Committee. In addition, special limitations may be established by the Committee to apply to the deferral of any non-periodic Compensation that a Participant is expected to receive. Elections to participate and defer Compensation shall be irrevocable with respect to the Compensation to which they apply and may be amended, revoked or suspended by the Participant only effective as of the January 1st following the amendment, revocation or suspension, in accordance with procedures established by the Committee, unless rules and regulations under Code Section 409A permit amendment, revocation or suspension as of some other time. The Employer will credit the deferred Compensation amount agreed to for each Plan Year to the Participant's Account from time to time as soon as administratively practicable after the deferred amounts otherwise would have been earned and paid to the Participant. All contributions under this provision to the Accounts of Participants in the Plan, as adjusted for earnings or losses (described below), shall be referred to as the Participant's "Compensation Deferral Subaccount."

A Participant's Compensation Deferral Contribution hereunder will be automatically suspended during any unpaid leave of absence or temporary layoff. Contributions suspended in accordance with the provisions of this paragraph shall be automatically resumed, without the necessity of any action by the Participant, upon return to employment at the expiration of such suspension period if such return to employment occurs within the same Plan Year for which the Compensation Deferral Contributions were being made.

3.3 Employer Matching Contributions. Each Plan Year, the Employer shall credit to the Account of each Participant an amount equal to a percentage of the Participant's Compensation Deferral Contributions as a matching contribution. The matching contribution shall be made only with respect to the portion of a Participant's Compensation Deferral Contributions that is from Excess Compensation, and shall generally (subject to Section 3.7) be made in Common Stock, with the number of whole and fractional shares of Common Stock determined based on their Fair Market Value on the date of crediting equivalent to the dollar amount of Employer Matching Contributions allocable to the Participant. If a Participant becomes eligible for an Employer Matching Contribution during a Plan Year, the contribution shall be made only with respect to Compensation Deferral Contributions of Excess Compensation allocated to the Plan after the date the Participant became eligible therefor. The amount or rate of matching contributions shall be 100% of the Participant's Compensation Deferral Contributions that are not in excess of 4% of his Excess Compensation for the Plan Year. The intent of the limitation on the allocation of Employer Matching Contributions to Excess Compensation is to provide each Participant with an Employer Matching Contribution under this Plan that does not duplicate the Employer Matching Contribution under the Qualified Plan for a particular Plan Year, but rather supplements the Employer Matching Contribution the Participant receives under the Qualified Plan due to the limitations on Compensation under the Qualified Plan. All contributions under this provision to the Accounts of Participants in the Plan, as adjusted for earnings or losses (described below), shall be referred to as the Participant's "Employer Matching Subaccount."

3.4 Prior Plan Accounts. The Employer will credit to the Participant's Account the accrued benefit of the Participant under any other nonqualified deferred compensation plan or arrangement sponsored by the Company or one of its affiliates that is consolidated and merged with and into this Plan. All amounts credited as contributions under this provision to the Accounts of Participants in the Plan, as adjusted for earnings or losses (described below), are referred to as "Prior Plan Credits." A schedule of the nonqualified deferred compensation plans merged with and into this Plan, if any, and of the amounts credited to the Accounts of Participants from such prior plans, shall be maintained by the Committee. Prior Plan Credits shall continue to be subject to the time and form of payment elected by the Participant under the Prior Plan, notwithstanding any contrary provision of this Plan.

3.5 Record of Account. Solely for the purpose of measuring the amount of the Employer's obligations to each Participant or his Beneficiaries under the Plan, the Employer will maintain a separate bookkeeping record, an "Account," for each Participant in the Plan.

The Committee, in its discretion, may either credit one or more hypothetical earnings rates to a Participant's Account balance for the Plan Year or may actually invest an amount equal to the amount credited to the Participant's Account from time to time in an account or accounts in its name with investment vehicles or companies, which investment options may include some or all of those used for investment purposes under the Qualified Plan, as determined by the Committee in its discretion, including Common Stock. The Committee may also establish a deferred compensation trust that qualifies as a so-called "rabbi" trust meeting applicable requirements of Code Section 409A. If such separate investments are made, or if multiple hypothetical investments are offered under the Plan, the Participant may be permitted to select the hypothetical investments or to direct the investment of the portion of the Employer's accounts allocable to him under the Plan in the same manner as is permitted under the Qualified Plan, except that the investment options may be different from those available under the Qualified Plan to the extent determined by the Committee. The Participant may change the allocation of his Account among the applicable investment alternatives then available under the Plan in accordance with procedures established by the Committee from time to time. The Committee is not obligated to make any particular investment options available, however, if investments are in fact made, and may, from time to time in its sole discretion, change the investment alternatives. Nothing herein shall be construed to confer on the Participant the right to continue to have any particular investment available.

The Committee will credit the Participant's Account with hypothetical or actual earnings or losses at least quarterly based on the earnings rate declared by the Committee or the performance results of the Employer's actual or hypothetical account(s) invested pursuant to the Committee's or the Participant's directions, and shall determine the fair market value of the Participant's Account based on the bookkeeping record or the fair market value of the portion of the Employer's accounts representing the Participant's Account as of each applicable Valuation Date. The amount payable under the Plan at any time shall be based on the value of the Participant's Account as of the last Valuation Date prior to the date of distribution. The determination of the earnings, losses or fair market value of the Participant's Account may be adjusted by the Committee to reflect its payroll, income or other taxes or costs associated with the Plan, as determined by the Committee in its sole discretion.

3.6 Common Stock. Amounts credited to the Plan as Common Stock shall be separately accounted for from amounts credited as cash or cash equivalents, as described in Section 3.6, above. The Common Stock credited to a Participant's Account shall be increased on each date that a dividend is paid on Common Stock. The number of additional shares of Common Stock credited to a Participant's Account as a result of such increase shall be determined first by multiplying the number of shares of Common Stock credited to the Participant's Account on the dividend record date by the amount of the dividend declared per share of Common Stock on the dividend declaration date, and then by dividing the product so determined by the Fair Market Value of the Common Stock on the dividend payment date. A Participant may also elect to change or convert any amount credited to his Account as Common Stock to a cash equivalent amount and direct the investment of such amount in accordance with Section 3.6. The value of the Common Stock credited to a Participant's Account shall be based upon the Fair Market Value of the Common Stock for the Valuation Date or other date as of which the valuation is made. Notwithstanding the foregoing, the Committee may elect to credit the dollar equivalent of the dividends allocable to Common Stock as a cash equivalent amount for each Participant, in lieu of increasing the number of shares of Common Stock credited to the Participant's Account. Any such election shall apply to all Participants in the Plan, as determined by the Committee in its sole discretion.

Notwithstanding the foregoing, during any period when the Company or any Participant who is a Reporting Person is prohibited from investing or trading in Common Stock under applicable state or federal security laws, the Committee may direct that any amounts subject to the prohibition on investing or trading in Common Stock (including any cash dividends on Common Stock that are subject to the prohibition) be kept in cash, invested in an interest bearing deposit account or money market fund, or invested in one or more of the alternative investment funds available under the Plan that do not include Common Stock, or, if permitted under applicable law, appoint an independent agent for the Plan to purchase or trade such Common Stock on behalf of the Plan or the Reporting Person during such periods.

3.7 Effect of Organic Changes on Common Stock. An "Organic Change" includes (i) a stock dividend, stock split, reverse stock split, share combination, special or extraordinary cash dividend, or recapitalization or similar event affecting the capital structure of the Company (each, a "Share Change"), or (ii) a merger, consolidation, acquisition of property or shares, separation, spin-off, reorganization, stock rights offering, liquidation, disaffiliation from the Company of a subsidiary or division ("Disaffiliation"), or similar event affecting the Company or any of its subsidiaries (each, an "Organic Change"). If any Organic Change shall occur, then the Committee shall make such substitutions or adjustments as it deems appropriate and equitable to each Participant's Account credited with Common Stock (if any). In the case of Organic Changes, such adjustments may include, without limitation, (x) the cancellation of outstanding Common Stock in exchange for payments of cash, property or a combination thereof having an aggregate value equal to the value of such Common Stock, as determined by the Committee in its sole discretion, (y) the substitution of other property (including, without limitation, cash or other securities of the Company and securities of entities other than the Company) for the Common Stock, and (z) in connection with any Disaffiliation, arranging for the assumption or replacement of Common Stock with other property or other securities (including, without limitation, other securities of the Company and securities of entities other than the Company), by the affected subsidiary, affiliate or division or by the entity that controls such subsidiary, affiliate or division following such Disaffiliation (as well as any corresponding adjustments to awards that remain based upon Company securities). The Participant shall be permitted to re-direct the investment of such assets into the other investment choices then available under this Plan.

ARTICLE IV

VESTING

4.1 Vesting. A Participant always will be 100% vested in amounts credited to his Account as Compensation Deferral Contributions and earnings allocable thereto. A Participant who was originally hired before January 1, 2014, will also be 100% vested in amounts credited to his Account as Employer Matching Contributions, if any. Participants hired on or after January 1, 2014, will become vested in amounts credited to their Accounts as Employer Matching Contributions after completion of two (2) years of Vesting Service. "Vesting Service" for this provision shall be determined in accordance with the vesting provisions of the Qualified Plan. In addition, a Participant shall also become 100% vested in his entire Account upon a Change in Control or if the Participant has a Separation from Service as a result of death or "disability" as defined in the Qualified Plan. If a Participant has a Separation from Service prior to becoming 100% vested in his entire Account, the non-vested portion shall be forfeited. If the Participant has a Separation from Service but is subsequently re-employed by the Employer, no benefits forfeited hereunder shall be reinstated unless otherwise determined by the Company in its sole discretion.

4.2 Confidentiality and Non-Competition Agreement. In its discretion, the Employer may require any Eligible Employee selected to become a Participant in the Plan to execute a Confidentiality and Non-Competition Agreement with the Employer in consideration of the benefits to be provided hereunder.

ARTICLE V

DISTRIBUTION OF BENEFITS

5.1 Distribution Elections. All distributions under the Plan shall be limited to the permitted Distribution Option; Participant elections of a different form of payment are not permitted.

5.2 Distribution Timing. A Participant shall receive payment of the amounts credited to his Account on the first payroll date occurring on or after the date that is six (6) months after the Participant's Separation from Service, but in no event later than the last business day of the calendar year in which such six (6) month anniversary occurs. Payment of amounts credited to the Participant's Account will be made in U.S. dollars and, to the extent deemed invested in Common Stock, in whole shares of Common Stock with any fractional shares converted to and paid in cash.

5.3 Distribution upon Death. In the event of the death of the Participant prior to receiving payment of all vested amounts due him under the Plan, the Beneficiary or Beneficiaries designated by the Participant shall be paid the remaining amount due under the Plan in a single lump sum at the earlier of the same time as would have applied absent the Participant's death or within 90 days thereof.

5.4 Lump Sum Distribution upon a Change in Control. Upon a Change in Control of the Company, the Participant's vested Account shall be payable in a single lump sum no later than 90 days following the Change in Control.

5.5 Withdrawals for Unforeseeable Emergency. Upon the occurrence of an unforeseeable emergency, a Participant shall be eligible to receive payment of the amount necessary to satisfy such emergency plus amounts necessary to pay taxes reasonably anticipated as a result of the distribution, after taking into account the extent to which such hardship is or may be relieved through reimbursement or compensation by insurance or otherwise or by liquidation of the Participant's assets (to the extent such liquidation would not itself cause severe financial hardship), or by cessation of deferrals under the Plan. The amount determined to be properly distributable under this Section and applicable regulations under Code Section 409A shall be payable in a single lump sum. For the purposes of this Section, the term "unforeseeable emergency" means a severe financial hardship to the Participant resulting from an illness or accident of the Participant, the Participant's spouse, or a dependent of the Participant (as defined in Code Section 152, without regard to Sections 152(b)(1), (b)(2) and (d)(1)(B)); loss of the Participant's property due to casualty, including the need to rebuild a home following damage not otherwise covered by insurance, for example, not as a result of a natural disaster; or other similar extraordinary and unforeseeable circumstances arising as a result of events beyond the control of the Participant, including imminent foreclosure of or eviction from the Participant's primary residence, the need to pay for medical expenses, including non-refundable deductibles, the cost of prescription drugs, and the need to pay for funeral expenses of a spouse, beneficiary, or dependent. It shall be the responsibility of the Participant seeking to make a withdrawal under this Section to demonstrate to the Committee that an unforeseeable emergency has occurred and to document the amount properly distributable hereunder. After a distribution on account of an unforeseeable emergency, a Participant's deferral elections shall cease and such Participant will not be permitted to participate in the Plan or elect additional deferrals until the next enrollment following one full year from the date of the distribution on account of an unforeseeable emergency. Such future deferral elections following a distribution on account of an unforeseeable emergency will be treated as an initial deferral election and subject to the rules applicable thereto under the Plan and Code Section 409A.

5.6 Acceleration of Payment. The acceleration of the time and/or form of any payment determined in accordance with the provisions of this Article V, above, shall not be made except due to unforeseeable emergency, as described above, or as set forth below and otherwise permitted by Code Section 409A and the Treasury Regulations and other guidance issued thereunder:

(a) Employment Taxes. A payment of all or part of the Participant's Account may be made to the extent necessary to pay the Federal Insurance Contributions Act ("FICA") tax imposed under Code Sections 3101, 3121(a), and 3121(v)(2) on amounts deferred under the Plan (the "FICA Amount"), income tax at source on wages imposed under Code Section 3401 or the corresponding withholding provisions of applicable state, local, or foreign tax laws as a result of the payment of the FICA Amount, and to pay the additional income tax at source on wages attributable to the pyramiding Code Section 3401 wages and taxes. The total payment under this Section shall not exceed the aggregate of the FICA Amount and the income tax withholding related to such FICA Amount. Notwithstanding the foregoing, the Company shall withhold the FICA Amount from other compensation payable to the Participant to the maximum extent permitted under applicable law.

(b) Payment of State, Local or Foreign Taxes. Payment may be made to reflect payment of state, local or foreign tax obligations arising from participation in the Plan that apply to an amount deferred under the Plan before the amount is paid or made available to the Participant, plus the income tax at source on wages imposed under Code Section 3401 as a result of such payment; provided, however, that the amount of the payment may not exceed the amount of the taxes due, and the income tax withholding related to such state, local and foreign tax amount. Notwithstanding the foregoing, the Company shall withhold such state, local or foreign taxes from other compensation payable to the Participant to the maximum extent permitted under applicable law.

(c) Income Inclusion under Code Section 409A. Payment may be made at any time the Plan fails to meet the requirements of Code Section 409A and the Treasury Regulations issued thereunder; provided, however, that payment cannot exceed the amount required to be included in income as a result of the failure to comply.

(d) Certain Offsets. Payment may be made as satisfaction of a debt of the Participant to the Employer where: (1) the debt is incurred in the ordinary course of the employment relationship; (2) the entire amount of the offset in any of the Participant's taxable years does not exceed \$5,000; and (3) the reduction is made at the same time and in the same amount as the debt otherwise would have been due and collected from the Participant.

(e) Domestic Relations Order. A payment of all or part of the Participant's Account may be made to a spouse, former spouse or other dependent under the terms of a domestic relations order (as defined in Code Section 414(p)(1)(B)). The Committee shall determine whether a payment should be made pursuant to the terms of a domestic relations order, provided, however, that once approved, any payment under the terms of a domestic relations order shall be made as soon as administratively practicable in the form of a single lump sum only.

5.7 Delay of Payment. If a Participant is a "specified employee" (as defined in Code Section 409A and the regulations thereunder) and is entitled to a distribution due to a Separation from Service, such Participant may not receive a distribution under the Plan until a date that is at least six months after the date of the Separation from Service, as provided under Section 5.2. In addition, the Company may in its discretion delay any payment due under the Plan to the extent permitted by Code Section 409A and the regulations thereunder.

5.8 Assignment and Assumption of Liabilities. In the discretion of the Company, upon the cessation of participation in the Plan by any Participant solely due to the employer of that Participant no longer qualifying as a member of the controlled group of the Company within the meaning of Code Sections 414(b) and (c), all liabilities associated with the Account of such Participant may be transferred to and assumed by the Participant's employer under a deferred compensation plan established by such employer that is substantially identical to this Plan and that preserves the deferral and payment elections in effect for the Participant under this Plan to the extent required by Code Section 409A. Any such Participant shall not be deemed to have incurred a Separation from Service for purposes of the Plan by virtue of his employer's ceasing to be a member of the controlled group of the Company. The foregoing provision shall be interpreted and administered in compliance with the requirements of Code Section 409A.

ARTICLE VI

PLAN ADMINISTRATION

6.1 Administration. The Plan shall be administered by the Committee as an unfunded deferred compensation plan that is not intended to meet the qualification requirements of Code Section 401 and that is intended to meet all applicable requirements of Code Section 409A.

6.2 Committee. The Committee will operate and administer the Plan and shall have all powers necessary to accomplish that purpose, including, but not limited to, the discretionary authority to interpret the Plan, the discretionary authority to determine all questions relating to the rights and status of Eligible Employees and Participants, and the discretionary authority to make such rules and regulations for the administration of the Plan as are not inconsistent with the terms and provisions hereof or applicable law, as well as such other authority and powers relating to the administration

of the Plan, except such as are reserved by the Compensation Committee or the Committee shall be final and binding on all parties.

Without limiting the powers set forth herein, the Committee shall have the power (i) to change or waive any requirements of the Plan to conform with Code Section 409A or other applicable law or to meet special circumstances not anticipated or covered in the Plan; (ii) to determine the times and places for holding meetings of the Committee and the notice to be given of such meetings; (iii) to employ such agents and assistants, such counsel (who may be counsel to the Company), and such clerical and other services as the Committee may require in carrying out the provisions of the Plan; and (iv) to authorize one or more of their members or any agent to execute or deliver any instrument on behalf of the Committee.

The members of the Committee, and the Company and its officers and directors, shall be entitled to rely upon all valuations, certificates and reports furnished by any funding agent or service provider, upon all certificates and reports made by an accountant, and upon all opinions given by any legal counsel selected or approved by the Committee, and the members of the Committee, the Company and its officers and directors shall, except as otherwise provided by law, be fully protected in respect of any action taken or suffered by them in good faith in reliance upon any such valuations, certificates, reports, opinions or other advice of a funding agent, service provider, accountant or counsel.

6.3 Statement of Participant's Account. The Committee shall, as soon as practicable after the end of each Plan Year, provide or make available to each Participant a statement setting forth the Account of such Participant under Section 3.6 as of the end of such Plan Year. Such statement may be provided solely electronically or via access through an internet website and shall be deemed to have been accepted as correct unless written notice to the contrary is received by the Committee within 30 days after providing access to such statement to the Participant. Account statements may be made available more often than annually in the discretion of the Committee.

6.4 Filing Claims. Any Participant, Beneficiary or other individual (hereinafter a "Claimant") entitled to benefits under the Plan, or otherwise eligible to participate herein, may be required to make a claim with the Committee (or its designee) requesting payment or distribution of such Plan benefits (or written confirmation of Plan eligibility, as the case may be), on such form or in such manner as the Committee shall prescribe. Unless and until a Claimant makes proper application for benefits in accordance with the rules and procedures established by the Committee, such Claimant shall have no right to receive any distribution from or under the Plan.

6.5 Notification to Claimant. If a Claimant's application is wholly or partially denied, the Committee (or its designee) shall, within 90 days, furnish to such Claimant a written notice of its decision. If prior to the expiration of the initial 90 day period, the Committee determines additional time is needed to come to a determination on the claim, the Committee shall provide written notice to the Claimant of the need for an extension not to exceed a total of 180 days from the date the application was received. Such notices shall be written in a manner calculated to be understood by such Claimant, and shall contain at least the following information:

- (a) the specific reason or reasons for such denial;
- (b) specific reference to pertinent Plan provisions upon which such denial is based;
- (c) a description of any additional material or information necessary for such Claimant to perfect his claim, and an explanation of why such material or information is necessary; and
- (d) an explanation of the Plan's claim review procedure describing the steps to be taken by such Claimant, if he wishes to submit his claim for review.

6.6 Review Procedure. Within 60 days after the receipt of such notice from the Committee, such Claimant, or the duly authorized representative thereof, may request, by written application to the Plan, a review by the Committee of the decision denying such claim. In connection with such review, such Claimant, or duly authorized representative thereof, shall be entitled to receive any and all documents pertinent to the claim or its denial and shall also be entitled to submit issues and comments in writing. The decision of the Committee upon such review shall be made promptly

and not later than 60 days after the receipt of such request for review, unless special circumstances require an extension of time for processing, in which case a decision shall be rendered as soon as possible, but not later than 120 days after the Committee's receipt of a request for review. Any such decision on review shall be in writing and shall include specific reasons for the decision and specific references to the pertinent Plan provisions on which the decision is based. Any legal proceedings challenging the determination of the Committee must be filed within one year after the completion of the claim and review process provided under the Plan, or if earlier, one year from the date that a Claimant knew or should have known a claim existed. In the event of a genuine dispute regarding the amount or timing of payments under the Plan, a delay in the payment of Plan benefits shall not cause a violation of Code Section 409A to the extent such delay satisfies the conditions set forth in Code Section 409A and the regulations thereunder.

6.7 Payment of Expenses. All costs and expenses incurred in administering the Plan shall be paid by the Company.

ARTICLE VII

AMENDMENT AND TERMINATION

7.1 Amendment. The Company has reserved, and does hereby reserve, the right at any time and from time to time by action of the Compensation Committee (or by action of the Committee if and to the extent that the Company has delegated the authority to amend the provisions of the Plan to such committee) to amend, modify or alter any or all of the provisions of the Plan without the consent of any Eligible Employees or Participants; provided, however, that no amendment shall operate retroactively so as to affect materially and adversely any rights to which a Participant may be entitled under the provisions of the Plan as in effect prior to such action. Any such amendment, modification or alteration shall be expressed in an instrument executed by an authorized officer or officers of the Company, and shall become effective as of the date designated in such instrument.

7.2 Termination. The Company reserves the right to suspend, discontinue or terminate the Plan, at any time in whole or in part, in compliance with the requirements of Code Section 409A; provided, however, that a suspension, discontinuance or termination of the Plan shall not accelerate the obligation to make payments to any person not otherwise currently entitled to payments under the Plan, unless otherwise specifically so determined by the Company and permitted by Code Section 409A and other applicable law, relieve the Company of its obligations to make payments to any person then entitled to payments under the Plan, or reduce any existing Account balance.

ARTICLE VIII

MISCELLANEOUS PROVISIONS

8.1 Employment Relationship. For purposes of determining if there has been a Separation from Service, the Employer is defined to include all members of a controlled group of corporations or other business entities within the meaning of Code Sections 414(b) and (c) that includes the Company. Nothing in the adoption of the Plan or the crediting of deferred compensation shall confer on any Participant the right to continued employment by the Company or an affiliate or subsidiary corporation of the Company, or affect in any way the right of the Company or such affiliate or subsidiary to terminate his employment at any time. Any question as to whether and when there has been a Separation from Service of a Participant's employment and the cause of such Separation from Service shall be determined by the Committee, and its determination shall be final.

8.2 Facility of Payments. Whenever, in the opinion of the Committee, a person entitled to receive any payment, or installment thereof, is under a legal disability or is unable to manage his financial affairs, the Committee shall have the discretionary authority to direct payments to such person's legal representative or to a relative or friend of such person for his benefit; alternatively, the Committee may in its discretion apply the payment for the benefit of such person in such manner as the Committee deems advisable. Any such payment or application of benefits made in

good faith in accordance with the provisions of this Section shall be a complete discharge of any liability of the Committee with respect to such payment or application of benefits.

8.3 Funding. All benefits under the Plan are unfunded and the Company shall not be required to establish any special or separate fund or to make any other segregation of assets in order to assure the payment of any amounts under the Plan; provided, however, that in order to provide a source of payment for its obligations under the Plan, the Company may establish a trust fund. The right of a Participant or his Beneficiary to receive a distribution hereunder shall be an unsecured claim against the general assets of the Company, and neither the Participant nor his Beneficiary shall have any rights in or claim against any amounts credited under the Plan or any other specific assets of the Company. All amounts credited under the Plan to the benefit of a Participant shall constitute general assets of the Company and may be disposed of by the Company at such time and for such purposes as it may deem appropriate.

8.4 Anti-Assignment. No right or benefit under the Plan shall be subject to anticipation, alienation, sale, assignment, pledge, encumbrance or charge; and any attempt to anticipate, alienate, sell, assign, pledge, encumber or charge the same shall be void. No right or benefit shall be liable for or subject to the debts, contracts, liabilities, or torts of the person entitled to such benefits. If a Participant, a Participant's spouse, or any Beneficiary should become bankrupt or attempt to anticipate, alienate, sell, assign, pledge, encumber or charge any right to benefits under the Plan, then those rights, in the discretion of the Committee, shall cease. In this case, the Committee may hold or apply the benefits at issue or any part thereof for the benefit of the Participant, the Participant's spouse, or Beneficiary in such manner as the Committee may deem proper.

8.5 Unclaimed Interests. If the Committee shall at any time be unable to make distribution or payment of benefits hereunder to a Participant or any Beneficiary of a Participant by reason of the fact that his whereabouts is unknown, the Committee shall so certify, and thereafter the Committee shall make a reasonable attempt to locate such missing person. If such person continues missing for a period of three years following such certification, the interest of such Participant in the Plan shall, in the discretion of the Committee, be distributed to the Beneficiary of such missing person. If neither the Participant nor the Beneficiary can be located, then any amounts due may be forfeited, subject to reinstatement without interest or earnings upon the missing Participant or Beneficiary providing sufficient evidence to satisfy the Committee that he is entitled to such forfeited amount.

8.6 References to Code, Statutes and Regulations. Any and all references in the Plan to any provision of the Code, ERISA, or any other statute, law, regulation, ruling or order shall be deemed to refer also to any successor statute, law, regulation, ruling or order.

8.7 Liability. The Company, and its directors, officers and employees, shall be free from liability, joint or several, for personal acts, omissions, and conduct, and for the acts, omissions and conduct of duly constituted agents, in the administration of the Plan, except to the extent that the effects and consequences of such personal acts, omissions or conduct shall result from willful misconduct. However, this Section shall not operate to relieve any of the aforementioned from any responsibility, liability, obligation, or duty that may arise under ERISA.

8.8 Tax Consequences of Compensation Reductions. The income and employment tax consequences to Participants of participating in the Plan shall be determined under applicable federal, state and local tax law and regulation and neither the Company nor any member of the Compensation Committee or Committee shall be a guarantor of or in any way responsible for the tax consequences to any Participant.

8.9 Company as Agent for Related Employers. Each corporation or other business entity which shall become a participating employer pursuant to Section 2.5 by so doing shall be deemed to have appointed the Company its agent to exercise on its behalf all of the powers and authority hereby conferred upon the Company by the terms of the Plan, including but not limited to the power to amend and terminate the Plan. The Company's authority shall continue unless and until the related employer terminates its participation in the Plan.

8.10 Governing Law; Severability. The Plan shall be construed according to the laws of the State of Ohio, including choice of law provisions, and all provisions hereof shall be administered according to the laws of that State, except to the extent preempted by federal law. A final judgment in any action or proceeding shall be conclusive and

may be enforced in other jurisdictions by suit on the judgment or in any other manner provided by law. In the event that any one or more of the provisions of the Plan shall for any reason be held to be invalid, illegal, or unenforceable, such invalidity, illegality or unenforceability shall not affect any other provision of the Plan, but the Plan shall be construed as if such invalid, illegal, or unenforceable provisions had never been contained herein, and there shall be deemed substituted such other provision as will most nearly accomplish the intent of the parties to the extent permitted by applicable law.

8.11 Taxes. The Company shall be entitled to withhold any taxes from any distribution hereunder or from other compensation then payable, as it believes necessary, appropriate, or required under relevant law.

Huntington Bancshares Incorporated

By:
Title:

Date:

SUBSIDIARIES OF HUNTINGTON BANCSHARES INCORPORATED

The direct and indirect subsidiaries of Huntington Bancshares Incorporated at December 31, 2018, are listed below. The state or jurisdiction of incorporation or organization of each subsidiary (unless otherwise noted) is Ohio.

41 South High Ltd. **
 7575 Corporation
 791, 801, AND 803 W. Big Beaver Road, LLC
 AM-HBAN Solar Trust (Delaware)
 Camco Statutory Trust 1 (Connecticut)
 CASCADE Holdings, LLC (Illinois)
 Community Bank Insurance Agency, Inc. (Michigan)
 CREPD, LLC
 FirstMerit Advisors, Inc.
 FirstMerit Community Development Corporation
 FirstMerit Mortgage Reinsurance Co., Inc. (Hawaii)
 FirstMerit Risk Management, Inc. (Vermont)
 FirstMerit Securities, Inc.
 FirstMerit Title Agency, LTD.
 FMRC, Inc. (Delaware)
 Forty-One Corporation
 Fourteen Corporation
 Franklin Mortgage Asset Trust 2009-A (Delaware)
 Haberer Registered Investment Advisor, Inc.
 HBI Payments Holdings, Inc.
 HBI Specialty Insurance, Inc.
 HBI Title Services, Inc.
 HCFFL, LLC (Nevada)
 Henry Acquisitions, Inc.
 HLFBI, Inc. (Nevada)
 HMC Reinsurance Company (Vermont)
 HMFAL, LLC
 HNB I LLC (Delaware)
 HPAL Holdings, LLC (Nevada)
 HPAL, LLC (Nevada)
 HPAL II, LLC (Nevada)
 HPCDS, Inc. (Nevada)
 HPCF Corporation (Nevada)
 HPCKAL, LLC (Nevada)
 HIPCLI, Inc.
 HREIC Holdings, LLC
 Huntington Auto Trust 2016-1 (Delaware)
 Huntington Bancshares Financial Corporation
 Huntington Capital Financing Holdings I, Inc. (Nevada)
 Huntington Capital Financing Holdings II, Inc. (Nevada)
 Huntington Capital Financing OREO, Inc. (Nevada)

Huntington Capital I (Delaware)
 Huntington Capital II (Delaware)
 Huntington Captive Insurance Company (Arizona)
 Huntington Equipment Finance, Inc. (Delaware)
 Huntington Equity Investments, LLC
 Huntington Finance LLC
 Huntington Funding, LLC (Delaware)
 Huntington Insurance, Inc.
 Huntington LT (Delaware)
 Huntington Merchant Services, LLC (Delaware)**
 Huntington Mezzanine Opportunities Inc.
 Huntington Municipal Fund I, Inc.
 Huntington Municipal Fund II, Inc.
 Huntington Municipal Securities, Inc. (Nevada) *
 Huntington Preferred Capital Holdings, Inc. (Indiana)
 Huntington Preferred Capital, Inc. *
 Huntington Preferred Capital II, Inc.
 Huntington Public Capital Corporation (Nevada)
 Huntington Renewable Energy Investments, LLC
 Huntington Residential Mortgage Securities, Inc.
 Huntington Technology Finance, Inc. (Delaware)
 Huntington Technology Funding, LLC (Delaware)
 Huntington West, Inc. (Delaware)
 Hutchinson Shockey Erley & Co. (Illinois)
 Inner City Partnerships, LLC **
 Metropolitan Savings Service Corporation
 Mezzanine Opportunities LLC **
 Mezzanine Opportunities II LLC **
 Midwest Funding, LLC (Illinois)
 Mobile Consultants, Inc.
 Prospect Trust I (Delaware)
 Rate Risk Management Advisors, LLC
 Red Mountain LLC (Delaware)
 Sky Capital LLC (Delaware) *
 Sky Financial Capital Trust III (Delaware)
 Sky Financial Capital Trust IV (Delaware)
 STB Auto Exchange, LLC
 The Derlam Company
 The Huntington Capital Investment Company
 The Huntington Capital Investment Company II
 The Huntington Community Development Corporation
 The Huntington Investment Company
 The Huntington Kentucky, LLC (Kentucky)
 The Huntington Leasing Company
 The Huntington National Bank (United States)
 The Huntington Real Estate Investment Company

The Huntington Real Estate Investment Company II

Thirty-Seven Corporation

Tower Hill Securities, Inc. (Nevada)

Troy BNK Investors LLC

Unizan Capital, LLC (Delaware) *

WMC Acquisition LLC (Indiana)

* - Owned jointly between The Huntington National Bank and Huntington Bancshares Incorporated.

** - Less than 100% owned.

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statements on Form S-3 (No. 333-212820) and Form S-8 (Nos. 33-10546, 33-41774, 33-44208, 333-136692, 333-140897, 333-144403, 333-153573, 333-158335, 333-161779, 333-161780, 333-168824, 333-173831, 333-183325, 333-187725, 333-192600, 333-202349, 333-206720, 333-209962, 333-224665, and 333-224666) of Huntington Bancshares Incorporated of our report dated February 15, 2019 relating to the financial statements and the effectiveness of internal control over financial reporting, which appears in this Form 10-K.

/s/ PricewaterhouseCoopers LLP

Columbus, Ohio

February 15, 2019

POWER OF ATTORNEY

Each director and officer of Huntington Bancshares Incorporated (the Corporation), whose signature appears below hereby appoints Jana J. Litsey, Stephen D. Steinour, and Howell D. McCullough III, or any of them, as his or her attorney-in-fact, to sign, in his or her name and behalf and in any and all capacities stated below, and to cause to be filed with the Securities and Exchange Commission, the Corporation's Annual Report on Form 10-K (the Annual Report) for the fiscal year ended December 31, 2018, and likewise to sign and file any amendments, including post-effective amendments, to the Annual Report, and the Corporation hereby also appoints such persons as its attorneys-in-fact and each of them as its attorney-in-fact with like authority to sign and file the Annual Report and any amendments thereto in its name and behalf, each such person and the Corporation hereby granting to such attorney-in-fact full power of substitution and revocation, and hereby ratifying all that such attorney-in-fact or his substitute may do by virtue hereof.

IN WITNESS WHEREOF, the undersigned have executed this Power of Attorney, in counterparts if necessary, effective as of January 16, 2019.

DIRECTORS/OFFICERS:

Signature / Title

/s/ Stephen D. Steinour

Stephen D. Steinour
Chairman, President, Chief Executive Officer, and Director (Principal Executive Officer)

/s/ Howell D. McCullough III

Howell D. McCullough III
Senior Executive Vice President and Chief Financial Officer (Principal Financial Officer)

/s/ Nancy E. Maloney

Nancy E. Maloney
Executive Vice President and Controller (Principal Accounting Officer)

/s/ Lizabeth Ardisana *

Lizabeth Ardisana
Director

/s/ Ann B. Crane *

Ann B. Crane
Director

/s/ Robert S. Cubbin *

Robert S. Cubbin
Director

/s/ Steven G. Elliott *

Steven G. Elliott
Director

/s/ Gina D. France *

Gina D. France

Director

/s/ J. Michael Hochschwender *

J. Michael Hochschwender

Director

/s/ John C. Inglis *

John C. Inglis

Director

/s/ Peter J. Kight *

Peter J. Kight

Director

/s/ Richard W. Neu *

Richard W. Neu

Director

/s/ David L. Porteous *

David L. Porteous

Director

/s/ Kathleen H. Ransier *

Kathleen H. Ransier

Director

CERTIFICATION

I, Stephen D. Steinour, certify that:

1. I have reviewed this Annual Report on Form 10-K of Huntington Bancshares Incorporated;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations, and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f), for the registrant and have:
 - a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officers and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize, and report financial information; and
 - b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 15, 2019

/s/ Stephen D. Steinour

Stephen D. Steinour

Chief Executive Officer

CERTIFICATION

I, Howell D. McCullough III, certify that:

1. I have reviewed this Annual Report on Form 10-K of Huntington Bancshares Incorporated;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations, and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f), for the registrant and have:
 - a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officers and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize, and report financial information; and
 - b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 15, 2019

/s/ Howell D. McCullough III

Howell D. McCullough III

Chief Financial Officer

SECTION 1350 CERTIFICATION

In connection with the Annual Report of Huntington Bancshares Incorporated (the Company) on Form 10-K for the year ended December 31, 2018, as filed with the Securities and Exchange Commission on the date hereof (the Report), I, Stephen D. Steinour, Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The Report fully complies with the requirements of Section 13(a) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Stephen D. Steinour

Stephen D. Steinour

Chief Executive Officer

February 15, 2019

SECTION 1350 CERTIFICATION

In connection with the Annual Report of Huntington Bancshares Incorporated (the "Company") on Form 10-K for the year ended December 31, 2018, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Howell D. McCullough III, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The Report fully complies with the requirements of Section 13(a) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Howell D. McCullough III

Howell D. McCullough III

Chief Financial Officer

February 15, 2019

WELLS FARGO BANK,
N.A.

02019-9946

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT
AND AFFIDAVIT**

SECTION I -- GENERAL INFORMATION

A. Legal name of the Disclosing Party submitting this EDS. Include d/b/a/ if applicable:

Wells Fargo Bank, N.A.

Check ONE of the following three boxes:

Indicate whether the Disclosing Party submitting this EDS is:

1. ☒ the Applicant

OR

2. ☐ a legal entity currently holding, or anticipated to hold within six months after City action on the contract, transaction or other undertaking to which this EDS pertains (referred to below as the "Matter"), a direct or indirect interest in excess of 7.5% in the Applicant. State the Applicant's legal name: _____

OR

3. ☐ a legal entity with a direct or indirect right of control of the Applicant (see Section II(B)(1)) State the legal name of the entity in which the Disclosing Party holds a right of control: _____

B. Business address of the Disclosing Party: 10 S. Wacker Drive, 15th Floor, Chicago, IL 60606

C. Telephone: 312-658-4154 Fax: _____

Email: Sasha.K.Nelson@Wellsfargo.com

D. Name of contact person: Sasha K. Nelson

E. Federal Employer Identification No. (if you have one): _____

F. Brief description of the Matter to which this EDS pertains. (Include project number and location of property, if applicable): _____

Municipal Depository

G. Which City agency or department is requesting this EDS? Department of Finance

If the Matter is a contract being handled by the City's Department of Procurement Services, please complete the following:

Specification # _____ and Contract # _____

SECTION II -- DISCLOSURE OF OWNERSHIP INTERESTS

A. NATURE OF THE DISCLOSING PARTY

1. Indicate the nature of the Disclosing Party:

- | | |
|---|--|
| <input type="checkbox"/> Person | <input type="checkbox"/> Limited liability company |
| <input type="checkbox"/> Publicly registered business corporation | <input type="checkbox"/> Limited liability partnership |
| <input type="checkbox"/> Privately held business corporation | <input type="checkbox"/> Joint venture |
| <input type="checkbox"/> Sole proprietorship | <input type="checkbox"/> Not-for-profit corporation |
| <input type="checkbox"/> General partnership | (Is the not-for-profit corporation also a 501(c)(3))? |
| <input type="checkbox"/> Limited partnership | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| <input type="checkbox"/> Trust | <input checked="" type="checkbox"/> Other (please specify) |
| | <u>National Banking Association</u> |

2. For legal entities, the state (or foreign country) of incorporation or organization, if applicable:

United States of America

3. For legal entities not organized in the State of Illinois: Has the organization registered to do business in the State of Illinois as a foreign entity?

☐ Yes ☒ No ☐ Organized in Illinois

B. IF THE DISCLOSING PARTY IS A LEGAL ENTITY:

1. List below the full names and titles, if applicable, of: (i) all executive officers and all directors of the entity; (ii) **for not-for-profit corporations**, all members, if any, which are legal entities (if there are no such members, write "no members which are legal entities"); (iii) **for trusts, estates or other similar entities**, the trustee, executor, administrator, or similarly situated party; (iv) **for general or limited partnerships, limited liability companies, limited liability partnerships or joint ventures**, each general partner, managing member, manager or any other person or legal entity that directly or indirectly controls the day-to-day management of the Applicant.

NOTE: Each legal entity listed below must submit an EDS on its own behalf.

Name

Title

Please see Attachment A (eDocs# 17630519)

2. Please provide the following information concerning each person or legal entity having a direct or indirect, current or prospective (i.e. within 6 months after City action) beneficial interest (including ownership) in excess of 7.5% of the Applicant. Examples of such an interest include shares in a corporation, partnership interest in a partnership or joint venture, interest of a member or manager in a

limited liability company, or interest of a beneficiary of a trust, estate or other similar entity. If none, state None.

NOTE: Each legal entity listed below may be required to submit an EDS on its own behalf.

Name	Business Address	Percentage Interest in the Applicant
------	------------------	--------------------------------------

Please see Attachment B (eDocs# 17660394)		
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SECTION III -- INCOME OR COMPENSATION TO, OR OWNERSHIP BY, CITY ELECTED OFFICIALS

Has the Disclosing Party provided any income or compensation to any City elected official during the 12-month period preceding the date of this EDS? ☐ Yes ☒ No

Does the Disclosing Party reasonably expect to provide any income or compensation to any City elected official during the 12-month period following the date of this EDS? ☐ Yes ☒ No

If yes to either of the above, please identify below the name(s) of such City elected official(s) and describe such income or compensation:

Please see Attachment C (eDocs# 17660432)

Does any City elected official or, to the best of the Disclosing Party's knowledge after reasonable inquiry, any City elected official's spouse or domestic partner, have a financial interest (as defined in Chapter 2-156 of the Municipal Code of Chicago (MCC)) in the Disclosing Party?

☐ Yes ☒ No

If "yes," please identify below the name(s) of such City elected official(s) and/or spouse(s)/domestic partner(s) and describe the financial interest(s).

Please see Attachment C (eDocs# 17660432)

SECTION IV -- DISCLOSURE OF SUBCONTRACTORS AND OTHER RETAINED PARTIES

The Disclosing Party must disclose the name and business address of each subcontractor, attorney, lobbyist (as defined in MCC Chapter 2-156), accountant, consultant and any other person or entity whom the Disclosing Party has retained or expects to retain in connection with the Matter, as well as the nature of the relationship, and the total amount of the fees paid or estimated to be paid. The Disclosing Party is not required to disclose employees who are paid solely through the Disclosing Party's regular payroll. If the Disclosing Party is uncertain whether a disclosure is required under this section, the Disclosing Party must either ask the City whether disclosure is required or make the disclosure.

Name (indicate whether retained or anticipated to be retained)	Business Address	Relationship to Disclosing Party (subcontractor, attorney, lobbyist, etc.)	Fees (indicate whether paid or estimated.) NOTE: hourly rate or t.b.d. is not an acceptable response.
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None

(Add sheets if necessary)

[X] Check here if the Disclosing Party has not retained, nor expects to retain, any such persons or entities.

SECTION V -- CERTIFICATIONS

A. COURT-ORDERED CHILD SUPPORT COMPLIANCE

Under MCC Section 2-92-415, substantial owners of business entities that contract with the City must remain in compliance with their child support obligations throughout the contract's term.

Has any person who directly or indirectly owns 10% or more of the Disclosing Party been declared in arrearage on any child support obligations by any Illinois court of competent jurisdiction?

☐ Yes ☐ No ☒ No person directly or indirectly owns 10% or more of the Disclosing Party.

If Yes, has the person entered into a court-approved agreement for payment of all support owed and is the person in compliance with that agreement?

☐ Yes ☐ No

B. FURTHER CERTIFICATIONS

1. [This paragraph 1 applies only if the Matter is a contract being handled by the City's Department of Procurement Services.] In the 5-year period preceding the date of this EDS, neither the Disclosing Party nor any Affiliated Entity [see definition in (5) below] has engaged, in connection with the performance of any public contract, the services of an integrity monitor, independent private sector inspector general, or integrity compliance consultant (i.e., an individual or entity with legal, auditing, investigative, or other similar skills, designated by a public agency to help the agency monitor the activity of specified agency vendors as well as help the vendors reform their business practices so they can be considered for agency contracts in the future, or continue with a contract in progress).

2. The Disclosing Party and its Affiliated Entities are not delinquent in the payment of any fine, fee, tax or other source of indebtedness owed to the City of Chicago, including, but not limited to, water and sewer charges, license fees, parking tickets, property taxes and sales taxes, nor is the Disclosing Party delinquent in the payment of any tax administered by the Illinois Department of Revenue.

3. The Disclosing Party and, if the Disclosing Party is a legal entity, all of those persons or entities identified in Section II(B)(1) of this EDS:

a. are not presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from any transactions by any federal, state or local unit of government;

b. have not, during the 5 years before the date of this EDS, been convicted of a criminal offense, adjudged guilty, or had a civil judgment rendered against them in connection with: obtaining, attempting to obtain, or performing a public (federal, state or local) transaction or contract under a public transaction; a violation of federal or state antitrust statutes; fraud; embezzlement; theft; forgery; bribery; falsification or destruction of records; making false statements; or receiving stolen property;

c. are not presently indicted for, or criminally or civilly charged by, a governmental entity (federal, state or local) with committing any of the offenses set forth in subparagraph (b) above;

d. have not, during the 5 years before the date of this EDS, had one or more public transactions (federal, state or local) terminated for cause or default; and

e. have not, during the 5 years before the date of this EDS, been convicted, adjudged guilty, or found liable in a civil proceeding, or in any criminal or civil action, including actions concerning environmental violations, instituted by the City or by the federal government, any state, or any other unit of local government.

The Disclosing Party understands and shall comply with the applicable requirements of MCC Chapters 2-56 (Inspector General) and 2-156 (Governmental Ethics).

5. Certifications (5), (6) and (7) concern:

- the Disclosing Party;
- any Contractor (meaning any contractor or subcontractor used by the Disclosing Party in connection with the Matter, including but not limited to all persons or legal entities disclosed under Section IV, Disclosure of Subcontractors and Other Retained Parties);
- any "Affiliated Entity" (meaning a person or entity that, directly or indirectly: controls the Disclosing Party, is controlled by the Disclosing Party, or is, with the Disclosing Party, under common control of another person or entity). Indicia of control include, without limitation: interlocking management or ownership; identity of interests among family members, shared facilities and equipment; common use of employees; or organization of a business entity following the ineligibility of a business entity to do business with federal or state or local government, including the City, using substantially the same management, ownership, or principals as the ineligible entity. With respect to Contractors, the term Affiliated Entity means a person or entity that directly or indirectly controls the Contractor, is controlled by it, or, with the Contractor, is under common control of another person or entity;
- any responsible official of the Disclosing Party, any Contractor or any Affiliated Entity or any other official, agent or employee of the Disclosing Party, any Contractor or any Affiliated Entity, acting pursuant to the direction or authorization of a responsible official of the Disclosing Party, any Contractor or any Affiliated Entity (collectively "Agents").

Neither the Disclosing Party, nor any Contractor, nor any Affiliated Entity of either the Disclosing Party or any Contractor, nor any Agents have, during the 5 years before the date of this EDS, or, with respect to a Contractor, an Affiliated Entity, or an Affiliated Entity of a Contractor during the 5 years before the date of such Contractor's or Affiliated Entity's contract or engagement in connection with the Matter:

- a. bribed or attempted to bribe, or been convicted or adjudged guilty of bribery or attempting to bribe, a public officer or employee of the City, the State of Illinois, or any agency of the federal government or of any state or local government in the United States of America, in that officer's or employee's official capacity;
- b. agreed or colluded with other bidders or prospective bidders, or been a party to any such agreement, or been convicted or adjudged guilty of agreement or collusion among bidders or prospective bidders, in restraint of freedom of competition by agreement to bid a fixed price or otherwise; or
- c. made an admission of such conduct described in subparagraph (a) or (b) above that is a matter of record, but have not been prosecuted for such conduct; or
- d. violated the provisions referenced in MCC Subsection 2-92-320(a)(4)(Contracts Requiring a Base Wage); (a)(5)(Debarment Regulations); or (a)(6)(Minimum Wage Ordinance).

6. Neither the Disclosing Party, nor any Affiliated Entity or Contractor, or any of their employees, officials, agents or partners, is barred from contracting with any unit of state or local government as a result of engaging in or being convicted of (1) bid-rigging in violation of 720 ILCS 5/33E-3; (2) bid-rotating in violation of 720 ILCS 5/33E-4; or (3) any similar offense of any state or of the United States of America that contains the same elements as the offense of bid-rigging or bid-rotating.

7. Neither the Disclosing Party nor any Affiliated Entity is listed on a Sanctions List maintained by the United States Department of Commerce, State, or Treasury, or any successor federal agency.

8. [FOR APPLICANT ONLY] (i) Neither the Applicant nor any controlling person [see MCC Chapter 1-23, Article I for applicability and defined terms] of the Applicant is currently indicted or charged with, or has admitted guilt of, or has ever been convicted of, or placed under supervision for, any criminal offense involving actual, attempted, or conspiracy to commit bribery, theft, fraud, forgery, perjury, dishonesty or deceit against an officer or employee of the City or any sister agency; and (ii) the Applicant understands and acknowledges that compliance with Article I is a continuing requirement for doing business with the City. NOTE: If MCC Chapter 1-23, Article I applies to the Applicant, that Article's permanent compliance timeframe supersedes 5-year compliance timeframes in this Section V.

9. [FOR APPLICANT ONLY] The Applicant and its Affiliated Entities will not use, nor permit their subcontractors to use, any facility listed as having an active exclusion by the U.S. EPA on the federal System for Award Management (SAM).

10. [FOR APPLICANT ONLY] The Applicant will obtain from any contractors/subcontractors hired or to be hired in connection with the Matter certifications equal in form and substance to those in Certifications (2) and (9) above and will not, without the prior written consent of the City, use any such

contractor/subcontractor that does not provide such certifications or that the Applicant has reason to believe has not provided or cannot provide truthful certifications.

1. If the Disclosing Party is unable to certify to any of the above statements in this Part B (Further Certifications), the Disclosing Party must explain below:

Please see Attachment D (eDocs# 17640470) and supporting attachments (eDocs# 17640435; 17640702; 17640723; 17640755; and 17663352).

If the letters "NA," the word "None," or no response appears on the lines above, it will be conclusively presumed that the Disclosing Party certified to the above statements.

12. To the best of the Disclosing Party's knowledge after reasonable inquiry, the following is a complete list of all current employees of the Disclosing Party who were, at any time during the 12-month period preceding the date of this EDS, an employee, or elected or appointed official, of the City of Chicago (if none, indicate with N/A or none).

None

13. To the best of the Disclosing Party's knowledge after reasonable inquiry, the following is a complete list of all gifts that the Disclosing Party has given or caused to be given, at any time during the 12-month period preceding the execution date of this EDS, to an employee, or elected or appointed official, of the City of Chicago. For purposes of this statement, a gift does not include: (i) anything made generally available to City employees or to the general public, or (ii) food or drink provided in the course of official City business and having a retail value of less than \$25 per recipient, or (iii) a political contribution otherwise duly reported as required by law (if none, indicate with N/A or none). As to any gift listed below, please also list the name of the City recipient.

None

C. CERTIFICATION OF STATUS AS FINANCIAL INSTITUTION

1. The Disclosing Party certifies that the Disclosing Party (check one)
☒ [X] is ☐ [] is not

a "financial institution" as defined in MCC Section 2-32-455(b).

2. If the Disclosing Party IS a financial institution, then the Disclosing Party pledges:

"We are not and will not become a predatory lender as defined in MCC Chapter 2-32. We further pledge that none of our affiliates is, and none of them will become, a predatory lender as defined in MCC Chapter 2-32. We understand that becoming a predatory lender or becoming an affiliate of a predatory lender may result in the loss of the privilege of doing business with the City."

If the Disclosing Party is unable to make this pledge because it or any of its affiliates (as defined in MCC Section 2-32-455(b)) is a predatory lender within the meaning of MCC Chapter 2-32, explain here (attach additional pages if necessary):

Please see Attachment D (eDocs# 17640470)

If the letters "NA," the word "None," or no response appears on the lines above, it will be conclusively presumed that the Disclosing Party certified to the above statements.

D. CERTIFICATION REGARDING FINANCIAL INTEREST IN CITY BUSINESS

Any words or terms defined in MCC Chapter 2-156 have the same meanings if used in this Part D.

1. In accordance with MCC Section 2-156-110: To the best of the Disclosing Party's knowledge after reasonable inquiry, does any official or employee of the City have a financial interest in his or her own name or in the name of any other person or entity in the Matter?

☐ Yes

☒ No

NOTE: If you checked "Yes" to Item D(1), proceed to Items D(2) and D(3). If you checked "No" to Item D(1), skip Items D(2) and D(3) and proceed to Part E.

2. Unless sold pursuant to a process of competitive bidding, or otherwise permitted, no City elected official or employee shall have a financial interest in his or her own name or in the name of any other person or entity in the purchase of any property that (i) belongs to the City, or (ii) is sold for taxes or assessments, or (iii) is sold by virtue of legal process at the suit of the City (collectively, "City Property Sale"). Compensation for property taken pursuant to the City's eminent domain power does not constitute a financial interest within the meaning of this Part D.

Does the Matter involve a City Property Sale?

☐ Yes

☒ No

3. If you checked "Yes" to Item D(1), provide the names and business addresses of the City officials or employees having such financial interest and identify the nature of the financial interest:

Name

Business Address

Nature of Financial Interest

4. The Disclosing Party further certifies that no prohibited financial interest in the Matter will be acquired by any City official or employee.

E. CERTIFICATION REGARDING SLAVERY ERA BUSINESS

Please check either (1) or (2) below. If the Disclosing Party checks (2), the Disclosing Party must disclose below or in an attachment to this EDS all information required by (2). Failure to comply with these disclosure requirements may make any contract entered into with the City in connection with the Matter voidable by the City.

 1. The Disclosing Party verifies that the Disclosing Party has searched any and all records of the Disclosing Party and any and all predecessor entities regarding records of investments or profits from slavery or slaveholder insurance policies during the slavery era (including insurance policies issued to slaveholders that provided coverage for damage to or injury or death of their slaves), and the Disclosing Party has found no such records.

 X 2. The Disclosing Party verifies that, as a result of conducting the search in step (1) above, the Disclosing Party has found records of investments or profits from slavery or slaveholder insurance policies. The Disclosing Party verifies that the following constitutes full disclosure of all such records, including the names of any and all slaves or slaveholders described in those records:

Please see Attachment E (eDocs# 17674538)

SECTION VI -- CERTIFICATIONS FOR FEDERALLY FUNDED MATTERS

NOTE: If the Matter is federally funded, complete this Section VI. If the Matter is not federally funded, proceed to Section VII. For purposes of this Section VI, tax credits allocated by the City and proceeds of debt obligations of the City are not federal funding.

A. CERTIFICATION REGARDING LOBBYING – N/A

1. List below the names of all persons or entities registered under the federal Lobbying Disclosure Act of 1995, as amended, who have made lobbying contacts on behalf of the Disclosing Party with respect to the Matter: (Add sheets if necessary):

(If no explanation appears or begins on the lines above, or if the letters "NA" or if the word "None" appear, it will be conclusively presumed that the Disclosing Party means that NO persons or entities registered under the Lobbying Disclosure Act of 1995, as amended, have made lobbying contacts on behalf of the Disclosing Party with respect to the Matter.)

2. The Disclosing Party has not spent and will not expend any federally appropriated funds to pay any person or entity listed in paragraph A(1) above for his or her lobbying activities or to pay any person or entity to influence or attempt to influence an officer or employee of any agency, as defined by applicable federal law, a member of Congress, an officer or employee of Congress, or an employee

of a member of Congress, in connection with the award of any federally funded contract, making any federally funded grant or loan, entering into any cooperative agreement, or to extend, continue, renew, amend, or modify any federally funded contract, grant, loan, or cooperative agreement.

3. The Disclosing Party will submit an updated certification at the end of each calendar quarter in which there occurs any event that materially affects the accuracy of the statements and information set forth in paragraphs A(1) and A(2) above.

4. The Disclosing Party certifies that either: (i) it is not an organization described in section 501(c)(4) of the Internal Revenue Code of 1986; or (ii) it is an organization described in section 501(c)(4) of the Internal Revenue Code of 1986 but has not engaged and will not engage in "Lobbying Activities," as that term is defined in the Lobbying Disclosure Act of 1995, as amended.

5. If the Disclosing Party is the Applicant, the Disclosing Party must obtain certifications equal in form and substance to paragraphs A(1) through A(4) above from all subcontractors before it awards any subcontract and the Disclosing Party must maintain all such subcontractors' certifications for the duration of the Matter and must make such certifications promptly available to the City upon request.

B. CERTIFICATION REGARDING EQUAL EMPLOYMENT OPPORTUNITY – N/A

If the Matter is federally funded, federal regulations require the Applicant and all proposed subcontractors to submit the following information with their bids or in writing at the outset of negotiations.

Is the Disclosing Party the Applicant?

☐ Yes

☐ No

If Yes, answer the three questions below:

1. Have you developed and do you have on file affirmative action programs pursuant to applicable federal regulations? (See 41 CFR Part 60-2.)

☐ Yes

☐ No

2. Have you filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance Programs, or the Equal Employment Opportunity Commission all reports due under the applicable filing requirements?

☐ Yes

☐ No

☐ Reports not required

3. Have you participated in any previous contracts or subcontracts subject to the equal opportunity clause?

☐ Yes

☐ No

If you checked No to question (1) or (2) above, please provide an explanation:

SECTION VII -- FURTHER ACKNOWLEDGMENTS AND CERTIFICATION

The Disclosing Party understands and agrees that:

A. The certifications, disclosures, and acknowledgments contained in this EDS will become part of any contract or other agreement between the Applicant and the City in connection with the Matter, whether procurement, City assistance, or other City action, and are material inducements to the City's execution of any contract or taking other action with respect to the Matter. The Disclosing Party understands that it must comply with all statutes, ordinances, and regulations on which this EDS is based.

B. The City's Governmental Ethics Ordinance, MCC Chapter 2-156, imposes certain duties and obligations on persons or entities seeking City contracts, work, business, or transactions. The full text of this ordinance and a training program is available on line at www.cityofchicago.org/Ethics, and may also be obtained from the City's Board of Ethics, 740 N. Sedgwick St., Suite 500, Chicago, IL 60610, (312) 744-9660. The Disclosing Party must comply fully with this ordinance.

C. If the City determines that any information provided in this EDS is false, incomplete or inaccurate, any contract or other agreement in connection with which it is submitted may be rescinded or be void or voidable, and the City may pursue any remedies under the contract or agreement (if not rescinded or void), at law, or in equity, including terminating the Disclosing Party's participation in the Matter and/or declining to allow the Disclosing Party to participate in other City transactions. Remedies at law for a false statement of material fact may include incarceration and an award to the City of treble damages.

D. It is the City's policy to make this document available to the public on its Internet site and/or upon request. Some or all of the information provided in, and appended to, this EDS may be made publicly available on the Internet, in response to a Freedom of Information Act request, or otherwise. By completing and signing this EDS, the Disclosing Party waives and releases any possible rights or claims which it may have against the City in connection with the public release of information contained in this EDS and also authorizes the City to verify the accuracy of any information submitted in this EDS.


E. The information provided in this EDS must be kept current. In the event of changes, the Disclosing Party must supplement this EDS up to the time the City takes action on the Matter. If the Matter is a contract being handled by the City's Department of Procurement Services, the Disclosing Party must update this EDS as the contract requires. **NOTE:** With respect to Matters subject to MCC Chapter 1-23, Article I (imposing **PERMANENT INELIGIBILITY** for certain specified offenses), the information provided herein regarding eligibility must be kept current for a longer period, as required by MCC Chapter 1-23 and Section 2-154-020.

CERTIFICATION

Under penalty of perjury, the person signing below: (1) warrants that he/she is authorized to execute this EDS, and all applicable Appendices, on behalf of the Disclosing Party, and (2) warrants that all certifications and statements contained in this EDS, and all applicable Appendices, are true, accurate and complete as of the date furnished to the City.

Wells Fargo Bank, N.A.

(Print or type exact legal name of Disclosing Party)

By: 
(Sign here)

Mark Lester

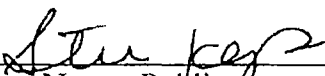
(Print or type name of person signing)

Senior Vice President, Relationship Manager

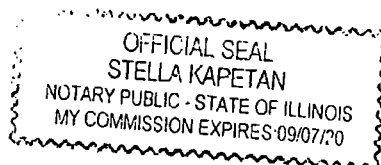
(Print or type title of person signing)

Signed and sworn to before me on (date) November 15, 2019

at Cook County, Illinois (state).


Notary Public

Commission expires: 9/7/20



INCUMBENCY CERTIFICATE

WELLS FARGO BANK, NATIONAL ASSOCIATION

I, Clara S. Blanding, hereby certify that I am an Assistant Secretary of Wells Fargo Bank, National Association, a national banking association organized and existing under the laws of the United States of America (the "Bank"), and I hereby further certify as follows:

1. The following is a true and correct extract from resolutions duly adopted by the Board of Directors of the Bank on May 15, 2018, and no modification, amendment, rescission or revocation of such resolutions has occurred affecting such extract as of the date of this certificate:

RESOLVED, that agreements, instruments, or other documents, including amendments and modifications thereto, relating to or affecting the property or business and affairs of the Bank, whether acting for its own account or in a fiduciary or other representative capacity, may be executed in its name by the persons hereinafter authorized;

RESOLVED, that for the purposes of these resolutions, "Senior Executive Officer" shall mean any person appointed, designated or otherwise elected President, Chief Executive Officer, Senior Executive Vice President, Executive Vice President or designated an Executive Officer by resolution of the Board of Directors of the Bank, and "Signing Officer" shall mean any Senior Executive Officer, any Senior Vice President, the Treasurer, any Vice President, any Assistant Vice President, any person whose title includes the word "Officer" (e.g., Commercial Banking Officer, Personal Banking Officer, Trust Officer), or any other person whose title has been or is hereafter designated by the Board of Directors as a title for an officer of the Bank, and such officers are hereby authorized to sign agreements, instruments and other documents on behalf of the Bank in accordance with the signing authorities conferred in Parts A, B and C of these resolutions;

A. Senior Executive Officers

RESOLVED, that any Senior Executive Officer of the Bank, acting alone, may execute agreements, guaranties, instruments or other documents which such officer may deem necessary, proper or expedient to the conduct of the business of the Bank;

B. Vice Presidents and Above

RESOLVED, that any Senior Executive Officer, any Senior Vice President and any Vice President, acting alone, may execute on behalf of the Bank:

1. Deeds, leases, assignments, bills of sale, purchase agreements and other instruments of conveyance to purchase, sell, lease or sublease to or from a

third party real property, or any interest therein, and any and all management agreements, construction contracts, permits and other contracts or documents required to be executed or delivered to or filed with any person, entity or jurisdiction in the course of the management, maintenance, improvement and/or operation of any real or personal property owned, held or leased by the Bank for its own account; *provided, however*, that such agreements, instruments and other documents may also be signed as hereinafter provided with respect to real property acquired by the Bank in connection with collateral for a loan.

2. Confidentiality agreements, bonds of indemnity and powers of attorney (including any instruments revoking such power of attorney); *provided, however*, that (a) proxies to vote stock in a corporation or to vote other interests in other legal entities or to service or enforce the Bank's rights with respect to real property and (b) stock and bond powers may also be signed as hereinafter provided.

C. Signing Officers

RESOLVED, that any Signing Officer, acting alone, may execute on behalf of the Bank, whether acting for its own account or in a fiduciary or other representative capacity:

[Service Contracts]

15. Agreements (including any amendments, terminations and any other documents or ancillary agreements related thereto) and proposals to provide services to or receive services from third parties.

D. Designated Signers; Other Officers; Certification; Effect of Previous Resolutions

RESOLVED, that any Senior Executive Officer, any Senior Vice President, and any Vice President, acting alone, by filing a written authorization with the Secretary of the Bank, may authorize other persons ("Designated Signers") to execute any of the agreements, instruments, or other documents contemplated in the preceding resolutions, but only to the extent of the authorizing officer's own authority thereunder, which Designated Signer shall retain such authority until such authorization expires pursuant to the terms set forth therein, or until relieved of such authority in a written instrument filed with the Secretary of the Bank by the authorizing officer, another officer of equal or greater authority, the Board of Directors or any committee thereof, or until termination of the Designated Signer's employment with the Bank or any of its affiliates;

RESOLVED, that for purposes of the foregoing resolutions, the signing authority of a Senior Managing Director shall be equivalent to that of an Executive Vice President,

the signing authority of a Managing Director shall be equivalent to that of a Senior Vice President, the signing authority of a Director shall be equivalent to that of a Vice President, and the signing authority of an Associate shall be equivalent to that of an Assistant Vice President;

RESOLVED, that the signature of the Secretary or of any Assistant Secretary of the Bank shall be required to certify any resolution adopted by the Board of Directors of the Bank or any committee thereof, the incumbency, title or signature of any officer of the Bank and any designation of authority under these resolutions or otherwise, and the Secretary or any Assistant Secretary of the Bank may also certify any records or other documents created in the ordinary course of the business of the Bank; and

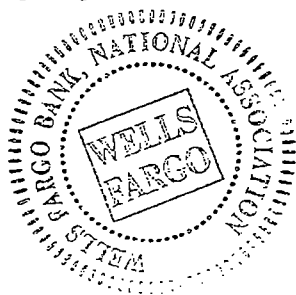
RESOLVED, that these resolutions shall supersede any resolution previously adopted by the Board of Directors of the Bank or any committee thereof to the extent that such previous resolution is inconsistent herewith.

2. On the date hereof, the following person was a duly appointed, qualified and acting officer of the Bank, that his correct title appears beside his name, and that on said date he was duly authorized to act on behalf of the Bank as set forth in the foregoing resolutions:

Name	Title
Mark Lester	Senior Vice President

IN WITNESS WHEREOF, I have hereunto signed my name and affixed the seal of the Bank this 5th day of December, 2019.

[Seal]



Clara S. Blanding

Clara S. Blanding, Assistant Secretary
Wells Fargo Bank, National Association

* * * Redacted [Indicates portions of the resolution which have been omitted because they are not relevant to the transaction for which this certificate has been requested.]

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
APPENDIX A**

**FAMILIAL RELATIONSHIPS WITH ELECTED CITY OFFICIALS
AND DEPARTMENT HEADS**

This Appendix is to be completed only by (a) the Applicant, and (b) any legal entity which has a direct ownership interest in the Applicant exceeding 7.5%. It is not to be completed by any legal entity which has only an indirect ownership interest in the Applicant.

Under MCC Section 2-154-015, the Disclosing Party must disclose whether such Disclosing Party or any Applicable Party or any Spouse or Domestic Partner thereof currently has a familial relationship with any elected city official or department head. A familial relationship exists if, as of the date this EDS is signed, the Disclosing Party or any Applicable Party or any Spouse or Domestic Partner thereof is related to the mayor, any alderman, the city clerk, the city treasurer or any city department head as spouse or domestic partner or as any of the following, whether by blood or adoption: parent, child, brother or sister, aunt or uncle, niece or nephew, grandparent, grandchild, father-in-law, mother-in-law, son-in-law, daughter-in-law, stepfather or stepmother, stepson or stepdaughter, stepbrother or stepsister or half-brother or half-sister.

Applicable Party means (1) all executive officers of the Disclosing Party listed in Section II.B.1.a., if the Disclosing Party is a corporation; all partners of the Disclosing Party, if the Disclosing Party is a general partnership; all general partners and limited partners of the Disclosing Party, if the Disclosing Party is a limited partnership; all managers, managing members and members of the Disclosing Party, if the Disclosing Party is a limited liability company; (2) all principal officers of the Disclosing Party; and (3) any person having more than a 7.5% ownership interest in the Disclosing Party. Principal officers means the president, chief operating officer, executive director, chief financial officer, treasurer or secretary of a legal entity or any person exercising similar authority.

Does the Disclosing Party or any Applicable Party or any Spouse or Domestic Partner thereof currently have a familial relationship with an elected city official or department head?

☒ Yes

☐ No

If yes, please identify below (1) the name and title of such person, (2) the name of the legal entity to which such person is connected; (3) the name and title of the elected city official or department head to whom such person has a familial relationship, and (4) the precise nature of such familial relationship.

(1) William M. Daley, Vice Chairman of Public Affairs, (2) Wells Fargo Bank, N.A. and Wells Fargo & Company, (3) Patrick Daley Thompson, Alderman, (4) Nephew.

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
APPENDIX B**

BUILDING CODE SCOFFLAW/PROBLEM LANDLORD CERTIFICATION

This Appendix is to be completed only by (a) the Applicant, and (b) any legal entity which has a direct ownership interest in the Applicant exceeding 7.5% (an "Owner"). It is not to be completed by any legal entity which has only an indirect ownership interest in the Applicant.

1. Pursuant to MCC Section 2-154-010, is the Applicant or any Owner identified as a building code scofflaw or problem landlord pursuant to MCC Section 2-92-416?

☐ Yes

☒ No

2. If the Applicant is a legal entity publicly traded on any exchange, is any officer or director of the Applicant identified as a building code scofflaw or problem landlord pursuant to MCC Section 2-92-416?

☐ Yes

☒ No

☐ The Applicant is not publicly traded on any exchange.

3. If yes to (1) or (2) above, please identify below the name of each person or legal entity identified as a building code scofflaw or problem landlord and the address of each building or buildings to which the pertinent code violations apply.

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
APPENDIX C**

PROHIBITION ON WAGE & SALARY HISTORY SCREENING - CERTIFICATION

This Appendix is to be completed only by an Applicant that is completing this EDS as a “contractor” as defined in MCC Section 2-92-385. That section, which should be consulted (www.amlegal.com), generally covers a party to any agreement pursuant to which they: (i) receive City of Chicago funds in consideration for services, work or goods provided (including for legal or other professional services), or (ii) pay the City money for a license, grant or concession allowing them to conduct a business on City premises.

On behalf of an Applicant that is a contractor pursuant to MCC Section 2-92-385, I hereby certify that the Applicant is in compliance with MCC Section 2-92-385(b)(1) and (2), which prohibit: (i) screening job applicants based on their wage or salary history, or (ii) seeking job applicants’ wage or salary history from current or former employers. I also certify that the Applicant has adopted a policy that includes those prohibitions.

☒ Yes

☐ No

☐ N/A – I am not an Applicant that is a “contractor” as defined in MCC Section 2-92-385.

This certification shall serve as the affidavit required by MCC Section 2-92-385(c)(1).

If you checked “no” to the above, please explain.

Attachment A

WELLS FARGO BANK, NATIONAL ASSOCIATION

Directors and Regulation O Executive Officers

(Effective as of November 13, 2019)

Directors

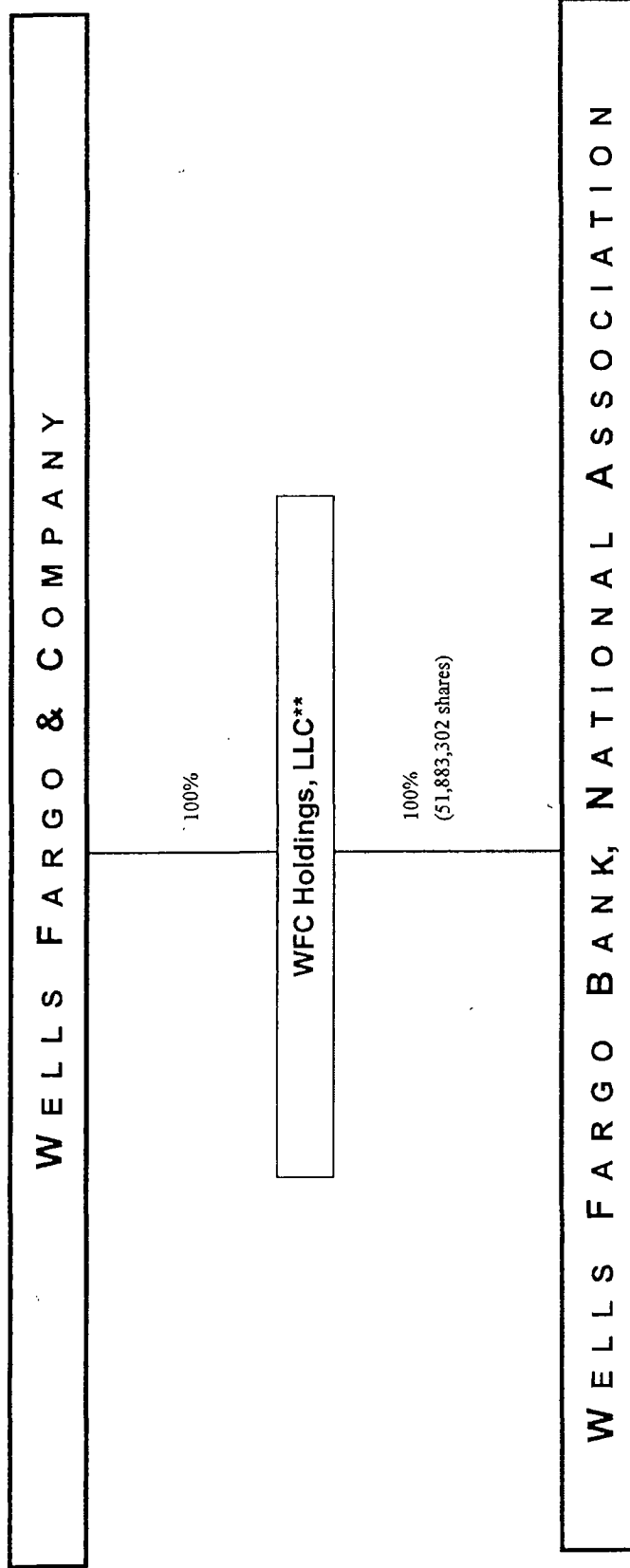
Theodore F. Craver Jr.*
Maria R. Morris*
Juan A. Pujadas*
James H. Quigley* — Chair
Charles W. Scharf

**Non-Employees*

Regulation O Executive Officers

Charles W. Scharf	Chief Executive Officer and President
Derek A. Flowers	Senior Executive Vice President and Head of Strategic Execution and Operations
David Galloreese	Senior Executive Vice President and Head of Human Resources
Richard D. Levy	Executive Vice President and Controller (Principal Accounting Officer)
Mary T. Mack	Senior Executive Vice President and Head of Consumer Banking (Community Banking and Consumer Lending)
Avid Modjtabai	Senior Executive Vice President and Head of Payments, Virtual Solutions and Innovation
Amanda G. Norton	Senior Executive Vice President and Chief Risk Officer
C. Allen Parker	Senior Executive Vice President and General Counsel
Petros G. Pelos	Senior Executive Vice President and Head of Wholesale Banking
John R. Shrewsberry	Senior Executive Vice President and Chief Financial Officer
Saul Van Beurden	Senior Executive Vice President and Head of Technology
Jonathan G. Weiss	Senior Executive Vice President and Head of Wealth and Investment Management
William M. Daley	Vice Chairman of Public Affairs

Ownership of Wells Fargo Bank, National Association as of November 1, 2018*



*Last ownership change December 1, 2016.

**Effective June 1, 2017, WFC Holdings Corporation converted and changed its name to WFC Holdings, LLC.

Attachment "C"

Section III – Income or Compensation to, or Ownership by, City Elected Officials

The undersigned warrants, to the best of his knowledge after due inquiry, that the Disclosing Party has not provided any income or compensation to any City elected official in 12 months before, nor does the undersigned reasonably expect to during the 12-month period following, the date the undersigned has signed this EDS. As the date of this filing, the undersigned is in the process of completing our due diligence on Independent Contracts, when completed we will update this response if needed.

Note that in the ordinary course of its business, Wells Fargo makes loans of various types with individuals and businesses. We have determined that these loans do not constitute a "business relationship" as defined in Chapter 2-156 of the Municipal Code.

Note further that the Disclosing Party has no way of identifying spouses or domestic partners of any City elected official, or the identities of any entities in which any city elected official or his or her spouse or domestic partner has a financial interest, and thus limits its certification to "City elected officials" as specially required by Section III. Specifically, we made due inquiry with respect to the City's Aldermen, the Mayor, the Treasurer and the City Clerk.

ATTACHMENT
"D"

ATTACHMENT TO SECTION V, PART B-CERTAIN OFFENSES INVOLVING CCC AND
SISTER AGENCIES AND SECTION V, PART C-FURTHER CERTIFICATIONS

Inclusive of the paragraphs that follow, the Applicant certifies the accuracy of the certifications contained in Section V, paragraphs B and C (to its most current certification) only as to itself, and certifies that to the best of the Applicant's knowledge after due inquiry, and as of January 2019, the statements in paragraphs B are accurate with respect to the executive officers and directors of the Applicant identified in Section II.B.1.

As with any large diversified financial services company of its size in the highly-regulated banking and securities field, Wells Fargo Bank, N.A. and Wells Fargo & Company (collectively, "Wells Fargo") are subject to receiving inquiries and subpoenas from regulators and law enforcement from time to time, as well as being subject to civil litigation. Wells Fargo responds regularly to inquiries and investigations by governmental entities and, as a highly regulated diversified financial institution has in the past entered into settlements of some of those investigations, including those specified below.

Wells Fargo Bank, N.A. has paid municipal fines and judgments in connection alleged violations of local housing laws (regarding certain homes the bank repossessed or that were subject to mortgages in which the Bank had a legal interest or role), some of which are characterized as misdemeanors. However, there have been no judgments, injunctions or liens arising out of such litigations or proceedings in the last five years that would materially impair Wells Fargo's ability as of this date to conduct its business or meet its obligations under the transaction to which this EDS relates.

During the third quarter of 2016, Wells Fargo Bank, N.A. entered into settlement agreements with the City of Los Angeles, the Consumer Financial Protection Bureau and the Office of the Comptroller of the Currency regarding certain sales practices. See press release dated September 8, 2016 at https://www.wellsfargo.com/about/press/2016/sales-practices-agreements_0908.content (the "2016 Settlement").

Following the announcement of the 2016 Settlement discussed above, certain state and local governmental bodies and municipal entities have temporarily suspended or removed Wells Fargo Bank, N.A. from providing certain commercial and investment banking services.

On March 28, 2017, Wells Fargo & Company (the "Company") issued a press release announcing its most recent overall Community Reinvestment Act ("CRA") rating of "Needs to Improve." The rating covers the years 2009-2012. Despite citing Bank's overall "Outstanding" performance on the exam's components, the Office of the Comptroller of the Currency downgraded the Bank's final rating to "Needs to Improve" due to previously issued regulatory consent orders.

On February 2, 2018, the Company entered into a consent order with the Federal Reserve Board ("FRB"). As required by the consent order, the Board submitted to the FRB a plan to further enhance the Board's governance and oversight of the Company, and the Company submitted to the FRB a plan to further improve the Company's compliance and operational risk management program.

On April 20, 2018, the Company entered into consent orders with the Consumer Financial Protection Bureau and the Office of the Comptroller of the Currency to pay an aggregate of \$1 billion in civil money penalties to

resolve matters regarding the Company's compliance risk management program and past practices involving certain automobile collateral protection insurance policies and certain mortgage interest rate lock extensions.

A number of jurisdictions suspended Wells Fargo Bank, N.A. as a provider of certain banking services in response to the overall CRA rating. In addition, a "Needs to Improve" rating could have impact on the Bank's relationships with additional states, counties, municipalities or other public agencies to the extent applicable law, regulation or policy limits, restricts or influences whether such entity may do business with a company that has an overall below "Satisfactory" rating.

Also in the ordinary course of its business, Wells Fargo regularly enters into financial transactions of various types with public entities throughout the United States. It is possible that one or more public entities have terminated a transaction for cause or default.

For a description of certain legal proceedings, please see the Wells Fargo's SEC filings 2019 10-Q (Q1, Q2 & Q3) and 2018 10-K <https://www.wellsfargo.com/about/investor-relations/filings/> a summary of which are on file with the City and our 2018 Annual report, <https://www.wellsfargo.com/about/investor-relations/annual-reports/>. For your ease of use, please see attached a copy of our Legal Actions as reported in our 2018 Annual Report, and 2019 10-Q (Q1, Q2 & Q3) and our 2108 10-K.

ATTACHMENT E

SLAVERY ERA BUSINESS SUMMARY

After years of research, Wells Fargo has found no records that indicate it – or any entities it acquired before the Wachovia merger – had ever financed slavery, held slaves as collateral, owned slaves, or profited from slavery.

With the Wachovia merger, Wells Fargo inherited hundreds of Wachovia's predecessor financial institutions, including two that had extensive involvement in slavery. In 2005 Wachovia announced these findings and apologized for the role its predecessors played and renewed its commitment to preserve and promote the history of the African-American experience in our nation. Wells Fargo shares that commitment and affirms its long-standing opposition to slavery.

Furthermore, Wells Fargo has found no records that any entities it acquired subsequent to the Wachovia merger – had ever financed slavery, held slaves as collateral, owned slaves, or profited from slavery, which research has been updated to include all legal entities acquired since its last submission of December, 2017.

The following narrative summarizes the results of the research that has been performed regarding Wachovia Bank and its ties to slavery.

SUMMARY OF RESEARCH

External research has revealed that two predecessor institutions of the undersigned, the Georgia Railroad & Banking Company and the Bank of Charleston, owned slaves.

Due to incomplete records, the undersigned cannot determine exactly how many slaves either the Georgia Railroad and Banking Company or the Bank of Charleston owned. Through specific transactional records, researchers determined that the Georgia Railroad and Banking Company owned at least 162 slaves, and the Bank of Charleston accepted at least 529 slaves as collateral on mortgaged properties or loans, and acquired an undetermined number of these individuals when customers defaulted on their loans.

The Georgia Railroad and Banking Company was founded in 1833 to complete a railroad line between the City of Augusta and the interior of the state of Georgia. The company relied on slave labor for the construction and maintenance of this railway. According to the existing and searchable bank records, 162 slaves were owned or authorized to be purchased by the Georgia Railroad and Banking Company between 1836 and 1842. In addition, the company awarded work to contractors who purchased at least 400 slaves to perform work on the railways.

The Bank of Charleston, founded in 1834, issued loans and mortgages where enslaved individuals were used as collateral. A review of the bank's account ledgers revealed a minimum of 24 transactions involving reference to 529 enslaved individuals being used

as collateral. In most cases, the loan was paid on schedule, and the bank never took possession of slaves that were pledged as collateral on the loan. In several documented instances, however, customers defaulted on their loans and the Bank of Charleston took actual possession of slaves. The total number of slaves of whom the bank took possession cannot be accurately tallied due to the lack of records.

In addition, ten predecessor companies were determined to have profited more indirectly from slavery through the following means:

- Founders, directors, or account holders who owned slaves and/or profited directly from slavery;
- Investing in or transacting business with companies or individuals that owned slaves;
- Investing in the bonds of slave states and municipalities;
- Investing in U.S. government bonds during years when the United States permitted and profited from slave labor directly through taxation.

These institutions are:

- Bank of North America (Philadelphia, Pa.)
- Bank of Baltimore
- The Philadelphia Bank (later Philadelphia National Bank)
- Farmers' & Mechanics' Bank of Philadelphia
- Pennsylvania Company for Insurances on Lives and the Granting of Annuities
- State Bank of Elizabeth (Elizabeth, N.J.)
- State Bank of Newark (Newark, N.J.)
- Savings Bank of Baltimore
- Girard National Bank
- The Carswell Group (established in 1868, acquired by Palmer & Cay, Inc. in 1985)
- The Trenton Banking Company

FIRMWIDE

PLEASE POPULATE THE HIGHLIGHTED PORTIONS ONLY

Firm Name:	Wells Fargo Bank, N.A.
Primary Representative:	Mark Lester
Primary Representative Email and Telephone:	Mark.Lester@wellsfargo.com
Headquarters Address:	420 Montgomery Street, San Francisco, CA 94104
Chicago Public Finance Office Address:	10 S. Wacker, Suite 1500, Chicago, IL 60606
Total Number of Employees:	275,076
Number of Employees in Illinois:	3,624
Number of Employees in Chicago:	2,591
Capital Position:	\$1.65 Trillion (adjusted average assets for WFBNA)
Minority Designation:	No

Job Categories	5					5				
	Male					Female				
	White (Not Hispanic)	Black (Not Hispanic)	Hispanic	Asian	Native American	White (Not Hispanic)	Black (Not Hispanic)	Hispanic	Asian	Native American
Overall Totals	1	1	1	1	1	1	1	1	1	1
Officials and Managers	17.53%	11.28%	12.47%	13.75%	15.61%	15.36%	9.51%	12.13%	10.90%	13.25%
Professionals	40.31%	19.28%	13.56%	27.67%	23.93%	27.35%	14.85%	7.49%	26.24%	12.73%
Technicians	8.96%	5.45%	2.32%	27.61%	9.07%	3.96%	1.64%	0.49%	13.46%	2.23%
Sales Workers	3.40%	1.24%	2.51%	2.42%	1.51%	1.73%	0.30%	0.89%	2.16%	0.92%
Office and Clerical	26.88%	58.45%	67.40%	24.78%	46.10%	50.10%	72.31%	78.57%	44.53%	68.90%
Craft Workers (Skilled)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Operatives (Semi-Skilled)	2.91%	4.18%	1.75%	3.75%	3.78%	1.41%	1.37%	0.44%	2.70%	1.84%
Laborers	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Service Workers	0.00%	0.12%	0.00%	0.01%	0.00%	0.00%	0.02%	0.00%	0.00%	0.13%
Total	10	1	1	1	1	1	1	1	1	1

Male	Female	Total
50%	50%	100%

Job Categories	White (Not Hispanic)	Black (Not Hispanic)	Hispanic	Asian	Native American
Overall Totals	13%	21%	8%	2%	3%
Officials and Managers	3%	7%	1%	2%	4%
Professionals	1%	1%	0%	0%	1%
Technicians	1%	0%	0%	0%	0%
Sales Workers	8%	13%	15%	7%	12%
Office and Clerical	0%	0%	0%	0%	0%
Craft Workers (Skilled)	0%	0%	0%	0%	0%
Operatives (Semi-Skilled)	0%	0%	0%	0%	0%
Laborers	0%	0%	0%	0%	0%
Service Workers	0%	20%	20%	20%	20%
Total	100%	20%	20%	20%	20%

* Wells Fargo is only able to provide percentages, and not actual counts of employees at this time

** We report two additional categories, including Hawaiian or Other Pacific Islander and Two or More Races. Given the limitations of the above spreadsheet, those individuals were not included in the above counts.

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT
AND AFFIDAVIT**

SECTION I -- GENERAL INFORMATION

A. Legal name of the Disclosing Party submitting this EDS. Include d/b/a/ if applicable:

WFC Holdings, LLC

Check ONE of the following three boxes:

Indicate whether the Disclosing Party submitting this EDS is:

1. ☐ the Applicant

OR

2. ☐ a legal entity currently holding, or anticipated to hold within six months after City action on the contract, transaction or other undertaking to which this EDS pertains (referred to below as the "Matter"), a direct or indirect interest in excess of 7.5% in the Applicant. State the Applicant's legal name: _____

OR

3. ☒ a legal entity with a direct or indirect right of control of the Applicant (see Section II(B)(1)) State the legal name of the entity in which the Disclosing Party holds a right of control:

Wells Fargo Bank, N.A.

B. Business address of the Disclosing Party: 420 Montgomery Street, San Francisco, CA 94163

C. Telephone: 312-658-4154 Fax: _____

Email: Sasha.K.Nelson@Wellsfargo.com

D. Name of contact person: Sasha K. Nelson

E. Federal Employer Identification No. (if you have one): _____

F. Brief description of the Matter to which this EDS pertains. (Include project number and location of property, if applicable):

Municipal Depository

G. Which City agency or department is requesting this EDS? Department of Finance

If the Matter is a contract being handled by the City's Department of Procurement Services, please complete the following:

Specification # _____ and Contract # _____

SECTION II -- DISCLOSURE OF OWNERSHIP INTERESTS

A. NATURE OF THE DISCLOSING PARTY

1. Indicate the nature of the Disclosing Party:

- | | |
|---|---|
| <input type="checkbox"/> Person | <input checked="" type="checkbox"/> Limited liability company |
| <input type="checkbox"/> Publicly registered business corporation | <input type="checkbox"/> Limited liability partnership |
| <input type="checkbox"/> Privately held business corporation | <input type="checkbox"/> Joint venture |
| <input type="checkbox"/> Sole proprietorship | <input type="checkbox"/> Not-for-profit corporation |
| <input type="checkbox"/> General partnership | (Is the not-for-profit corporation also a 501(c)(3))? |
| <input type="checkbox"/> Limited partnership | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| <input type="checkbox"/> Trust | <input type="checkbox"/> Other (please specify) |

2. For legal entities, the state (or foreign country) of incorporation or organization, if applicable:

Delaware

3. For legal entities not organized in the State of Illinois: Has the organization registered to do business in the State of Illinois as a foreign entity?

☐ Yes ☒ No ☐ Organized in Illinois

B. IF THE DISCLOSING PARTY IS A LEGAL ENTITY:

1. List below the full names and titles, if applicable, of: (i) all executive officers and all directors of the entity; (ii) **for not-for-profit corporations**, all members, if any, which are legal entities (if there are no such members, write "no members which are legal entities"); (iii) **for trusts, estates or other similar entities**, the trustee, executor, administrator, or similarly situated party; (iv) **for general or limited partnerships, limited liability companies, limited liability partnerships or joint ventures**, each general partner, managing member, manager or any other person or legal entity that directly or indirectly controls the day-to-day management of the Applicant.

NOTE: Each legal entity listed below must submit an EDS on its own behalf.

Name	Title
------	-------

Please see Attachment A (eDocs# 17630286)

2. Please provide the following information concerning each person or legal entity having a direct or indirect, current or prospective (i.e. within 6 months after City action) beneficial interest (including ownership) in excess of 7.5% of the Applicant. Examples of such an interest include shares in a corporation, partnership interest in a partnership or joint venture, interest of a member or manager in a

limited liability company, or interest of a beneficiary of a trust, estate or other similar entity. If none, state None.

NOTE: Each legal entity listed below may be required to submit an EDS on its own behalf.

Name	Business Address	Percentage Interest in the Applicant
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Please see Attachment B (eDocs# 17660394)		
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SECTION III -- INCOME OR COMPENSATION TO, OR OWNERSHIP BY, CITY ELECTED OFFICIALS

Has the Disclosing Party provided any income or compensation to any City elected official during the 12-month period preceding the date of this EDS? ☐ Yes ☒ No

Does the Disclosing Party reasonably expect to provide any income or compensation to any City elected official during the 12-month period following the date of this EDS? ☐ Yes ☒ No

If yes to either of the above, please identify below the name(s) of such City elected official(s) and describe such income or compensation:

Please see Attachment C (eDocs# 17660432)

Does any City elected official or, to the best of the Disclosing Party's knowledge after reasonable inquiry, any City elected official's spouse or domestic partner, have a financial interest (as defined in Chapter 2-156 of the Municipal Code of Chicago (MCC)) in the Disclosing Party?

☐ Yes ☒ No

If "yes," please identify below the name(s) of such City elected official(s) and/or spouse(s)/domestic partner(s) and describe the financial interest(s).

Please see Attachment C (eDocs# 17660432)

SECTION IV -- DISCLOSURE OF SUBCONTRACTORS AND OTHER RETAINED PARTIES

The Disclosing Party must disclose the name and business address of each subcontractor, attorney, lobbyist (as defined in MCC Chapter 2-156), accountant, consultant and any other person or entity whom the Disclosing Party has retained or expects to retain in connection with the Matter, as well as the nature of the relationship, and the total amount of the fees paid or estimated to be paid. The Disclosing Party is not required to disclose employees who are paid solely through the Disclosing Party's regular payroll. If the Disclosing Party is uncertain whether a disclosure is required under this section, the Disclosing Party must either ask the City whether disclosure is required or make the disclosure.

Name (indicate whether retained or anticipated to be retained)	Business Address	Relationship to Disclosing Party (subcontractor, attorney, lobbyist, etc.)	Fees (indicate whether paid or estimated.) NOTE: hourly rate or t.b.d. is not an acceptable response.
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None

(Add sheets if necessary)

[X] Check here if the Disclosing Party has not retained, nor expects to retain, any such persons or entities.

SECTION V -- CERTIFICATIONS

A. COURT-ORDERED CHILD SUPPORT COMPLIANCE

Under MCC Section 2-92-415, substantial owners of business entities that contract with the City must remain in compliance with their child support obligations throughout the contract's term.

Has any person who directly or indirectly owns 10% or more of the Disclosing Party been declared in arrearage on any child support obligations by any Illinois court of competent jurisdiction?

[] Yes [] No [X] No person directly or indirectly owns 10% or more of the Disclosing Party.

If Yes, has the person entered into a court-approved agreement for payment of all support owed and is the person in compliance with that agreement?

[] Yes [] No

B. FURTHER CERTIFICATIONS

1. [This paragraph 1 applies only if the Matter is a contract being handled by the City's Department of Procurement Services.] In the 5-year period preceding the date of this EDS, neither the Disclosing Party nor any Affiliated Entity [see definition in (5) below] has engaged, in connection with the performance of any public contract, the services of an integrity monitor, independent private sector inspector general, or integrity compliance consultant (i.e., an individual or entity with legal, auditing, investigative, or other similar skills, designated by a public agency to help the agency monitor the activity of specified agency vendors as well as help the vendors reform their business practices so they can be considered for agency contracts in the future, or continue with a contract in progress).

2. The Disclosing Party and its Affiliated Entities are not delinquent in the payment of any fine, fee, tax or other source of indebtedness owed to the City of Chicago, including, but not limited to, water and sewer charges, license fees, parking tickets, property taxes and sales taxes, nor is the Disclosing Party delinquent in the payment of any tax administered by the Illinois Department of Revenue.

3. The Disclosing Party and, if the Disclosing Party is a legal entity, all of those persons or entities identified in Section II(B)(1) of this EDS:

a. are not presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from any transactions by any federal, state or local unit of government;

b. have not, during the 5 years before the date of this EDS, been convicted of a criminal offense, adjudged guilty, or had a civil judgment rendered against them in connection with: obtaining, attempting to obtain, or performing a public (federal, state or local) transaction or contract under a public transaction; a violation of federal or state antitrust statutes; fraud; embezzlement; theft; forgery; bribery; falsification or destruction of records; making false statements; or receiving stolen property;

c. are not presently indicted for, or criminally or civilly charged by, a governmental entity (federal, state or local) with committing any of the offenses set forth in subparagraph (b) above;

d. have not, during the 5 years before the date of this EDS, had one or more public transactions (federal, state or local) terminated for cause or default; and

e. have not, during the 5 years before the date of this EDS, been convicted, adjudged guilty, or found liable in a civil proceeding, or in any criminal or civil action, including actions concerning environmental violations, instituted by the City or by the federal government, any state, or any other unit of local government.

4. The Disclosing Party understands and shall comply with the applicable requirements of MCC chapters 2-56 (Inspector General) and 2-156 (Governmental Ethics).

5. Certifications (5), (6) and (7) concern:

- the Disclosing Party;
- any Contractor (meaning any contractor or subcontractor used by the Disclosing Party in connection with the Matter, including but not limited to all persons or legal entities disclosed under Section IV, Disclosure of Subcontractors and Other Retained Parties);
- any "Affiliated Entity" (meaning a person or entity that, directly or indirectly: controls the Disclosing Party, is controlled by the Disclosing Party, or is, with the Disclosing Party, under common control of another person or entity). Indicia of control include, without limitation: interlocking management or ownership; identity of interests among family members, shared facilities and equipment; common use of employees; or organization of a business entity following the ineligibility of a business entity to do business with federal or state or local government, including the City, using substantially the same management, ownership, or principals as the ineligible entity. With respect to Contractors, the term Affiliated Entity means a person or entity that directly or indirectly controls the Contractor, is controlled by it, or, with the Contractor, is under common control of another person or entity;
- any responsible official of the Disclosing Party, any Contractor or any Affiliated Entity or any other official, agent or employee of the Disclosing Party, any Contractor or any Affiliated Entity, acting pursuant to the direction or authorization of a responsible official of the Disclosing Party, any Contractor or any Affiliated Entity (collectively "Agents").

Neither the Disclosing Party, nor any Contractor, nor any Affiliated Entity of either the Disclosing Party or any Contractor, nor any Agents have, during the 5 years before the date of this EDS, or, with respect to a Contractor, an Affiliated Entity, or an Affiliated Entity of a Contractor during the 5 years before the date of such Contractor's or Affiliated Entity's contract or engagement in connection with the Matter:

- a. bribed or attempted to bribe, or been convicted or adjudged guilty of bribery or attempting to bribe, a public officer or employee of the City, the State of Illinois, or any agency of the federal government or of any state or local government in the United States of America, in that officer's or employee's official capacity;
- b. agreed or colluded with other bidders or prospective bidders, or been a party to any such agreement, or been convicted or adjudged guilty of agreement or collusion among bidders or prospective bidders, in restraint of freedom of competition by agreement to bid a fixed price or otherwise; or
- c. made an admission of such conduct described in subparagraph (a) or (b) above that is a matter of record, but have not been prosecuted for such conduct; or
- d. violated the provisions referenced in MCC Subsection 2-92-320(a)(4)(Contracts Requiring a Base Wage); (a)(5)(Debarment Regulations); or (a)(6)(Minimum Wage Ordinance).

6. Neither the Disclosing Party, nor any Affiliated Entity or Contractor, or any of their employees, officials, agents or partners, is barred from contracting with any unit of state or local government as a result of engaging in or being convicted of (1) bid-rigging in violation of 720 ILCS 5/33E-3; (2) bid-rotating in violation of 720 ILCS 5/33E-4; or (3) any similar offense of any state or of the United States of America that contains the same elements as the offense of bid-rigging or bid-rotating.

7. Neither the Disclosing Party nor any Affiliated Entity is listed on a Sanctions List maintained by the United States Department of Commerce, State, or Treasury, or any successor federal agency.

8. [FOR APPLICANT ONLY] (i) Neither the Applicant nor any controlling person [see MCC Chapter 1-23, Article I for applicability and defined terms] of the Applicant is currently indicted or charged with, or has admitted guilt of, or has ever been convicted of, or placed under supervision for, any criminal offense involving actual, attempted, or conspiracy to commit bribery, theft, fraud, forgery, perjury, dishonesty or deceit against an officer or employee of the City or any sister agency; and (ii) the Applicant understands and acknowledges that compliance with Article I is a continuing requirement for doing business with the City. NOTE: If MCC Chapter 1-23, Article I applies to the Applicant, that Article's permanent compliance timeframe supersedes 5-year compliance timeframes in this Section V.

9. [FOR APPLICANT ONLY] The Applicant and its Affiliated Entities will not use, nor permit their subcontractors to use, any facility listed as having an active exclusion by the U.S. EPA on the federal System for Award Management (SAM).

10. [FOR APPLICANT ONLY] The Applicant will obtain from any contractors/subcontractors hired or to be hired in connection with the Matter certifications equal in form and substance to those in Certifications (2) and (9) above and will not, without the prior written consent of the City, use any such

contractor/subcontractor that does not provide such certifications or that the Applicant has reason to believe has not provided or cannot provide truthful certifications.

11. If the Disclosing Party is unable to certify to any of the above statements in this Part B (Further Certifications), the Disclosing Party must explain below:

Please see Attachment D (eDocs# 17640470) and supporting attachments (eDocs# 17640435; 17640702; 17640723; 17640755; and 17663352).

If the letters "NA," the word "None," or no response appears on the lines above, it will be conclusively presumed that the Disclosing Party certified to the above statements.

12. To the best of the Disclosing Party's knowledge after reasonable inquiry, the following is a complete list of all current employees of the Disclosing Party who were, at any time during the 12-month period preceding the date of this EDS, an employee, or elected or appointed official, of the City of Chicago (if none, indicate with N/A or none).

None

13. To the best of the Disclosing Party's knowledge after reasonable inquiry, the following is a complete list of all gifts that the Disclosing Party has given or caused to be given, at any time during the 12-month period preceding the execution date of this EDS, to an employee, or elected or appointed official, of the City of Chicago. For purposes of this statement, a gift does not include: (i) anything made generally available to City employees or to the general public, or (ii) food or drink provided in the course of official City business and having a retail value of less than \$25 per recipient, or (iii) a political contribution otherwise duly reported as required by law (if none, indicate with N/A or none). As to any gift listed below, please also list the name of the City recipient.

None

C. CERTIFICATION OF STATUS AS FINANCIAL INSTITUTION

1. The Disclosing Party certifies that the Disclosing Party (check one)

☒ is ☐ is not

a "financial institution" as defined in MCC Section 2-32-455(b).

2. If the Disclosing Party IS a financial institution, then the Disclosing Party pledges:

"We are not and will not become a predatory lender as defined in MCC Chapter 2-32. We further pledge that none of our affiliates is, and none of them will become, a predatory lender as defined in MCC Chapter 2-32. We understand that becoming a predatory lender or becoming an affiliate of a predatory lender may result in the loss of the privilege of doing business with the City."

If the Disclosing Party is unable to make this pledge because it or any of its affiliates (as defined in MCC Section 2-32-455(b)) is a predatory lender within the meaning of MCC Chapter 2-32, explain here (attach additional pages if necessary):

Please see Attachment D (eDocs# 17640470)

If the letters "NA," the word "None," or no response appears on the lines above, it will be conclusively presumed that the Disclosing Party certified to the above statements.

D. CERTIFICATION REGARDING FINANCIAL INTEREST IN CITY BUSINESS

Any words or terms defined in MCC Chapter 2-156 have the same meanings if used in this Part D.

1. In accordance with MCC Section 2-156-110: To the best of the Disclosing Party's knowledge after reasonable inquiry, does any official or employee of the City have a financial interest in his or her own name or in the name of any other person or entity in the Matter?

☐ Yes

☒ No

NOTE: If you checked "Yes" to Item D(1), proceed to Items D(2) and D(3). If you checked "No" to Item D(1), skip Items D(2) and D(3) and proceed to Part E.

2. Unless sold pursuant to a process of competitive bidding, or otherwise permitted, no City elected official or employee shall have a financial interest in his or her own name or in the name of any other person or entity in the purchase of any property that (i) belongs to the City, or (ii) is sold for taxes or assessments, or (iii) is sold by virtue of legal process at the suit of the City (collectively, "City Property Sale"). Compensation for property taken pursuant to the City's eminent domain power does not constitute a financial interest within the meaning of this Part D.

Does the Matter involve a City Property Sale?

☐ Yes

☒ No

3. If you checked "Yes" to Item D(1), provide the names and business addresses of the City officials or employees having such financial interest and identify the nature of the financial interest:

Name	Business Address	Nature of Financial Interest
------	------------------	------------------------------

4. The Disclosing Party further certifies that no prohibited financial interest in the Matter will be acquired by any City official or employee.

E. CERTIFICATION REGARDING SLAVERY ERA BUSINESS

Please check either (1) or (2) below. If the Disclosing Party checks (2), the Disclosing Party must disclose below or in an attachment to this EDS all information required by (2). Failure to comply with these disclosure requirements may make any contract entered into with the City in connection with the Matter voidable by the City.

 1. The Disclosing Party verifies that the Disclosing Party has searched any and all records of the Disclosing Party and any and all predecessor entities regarding records of investments or profits from slavery or slaveholder insurance policies during the slavery era (including insurance policies issued to slaveholders that provided coverage for damage to or injury or death of their slaves), and the Disclosing Party has found no such records.

 X 2. The Disclosing Party verifies that, as a result of conducting the search in step (1) above, the Disclosing Party has found records of investments or profits from slavery or slaveholder insurance policies. The Disclosing Party verifies that the following constitutes full disclosure of all such records, including the names of any and all slaves or slaveholders described in those records:

Please see Attachment E (eDocs# 17674538)

SECTION VI -- CERTIFICATIONS FOR FEDERALLY FUNDED MATTERS

NOTE: If the Matter is federally funded, complete this Section VI. If the Matter is not federally funded, proceed to Section VII. For purposes of this Section VI, tax credits allocated by the City and proceeds of debt obligations of the City are not federal funding.

A. CERTIFICATION REGARDING LOBBYING – N/A

1. List below the names of all persons or entities registered under the federal Lobbying Disclosure Act of 1995, as amended, who have made lobbying contacts on behalf of the Disclosing Party with respect to the Matter: (Add sheets if necessary):

(If no explanation appears or begins on the lines above, or if the letters "NA" or if the word "None" appear, it will be conclusively presumed that the Disclosing Party means that NO persons or entities registered under the Lobbying Disclosure Act of 1995, as amended, have made lobbying contacts on behalf of the Disclosing Party with respect to the Matter.)

2. The Disclosing Party has not spent and will not expend any federally appropriated funds to pay any person or entity listed in paragraph A(1) above for his or her lobbying activities or to pay any person or entity to influence or attempt to influence an officer or employee of any agency, as defined by applicable federal law, a member of Congress, an officer or employee of Congress, or an employee

of a member of Congress, in connection with the award of any federally funded contract, making any federally funded grant or loan, entering into any cooperative agreement, or to extend, continue, renew, amend, or modify any federally funded contract, grant, loan, or cooperative agreement.

3. The Disclosing Party will submit an updated certification at the end of each calendar quarter in which there occurs any event that materially affects the accuracy of the statements and information set forth in paragraphs A(1) and A(2) above.

4. The Disclosing Party certifies that either: (i) it is not an organization described in section 501(c)(4) of the Internal Revenue Code of 1986; or (ii) it is an organization described in section 501(c)(4) of the Internal Revenue Code of 1986 but has not engaged and will not engage in "Lobbying Activities," as that term is defined in the Lobbying Disclosure Act of 1995, as amended.

5. If the Disclosing Party is the Applicant, the Disclosing Party must obtain certifications equal in form and substance to paragraphs A(1) through A(4) above from all subcontractors before it awards any subcontract and the Disclosing Party must maintain all such subcontractors' certifications for the duration of the Matter and must make such certifications promptly available to the City upon request.

B. CERTIFICATION REGARDING EQUAL EMPLOYMENT OPPORTUNITY – N/A

If the Matter is federally funded, federal regulations require the Applicant and all proposed subcontractors to submit the following information with their bids or in writing at the outset of negotiations.

Is the Disclosing Party the Applicant?

☐ Yes

☐ No

If Yes, answer the three questions below:

1. Have you developed and do you have on file affirmative action programs pursuant to applicable federal regulations? (See 41 CFR Part 60-2.)

☐ Yes

☐ No

2. Have you filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance Programs, or the Equal Employment Opportunity Commission all reports due under the applicable filing requirements?

☐ Yes

☐ No

☐ Reports not required

3. Have you participated in any previous contracts or subcontracts subject to the equal opportunity clause?

☐ Yes

☐ No

If you checked No to question (1) or (2) above, please provide an explanation:

SECTION VII -- FURTHER ACKNOWLEDGMENTS AND CERTIFICATION

The Disclosing Party understands and agrees that:

A. The certifications, disclosures, and acknowledgments contained in this EDS will become part of any contract or other agreement between the Applicant and the City in connection with the Matter, whether procurement, City assistance, or other City action, and are material inducements to the City's execution of any contract or taking other action with respect to the Matter. The Disclosing Party understands that it must comply with all statutes, ordinances, and regulations on which this EDS is based.

B. The City's Governmental Ethics Ordinance, MCC Chapter 2-156, imposes certain duties and obligations on persons or entities seeking City contracts, work, business, or transactions. The full text of this ordinance and a training program is available on line at www.cityofchicago.org/Ethics, and may also be obtained from the City's Board of Ethics, 740 N. Sedgwick St., Suite 500, Chicago, IL 60610, (312) 744-9660. The Disclosing Party must comply fully with this ordinance.

C. If the City determines that any information provided in this EDS is false, incomplete or inaccurate, any contract or other agreement in connection with which it is submitted may be rescinded or be void or voidable, and the City may pursue any remedies under the contract or agreement (if not rescinded or void), at law, or in equity, including terminating the Disclosing Party's participation in the Matter and/or declining to allow the Disclosing Party to participate in other City transactions. Remedies at law for a false statement of material fact may include incarceration and an award to the City of treble damages.

D. It is the City's policy to make this document available to the public on its Internet site and/or upon request. Some or all of the information provided in, and appended to, this EDS may be made publicly available on the Internet, in response to a Freedom of Information Act request, or otherwise. By completing and signing this EDS, the Disclosing Party waives and releases any possible rights or claims which it may have against the City in connection with the public release of information contained in this EDS and also authorizes the City to verify the accuracy of any information submitted in this EDS.

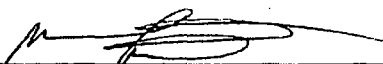
E. The information provided in this EDS must be kept current. In the event of changes, the Disclosing Party must supplement this EDS up to the time the City takes action on the Matter. If the Matter is a contract being handled by the City's Department of Procurement Services, the Disclosing Party must update this EDS as the contract requires. **NOTE:** With respect to Matters subject to MCC Chapter 1-23, Article I (imposing **PERMANENT INELIGIBILITY** for certain specified offenses), the information provided herein regarding eligibility must be kept current for a longer period, as required by MCC Chapter 1-23 and Section 2-154-020.

CERTIFICATION

Under penalty of perjury, the person signing below: (1) warrants that he/she is authorized to execute this EDS, and all applicable Appendices, on behalf of the Disclosing Party, and (2) warrants that all certifications and statements contained in this EDS, and all applicable Appendices, are true, accurate and complete as of the date furnished to the City.

WFC Holdings, LLC

(Print or type exact legal name of Disclosing Party)

By: 
(Sign here)

Mark Lester

(Print or type name of person signing)

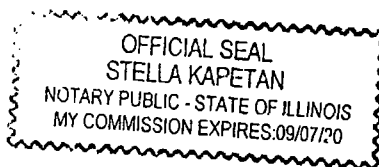
Senior Vice President, Relationship Manager

(Print or type title of person signing)

Signed and sworn to before me on (date) 11/15/19,

at Cook County, Illinois (state).


Notary Public



Commission expires: 9/7/20

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
APPENDIX A**

**FAMILIAL RELATIONSHIPS WITH ELECTED CITY OFFICIALS
AND DEPARTMENT HEADS**

This Appendix is to be completed only by (a) the Applicant, and (b) any legal entity which has a direct ownership interest in the Applicant exceeding 7.5%. It is not to be completed by any legal entity which has only an indirect ownership interest in the Applicant.

Under MCC Section 2-154-015, the Disclosing Party must disclose whether such Disclosing Party or any Applicable Party or any Spouse or Domestic Partner thereof currently has a familial relationship with any elected city official or department head. A familial relationship exists if, as of the date this EDS is signed, the Disclosing Party or any Applicable Party or any Spouse or Domestic Partner thereof is related to the mayor, any alderman, the city clerk, the city treasurer or any city department head as spouse or domestic partner or as any of the following, whether by blood or adoption: parent, child, brother or sister, aunt or uncle, niece or nephew, grandparent, grandchild, father-in-law, mother-in-law, son-in-law, daughter-in-law, stepfather or stepmother, stepson or stepdaughter, stepbrother or stepsister or half-brother or half-sister.

Applicable Party means (1) all executive officers of the Disclosing Party listed in Section II.B.1.a., if the Disclosing Party is a corporation; all partners of the Disclosing Party, if the Disclosing Party is a general partnership; all general partners and limited partners of the Disclosing Party, if the Disclosing Party is a limited partnership; all managers, managing members and members of the Disclosing Party, if the Disclosing Party is a limited liability company; (2) all principal officers of the Disclosing Party; and (3) any person having more than a 7.5% ownership interest in the Disclosing Party. Principal officers means the president, chief operating officer, executive director, chief financial officer, treasurer or secretary of a legal entity or any person exercising similar authority.

Does the Disclosing Party or any Applicable Party or any Spouse or Domestic Partner thereof currently have a familial relationship with an elected city official or department head?

☐ Yes

☒ No

If yes, please identify below (1) the name and title of such person, (2) the name of the legal entity to which such person is connected; (3) the name and title of the elected city official or department head to whom such person has a familial relationship, and (4) the precise nature of such familial relationship.

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
APPENDIX B**

BUILDING CODE SCOFFLAW/PROBLEM LANDLORD CERTIFICATION

This Appendix is to be completed only by (a) the Applicant, and (b) any legal entity which has a direct ownership interest in the Applicant exceeding 7.5% (an "Owner"). It is not to be completed by any legal entity which has only an indirect ownership interest in the Applicant.

1. Pursuant to MCC Section 2-154-010, is the Applicant or any Owner identified as a building code scofflaw or problem landlord pursuant to MCC Section 2-92-416?

☐ Yes ☒ No

2. If the Applicant is a legal entity publicly traded on any exchange, is any officer or director of the Applicant identified as a building code scofflaw or problem landlord pursuant to MCC Section 2-92-416?

☐ Yes ☒ No ☐ The Applicant is not publicly traded on any exchange.

3. If yes to (1) or (2) above, please identify below the name of each person or legal entity identified as a building code scofflaw or problem landlord and the address of each building or buildings to which the pertinent code violations apply.

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
APPENDIX C**

PROHIBITION ON WAGE & SALARY HISTORY SCREENING - CERTIFICATION

This Appendix is to be completed only by an Applicant that is completing this EDS as a “contractor” as defined in MCC Section 2-92-385. That section, which should be consulted (www.amlegal.com), generally covers a party to any agreement pursuant to which they: (i) receive City of Chicago funds in consideration for services, work or goods provided (including for legal or other professional services), or (ii) pay the City money for a license, grant or concession allowing them to conduct a business on City premises.

On behalf of an Applicant that is a contractor pursuant to MCC Section 2-92-385, I hereby certify that the Applicant is in compliance with MCC Section 2-92-385(b)(1) and (2), which prohibit: (i) screening job applicants based on their wage or salary history, or (ii) seeking job applicants’ wage or salary history from current or former employers. I also certify that the Applicant has adopted a policy that includes those prohibitions.

☐ Yes

☐ No

☒ N/A – I am not an Applicant that is a “contractor” as defined in MCC Section 2-92-385.

This certification shall serve as the affidavit required by MCC Section 2-92-385(c)(1).

If you checked “no” to the above, please explain.

WFC Holdings, LLC a legal entity with a direct or indirect right of control of Wells Fargo Bank, N.A.
(the “Applicant”).

Attachment A

WFC HOLDINGS, LLC

**Directors and Regulation O Executive
Officers**

(Effective as of October 21, 2019)

Director Shrewsberry, John

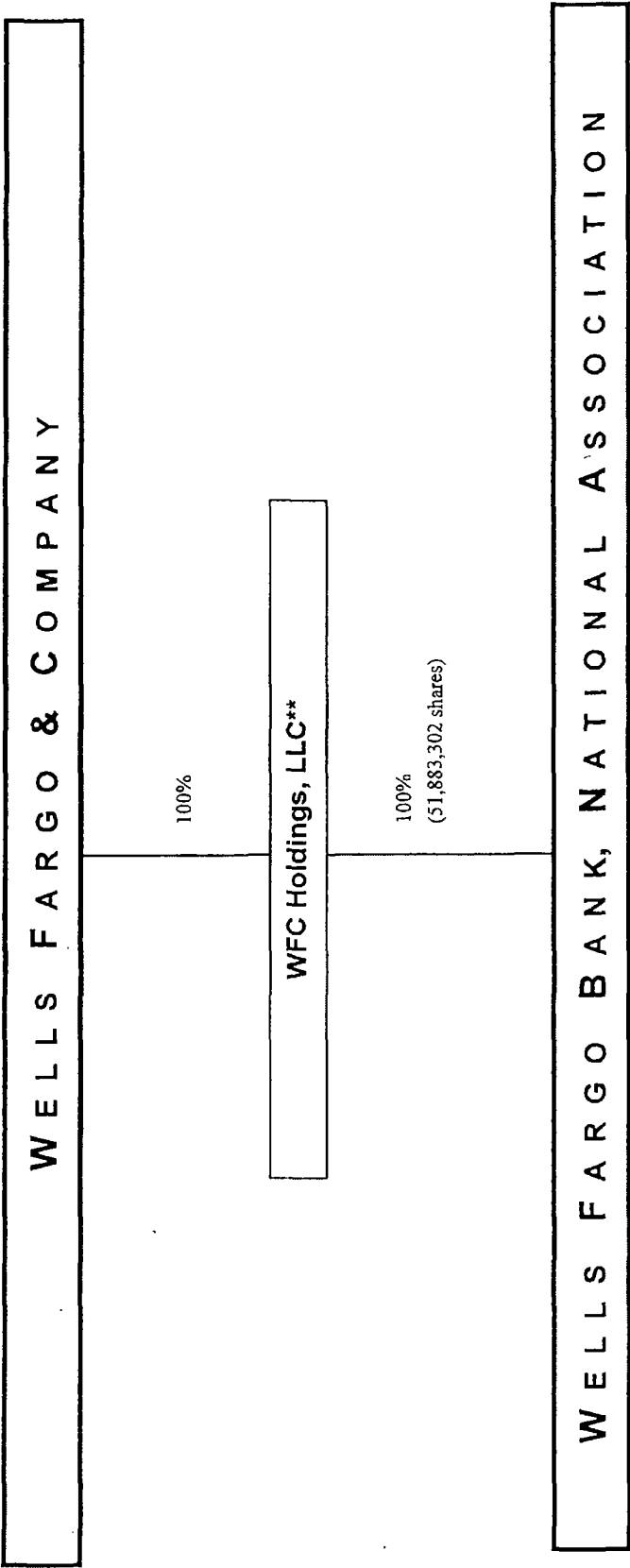
Director Levy, Richard

Director Lebioda, Nathan

Executive Officer for Reg O purposes Shrewsberry, John

Executive Officer for Reg O purposes Parker, C.

Ownership of Wells Fargo Bank, National Association as of November 1, 2018*



*Last ownership change December 1, 2016.

**Effective June 1, 2017, WFC Holdings Corporation converted and changed its name to WFC Holdings, LLC.

Attachment "C"

Section III – Income or Compensation to, or Ownership by, City Elected Officials

The undersigned warrants, to the best of his knowledge after due inquiry, that the Disclosing Party has not provided any income or compensation to any City elected official in 12 months before, nor does the undersigned reasonably expect to during the 12-month period following, the date the undersigned has signed this EDS. As the date of this filing, the undersigned is in the process of completing our due diligence on Independent Contracts, when completed we will update this response if needed.

Note that in the ordinary course of its business, Wells Fargo makes loans of various types with individuals and businesses. We have determined that these loans do not constitute a "business relationship" as defined in Chapter 2-156 of the Municipal Code.

Note further that the Disclosing Party has no way of identifying spouses or domestic partners of any City elected official, or the identities of any entities in which any city elected official or his or her spouse or domestic partner has a financial interest, and thus limits its certification to "City elected officials" as specially required by Section III. Specifically, we made due inquiry with respect to the City's Aldermen, the Mayor, the Treasurer and the City Clerk.

ATTACHMENT
"D"

ATTACHMENT TO SECTION V, PART B-CERTAIN OFFENSES INVOLVING CCC AND
SISTER AGENCIES AND SECTION V, PART C-FURTHER CERTIFICATIONS

Inclusive of the paragraphs that follow and except as stated in the following sentence, the Disclosing Party certifies the accuracy of the certifications contained in Section V, paragraphs B and C (to its most current certification) only as to itself, and certifies that to the best of the Disclosing Party's knowledge after due inquiry, and as of January 2019, the statements in paragraphs B are accurate with respect to the executive officers and directors of the Disclosing Party identified in Section II.B.1 Section. The Disclosing Party continues to research the requested certifications set forth in Sections V.B.3(a) and (d), and 6, and will confirm such certifications or update this response, as applicable, upon receipt of the due diligence.

As with any large diversified financial services company of its size in the highly-regulated banking and securities field, Wells Fargo Bank, N.A. and Wells Fargo & Company (collectively, "Wells Fargo") are subject to receiving inquiries and subpoenas from regulators and law enforcement from time to time, as well as being subject to civil litigation. Wells Fargo responds regularly to inquiries and investigations by governmental entities and, as a highly regulated diversified financial institution has in the past entered into settlements of some of those investigations, including those specified below.

Wells Fargo Bank, N.A. has paid municipal fines and judgments in connection alleged violations of local housing laws (regarding certain homes the bank repossessed or that were subject to mortgages in which the Bank had a legal interest or role), some of which are characterized as misdemeanors. However, there have been no judgments, injunctions or liens arising out of such litigations or proceedings in the last five years that would materially impair Wells Fargo's ability as of this date to conduct its business or meet its obligations under the transaction to which this EDS relates.

During the third quarter of 2016, Wells Fargo Bank, N.A. entered into settlement agreements with the City of Los Angeles, the Consumer Financial Protection Bureau and the Office of the Comptroller of the Currency regarding certain sales practices. See press release dated September 8, 2016 at https://www.wellsfargo.com/about/press/2016/sales-practices-agreements_0908.content (the "2016 Settlement").

Following the announcement of the 2016 Settlement discussed above, certain state and local governmental bodies and municipal entities have temporarily suspended or removed Wells Fargo Bank, N.A. from providing certain commercial and investment banking services.

On March 28, 2017, Wells Fargo & Company (the "Company") issued a press release announcing its most recent overall Community Reinvestment Act ("CRA") rating of "Needs to Improve." The rating covers the years 2009-2012. Despite citing Bank's overall "Outstanding" performance on the exam's components, the Office of the Comptroller of the Currency downgraded the Bank's final rating to "Needs to Improve" due to previously issued regulatory consent orders.

On February 2, 2018, the Company entered into a consent order with the Federal Reserve Board ("FRB"). As required by the consent order, the Board submitted to the FRB a plan to further enhance the Board's governance and oversight of the Company, and the Company submitted to the FRB a plan to further improve the Company's compliance and operational risk management program.

On April 20, 2018, the Company entered into consent orders with the Consumer Financial Protection Bureau and the Office of the Comptroller of the Currency to pay an aggregate of \$1 billion in civil money penalties to resolve matters regarding the Company's compliance risk management program and past practices involving certain automobile collateral protection insurance policies and certain mortgage interest rate lock extensions.

A number of jurisdictions suspended Wells Fargo Bank, N.A. as a provider of certain banking services in response to the overall CRA rating. In addition, a "Needs to Improve" rating could have impact on the Bank's relationships with additional states, counties, municipalities or other public agencies to the extent applicable law, regulation or policy limits, restricts or influences whether such entity may do business with a company that has an overall below "Satisfactory" rating.

Also in the ordinary course of its business, Wells Fargo regularly enters into financial transactions of various types with public entities throughout the United States. It is possible that one or more public entities have terminated a transaction for cause or default.

For a description of certain legal proceedings, please see the Wells Fargo's SEC filings 2019 10-Q (Q1, Q2 & Q3) and 2018 10-K <https://www.wellsfargo.com/about/investor-relations/filings/> a summary of which are on file with the City and our 2018 Annual report, <https://www.wellsfargo.com/about/investor-relations/annual-reports/>. For your ease of use, please see attached a copy of our Legal Actions as reported in our 2018 Annual Report, and 2019 10-Q (Q1, Q2 & Q3) and our 2108 10-K.

ATTACHMENT E

SLAVERY ERA BUSINESS SUMMARY

After years of research, Wells Fargo has found no records that indicate it – or any entities it acquired before the Wachovia merger – had ever financed slavery, held slaves as collateral, owned slaves, or profited from slavery.

With the Wachovia merger, Wells Fargo inherited hundreds of Wachovia's predecessor financial institutions, including two that had extensive involvement in slavery. In 2005 Wachovia announced these findings and apologized for the role its predecessors played and renewed its commitment to preserve and promote the history of the African-American experience in our nation. Wells Fargo shares that commitment and affirms its long-standing opposition to slavery.

Furthermore, Wells Fargo has found no records that any entities it acquired subsequent to the Wachovia merger – had ever financed slavery, held slaves as collateral, owned slaves, or profited from slavery, which research has been updated to include all legal entities acquired since its last submission of December, 2017.

The following narrative summarizes the results of the research that has been performed regarding Wachovia Bank and its ties to slavery.

SUMMARY OF RESEARCH

External research has revealed that two predecessor institutions of the undersigned, the Georgia Railroad & Banking Company and the Bank of Charleston, owned slaves.

Due to incomplete records, the undersigned cannot determine exactly how many slaves either the Georgia Railroad and Banking Company or the Bank of Charleston owned. Through specific transactional records, researchers determined that the Georgia Railroad and Banking Company owned at least 162 slaves, and the Bank of Charleston accepted at least 529 slaves as collateral on mortgaged properties or loans, and acquired an undetermined number of these individuals when customers defaulted on their loans.

The Georgia Railroad and Banking Company was founded in 1833 to complete a railroad line between the City of Augusta and the interior of the state of Georgia. The company relied on slave labor for the construction and maintenance of this railway. According to the existing and searchable bank records, 162 slaves were owned or authorized to be purchased by the Georgia Railroad and Banking Company between 1836 and 1842. In addition, the company awarded work to contractors who purchased at least 400 slaves to perform work on the railways.

The Bank of Charleston, founded in 1834, issued loans and mortgages where enslaved individuals were used as collateral. A review of the bank's account ledgers revealed a minimum of 24 transactions involving reference to 529 enslaved individuals being used

as collateral. In most cases, the loan was paid on schedule, and the bank never took possession of slaves that were pledged as collateral on the loan. In several documented instances, however, customers defaulted on their loans and the Bank of Charleston took actual possession of slaves. The total number of slaves of whom the bank took possession cannot be accurately tallied due to the lack of records.

In addition, ten predecessor companies were determined to have profited more indirectly from slavery through the following means:

- Founders, directors, or account holders who owned slaves and/or profited directly from slavery;
- Investing in or transacting business with companies or individuals that owned slaves;
- Investing in the bonds of slave states and municipalities;
- Investing in U.S. government bonds during years when the United States permitted and profited from slave labor directly through taxation.

These institutions are:

- Bank of North America (Philadelphia, Pa.)
- Bank of Baltimore
- The Philadelphia Bank (later Philadelphia National Bank)
- Farmers' & Mechanics' Bank of Philadelphia
- Pennsylvania Company for Insurances on Lives and the Granting of Annuities
- State Bank of Elizabeth (Elizabeth, N.J.)
- State Bank of Newark (Newark, N.J.)
- Savings Bank of Baltimore
- Girard National Bank
- The Carswell Group (established in 1868, acquired by Palmer & Cay, Inc. in 1985)
- The Trenton Banking Company

Note 16: Legal Actions

Wells Fargo and certain of our subsidiaries are involved in a number of judicial, regulatory, arbitration, and other proceedings concerning matters arising from the conduct of our business activities, and many of those proceedings expose Wells Fargo to potential financial loss. These proceedings include actions brought against Wells Fargo and/or our subsidiaries with respect to corporate-related matters and transactions in which Wells Fargo and/or our subsidiaries were involved. In addition, Wells Fargo and our subsidiaries may be requested to provide information or otherwise cooperate with government authorities in the conduct of investigations of other persons or industry groups.

Although there can be no assurance as to the ultimate outcome, Wells Fargo and/or our subsidiaries have generally denied, or believe we have a meritorious defense and will deny, liability in all significant legal actions pending against us, including the matters described below, and we intend to defend vigorously each case, other than matters we describe as having settled. We establish accruals for legal actions when potential losses associated with the actions become probable and the costs can be reasonably estimated. For such accruals, we record the amount we consider to be the best estimate within a range of potential losses that are both probable and estimable; however, if we cannot determine a best estimate, then we record the low end of the range of those potential losses. The actual costs of resolving legal actions may be substantially higher or lower than the amounts accrued for those actions.

ATM ACCESS FEE LITIGATION In October 2011, plaintiffs filed a putative class action, *Mackmin, et al. v. Visa, Inc. et al.*, against Wells Fargo & Company, Wells Fargo Bank, N.A., Visa, MasterCard, and several other banks in the United States District Court for the District of Columbia. Plaintiffs allege that the Visa and MasterCard requirement that if an ATM operator charges an access fee on Visa and MasterCard transactions, then that fee cannot be greater than the access fee charged for transactions on other networks, violates antitrust rules. Plaintiffs seek treble damages, restitution, injunctive relief, and attorneys' fees where available under federal and state law. Two other antitrust cases that make similar allegations were filed in the same court, but these cases did not name Wells Fargo as a defendant. On February 13, 2013, the district court granted defendants' motions to dismiss the three actions. Plaintiffs appealed the dismissals and, on August 4, 2015, the United States Court of Appeals for the District of Columbia Circuit vacated the district court's decisions and remanded the three cases to the district court for further proceedings. On June 28, 2016, the United States Supreme Court granted defendants' petitions for writ of certiorari to review the decisions of the United States Court of Appeals for the District of Columbia. On November 17, 2016, the United States Supreme Court dismissed the petitions as improvidently granted, and the three cases returned to the district court for further proceedings.

AUTOMOBILE LENDING MATTERS On April 20, 2018, the Company entered into consent orders with the Office of the Comptroller of the Currency (OCC) and the Consumer Financial Protection Bureau (CFPB) to resolve, among other things, investigations by the agencies into the Company's compliance risk management program and its past practices involving certain automobile collateral protection insurance (CPI) policies and, as discussed below, certain mortgage interest rate lock

extensions. The consent orders require remediation to customers and the payment of a total of \$1.0 billion in civil money penalties to the agencies. In July 2017, the Company announced a plan to remediate customers who may have been financially harmed due to issues related to automobile CPI policies purchased through a third-party vendor on their behalf. Multiple putative class action cases alleging, among other things, unfair and deceptive practices relating to these CPI policies, have been filed against the Company and consolidated into one multi-district litigation in the United States District Court for the Central District of California. A putative class of shareholders also filed a securities fraud class action against the Company and its executive officers alleging material misstatements and omissions of CPI-related information in the Company's public disclosures. Former team members have also alleged retaliation for raising concerns regarding automobile lending practices. In addition, the Company has identified certain issues related to the unused portion of guaranteed automobile protection (GAP) waiver or insurance agreements between the customer and dealer and, by assignment, the lender, which will result in remediation to customers in certain states. Allegations related to the CPI and GAP programs are among the subjects of shareholder derivative lawsuits pending in federal and state court in California. The court dismissed the state court action in September 2018, but plaintiffs filed an amended complaint in November 2018. Subject to full documentation and court approval, the parties have reached agreements in principle to resolve the shareholder derivative lawsuits pursuant to which the Company will pay plaintiffs' attorneys' fees and undertake certain business and governance practices. These and other issues related to the origination, servicing, and/or collection of consumer automobile loans, including related insurance products, have also subjected the Company to formal or informal inquiries, investigations, or examinations from federal and state government agencies. In December 2018, the Company entered into an agreement with all 50 state Attorneys General and the District of Columbia to resolve an investigation into the Company's retail sales practices, CPI and GAP, and mortgage interest rate lock matters, pursuant to which the Company paid \$575 million.

CONSUMER DEPOSIT ACCOUNT RELATED REGULATORY INVESTIGATION The CFPB is conducting an investigation into whether customers were unduly harmed by the Company's procedures regarding the freezing (and, in many cases, closing) of consumer deposit accounts after the Company detected suspected fraudulent activity (by third-parties or account holders) that affected those accounts. A former team member has brought a state court action alleging retaliation for raising concerns about these procedures.

FIDUCIARY AND CUSTODY ACCOUNT FEE CALCULATIONS Federal government agencies are conducting formal or informal inquiries, investigations, or examinations regarding fee calculations within certain fiduciary and custody accounts in the Company's investment and fiduciary services business, which is part of the wealth management business within WIM. The Company has determined that there have been instances of incorrect fees being applied to certain assets and accounts, resulting in both overcharges and undercharges to customers.

FOREIGN EXCHANGE BUSINESS Federal government agencies, including the United States Department of Justice (Department of Justice), are investigating or examining certain

activities in the Company's foreign exchange business. The Company has accrued amounts to remediate customers that may have received pricing inconsistent with commitments made to those customers, and to rebate customers where historic pricing, while consistent with contracts entered into with those customers, does not conform to the Company's recently implemented standards and pricing.

INTERCHANGE LITIGATION Plaintiffs representing a putative class of merchants have filed putative class actions, and individual merchants have filed individual actions, against Wells Fargo Bank, N.A., Wells Fargo & Company, Wachovia Bank, N.A., and Wachovia Corporation regarding the interchange fees associated with Visa and MasterCard payment card transactions. Visa, MasterCard, and several other banks and bank holding companies are also named as defendants in these actions. These actions have been consolidated in the United States District Court for the Eastern District of New York. The amended and consolidated complaint asserts claims against defendants based on alleged violations of federal and state antitrust laws and seeks damages, as well as injunctive relief. Plaintiff merchants allege that Visa, MasterCard, and payment card issuing banks unlawfully colluded to set interchange rates. Plaintiffs also allege that enforcement of certain Visa and MasterCard rules and alleged tying and bundling of services offered to merchants are anticompetitive. Wells Fargo and Wachovia, along with other defendants and entities, are parties to Loss and Judgment Sharing Agreements, which provide that they, along with other entities, will share, based on a formula, in any losses from the Interchange Litigation. On July 13, 2012, Visa, MasterCard, and the financial institution defendants, including Wells Fargo, signed a memorandum of understanding with plaintiff merchants to resolve the consolidated class action and reached a separate settlement in principle of the consolidated individual actions. The settlement payments to be made by all defendants in the consolidated class and individual actions totaled approximately \$6.6 billion before reductions applicable to certain merchants opting out of the settlement. The class settlement also provided for the distribution to class merchants of 10 basis points of default interchange across all credit rate categories for a period of 8 consecutive months. The district court granted final approval of the settlement, which was appealed to the United States Court of Appeals for the Second Circuit by settlement objector merchants. Other merchants opted out of the settlement and are pursuing several individual actions. On June 30, 2016, the Second Circuit vacated the settlement agreement and reversed and remanded the consolidated action to the United States District Court for the Eastern District of New York for further proceedings. On November 23, 2016, prior class counsel filed a petition to the United States Supreme Court, seeking review of the reversal of the settlement by the Second Circuit, and the Supreme Court denied the petition on March 27, 2017. On November 30, 2016, the district court appointed lead class counsel for a damages class and an equitable relief class. The parties have entered into a settlement agreement to resolve the money damages class claims pursuant to which defendants will pay a total of approximately \$6.2 billion, which includes approximately \$5.3 billion of funds remaining from the 2012 settlement and \$900 million in additional funding. The Company's allocated responsibility for the additional funding is approximately \$94.5 million. The court granted preliminary approval of the settlement in January 2019, and scheduled a final approval hearing for November 7, 2019. Several of the opt-out litigations were settled during the pendency of the Second Circuit appeal

while others remain pending. Discovery is proceeding in the opt-out litigations and the equitable relief class case.

LOW INCOME HOUSING TAX CREDITS Federal government agencies have undertaken formal or informal inquiries or investigations regarding the manner in which the Company purchased, and negotiated the purchase of, certain federal low income housing tax credits in connection with the financing of low income housing developments.

MORTGAGE BANKRUPTCY LOAN MODIFICATION LITIGATION Plaintiffs, representing a putative class of mortgage borrowers who were debtors in Chapter 13 bankruptcy cases, filed a putative class action, *Cotton, et al. v. Wells Fargo, et al.*, against Wells Fargo & Company and Wells Fargo Bank, N.A. in the United States Bankruptcy Court for the Western District of North Carolina on June 7, 2017. Plaintiffs allege that Wells Fargo improperly and unilaterally modified the mortgages of borrowers who were debtors in Chapter 13 bankruptcy cases. Plaintiffs allege that Wells Fargo implemented these modifications by improperly filing mortgage payment change notices in Chapter 13 bankruptcy cases, in violation of bankruptcy rules and process. The amended complaint asserts claims based on, among other things, alleged fraud, violations of bankruptcy rules and laws, and unfair and deceptive trade practices. The amended complaint seeks monetary damages, attorneys' fees, and declaratory and injunctive relief. The parties have entered into a settlement agreement pursuant to which the Company will pay \$13.5 million to resolve the claims. On October 24, 2018, the court granted preliminary approval of the settlement and scheduled a final fairness hearing for March 4, 2019.

MORTGAGE INTEREST RATE LOCK RELATED REGULATORY INVESTIGATION On April 20, 2018, the Company entered into consent orders with the OCC and CFPB to resolve, among other things, investigations by the agencies into the Company's compliance risk management program and its past practices involving certain automobile CPI policies and certain mortgage interest rate lock extensions. The consent orders require remediation to customers and the payment of a total of \$1.0 billion in civil money penalties to the agencies. On October 4, 2017, the Company announced plans to reach out to all home lending customers who paid fees for mortgage rate lock extensions requested from September 16, 2013, through February 28, 2017, and to provide refunds, with interest, to customers who believe they should not have paid those fees. The Company was named in a putative class action, filed in the United States District Court for the Northern District of California, alleging violations of federal and state consumer fraud statutes relating to mortgage rate lock extension fees. The Company filed a motion to dismiss and the court granted the motion. Subsequently, a putative class action was filed in the United States District Court for the District of Oregon, raising similar allegations. The Company filed a motion to dismiss this action. In addition, former team members have asserted claims, including in pending litigation, that they were terminated for raising concerns regarding mortgage interest rate lock extension practices. Allegations related to mortgage interest rate lock extension fees are also among the subjects of two shareholder derivative lawsuits filed in California state court. This matter has also subjected the Company to formal or informal inquiries, investigations or examinations from other federal and state government agencies. In December 2018, the Company entered into an agreement with all 50 state Attorneys General and the

Note 16: Legal Actions (continued)

District of Columbia to resolve an investigation into the Company's retail sales practices, CPI and GAP, and mortgage interest rate lock matters, pursuant to which the Company paid \$575 million.

MORTGAGE LOAN MODIFICATION LITIGATION Plaintiffs representing a putative class of mortgage borrowers have filed separate putative class actions, *Hernandez v. Wells Fargo, et al.*, and *Coordes v. Wells Fargo, et al.*, against Wells Fargo Bank, N.A. in the United States District Court for the Northern District of California and the United States District Court for the District of Washington, respectively. Plaintiffs allege that Wells Fargo improperly denied mortgage loan modifications or repayment plans to customers in the foreclosure process due to the overstatement of foreclosure attorneys' fees that were included for purposes of determining whether a customer in the foreclosure process qualified for a mortgage loan modification or repayment plan.

MORTGAGE RELATED REGULATORY INVESTIGATIONS Federal and state government agencies, including the Department of Justice, have been investigating or examining certain mortgage related activities of Wells Fargo and predecessor institutions. Wells Fargo, for itself and for predecessor institutions, has responded, or continues to respond, to requests from these agencies seeking information regarding the origination, underwriting, and securitization of residential mortgages, including sub-prime mortgages. These agencies have advanced theories of purported liability with respect to certain of these activities. An agreement, pursuant to which the Company paid \$2.09 billion, was reached in August 2018 to resolve the Department of Justice investigation, which related to certain 2005-2007 residential mortgage-backed securities activities. In addition, the Company reached an agreement with the Attorney General of the State of Illinois in November 2018 pursuant to which the Company paid \$17 million in restitution to certain Illinois state pension funds to resolve a claim relating to certain residential mortgage-backed securities activities. Other financial institutions have entered into similar settlements with these agencies, the nature of which related to the specific activities of those financial institutions, including the imposition of significant financial penalties and remedial actions.

OFAC RELATED INVESTIGATION The Company has self-identified an issue whereby certain foreign banks utilized a Wells Fargo software-based solution to conduct import/export trade-related financing transactions with countries and entities prohibited by the Office of Foreign Assets Control (OFAC) of the United States Department of the Treasury. We do not believe any funds related to these transactions flowed through accounts at Wells Fargo as a result of the aforementioned conduct. The Company has made voluntary self-disclosures to OFAC and is cooperating with an inquiry from the Department of Justice.

ORDER OF POSTING LITIGATION Plaintiffs filed a series of putative class actions against Wachovia Bank, N.A. and Wells Fargo Bank, N.A., as well as many other banks, challenging the "high to low" order in which the banks post debit card transactions to consumer deposit accounts. Most of these actions were consolidated in multi-district litigation proceedings (MDL proceedings) in the United States District Court for the Southern District of Florida. The court in the MDL proceedings has certified a class of putative plaintiffs, and Wells Fargo moved to compel arbitration of the claims of unnamed class members.

The court denied the motions to compel arbitration in October 2016, and Wells Fargo appealed this decision to the United States Court of Appeals for the Eleventh Circuit. In May 2018, the Eleventh Circuit ruled in Wells Fargo's favor and found that Wells Fargo had not waived its arbitration rights and remanded the case to the district court for further proceedings. Plaintiffs filed a petition for rehearing to the Eleventh Circuit, which was denied in August 2018. Plaintiffs petitioned for certiorari from the United States Supreme Court, and that petition was denied in January 2019.

RETAIL SALES PRACTICES MATTERS Federal, state, and local government agencies, including the Department of Justice, the United States Securities and Exchange Commission (SEC), and the United States Department of Labor; state attorneys general, including the New York Attorney General; and prosecutors' offices, as well as Congressional committees, have undertaken formal or informal inquiries, investigations or examinations arising out of certain retail sales practices of the Company that were the subject of settlements with the CFPB, the OCC, and the Office of the Los Angeles City Attorney announced by the Company on September 8, 2016. These matters are at varying stages. The Company has responded, and continues to respond, to requests from a number of the foregoing. In October 2018, the Company entered into an agreement to resolve the New York Attorney General's investigation pursuant to which the Company paid \$65 million to the State of New York. In December 2018, the Company entered into an agreement with all 50 state Attorneys General and the District of Columbia to resolve an investigation into the Company's retail sales practices, CPI and GAP, and mortgage interest rate lock matters, pursuant to which the Company paid \$575 million. The Company has also engaged in preliminary and/or exploratory resolution discussions with the Department of Justice and the SEC, although there can be no assurance as to the outcome of these discussions.

In addition, a number of lawsuits have also been filed by non-governmental parties seeking damages or other remedies related to these retail sales practices. First, various class plaintiffs purporting to represent consumers who allege that they received products or services without their authorization or consent have brought separate putative class actions against the Company in the United States District Court for the Northern District of California and various other jurisdictions. In April 2017, the Company entered into a settlement agreement in the first-filed action, *Jabbari v. Wells Fargo Bank, N.A.*, to resolve claims regarding certain products or services provided without authorization or consent for the time period May 1, 2002 to April 20, 2017. Pursuant to the settlement, the Company will pay \$142 million for remediation, attorneys' fees, and settlement fund claims administration. In the unlikely event that the \$142 million settlement total is not enough to provide remediation, pay attorneys' fees, pay settlement fund claims administration costs, and have at least \$25 million left over to distribute to all class members, the Company will contribute additional funds to the settlement. In addition, in the unlikely event that the number of unauthorized accounts identified by settlement class members in the claims process and not disputed by the claims administrator exceeds plaintiffs' 3.5 million account estimate, the Company will proportionately increase the \$25 million reserve so that the ratio of reserve to unauthorized accounts is no less than what was implied by plaintiffs' estimate at the time of the district court's preliminary approval of the settlement in July 2017. The district court issued an order

granting final approval of the settlement on June 14, 2018. Several appeals of the district court's order granting final approval of the settlement have been filed with the United States Court of Appeals for the Ninth Circuit. Second, Wells Fargo shareholders brought a consolidated securities fraud class action in the United States District Court for the Northern District of California alleging certain misstatements and omissions in the Company's disclosures related to sales practices matters. The Company entered into a settlement agreement to resolve this matter pursuant to which the Company paid \$480 million. The district court issued an order granting final approval of the settlement on December 20, 2018. Third, Wells Fargo shareholders have brought numerous shareholder derivative lawsuits asserting breach of fiduciary duty claims, among others, against current and former directors and officers for their alleged failure to detect and prevent sales practices issues. These actions have been filed or transferred to the United States District Court for the Northern District of California and California state court for coordinated proceedings. An additional lawsuit asserting similar claims in Delaware state court has been stayed. Subject to full documentation and court approval, the parties have reached an agreement in principle to resolve the shareholder derivative lawsuits pursuant to which insurance carriers will pay the Company approximately \$240 million for alleged damage to the Company, and the Company will pay plaintiffs' attorneys' fees. Fourth, multiple employment litigation matters have been brought against Wells Fargo, including an Employee Retirement Income Security Act (ERISA) class action in the United States District Court for the District of Minnesota on behalf of 401(k) plan participants that has been dismissed and is now on appeal; a class action in the United States District Court for the Northern District of California on behalf of team members who allege that they protested sales practice misconduct and/or were terminated for not meeting sales goals that has now been dismissed, and we have entered into a framework with plaintiffs' counsel to address individual claims that have been asserted; various wage and hour class actions brought in federal and state court in California (which have been settled), New Jersey, and Pennsylvania on behalf of non-exempt branch based team members alleging that sales pressure resulted in uncompensated overtime; and multiple single plaintiff Sarbanes-Oxley Act complaints and state-law whistleblower actions filed with the United States Department of Labor or in various state courts alleging adverse employment actions for raising sales practice misconduct issues.

RMBS TRUSTEE LITIGATION In November 2014, a group of institutional investors (Institutional Investor Plaintiffs), including funds affiliated with BlackRock, Inc., filed a putative class action in the United States District Court for the Southern District of New York against Wells Fargo Bank, N.A., alleging claims against the Company in its capacity as trustee for a number of residential mortgage-backed securities (RMBS) trusts (Federal Court Complaint). Similar complaints have been filed against other trustees in various courts, including in the Southern District of New York, in New York state court, and in other states, by RMBS investors. The Federal Court Complaint alleges that Wells Fargo Bank, N.A., as trustee, caused losses to investors and asserts causes of action based upon, among other things, the trustee's alleged failure to notify and enforce repurchase obligations of mortgage loan sellers for purported breaches of representations and warranties, notify investors of alleged events of default, and abide by appropriate standards of care following alleged events of default. Plaintiffs seek money damages in an unspecified amount, reimbursement of expenses,

and equitable relief. In December 2014 and December 2015, certain other investors filed four complaints alleging similar claims against Wells Fargo Bank, N.A. in the Southern District of New York (Related Federal Cases), and the various cases pending against Wells Fargo are proceeding before the same judge. On January 19, 2016, the Southern District of New York entered an order in connection with the Federal Court Complaint dismissing claims related to certain of the trusts at issue (Dismissed Trusts). The Company's motion to dismiss the Federal Court Complaint and the complaints for the Related Federal Cases was granted in part and denied in part in March 2017. In May 2017, the Company filed third-party complaints against certain investment advisors affiliated with the Institutional Investor Plaintiffs seeking contribution with respect to claims alleged in the Federal Court Complaint (Third-Party Claims). The investment advisors have moved to dismiss those complaints. On April 17, 2018, the Southern District of New York denied class certification in the Related Federal Case brought by Royal Park Investments SA/NV (Royal Park Action).

A complaint raising similar allegations to those in the Federal Court Complaint was filed in May 2016 in New York state court by a different plaintiff investor. In December 2016, the Institutional Investor Plaintiffs filed a new putative class action complaint in New York state court in respect of 261 RMBS trusts, including the Dismissed Trusts, for which Wells Fargo Bank, N.A. serves or served as trustee (State Court Action).

In July 2017, certain of the plaintiffs from the State Court Action filed a civil complaint relating to Wells Fargo Bank, N.A.'s setting aside reserves for legal fees and expenses in connection with the liquidation of eleven RMBS trusts at issue in the State Court Action (Declaratory Judgment Action). The complaint seeks, among other relief, declarations that Wells Fargo Bank, N.A. is not entitled to indemnification, the advancement of funds, or the taking of reserves from trust funds for legal fees and expenses it incurs in defending the claims in the State Court Action. In November 2017, the Company's motion to dismiss the complaint was granted. Plaintiffs filed a notice of appeal in January 2018.

In November 2018, the Institutional Investor Plaintiffs and the Company entered into a settlement agreement pursuant to which, among other terms, the Company will pay \$43 million to resolve the Federal Court Complaint and the State Court Action. The settlement will also resolve the Third Party Claims and the Declaratory Judgment Action. The New York state court has scheduled a fairness hearing on the settlement for May 6, 2019. In addition, Royal Park Investments SA/NV and Wells Fargo Bank, N.A. have reached an agreement resolving the Royal Park Action. Other than the Royal Park Action, the Related Federal Cases are not covered by these settlement agreements.

SEMINOLE TRIBE TRUSTEE LITIGATION The Seminole Tribe of Florida filed a complaint in Florida state court alleging that Wells Fargo, as trustee, charged excess fees in connection with the administration of a minor's trust and failed to invest the assets of the trust prudently. The complaint was later amended to include three individual current and former beneficiaries as plaintiffs and to remove the Tribe as a party to the case. In December 2016, the Company filed a motion to dismiss the amended complaint on the grounds that the Tribe is a necessary party and that the individual beneficiaries lack standing to bring claims. The motion was denied in June 2018. Trial is scheduled for October 2019.

Note 16: Legal Actions *(continued)*

WHOLESALE BANKING CONSENT ORDER INVESTIGATION

On November 19, 2015, the Company entered into a consent order with the OCC, pursuant to which the Wholesale Banking group was required to implement customer due diligence standards that include collection of current beneficial ownership information for certain business customers. The Company is responding to inquiries from various federal government agencies regarding potentially inappropriate conduct in connection with the collection of beneficial ownership information.

OUTLOOK As described above, the Company establishes accruals for legal actions when potential losses associated with the actions become probable and the costs can be reasonably estimated. The high end of the range of reasonably possible potential losses in excess of the Company's accrual for probable and estimable losses was approximately \$2.7 billion as of December 31, 2018. The increase in the high end of the range from September 30, 2018, was due to a variety of matters, including the Company's existing retail sales practices matters. The outcomes of legal actions are unpredictable and subject to significant uncertainties, and it is inherently difficult to determine whether any loss is probable or even possible. It is also inherently difficult to estimate the amount of any loss and there may be matters for which a loss is probable or reasonably possible but not currently estimable. Accordingly, actual losses may be in excess of the established accrual or the range of reasonably possible loss. Wells Fargo is unable to determine whether the ultimate resolution of the retail sales practices matters will have a material adverse effect on its consolidated financial condition. Based on information currently available, advice of counsel, available insurance coverage, and established reserves, Wells Fargo believes that the eventual outcome of other actions against Wells Fargo and/or its subsidiaries will not, individually or in the aggregate, have a material adverse effect on Wells Fargo's consolidated financial condition. However, it is possible that the ultimate resolution of a matter, if unfavorable, may be material to Wells Fargo's results of operations for any particular period.

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT
AND AFFIDAVIT**

SECTION I -- GENERAL INFORMATION

A. Legal name of the Disclosing Party submitting this EDS. Include d/b/a/ if applicable:

Wells Fargo & Company

Check ONE of the following three boxes:

Indicate whether the Disclosing Party submitting this EDS is:

1. ☐ the Applicant

OR

2. ☐ a legal entity currently holding, or anticipated to hold within six months after City action on the contract, transaction or other undertaking to which this EDS pertains (referred to below as the "Matter"), a direct or indirect interest in excess of 7.5% in the Applicant. State the Applicant's legal name: _____

OR

3. ☒ a legal entity with a direct or indirect right of control of the Applicant (see Section II(B)(1)) State the legal name of the entity in which the Disclosing Party holds a right of control:

Wells Fargo Bank, N.A.

B. Business address of the Disclosing Party: 420 Montgomery Street, San Francisco, CA 94163

C. Telephone: 312-658-4154 Fax: _____

Email: Sasha.K.Nelson@Wellsfargo.com

D. Name of contact person: Sasha K. Nelson

E. Federal Employer Identification No. (if you have one): _____

F. Brief description of the Matter to which this EDS pertains. (Include project number and location of property, if applicable):

Municipal Depository

G. Which City agency or department is requesting this EDS? Department of Finance

If the Matter is a contract being handled by the City's Department of Procurement Services, please complete the following:

Specification # _____ and Contract # _____

SECTION II -- DISCLOSURE OF OWNERSHIP INTERESTS

A. NATURE OF THE DISCLOSING PARTY

1. Indicate the nature of the Disclosing Party:

- | | |
|--|--|
| <input type="checkbox"/> Person | <input type="checkbox"/> Limited liability company |
| <input checked="" type="checkbox"/> Publicly registered business corporation | <input type="checkbox"/> Limited liability partnership |
| <input type="checkbox"/> Privately held business corporation | <input type="checkbox"/> Joint venture |
| <input type="checkbox"/> Sole proprietorship | <input type="checkbox"/> Not-for-profit corporation |
| <input type="checkbox"/> General partnership | (Is the not-for-profit corporation also a 501(c)(3))? |
| <input type="checkbox"/> Limited partnership | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| <input type="checkbox"/> Trust | <input type="checkbox"/> Other (please specify) |

2. For legal entities, the state (or foreign country) of incorporation or organization, if applicable:

Delaware

3. For legal entities not organized in the State of Illinois: Has the organization registered to do business in the State of Illinois as a foreign entity?

☐ Yes ☒ No ☐ Organized in Illinois

B. IF THE DISCLOSING PARTY IS A LEGAL ENTITY:

1. List below the full names and titles, if applicable, of: (i) all executive officers and all directors of the entity; (ii) **for not-for-profit corporations**, all members, if any, which are legal entities (if there are no such members, write "no members which are legal entities"); (iii) **for trusts, estates or other similar entities**, the trustee, executor, administrator, or similarly situated party; (iv) **for general or limited partnerships, limited liability companies, limited liability partnerships or joint ventures**, each general partner, managing member, manager or any other person or legal entity that directly or indirectly controls the day-to-day management of the Applicant.

NOTE: Each legal entity listed below must submit an EDS on its own behalf.

Name

Title

Please see Attachment A (eDocs# 17630283)

2. Please provide the following information concerning each person or legal entity having a direct or indirect, current or prospective (i.e. within 6 months after City action) beneficial interest (including ownership) in excess of 7.5% of the Applicant. Examples of such an interest include shares in a corporation, partnership interest in a partnership or joint venture, interest of a member or manager in a

limited liability company, or interest of a beneficiary of a trust, estate or other similar entity. If none, state None.

NOTE: Each legal entity listed below may be required to submit an EDS on its own behalf.

Name	Business Address	Percentage Interest in the Applicant
------	------------------	--------------------------------------

None		
------	--	--

SECTION III -- INCOME OR COMPENSATION TO, OR OWNERSHIP BY, CITY ELECTED OFFICIALS

Has the Disclosing Party provided any income or compensation to any City elected official during the 12-month period preceding the date of this EDS? ☐ Yes ☒ No

Does the Disclosing Party reasonably expect to provide any income or compensation to any City elected official during the 12-month period following the date of this EDS? ☐ Yes ☒ No

If yes to either of the above, please identify below the name(s) of such City elected official(s) and describe such income or compensation:

Please see Attachment C (eDocs# 17660432)

Does any City elected official or, to the best of the Disclosing Party's knowledge after reasonable inquiry, any City elected official's spouse or domestic partner, have a financial interest (as defined in Chapter 2-156 of the Municipal Code of Chicago (MCC)) in the Disclosing Party?

☐ Yes ☒ No

If "yes," please identify below the name(s) of such City elected official(s) and/or spouse(s)/domestic partner(s) and describe the financial interest(s).

Please see Attachment C (eDocs# 17660432)

SECTION IV -- DISCLOSURE OF SUBCONTRACTORS AND OTHER RETAINED PARTIES

The Disclosing Party must disclose the name and business address of each subcontractor, attorney, lobbyist (as defined in MCC Chapter 2-156), accountant, consultant and any other person or entity whom the Disclosing Party has retained or expects to retain in connection with the Matter, as well as the nature of the relationship, and the total amount of the fees paid or estimated to be paid. The Disclosing Party is not required to disclose employees who are paid solely through the Disclosing Party's regular payroll. If the Disclosing Party is uncertain whether a disclosure is required under this Section, the Disclosing Party must either ask the City whether disclosure is required or make the disclosure.

Name (indicate whether retained or anticipated to be retained)	Business Address	Relationship to Disclosing Party (subcontractor, attorney, lobbyist, etc.)	Fees (indicate whether paid or estimated.) NOTE: hourly rate or t.b.d. is not an acceptable response.
None			

(Add sheets if necessary)

[X] Check here if the Disclosing Party has not retained, nor expects to retain, any such persons or entities.

SECTION V -- CERTIFICATIONS

A. COURT-ORDERED CHILD SUPPORT COMPLIANCE

Under MCC Section 2-92-415, substantial owners of business entities that contract with the City must remain in compliance with their child support obligations throughout the contract's term.

Has any person who directly or indirectly owns 10% or more of the Disclosing Party been declared in arrearage on any child support obligations by any Illinois court of competent jurisdiction?

[] Yes [] No [X] No person directly or indirectly owns 10% or more of the Disclosing Party.

If Yes, has the person entered into a court-approved agreement for payment of all support owed and is the person in compliance with that agreement?

[] Yes [] No

B. FURTHER CERTIFICATIONS

1. [This paragraph 1 applies only if the Matter is a contract being handled by the City's Department of Procurement Services.] In the 5-year period preceding the date of this EDS, neither the Disclosing Party nor any Affiliated Entity [see definition in (5) below] has engaged, in connection with the performance of any public contract, the services of an integrity monitor, independent private sector inspector general, or integrity compliance consultant (i.e., an individual or entity with legal, auditing, investigative, or other similar skills, designated by a public agency to help the agency monitor the activity of specified agency vendors as well as help the vendors reform their business practices so they can be considered for agency contracts in the future, or continue with a contract in progress).

2. The Disclosing Party and its Affiliated Entities are not delinquent in the payment of any fine, fee, tax or other source of indebtedness owed to the City of Chicago, including, but not limited to, water and sewer charges, license fees, parking tickets, property taxes and sales taxes, nor is the Disclosing Party delinquent in the payment of any tax administered by the Illinois Department of Revenue.

3. The Disclosing Party and, if the Disclosing Party is a legal entity, all of those persons or entities identified in Section II(B)(1) of this EDS:

a. are not presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from any transactions by any federal, state or local unit of government;

b. have not, during the 5 years before the date of this EDS, been convicted of a criminal offense, adjudged guilty, or had a civil judgment rendered against them in connection with: obtaining, attempting to obtain, or performing a public (federal, state or local) transaction or contract under a public transaction; a violation of federal or state antitrust statutes; fraud; embezzlement; theft; forgery; bribery; falsification or destruction of records; making false statements; or receiving stolen property;

c. are not presently indicted for, or criminally or civilly charged by, a governmental entity (federal, state or local) with committing any of the offenses set forth in subparagraph (b) above;

d. have not, during the 5 years before the date of this EDS, had one or more public transactions (federal, state or local) terminated for cause or default; and

e. have not, during the 5 years before the date of this EDS, been convicted, adjudged guilty, or found liable in a civil proceeding, or in any criminal or civil action, including actions concerning environmental violations, instituted by the City or by the federal government, any state, or any other unit of local government.

4. The Disclosing Party understands and shall comply with the applicable requirements of MCC chapters 2-56 (Inspector General) and 2-156 (Governmental Ethics).

5. Certifications (5), (6) and (7) concern:

- the Disclosing Party;
- any Contractor (meaning any contractor or subcontractor used by the Disclosing Party in connection with the Matter, including but not limited to all persons or legal entities disclosed under Section IV, Disclosure of Subcontractors and Other Retained Parties);
- any "Affiliated Entity" (meaning a person or entity that, directly or indirectly: controls the Disclosing Party, is controlled by the Disclosing Party, or is, with the Disclosing Party, under common control of another person or entity). Indicia of control include, without limitation: interlocking management or ownership; identity of interests among family members, shared facilities and equipment; common use of employees; or organization of a business entity following the ineligibility of a business entity to do business with federal or state or local government, including the City, using substantially the same management, ownership, or principals as the ineligible entity. With respect to Contractors, the term Affiliated Entity means a person or entity that directly or indirectly controls the Contractor, is controlled by it, or, with the Contractor, is under common control of another person or entity;
- any responsible official of the Disclosing Party, any Contractor or any Affiliated Entity or any other official, agent or employee of the Disclosing Party, any Contractor or any Affiliated Entity, acting pursuant to the direction or authorization of a responsible official of the Disclosing Party, any Contractor or any Affiliated Entity (collectively "Agents").

Neither the Disclosing Party, nor any Contractor, nor any Affiliated Entity of either the Disclosing Party or any Contractor, nor any Agents have, during the 5 years before the date of this EDS, or, with respect to a Contractor, an Affiliated Entity, or an Affiliated Entity of a Contractor during the 5 years before the date of such Contractor's or Affiliated Entity's contract or engagement in connection with the Matter:

- a. bribed or attempted to bribe, or been convicted or adjudged guilty of bribery or attempting to bribe, a public officer or employee of the City, the State of Illinois, or any agency of the federal government or of any state or local government in the United States of America, in that officer's or employee's official capacity;
- b. agreed or colluded with other bidders or prospective bidders, or been a party to any such agreement, or been convicted or adjudged guilty of agreement or collusion among bidders or prospective bidders, in restraint of freedom of competition by agreement to bid a fixed price or otherwise; or
- c. made an admission of such conduct described in subparagraph (a) or (b) above that is a matter of record, but have not been prosecuted for such conduct; or
- d. violated the provisions referenced in MCC Subsection 2-92-320(a)(4)(Contracts Requiring a Base Wage); (a)(5)(Debarment Regulations); or (a)(6)(Minimum Wage Ordinance).

6. Neither the Disclosing Party, nor any Affiliated Entity or Contractor, or any of their employees, officials, agents or partners, is barred from contracting with any unit of state or local government as a result of engaging in or being convicted of (1) bid-rigging in violation of 720 ILCS 5/33E-3; (2) bid-rotating in violation of 720 ILCS 5/33E-4; or (3) any similar offense of any state or of the United States of America that contains the same elements as the offense of bid-rigging or bid-rotating.

7. Neither the Disclosing Party nor any Affiliated Entity is listed on a Sanctions List maintained by the United States Department of Commerce, State, or Treasury, or any successor federal agency.

8. [FOR APPLICANT ONLY] (i) Neither the Applicant nor any controlling person [see MCC Chapter 1-23, Article I for applicability and defined terms] of the Applicant is currently indicted or charged with, or has admitted guilt of, or has ever been convicted of, or placed under supervision for, any criminal offense involving actual, attempted, or conspiracy to commit bribery, theft, fraud, forgery, perjury, dishonesty or deceit against an officer or employee of the City or any sister agency; and (ii) the Applicant understands and acknowledges that compliance with Article I is a continuing requirement for doing business with the City. NOTE: If MCC Chapter 1-23, Article I applies to the Applicant, that Article's permanent compliance timeframe supersedes 5-year compliance timeframes in this Section V.

9. [FOR APPLICANT ONLY] The Applicant and its Affiliated Entities will not use, nor permit their subcontractors to use, any facility listed as having an active exclusion by the U.S. EPA on the federal System for Award Management (SAM).

10. [FOR APPLICANT ONLY] The Applicant will obtain from any contractors/subcontractors hired or to be hired in connection with the Matter certifications equal in form and substance to those in Certifications (2) and (9) above and will not, without the prior written consent of the City, use any such

contractor/subcontractor that does not provide such certifications or that the Applicant has reason to believe has not provided or cannot provide truthful certifications.

1. If the Disclosing Party is unable to certify to any of the above statements in this Part B (Further Certifications), the Disclosing Party must explain below:

Please see Attachment D (eDocs# 17640470) and supporting attachments (eDocs# 17640435; 17640702; 17640723; 17640755; and 17663352).

If the letters "NA," the word "None," or no response appears on the lines above, it will be conclusively presumed that the Disclosing Party certified to the above statements.

12. To the best of the Disclosing Party's knowledge after reasonable inquiry, the following is a complete list of all current employees of the Disclosing Party who were, at any time during the 12-month period preceding the date of this EDS, an employee, or elected or appointed official, of the City of Chicago (if none, indicate with N/A or none).

None

13. To the best of the Disclosing Party's knowledge after reasonable inquiry, the following is a complete list of all gifts that the Disclosing Party has given or caused to be given, at any time during the 12-month period preceding the execution date of this EDS, to an employee, or elected or appointed official, of the City of Chicago. For purposes of this statement, a gift does not include: (i) anything made generally available to City employees or to the general public, or (ii) food or drink provided in the course of official City business and having a retail value of less than \$25 per recipient, or (iii) a political contribution otherwise duly reported as required by law (if none, indicate with N/A or none). As to any gift listed below, please also list the name of the City recipient.

None

C. CERTIFICATION OF STATUS AS FINANCIAL INSTITUTION

1. The Disclosing Party certifies that the Disclosing Party (check one)
[X] is [] is not

a "financial institution" as defined in MCC Section 2-32-455(b).

2. If the Disclosing Party IS a financial institution, then the Disclosing Party pledges:

"We are not and will not become a predatory lender as defined in MCC Chapter 2-32. We further pledge that none of our affiliates is, and none of them will become, a predatory lender as defined in MCC Chapter 2-32. We understand that becoming a predatory lender or becoming an affiliate of a predatory lender may result in the loss of the privilege of doing business with the City."

If the Disclosing Party is unable to make this pledge because it or any of its affiliates (as defined in MCC Section 2-32-455(b)) is a predatory lender within the meaning of MCC Chapter 2-32, explain here (attach additional pages if necessary):

Please see Attachment D (eDocs# 17640470)

If the letters "NA," the word "None," or no response appears on the lines above, it will be conclusively presumed that the Disclosing Party certified to the above statements.

D. CERTIFICATION REGARDING FINANCIAL INTEREST IN CITY BUSINESS

Any words or terms defined in MCC Chapter 2-156 have the same meanings if used in this Part D.

1. In accordance with MCC Section 2-156-110: To the best of the Disclosing Party's knowledge after reasonable inquiry, does any official or employee of the City have a financial interest in his or her own name or in the name of any other person or entity in the Matter?

☐ Yes

☒ No

NOTE: If you checked "Yes" to Item D(1), proceed to Items D(2) and D(3). If you checked "No" to Item D(1), skip Items D(2) and D(3) and proceed to Part E.

2. Unless sold pursuant to a process of competitive bidding, or otherwise permitted, no City elected official or employee shall have a financial interest in his or her own name or in the name of any other person or entity in the purchase of any property that (i) belongs to the City, or (ii) is sold for taxes or assessments, or (iii) is sold by virtue of legal process at the suit of the City (collectively, "City Property Sale"). Compensation for property taken pursuant to the City's eminent domain power does not constitute a financial interest within the meaning of this Part D.

Does the Matter involve a City Property Sale?

☐ Yes

☒ No

3. If you checked "Yes" to Item D(1), provide the names and business addresses of the City officials or employees having such financial interest and identify the nature of the financial interest:

Name	Business Address	Nature of Financial Interest

4. The Disclosing Party further certifies that no prohibited financial interest in the Matter will be acquired by any City official or employee.

E. CERTIFICATION REGARDING SLAVERY ERA BUSINESS

Please check either (1) or (2) below. If the Disclosing Party checks (2), the Disclosing Party just disclose below or in an attachment to this EDS all information required by (2). Failure to comply with these disclosure requirements may make any contract entered into with the City in connection with the Matter voidable by the City.

____ 1. The Disclosing Party verifies that the Disclosing Party has searched any and all records of the Disclosing Party and any and all predecessor entities regarding records of investments or profits from slavery or slaveholder insurance policies during the slavery era (including insurance policies issued to slaveholders that provided coverage for damage to or injury or death of their slaves), and the Disclosing Party has found no such records.

X 2. The Disclosing Party verifies that, as a result of conducting the search in step (1) above, the Disclosing Party has found records of investments or profits from slavery or slaveholder insurance policies. The Disclosing Party verifies that the following constitutes full disclosure of all such records, including the names of any and all slaves or slaveholders described in those records:
Please see Attachment E (eDocs# 17674538)

SECTION VI -- CERTIFICATIONS FOR FEDERALLY FUNDED MATTERS

NOTE: If the Matter is federally funded, complete this Section VI. If the Matter is not federally funded, proceed to Section VII. For purposes of this Section VI, tax credits allocated by the City and proceeds of debt obligations of the City are not federal funding.

A. CERTIFICATION REGARDING LOBBYING – N/A

1. List below the names of all persons or entities registered under the federal Lobbying Disclosure Act of 1995, as amended, who have made lobbying contacts on behalf of the Disclosing Party with respect to the Matter: (Add sheets if necessary):

(If no explanation appears or begins on the lines above, or if the letters "NA" or if the word "None" appear, it will be conclusively presumed that the Disclosing Party means that NO persons or entities registered under the Lobbying Disclosure Act of 1995, as amended, have made lobbying contacts on behalf of the Disclosing Party with respect to the Matter.)

2. The Disclosing Party has not spent and will not expend any federally appropriated funds to pay any person or entity listed in paragraph A(1) above for his or her lobbying activities or to pay any person or entity to influence or attempt to influence an officer or employee of any agency, as defined by applicable federal law, a member of Congress, an officer or employee of Congress, or an employee

of a member of Congress, in connection with the award of any federally funded contract, making any federally funded grant or loan, entering into any cooperative agreement, or to extend, continue, renew, amend, or modify any federally funded contract, grant, loan, or cooperative agreement.

3. The Disclosing Party will submit an updated certification at the end of each calendar quarter in which there occurs any event that materially affects the accuracy of the statements and information set forth in paragraphs A(1) and A(2) above.

4. The Disclosing Party certifies that either: (i) it is not an organization described in section 501(c)(4) of the Internal Revenue Code of 1986; or (ii) it is an organization described in section 501(c)(4) of the Internal Revenue Code of 1986 but has not engaged and will not engage in "Lobbying Activities," as that term is defined in the Lobbying Disclosure Act of 1995, as amended.

5. If the Disclosing Party is the Applicant, the Disclosing Party must obtain certifications equal in form and substance to paragraphs A(1) through A(4) above from all subcontractors before it awards any subcontract and the Disclosing Party must maintain all such subcontractors' certifications for the duration of the Matter and must make such certifications promptly available to the City upon request.

B. CERTIFICATION REGARDING EQUAL EMPLOYMENT OPPORTUNITY – N/A

If the Matter is federally funded, federal regulations require the Applicant and all proposed subcontractors to submit the following information with their bids or in writing at the outset of negotiations.

Is the Disclosing Party the Applicant?

☐ Yes

☐ No

If Yes, answer the three questions below:

1. Have you developed and do you have on file affirmative action programs pursuant to applicable federal regulations? (See 41 CFR Part 60-2.)

☐ Yes

☐ No

2. Have you filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance Programs, or the Equal Employment Opportunity Commission all reports due under the applicable filing requirements?

☐ Yes

☐ No

☐ Reports not required

3. Have you participated in any previous contracts or subcontracts subject to the equal opportunity clause?

☐ Yes

☐ No

If you checked No to question (1) or (2) above, please provide an explanation:

SECTION VII -- FURTHER ACKNOWLEDGMENTS AND CERTIFICATION

The Disclosing Party understands and agrees that:

- A. The certifications, disclosures, and acknowledgments contained in this EDS will become part of any contract or other agreement between the Applicant and the City in connection with the Matter, whether procurement, City assistance, or other City action, and are material inducements to the City's execution of any contract or taking other action with respect to the Matter. The Disclosing Party understands that it must comply with all statutes, ordinances, and regulations on which this EDS is based.
- B. The City's Governmental Ethics Ordinance, MCC Chapter 2-156, imposes certain duties and obligations on persons or entities seeking City contracts, work, business, or transactions. The full text of this ordinance and a training program is available on line at www.cityofchicago.org/Ethics, and may also be obtained from the City's Board of Ethics, 740 N. Sedgwick St., Suite 500, Chicago, IL 60610, (312) 744-9660. The Disclosing Party must comply fully with this ordinance.
- C. If the City determines that any information provided in this EDS is false, incomplete or inaccurate, any contract or other agreement in connection with which it is submitted may be rescinded or be void or voidable, and the City may pursue any remedies under the contract or agreement (if not rescinded or void), at law, or in equity, including terminating the Disclosing Party's participation in the Matter and/or declining to allow the Disclosing Party to participate in other City transactions. Remedies at law for a false statement of material fact may include incarceration and an award to the City of treble damages.
- D. It is the City's policy to make this document available to the public on its Internet site and/or upon request. Some or all of the information provided in, and appended to, this EDS may be made publicly available on the Internet, in response to a Freedom of Information Act request, or otherwise. By completing and signing this EDS, the Disclosing Party waives and releases any possible rights or claims which it may have against the City in connection with the public release of information contained in this EDS and also authorizes the City to verify the accuracy of any information submitted in this EDS.
- E. The information provided in this EDS must be kept current. In the event of changes, the Disclosing Party must supplement this EDS up to the time the City takes action on the Matter. If the Matter is a contract being handled by the City's Department of Procurement Services, the Disclosing Party must update this EDS as the contract requires. **NOTE:** With respect to Matters subject to MCC Chapter 1-23, Article I (imposing **PERMANENT INELIGIBILITY** for certain specified offenses), the information provided herein regarding eligibility must be kept current for a longer period, as required by MCC Chapter 1-23 and Section 2-154-020.

CERTIFICATION

Under penalty of perjury, the person signing below: (1) warrants that he/she is authorized to execute this EDS, and all applicable Appendices, on behalf of the Disclosing Party, and (2) warrants that all certifications and statements contained in this EDS, and all applicable Appendices, are true, accurate and complete as of the date furnished to the City.

Wells Fargo & Company

(Print or type exact legal name of Disclosing Party)

By: 

(Sign here)

Mark Lester

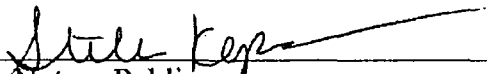
(Print or type name of person signing)

Senior Vice President, Relationship Manager

(Print or type title of person signing)

Signed and sworn to before me on (date) November 15, 2019,

at Cook County, Illinois (state).


Notary Public



Commission expires: 9/7/20

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
APPENDIX A**

**FAMILIAL RELATIONSHIPS WITH ELECTED CITY OFFICIALS
AND DEPARTMENT HEADS**

This Appendix is to be completed only by (a) the Applicant, and (b) any legal entity which has a direct ownership interest in the Applicant exceeding 7.5%. It is not to be completed by any legal entity which has only an indirect ownership interest in the Applicant.

Under MCC Section 2-154-015, the Disclosing Party must disclose whether such Disclosing Party or any Applicable Party or any Spouse or Domestic Partner thereof currently has a familial relationship with any elected city official or department head. A familial relationship exists if, as of the date this EDS is signed, the Disclosing Party or any Applicable Party or any Spouse or Domestic Partner thereof is related to the mayor, any alderman, the city clerk, the city treasurer or any city department head as spouse or domestic partner or as any of the following, whether by blood or adoption: parent, child, brother or sister, aunt or uncle, niece or nephew, grandparent, grandchild, father-in-law, mother-in-law, son-in-law, daughter-in-law, stepfather or stepmother, stepson or stepdaughter, stepbrother or stepsister or half-brother or half-sister.

Applicable Party means (1) all executive officers of the Disclosing Party listed in Section II.B.1.a., if the Disclosing Party is a corporation; all partners of the Disclosing Party, if the Disclosing Party is a general partnership; all general partners and limited partners of the Disclosing Party, if the Disclosing Party is a limited partnership; all managers, managing members and members of the Disclosing Party, if the Disclosing Party is a limited liability company; (2) all principal officers of the Disclosing Party; and (3) any person having more than a 7.5% ownership interest in the Disclosing Party. Principal officers means the president, chief operating officer, executive director, chief financial officer, treasurer or secretary of a legal entity or any person exercising similar authority.

Does the Disclosing Party or any Applicable Party or any Spouse or Domestic Partner thereof currently have a familial relationship with an elected city official or department head?

☒ Yes

☐ No

If yes, please identify below (1) the name and title of such person, (2) the name of the legal entity to which such person is connected; (3) the name and title of the elected city official or department head to whom such person has a familial relationship, and (4) the precise nature of such familial relationship.

(1) William M. Daley, Vice Chairman of Public Affairs, (2) Wells Fargo Bank, N.A. and Wells Fargo & Company,

(3) Patrick Daley Thompson, Alderman, (4) Nephew.

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
APPENDIX B**

BUILDING CODE SCOFFLAW/PROBLEM LANDLORD CERTIFICATION

This Appendix is to be completed only by (a) the Applicant, and (b) any legal entity which has a direct ownership interest in the Applicant exceeding 7.5% (an "Owner"). It is not to be completed by any legal entity which has only an indirect ownership interest in the Applicant.

1. Pursuant to MCC Section 2-154-010, is the Applicant or any Owner identified as a building code scofflaw or problem landlord pursuant to MCC Section 2-92-416?

☐ Yes

☒ No

2. If the Applicant is a legal entity publicly traded on any exchange, is any officer or director of the Applicant identified as a building code scofflaw or problem landlord pursuant to MCC Section 2-92-416?

☐ Yes

☒ No

☐ The Applicant is not publicly traded on any exchange.

3. If yes to (1) or (2) above, please identify below the name of each person or legal entity identified as a building code scofflaw or problem landlord and the address of each building or buildings to which the pertinent code violations apply.

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
APPENDIX C**

PROHIBITION ON WAGE & SALARY HISTORY SCREENING - CERTIFICATION

This Appendix is to be completed only by an Applicant that is completing this EDS as a “contractor” as defined in MCC Section 2-92-385. That section, which should be consulted (www.amlegal.com), generally covers a party to any agreement pursuant to which they: (i) receive City of Chicago funds in consideration for services, work or goods provided (including for legal or other professional services), or (ii) pay the City money for a license, grant or concession allowing them to conduct a business on City premises.

On behalf of an Applicant that is a contractor pursuant to MCC Section 2-92-385, I hereby certify that the Applicant is in compliance with MCC Section 2-92-385(b)(1) and (2), which prohibit: (i) screening job applicants based on their wage or salary history, or (ii) seeking job applicants’ wage or salary history from current or former employers. I also certify that the Applicant has adopted a policy that includes those prohibitions.

☐ Yes

☐ No

☒ N/A – I am not an Applicant that is a “contractor” as defined in MCC Section 2-92-385.

This certification shall serve as the affidavit required by MCC Section 2-92-385(c)(1).

If you checked “no” to the above, please explain.

Wells Fargo & Company a legal entity with a direct or indirect right of control of Wells Fargo Bank, N.A. (the “Applicant”).

Attachment A
WELLS FARGO & COMPANY

Directors and Executive Officers
(Effective as of November 13, 2019)

Directors

John D. Baker, II
Celeste A. Clark
Theodore F. Craver, Jr.
Elizabeth A. Duke
Wayne M. Hewett
Donald. M. James
Maria R. Morris
Charles H. Noski
Richard B. Payne, Jr.
Juan A. Pujadas
James H. Quigley
Ronald L. Sargent
Charles W. Scharf
Suzanne M. Vautrinot

Executive Officers

Derek A. Flowers , Senior EVP, Head of Strategic Execution and Operations

David C. Galloreese , Senior EVP, Head of Human Resources

Richard D. Levy , EVP, Controller

Mary T. Mack , Senior EVP, Consumer Banking

Avid Modjtabaj , Senior EVP, Payments, Virtual Solutions and Innovation

Amanda G. Norton , Senior EVP, Chief Risk Officer

C. Allen Parker , Senior EVP, General Counsel

Perry G. Pclos , Senior EVP, Wholesale Banking

Charles W. Scharf , Chief Executive Officer and President

John R. Shrewsberry , Senior EVP, Chief Financial Officer

Saul Van Beurden , Senior EVP, Head of Technology

Jonathan G. Weiss , Senior EVP, Wealth and Investment Management

William M. Daley , Vice Chairman of Public Affairs

Attachment "C"

Section III – Income or Compensation to, or Ownership by, City Elected Officials

The undersigned warrants, to the best of his knowledge after due inquiry, that the Disclosing Party has not provided any income or compensation to any City elected official in 12 months before, nor does the undersigned reasonably expect to during the 12-month period following, the date the undersigned has signed this EDS. As the date of this filing, the undersigned is in the process of completing our due diligence on Independent Contracts, when completed we will update this response if needed.

Note that in the ordinary course of its business, Wells Fargo makes loans of various types with individuals and businesses. We have determined that these loans do not constitute a "business relationship" as defined in Chapter 2-156 of the Municipal Code.

Note further that the Disclosing Party has no way of identifying spouses or domestic partners of any City elected official, or the identities of any entities in which any city elected official or his or her spouse or domestic partner has a financial interest, and thus limits its certification to "City elected officials" as specially required by Section III. Specifically, we made due inquiry with respect to the City's Aldermen, the Mayor, the Treasurer and the City Clerk.

ATTACHMENT
"D"

ATTACHMENT TO SECTION V, PART B-CERTAIN OFFENSES INVOLVING CCC AND
SISTER AGENCIES AND SECTION V, PART C-FURTHER CERTIFICATIONS

Inclusive of the paragraphs that follow and except as stated in the following sentence, the Disclosing Party certifies the accuracy of the certifications contained in Section V, paragraphs B and C (to its most current certification) only as to itself, and certifies that to the best of the Disclosing Party's knowledge after due inquiry, and as of January 2019, the statements in paragraphs B are accurate with respect to the executive officers and directors of the Disclosing Party identified in Section II.B.1 Section. The Disclosing Party continues to research the requested certifications set forth in Sections V.B.3(a) and (d), and 6, and will confirm such certifications or update this response, as applicable, upon receipt of the due diligence.

As with any large diversified financial services company of its size in the highly-regulated banking and securities field, Wells Fargo Bank, N.A. and Wells Fargo & Company (collectively, "Wells Fargo") are subject to receiving inquiries and subpoenas from regulators and law enforcement from time to time, as well as being subject to civil litigation. Wells Fargo responds regularly to inquiries and investigations by governmental entities and, as a highly regulated diversified financial institution has in the past entered into settlements of some of those investigations, including those specified below.

Wells Fargo Bank, N.A. has paid municipal fines and judgments in connection alleged violations of local housing laws (regarding certain homes the bank repossessed or that were subject to mortgages in which the Bank had a legal interest or role), some of which are characterized as misdemeanors. However, there have been no judgments, injunctions or liens arising out of such litigations or proceedings in the last five years that would materially impair Wells Fargo's ability as of this date to conduct its business or meet its obligations under the transaction to which this EDS relates.

During the third quarter of 2016, Wells Fargo Bank, N.A. entered into settlement agreements with the City of Los Angeles, the Consumer Financial Protection Bureau and the Office of the Comptroller of the Currency regarding certain sales practices. See press release dated September 8, 2016 at https://www.wellsfargo.com/about/press/2016/sales-practices-agreements_0908.content (the "2016 Settlement").

Following the announcement of the 2016 Settlement discussed above, certain state and local governmental bodies and municipal entities have temporarily suspended or removed Wells Fargo Bank, N.A. from providing certain commercial and investment banking services.

On March 28, 2017, Wells Fargo & Company (the "Company") issued a press release announcing its most recent overall Community Reinvestment Act ("CRA") rating of "Needs to Improve." The rating covers the years 2009-2012. Despite citing Bank's overall "Outstanding" performance on the exam's components, the Office of the Comptroller of the Currency downgraded the Bank's final rating to "Needs to Improve" due to previously issued regulatory consent orders.

On February 2, 2018, the Company entered into a consent order with the Federal Reserve Board ("FRB"). As required by the consent order, the Board submitted to the FRB a plan to further enhance the Board's governance and oversight of the Company, and the Company submitted to the FRB a plan to further improve the Company's compliance and operational risk management program.

On April 20, 2018, the Company entered into consent orders with the Consumer Financial Protection Bureau and the Office of the Comptroller of the Currency to pay an aggregate of \$1 billion in civil money penalties to resolve matters regarding the Company's compliance risk management program and past practices involving certain automobile collateral protection insurance policies and certain mortgage interest rate lock extensions.

A number of jurisdictions suspended Wells Fargo Bank, N.A. as a provider of certain banking services in response to the overall CRA rating. In addition, a "Needs to Improve" rating could have impact on the Bank's relationships with additional states, counties, municipalities or other public agencies to the extent applicable law, regulation or policy limits, restricts or influences whether such entity may do business with a company that has an overall below "Satisfactory" rating.

Also in the ordinary course of its business, Wells Fargo regularly enters into financial transactions of various types with public entities throughout the United States. It is possible that one or more public entities have terminated a transaction for cause or default.

For a description of certain legal proceedings, please see the Wells Fargo's SEC filings 2019 10-Q (Q1, Q2 & Q3) and 2018 10-K <https://www.wellsfargo.com/about/investor-relations/filings/> a summary of which are on file with the City and our 2018 Annual report, <https://www.wellsfargo.com/about/investor-relations/annual-reports/>. For your ease of use, please see attached a copy of our Legal Actions as reported in our 2018 Annual Report, and 2019 10-Q (Q1, Q2 & Q3) and our 2108 10-K.

ATTACHMENT E

SLAVERY ERA BUSINESS SUMMARY

After years of research, Wells Fargo has found no records that indicate it – or any entities it acquired before the Wachovia merger – had ever financed slavery, held slaves as collateral, owned slaves, or profited from slavery.

With the Wachovia merger, Wells Fargo inherited hundreds of Wachovia's predecessor financial institutions, including two that had extensive involvement in slavery. In 2005 Wachovia announced these findings and apologized for the role its predecessors played and renewed its commitment to preserve and promote the history of the African-American experience in our nation. Wells Fargo shares that commitment and affirms its long-standing opposition to slavery.

Furthermore, Wells Fargo has found no records that any entities it acquired subsequent to the Wachovia merger – had ever financed slavery, held slaves as collateral, owned slaves, or profited from slavery, which research has been updated to include all legal entities acquired since its last submission of December, 2017.

The following narrative summarizes the results of the research that has been performed regarding Wachovia Bank and its ties to slavery.

SUMMARY OF RESEARCH

External research has revealed that two predecessor institutions of the undersigned, the Georgia Railroad & Banking Company and the Bank of Charleston, owned slaves.

Due to incomplete records, the undersigned cannot determine exactly how many slaves either the Georgia Railroad and Banking Company or the Bank of Charleston owned. Through specific transactional records, researchers determined that the Georgia Railroad and Banking Company owned at least 162 slaves, and the Bank of Charleston accepted at least 529 slaves as collateral on mortgaged properties or loans, and acquired an undetermined number of these individuals when customers defaulted on their loans.

The Georgia Railroad and Banking Company was founded in 1833 to complete a railroad line between the City of Augusta and the interior of the state of Georgia. The company relied on slave labor for the construction and maintenance of this railway. According to the existing and searchable bank records, 162 slaves were owned or authorized to be purchased by the Georgia Railroad and Banking Company between 1836 and 1842. In addition, the company awarded work to contractors who purchased at least 400 slaves to perform work on the railways.

The Bank of Charleston, founded in 1834, issued loans and mortgages where enslaved individuals were used as collateral. A review of the bank's account ledgers revealed a minimum of 24 transactions involving reference to 529 enslaved individuals being used

as collateral. In most cases, the loan was paid on schedule, and the bank never took possession of slaves that were pledged as collateral on the loan. In several documented instances, however, customers defaulted on their loans and the Bank of Charleston took actual possession of slaves. The total number of slaves of whom the bank took possession cannot be accurately tallied due to the lack of records.

In addition, ten predecessor companies were determined to have profited more indirectly from slavery through the following means:

- Founders, directors, or account holders who owned slaves and/or profited directly from slavery;
- Investing in or transacting business with companies or individuals that owned slaves;
- Investing in the bonds of slave states and municipalities;
- Investing in U.S. government bonds during years when the United States permitted and profited from slave labor directly through taxation.

These institutions are:

- Bank of North America (Philadelphia, Pa.)
- Bank of Baltimore
- The Philadelphia Bank (later Philadelphia National Bank)
- Farmers' & Mechanics' Bank of Philadelphia
- Pennsylvania Company for Insurances on Lives and the Granting of Annuities
- State Bank of Elizabeth (Elizabeth, N.J.)
- State Bank of Newark (Newark, N.J.)
- Savings Bank of Baltimore
- Girard National Bank
- The Carswell Group (established in 1868, acquired by Palmer & Cay, Inc. in 1985)
- The Trenton Banking Company

ZIONS
BANCORPORATION,
NATIONAL
ASSOCIATION

O2019-9946

CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT
AND AFFIDAVIT

SECTION I -- GENERAL INFORMATION

A. Legal name of the Disclosing Party submitting this EDS. Include d/b/a/ if applicable:

Zions Bancorporation, National Association

Check ONE of the following three boxes:

Indicate whether the Disclosing Party submitting this EDS is:

1. ☒ the Applicant

OR

2. ☐ a legal entity currently holding, or anticipated to hold within six months after City action on the contract, transaction or other undertaking to which this EDS pertains (referred to below as the "Matter"), a direct or indirect interest in excess of 7.5% in the Applicant. State the Applicant's legal name: _____

OR

3. ☐ a legal entity with a direct or indirect right of control of the Applicant (see Section II(B)(1))
State the legal name of the entity in which the Disclosing Party holds a right of control: _____

B. Business address of the Disclosing Party: 111 West Washington, Suite #1860

Chicago, IL 60602

C. Telephone: (312) 763-4257 Fax: (855) 216-8162 Email: Robert.cafarelli@zionsbancorp.com

D. Name of contact person: Robert Cafarelli

E. Federal Employer Identification No. (if you have one): _____

F. Brief description of the Matter to which this EDS pertains. (Include project number and location of property, if applicable):

Municipal Depository Services RFP 2020

G. Which City agency or department is requesting this EDS? Finance

If the Matter is a contract being handled by the City's Department of Procurement Services, please complete the following:

Specification # _____ and Contract # _____

SECTION II -- DISCLOSURE OF OWNERSHIP INTERESTS

A. NATURE OF THE DISCLOSING PARTY

1. Indicate the nature of the Disclosing Party:

- | | |
|--|--|
| <input type="checkbox"/> Person | <input type="checkbox"/> Limited liability company |
| <input checked="" type="checkbox"/> Publicly registered business corporation | <input type="checkbox"/> Limited liability partnership |
| <input type="checkbox"/> Privately held business corporation | <input type="checkbox"/> Joint venture |
| <input type="checkbox"/> Sole proprietorship | <input type="checkbox"/> Not-for-profit corporation |
| <input type="checkbox"/> General partnership | (Is the not-for-profit corporation also a 501(c)(3))? |
| <input type="checkbox"/> Limited partnership | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| <input type="checkbox"/> Trust | <input type="checkbox"/> Other (please specify) |

2. For legal entities, the state (or foreign country) of incorporation or organization, if applicable:

United States

3. For legal entities not organized in the State of Illinois: Has the organization registered to do business in the State of Illinois as a foreign entity?

☐ Yes ☒ No ☐ Organized in Illinois

B. IF THE DISCLOSING PARTY IS A LEGAL ENTITY:

1. List below the full names and titles, if applicable, of: (i) all executive officers and all directors of the entity; (ii) **for not-for-profit corporations**, all members, if any, which are legal entities (if there are no such members, write "no members which are legal entities"); (iii) **for trusts, estates or other similar entities**, the trustee, executor, administrator, or similarly situated party; (iv) **for general or limited partnerships, limited liability companies, limited liability partnerships or joint ventures**, each general partner, managing member, manager or any other person or legal entity that directly or indirectly controls the day-to-day management of the Applicant.

NOTE: Each legal entity listed below must submit an EDS on its own behalf.

Name

Title

See attachment

2. Please provide the following information concerning each person or legal entity having a direct or indirect, current or prospective (i.e. within 6 months after City action) beneficial interest (including ownership) in excess of 7.5% of the Applicant. Examples of such an interest include shares in a corporation, partnership interest in a partnership or joint venture, interest of a member or manager in a

limited liability company, or interest of a beneficiary of a trust, estate or other similar entity. If none, state "None."

NOTE: Each legal entity listed below may be required to submit an EDS on its own behalf.

Name	Business Address	Percentage Interest in the Applicant
Vanguard Group, Inc.	100 Vanguard Blvd, Malvern, PA	12.81% as of 6/30/19
BlackRock, Inc.	55 East 52 nd Street, New York, NY	8.24% as of 6/30/19

SECTION III -- INCOME OR COMPENSATION TO, OR OWNERSHIP BY, CITY ELECTED OFFICIALS

Has the Disclosing Party provided any income or compensation to any City elected official during the 12-month period preceding the date of this EDS? ☐ Yes ☒ No

Does the Disclosing Party reasonably expect to provide any income or compensation to any City elected official during the 12-month period following the date of this EDS? ☐ Yes ☒ No

If "yes" to either of the above, please identify below the name(s) of such City elected official(s) and describe such income or compensation:

Does any City elected official or, to the best of the Disclosing Party's knowledge after reasonable inquiry, any City elected official's spouse or domestic partner, have a financial interest (as defined in Chapter 2-156 of the Municipal Code of Chicago ("MCC")) in the Disclosing Party?

☐ Yes ☒ No

If "yes," please identify below the name(s) of such City elected official(s) and/or spouse(s)/domestic partner(s) and describe the financial interest(s).

SECTION IV -- DISCLOSURE OF SUBCONTRACTORS AND OTHER RETAINED PARTIES

The Disclosing Party must disclose the name and business address of each subcontractor, attorney, lobbyist (as defined in MCC Chapter 2-156), accountant, consultant and any other person or entity whom the Disclosing Party has retained or expects to retain in connection with the Matter, as well as the nature of the relationship, and the total amount of the fees paid or estimated to be paid. The Disclosing Party is not required to disclose employees who are paid solely through the Disclosing Party's regular payroll. If the Disclosing Party is uncertain whether a disclosure is required under this Section, the Disclosing Party must either ask the City whether disclosure is required or make the disclosure.

Name (indicate whether retained or anticipated to be retained)	Business Address	Relationship to Disclosing Party (subcontractor, attorney, lobbyist, etc.)	Fees (indicate whether paid or estimated.) NOTE: "hourly rate" or "t.b.d." is not an acceptable response.
--	------------------	--	---

N/A

(Add sheets if necessary)

[X] Check here if the Disclosing Party has not retained, nor expects to retain, any such persons or entities.

SECTION V -- CERTIFICATIONS

A. COURT-ORDERED CHILD SUPPORT COMPLIANCE

Under MCC Section 2-92-415, substantial owners of business entities that contract with the City must remain in compliance with their child support obligations throughout the contract's term.

Has any person who directly or indirectly owns 10% or more of the Disclosing Party been declared in arrearage on any child support obligations by any Illinois court of competent jurisdiction?

[] Yes [] No [X] No person directly or indirectly owns 10% or more of the Disclosing Party.

If "Yes," has the person entered into a court-approved agreement for payment of all support owed and is the person in compliance with that agreement?

[] Yes [] No

B. FURTHER CERTIFICATIONS

1. [This paragraph 1 applies only if the Matter is a contract being handled by the City's Department of Procurement Services.] In the 5-year period preceding the date of this EDS, neither the Disclosing Party nor any Affiliated Entity [see definition in (5) below] has engaged, in connection with the performance of any public contract, the services of an integrity monitor, independent private sector inspector general, or integrity compliance consultant (i.e., an individual or entity with legal, auditing, investigative, or other similar skills, designated by a public agency to help the agency monitor the activity of specified agency vendors as well as help the vendors reform their business practices so they can be considered for agency contracts in the future, or continue with a contract in progress).

2. The Disclosing Party and its Affiliated Entities are not delinquent in the payment of any fine, fee, tax or other source of indebtedness owed to the City of Chicago, including, but not limited to, water and sewer charges, license fees, parking tickets, property taxes and sales taxes, nor is the Disclosing Party delinquent in the payment of any tax administered by the Illinois Department of Revenue.

3. The Disclosing Party and, if the Disclosing Party is a legal entity, all of those persons or entities identified in Section II(B)(1) of this EDS:

- a. are not presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from any transactions by any federal, state or local unit of government;
- b. have not, during the 5 years before the date of this EDS, been convicted of a criminal offense, adjudged guilty, or had a civil judgment rendered against them in connection with: obtaining, attempting to obtain, or performing a public (federal, state or local) transaction or contract under a public transaction; a violation of federal or state antitrust statutes; fraud; embezzlement; theft; forgery; bribery; falsification or destruction of records; making false statements; or receiving stolen property;
- c. are not presently indicted for, or criminally or civilly charged by, a governmental entity (federal, state or local) with committing any of the offenses set forth in subparagraph (b) above;
- d. have not, during the 5 years before the date of this EDS, had one or more public transactions (federal, state or local) terminated for cause or default; and
- e. have not, during the 5 years before the date of this EDS, been convicted, adjudged guilty, or found liable in a civil proceeding, or in any criminal or civil action, including actions concerning environmental violations, instituted by the City or by the federal government, any state, or any other unit of local government.

4. The Disclosing Party understands and shall comply with the applicable requirements of MCC Chapters 2-56 (Inspector General) and 2-156 (Governmental Ethics).

5. Certifications (5), (6) and (7) concern:

- the Disclosing Party;
- any "Contractor" (meaning any contractor or subcontractor used by the Disclosing Party in connection with the Matter, including but not limited to all persons or legal entities disclosed under Section IV, "Disclosure of Subcontractors and Other Retained Parties");
- any "Affiliated Entity" (meaning a person or entity that, directly or indirectly: controls the Disclosing Party, is controlled by the Disclosing Party, or is, with the Disclosing Party, under common control of another person or entity). Indicia of control include, without limitation: interlocking management or ownership; identity of interests among family members, shared facilities and equipment; common use of employees; or organization of a business entity following the ineligibility of a business entity to do business with federal or state or local government, including the City, using substantially the same management, ownership, or principals as the ineligible entity. With respect to Contractors, the term Affiliated Entity means a person or entity that directly or indirectly controls the Contractor, is controlled by it, or, with the Contractor, is under common control of another person or entity;
- any responsible official of the Disclosing Party, any Contractor or any Affiliated Entity or any other official, agent or employee of the Disclosing Party, any Contractor or any Affiliated Entity, acting pursuant to the direction or authorization of a responsible official of the Disclosing Party, any Contractor or any Affiliated Entity (collectively "Agents").

Neither the Disclosing Party, nor any Contractor, nor any Affiliated Entity of either the Disclosing Party or any Contractor, nor any Agents have, during the 5 years before the date of this EDS, or, with respect to a Contractor, an Affiliated Entity, or an Affiliated Entity of a Contractor during the 5 years before the date of such Contractor's or Affiliated Entity's contract or engagement in connection with the Matter:

- a. bribed or attempted to bribe, or been convicted or adjudged guilty of bribery or attempting to bribe, a public officer or employee of the City, the State of Illinois, or any agency of the federal government or of any state or local government in the United States of America, in that officer's or employee's official capacity;
 - b. agreed or colluded with other bidders or prospective bidders, or been a party to any such agreement, or been convicted or adjudged guilty of agreement or collusion among bidders or prospective bidders, in restraint of freedom of competition by agreement to bid a fixed price or otherwise; or
 - c. made an admission of such conduct described in subparagraph (a) or (b) above that is a matter of record, but have not been prosecuted for such conduct; or
 - d. violated the provisions referenced in MCC Subsection 2-92-320(a)(4)(Contracts Requiring a Base Wage); (a)(5)(Debarment Regulations); or (a)(6)(Minimum Wage Ordinance).
6. Neither the Disclosing Party, nor any Affiliated Entity or Contractor, or any of their employees, officials, agents or partners, is barred from contracting with any unit of state or local government as a result of engaging in or being convicted of (1) bid-rigging in violation of 720 ILCS 5/33E-3; (2) bid-rotating in violation of 720 ILCS 5/33E-4; or (3) any similar offense of any state or of the United States of America that contains the same elements as the offense of bid-rigging or bid-rotating.
7. Neither the Disclosing Party nor any Affiliated Entity is listed on a Sanctions List maintained by the United States Department of Commerce, State, or Treasury, or any successor federal agency.
8. [FOR APPLICANT ONLY] (i) Neither the Applicant nor any "controlling person" [see MCC Chapter 1-23, Article I for applicability and defined terms] of the Applicant is currently indicted or charged with, or has admitted guilt of, or has ever been convicted of, or placed under supervision for, any criminal offense involving actual, attempted, or conspiracy to commit bribery, theft, fraud, forgery, perjury, dishonesty or deceit against an officer or employee of the City or any "sister agency"; and (ii) the Applicant understands and acknowledges that compliance with Article I is a continuing requirement for doing business with the City. NOTE: If MCC Chapter 1-23, Article I applies to the Applicant, that Article's permanent compliance timeframe supersedes 5-year compliance timeframes in this Section V.
9. [FOR APPLICANT ONLY] The Applicant and its Affiliated Entities will not use, nor permit their subcontractors to use, any facility listed as having an active exclusion by the U.S. EPA on the federal System for Award Management ("SAM").
10. [FOR APPLICANT ONLY] The Applicant will obtain from any contractors/subcontractors hired or to be hired in connection with the Matter certifications equal in form and substance to those in Certifications (2) and (9) above and will not, without the prior written consent of the City, use any such

contractor/subcontractor that does not provide such certifications or that the Applicant has reason to believe has not provided or cannot provide truthful certifications.

11. If the Disclosing Party is unable to certify to any of the above statements in this Part B (Further Certifications), the Disclosing Party must explain below:

NA

If the letters "NA," the word "None," or no response appears on the lines above, it will be conclusively presumed that the Disclosing Party certified to the above statements.

12. To the best of the Disclosing Party's knowledge after reasonable inquiry, the following is a complete list of all current employees of the Disclosing Party who were, at any time during the 12-month period preceding the date of this EDS, an employee, or elected or appointed official, of the City of Chicago (if none, indicate with "N/A" or "none").

NA

13. To the best of the Disclosing Party's knowledge after reasonable inquiry, the following is a complete list of all gifts that the Disclosing Party has given or caused to be given, at any time during the 12-month period preceding the execution date of this EDS, to an employee, or elected or appointed official, of the City of Chicago. For purposes of this statement, a "gift" does not include: (i) anything made generally available to City employees or to the general public, or (ii) food or drink provided in the course of official City business and having a retail value of less than \$25 per recipient, or (iii) a political contribution otherwise duly reported as required by law (if none, indicate with "N/A" or "none"). As to any gift listed below, please also list the name of the City recipient.

N/A

C. CERTIFICATION OF STATUS AS FINANCIAL INSTITUTION

1. The Disclosing Party certifies that the Disclosing Party (check one)
[X] is [] is not

a "financial institution" as defined in MCC Section 2-32-455(b).

2. If the Disclosing Party IS a financial institution, then the Disclosing Party pledges:

"We are not and will not become a predatory lender as defined in MCC Chapter 2-32. We further pledge that none of our affiliates is, and none of them will become, a predatory lender as defined in MCC Chapter 2-32. We understand that becoming a predatory lender or becoming an affiliate of a predatory lender may result in the loss of the privilege of doing business with the City."

If the Disclosing Party is unable to make this pledge because it or any of its affiliates (as defined in MCC Section 2-32-455(b)) is a predatory lender within the meaning of MCC Chapter 2-32, explain here (attach additional pages if necessary):

NA

If the letters "NA," the word "None," or no response appears on the lines above, it will be conclusively presumed that the Disclosing Party certified to the above statements.

D. CERTIFICATION REGARDING FINANCIAL INTEREST IN CITY BUSINESS

Any words or terms defined in MCC Chapter 2-156 have the same meanings if used in this Part D.

1. In accordance with MCC Section 2-156-110: To the best of the Disclosing Party's knowledge after reasonable inquiry, does any official or employee of the City have a financial interest in his or her own name or in the name of any other person or entity in the Matter?

☐ Yes

☒ No

NOTE: If you checked "Yes" to Item D(1), proceed to Items D(2) and D(3). If you checked "No" to Item D(1), skip Items D(2) and D(3) and proceed to Part E.

2. Unless sold pursuant to a process of competitive bidding, or otherwise permitted, no City elected official or employee shall have a financial interest in his or her own name or in the name of any other person or entity in the purchase of any property that (i) belongs to the City, or (ii) is sold for taxes or assessments, or (iii) is sold by virtue of legal process at the suit of the City (collectively, "City Property Sale"). Compensation for property taken pursuant to the City's eminent domain power does not constitute a financial interest within the meaning of this Part D.

Does the Matter involve a City Property Sale?

☐ Yes

☐ No

3. If you checked "Yes" to Item D(1), provide the names and business addresses of the City officials or employees having such financial interest and identify the nature of the financial interest:

Name

Business Address

Nature of Financial Interest

4. The Disclosing Party further certifies that no prohibited financial interest in the Matter will be acquired by any City official or employee.

E. CERTIFICATION REGARDING SLAVERY ERA BUSINESS

Please check either (1) or (2) below. If the Disclosing Party checks (2), the Disclosing Party must disclose below or in an attachment to this EDS all information required by (2). Failure to comply with these disclosure requirements may make any contract entered into with the City in connection with the Matter voidable by the City.

X1. The Disclosing Party verifies that the Disclosing Party has searched any and all records of the Disclosing Party and any and all predecessor entities regarding records of investments or profits from slavery or slaveholder insurance policies during the slavery era (including insurance policies issued to slaveholders that provided coverage for damage to or injury or death of their slaves), and the Disclosing Party has found no such records.

___ 2. The Disclosing Party verifies that, as a result of conducting the search in step (1) above, the Disclosing Party has found records of investments or profits from slavery or slaveholder insurance policies. The Disclosing Party verifies that the following constitutes full disclosure of all such records, including the names of any and all slaves or slaveholders described in those records:

SECTION VI -- CERTIFICATIONS FOR FEDERALLY FUNDED MATTERS

NOTE: If the Matter is federally funded, complete this Section VI. If the Matter is not federally funded, proceed to Section VII. For purposes of this Section VI, tax credits allocated by the City and proceeds of debt obligations of the City are not federal funding.

A. CERTIFICATION REGARDING LOBBYING

1. List below the names of all persons or entities registered under the federal Lobbying Disclosure Act of 1995, as amended, who have made lobbying contacts on behalf of the Disclosing Party with respect to the Matter: (Add sheets if necessary):

NA

(If no explanation appears or begins on the lines above, or if the letters "NA" or if the word "None" appear, it will be conclusively presumed that the Disclosing Party means that NO persons or entities registered under the Lobbying Disclosure Act of 1995, as amended, have made lobbying contacts on behalf of the Disclosing Party with respect to the Matter.)

2. The Disclosing Party has not spent and will not expend any federally appropriated funds to pay any person or entity listed in paragraph A(1) above for his or her lobbying activities or to pay any person or entity to influence or attempt to influence an officer or employee of any agency, as defined by applicable federal law, a member of Congress, an officer or employee of Congress, or an employee

of a member of Congress, in connection with the award of any federally funded contract, making any federally funded grant or loan, entering into any cooperative agreement, or to extend, continue, renew, amend, or modify any federally funded contract, grant, loan, or cooperative agreement.

3. The Disclosing Party will submit an updated certification at the end of each calendar quarter in which there occurs any event that materially affects the accuracy of the statements and information set forth in paragraphs A(1) and A(2) above.

4. The Disclosing Party certifies that either: (i) it is not an organization described in section 501(c)(4) of the Internal Revenue Code of 1986; or (ii) it is an organization described in section 501(c)(4) of the Internal Revenue Code of 1986 but has not engaged and will not engage in "Lobbying Activities," as that term is defined in the Lobbying Disclosure Act of 1995, as amended.

5. If the Disclosing Party is the Applicant, the Disclosing Party must obtain certifications equal in form and substance to paragraphs A(1) through A(4) above from all subcontractors before it awards any subcontract and the Disclosing Party must maintain all such subcontractors' certifications for the duration of the Matter and must make such certifications promptly available to the City upon request.

B. CERTIFICATION REGARDING EQUAL EMPLOYMENT OPPORTUNITY

If the Matter is federally funded, federal regulations require the Applicant and all proposed subcontractors to submit the following information with their bids or in writing at the outset of negotiations.

Is the Disclosing Party the Applicant?

☒ Yes

☐ No

If Yes, answer the three questions below:

1. Have you developed and do you have on file affirmative action programs pursuant to applicable federal regulations? (See 41 CFR Part 60-2.)

☒ Yes

☐ No

2. Have you filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance Programs, or the Equal Employment Opportunity Commission all reports due under the applicable filing requirements?

☒ Yes

☐ No

☐ Reports not required

3. Have you participated in any previous contracts or subcontracts subject to the equal opportunity clause?

☒ Yes

☐ No

If you checked "No" to question (1) or (2) above, please provide an explanation:

SECTION VII -- FURTHER ACKNOWLEDGMENTS AND CERTIFICATION

The Disclosing Party understands and agrees that:

A. The certifications, disclosures, and acknowledgments contained in this EDS will become part of any contract or other agreement between the Applicant and the City in connection with the Matter, whether procurement, City assistance, or other City action, and are material inducements to the City's execution of any contract or taking other action with respect to the Matter. The Disclosing Party understands that it must comply with all statutes, ordinances, and regulations on which this EDS is based.

B. The City's Governmental Ethics Ordinance, MCC Chapter 2-156, imposes certain duties and obligations on persons or entities seeking City contracts, work, business, or transactions. The full text of this ordinance and a training program is available on line at www.cityofchicago.org/Ethics, and may also be obtained from the City's Board of Ethics, 740 N. Sedgwick St., Suite 500, Chicago, IL 60610, (312) 744-9660. The Disclosing Party must comply fully with this ordinance.

C. If the City determines that any information provided in this EDS is false, incomplete or inaccurate, any contract or other agreement in connection with which it is submitted may be rescinded or be void or voidable, and the City may pursue any remedies under the contract or agreement (if not rescinded or void), at law, or in equity, including terminating the Disclosing Party's participation in the Matter and/or declining to allow the Disclosing Party to participate in other City transactions. Remedies at law for a false statement of material fact may include incarceration and an award to the City of treble damages.

D. It is the City's policy to make this document available to the public on its Internet site and/or upon request. Some or all of the information provided in, and appended to, this EDS may be made publicly available on the Internet, in response to a Freedom of Information Act request, or otherwise. By completing and signing this EDS, the Disclosing Party waives and releases any possible rights or claims which it may have against the City in connection with the public release of information contained in this EDS and also authorizes the City to verify the accuracy of any information submitted in this EDS.

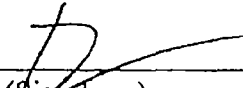
E. The information provided in this EDS must be kept current. In the event of changes, the Disclosing Party must supplement this EDS up to the time the City takes action on the Matter. If the Matter is a contract being handled by the City's Department of Procurement Services, the Disclosing Party must update this EDS as the contract requires. **NOTE:** With respect to Matters subject to MCC Chapter 1-23, Article I (imposing **PERMANENT INELIGIBILITY** for certain specified offenses), the information provided herein regarding eligibility must be kept current for a longer period, as required by MCC Chapter 1-23 and Section 2-154-020.

CERTIFICATION

Under penalty of perjury, the person signing below: (1) warrants that he/she is authorized to execute this EDS, and all applicable Appendices, on behalf of the Disclosing Party, and (2) warrants that all certifications and statements contained in this EDS, and all applicable Appendices, are true, accurate and complete as of the date furnished to the City.

Zions Bancorporation, National Association

(Print or type exact legal name of Disclosing Party)

By: 
(Sign here)

Robert Cafarelli
(Print or type name of person signing)

Vice President, Zions Bank Division
(Print or type title of person signing)

Signed and sworn to before me on November 6, 2019,
) at Cook County, Illinois (state).


Notary Public

Commission expires: 10-24-21



**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
APPENDIX A**

**FAMILIAL RELATIONSHIPS WITH ELECTED CITY OFFICIALS
AND DEPARTMENT HEADS**

This Appendix is to be completed only by (a) the Applicant, and (b) any legal entity which has a direct ownership interest in the Applicant exceeding 7.5%. It is not to be completed by any legal entity which has only an indirect ownership interest in the Applicant.

Under MCC Section 2-154-015, the Disclosing Party must disclose whether such Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof currently has a "familial relationship" with any elected city official or department head. A "familial relationship" exists if, as of the date this EDS is signed, the Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof is related to the mayor, any alderman, the city clerk, the city treasurer or any city department head as spouse or domestic partner or as any of the following, whether by blood or adoption: parent, child, brother or sister, aunt or uncle, niece or nephew, grandparent, grandchild, father-in-law, mother-in-law, son-in-law, daughter-in-law, stepfather or stepmother, stepson or stepdaughter, stepbrother or stepsister or half-brother or half-sister.

"Applicable Party" means (1) all executive officers of the Disclosing Party listed in Section II.B.1.a., if the Disclosing Party is a corporation; all partners of the Disclosing Party, if the Disclosing Party is a general partnership; all general partners and limited partners of the Disclosing Party, if the Disclosing Party is a limited partnership; all managers, managing members and members of the Disclosing Party, if the Disclosing Party is a limited liability company; (2) all principal officers of the Disclosing Party; and (3) any person having more than a 7.5% ownership interest in the Disclosing Party. "Principal officers" means the president, chief operating officer, executive director, chief financial officer, treasurer or secretary of a legal entity or any person exercising similar authority.

Does the Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof currently have a "familial relationship" with an elected city official or department head?

☐ Yes

☒ No

If yes, please identify below (1) the name and title of such person, (2) the name of the legal entity to which such person is connected; (3) the name and title of the elected city official or department head to whom such person has a familial relationship, and (4) the precise nature of such familial relationship.

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
APPENDIX B**

BUILDING CODE SCOFFLAW/PROBLEM LANDLORD CERTIFICATION

This Appendix is to be completed only by (a) the Applicant, and (b) any legal entity which has a direct ownership interest in the Applicant exceeding 7.5% (an "Owner"). It is not to be completed by any legal entity which has only an indirect ownership interest in the Applicant.

1. Pursuant to MCC Section 2-154-010, is the Applicant or any Owner identified as a building code scofflaw or problem landlord pursuant to MCC Section 2-92-416?

☐ Yes

☒ No

2. If the Applicant is a legal entity publicly traded on any exchange, is any officer or director of the Applicant identified as a building code scofflaw or problem landlord pursuant to MCC Section 2-92-416?

☐ Yes

☒ No

☐ The Applicant is not publicly traded on any exchange.

3. If yes to (1) or (2) above, please identify below the name of each person or legal entity identified as a building code scofflaw or problem landlord and the address of each building or buildings to which the pertinent code violations apply.

**CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT AND AFFIDAVIT
APPENDIX C**

PROHIBITION ON WAGE & SALARY HISTORY SCREENING - CERTIFICATION

This Appendix is to be completed only by an Applicant that is completing this EDS as a “contractor” as defined in MCC Section 2-92-385. That section, which should be consulted (www.amlegal.com), generally covers a party to any agreement pursuant to which they: (i) receive City of Chicago funds in consideration for services, work or goods provided (including for legal or other professional services), or (ii) pay the City money for a license, grant or concession allowing them to conduct a business on City premises.

On behalf of an Applicant that is a contractor pursuant to MCC Section 2-92-385, I hereby certify that the Applicant is in compliance with MCC Section 2-92-385(b)(1) and (2), which prohibit: (i) screening job applicants based on their wage or salary history, or (ii) seeking job applicants’ wage or salary history from current or former employers. I also certify that the Applicant has adopted a policy that includes those prohibitions.

☐ Yes

☐ No

☒ N/A – I am not an Applicant that is a “contractor” as defined in MCC Section 2-92-385.

This certification shall serve as the affidavit required by MCC Section 2-92-385(c)(1).

If you checked “no” to the above, please explain.

List of executive officers and directors:

Harris H. Simmons	Chairman, Chief Executive Officer
Jerry C. Atkin	Director
Gary Crittenden	Director
Suren K. Gupta	Director
J. David Heaney	Director
Vivian S. Lee	Director
Scott J. McLean	Director, Chief Operating Officer
Edward F. Murphy	Director
Stephen D. Quinn	Director
Aaron B. Skonnard	Director
Barbara A. Yastine	Director
Paul E. Burdiss	Chief Financial Officer
James. R. Abbott	Senior Vice President, Investor Relations
Bruce K. Alexander	Executive Vice President
A. Scott Anderson	Executive Vice President
David E. Blackford	Executive Vice President
Kenneth Jay Collins	Executive Vice President
Alan M. Forney	Executive Vice President
Olga T. Hoff	Executive Vice President
Alexander J. Hume	Senior Vice President, Controller
Thomas E. Laursen	Executive Vice President, General Counsel
Scott A. Law	Executive Vice President, Chief Human Resources Officer
Keith D. Maio	Executive Vice President, Chief Banking Officer
Michael Morris	Executive Vice President, Chief Credit Officer
Rebecca K. Robinson	Executive Vice President
Edward P. Schreiber	Executive Vice President, Chief Risk Officer
Terrance A. Shirey	Executive Vice President
Jennifer Anne Smith	Executive Vice President, Chief Information Officer
Steven D. Stephens	Executive Vice President
Randy R. Stewart	Executive Vice President
Mark R. Young	Executive Vice President

**SECRETARY'S CERTIFICATE
(INCUMBENCY)**

I, Rena A. Miller, do hereby certify that I am the duly appointed Assistant Secretary of Zions Bancorporation, National Association, a national banking association organized and existing under the laws of the United States (the "Association"), and that the following is a true and correct copy of Section 10.3 of the Bylaws of the Association, and has not been amended, altered or repealed, and remains in full force and effect on the date hereof:

10.3 Execution of Instruments. All agreements, indentures, mortgages, deeds, conveyances, transfers, certificates, declarations, receipts, discharges, releases, satisfactions, settlements, petitions, schedules, accounts, affidavits, bonds, undertakings, proxies and other instruments or documents (collectively, "instruments") may be signed, executed, acknowledged, verified, delivered or accepted in behalf of the Association by the chairperson, or the Chief Executive Officer, or any vice president (however designated), or any other officer who holds a position that is senior to a vice president (however designated), or the secretary or any assistant secretary, or if in connection with the exercise of fiduciary powers of the Association, by any of said officers or by any Trust Officer. Any such instruments may also be executed, acknowledged, verified, delivered or accepted in behalf of the Association in such other manner and by such other officers or individuals as the board of directors or its authorized delegate may from time to time direct. The provisions of this Section 10.3 are supplementary to any other provisions of these Bylaws.

I also certify that the following individuals are duly appointed officers of the Association, with authority to execute instruments related to the Association's Zions Bank division pursuant to the Bylaws:

Richard J. Sullivan, III - EVP & Director of Corporate Trust
Allison Darnall - Vice President & Trust Officer
Anna McCully - Vice President & Trust Officer
Annette Langheinrich - Vice President
April Holland - Trust Officer
Arla K. Scott - Vice President & Trust Officer
Ashley Reed - Asst. Vice President & Trust Officer
Carisa Dillinger - Asst. Vice President & Trust Officer
Carl J. Mathis - Vice President & Trust Officer
Carrie Sandoval - Trust Officer
Charmaine Hunter - Asst. Vice President & Trust Officer
Dan Ellison - Vice President & Trust Officer
Daniel J. Dixon - Senior Vice President & Trust Officer
Daryl Pomykala - Vice President & Trust Officer
David W. Bata - Senior Vice President & Trust Officer
Eric Mitzel - Vice President & Trust Officer
Fabiola Fernandes - Trust Officer
Francis (Frank) Lamb - Vice President
Gregory G. Cross - Vice President & Trust Officer
Jacqueline Nowak - Vice President & Trust Officer
Joni D'Amico - Senior Vice President & Trust Officer
Joseph Dailey - Trust Officer
Kheang Tan - Asst. Vice President & Trust Officer
Linda Anderson - Trust Officer
Lorrie Letchworth - Trust Officer

FIRMWIDE
PLEASE POPULATE THE HIGHLIGHTED PORTIONS ONLY

Firm Name:	Zions Bancorporation, National Association
Primary Representative:	Robert Cafarella
Primary Representative Email and Telephone:	robert.cafarella@zionsbancorp.com (312)763-4252
Headquarters Address:	One South Main, Salt Lake City, UT
Chicago Public Finance Office Address:	111 W. Washington Street Chicago, IL 60602
Total Number of Employees:	10,511
Number of Employees in Illinois:	13
Number of Employees in Chicago:	8
Capital Position:	70,361,000,000
Minority Designation:	No

Job Categories	4,359					6,130				
	Male					Female				
Overall Totals	White (Not Hispanic)	Black (Not Hispanic)	Hispanic	Asian	Native American	White (Not Hispanic)	Black (Not Hispanic)	Hispanic	Asian	Native American
Officials and Managers	2,189	901	25	100	72	3	737	72	188	85
Professionals	3,554	1,560	45	219	231	5	1,014	87	208	179
Technicians	15	7		7	1					6
Sales Workers	15	14		0	1					
Office and Clerical	4,715	692	79	288	98	10	2,012	321	895	298
Craft Workers (Skilled)	0									
Operatives (Semi-Skilled)	1	1								
Laborers	0									
Service Workers	0									
Total	10,489	3,175	149	614	403	18	3,763	480	1,291	562
										34

Male	Female	Total
42%	58%	100%

Job Categories	White (Not Hispanic)	Black (Not Hispanic)	Hispanic	Asian	Native American
Officials and Managers	21%	1%	3%	1%	0%
Professionals	34%	1%	4%	4%	0%
Technicians	0%	0%	0%	0%	0%
Sales Workers	0%	0%	0%	0%	0%
Office and Clerical	45%	4%	11%	4%	0%
Craft Workers (Skilled)	0%	0%	0%	0%	0%
Operatives (Semi-Skilled)	0%	0%	0%	0%	0%
Laborers	0%	0%	0%	0%	0%
Service Workers	0%	0%	0%	0%	0%
Total	100%	6%	18%	9%	0%

SC 13G/A 1 zionsbancorpna.htm

SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

Schedule 13G

Under the Securities Exchange Act of 1934
(Amendment No.: 8)*

Name of issuer Zions Bancorp NA

Title of Class of Securities: Common Stock

CUSIP Number

Date of Event Which Requires Filing of this Statement: December 31, 2018

Check the appropriate box to designate the rule pursuant to which this Schedule is filed:

- ☒ Rule 13d-1(b)
☐ Rule 13d-1(c)
☐ Rule 13d-1(d)

*The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter the disclosures provided in a prior cover page.

The information required in the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

(Continued on the following page(s))

13G

CUSIP No.

1. NAME OF REPORTING PERSON
S S OR I R.S. IDENTIFICATION NO. OF ABOVE PERSON

The Vanguard Group -

2. CHECK THE APPROPRIATE [LINE] IF A MEMBER OF A GROUP

A. ☐ B
☒

3. SEC USE ONLY

4. CITIZENSHIP OF PLACE OF ORGANIZATION

Pennsylvania

(For questions 5-8, report the number of shares beneficially owned by each reporting person with:)

5. SOLE VOTING POWER

225,775

6. SHARED VOTING POWER

51,722

7. SOLE DISPOSITIVE POWER

21,912,492

8. SHARED DISPOSITIVE POWER

270,613

9. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

22,183,105

10. CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES

N/A

11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9

11.54%

12. TYPE OF REPORTING PERSON

IA

SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549SCHEDULE 13G
Under the Securities Act of 1934

Check the following [line] if a fee is being paid with this statement N/A

Item 1(a) - Name of Issuer:

Zions Bancorp NA

Item 1(b) - Address of Issuer's Principal Executive Offices:

One South Main 15th Floor
Salt Lake City, Utah 84133

Item 2(a) - Name of Person Filing:

The Vanguard Group -

Item 2(b) - Address of Principal Business Office or, if none, residence:

100 Vanguard Blvd.
Malvern, PA 19355

Item 2(c) - Citizenship:

Pennsylvania

Item 2(d) - Title of Class of Securities:

Common Stock

Item 2(e) - CUSIP Number

989701107

Item 3 - Type of Filing:

This statement is being filed pursuant to Rule 13d-1. An investment adviser in accordance with §240.13d-1(b)(1)(ii)(E).

Item 4 - Ownership:

(a) Amount Beneficially Owned:

22,183,105

(b) Percent of Class.

11.54%

(c) Number of shares as to which such person has:

(i) sole power to vote or direct to vote: 225,775

(ii) shared power to vote or direct to vote: 51,722

(iii) sole power to dispose of or to direct the disposition of: 21,912,492

(iv) shared power to dispose of or to direct the disposition of: 270,613

Comments:

Item 5 - Ownership of Five Percent or Less of a Class:

Not Applicable

Item 6 - Ownership of More Than Five Percent on Behalf of Another Person:

Not applicable

Item 7 - Identification and Classification of the Subsidiary Which Acquired The Security Being Reported on by the Parent Holding Company:

See Attached Appendix A

Item 8 - Identification and Classification of Members of Group:

Not applicable

Item 9 - Notice of Dissolution of Group:

Not applicable

Item 10 - Certification:

By signing below I certify that, to the best of my knowledge and belief, the securities referred to above were acquired in the ordinary course of business and were not acquired for the purpose of and do not have the effect of changing or influencing the control of the issuer of such securities and were not acquired in connection with or as a participant in any transaction having such purpose or effect.

Signature:

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

Date: 02/11/2019

By /s/ Christine M. Buchanan
Name: Christine M. Buchanan
Title: Principal

Appendix A

Vanguard Fiduciary Trust Company ("VFTC"), a wholly-owned subsidiary of The Vanguard Group, Inc., is the beneficial owner of 164,524 shares or .08% of the Common Stock outstanding of the Company as a result of its serving as investment manager of collective trust accounts.

Vanguard Investments Australia, Ltd. ("VIA"), a wholly-owned subsidiary of The Vanguard Group, Inc., is the beneficial owner of 164,573 shares or .08% of the Common Stock outstanding of the Company as a result of its serving as investment manager of Australian investment offerings.

Section 1: 10-Q (10-Q)

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549
FORM 10-Q

(Mark One)

☒ QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES
EXCHANGE ACT OF 1934

For the quarterly period ended September 30, 2019
OR

☐ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES
EXCHANGE ACT OF 1934

For the transition period from _____ to _____

Commission file number 001-33099

BlackRock

BlackRock, Inc.
(Exact name of registrant as specified in its charter)

Delaware

(State or Other Jurisdiction of
Incorporation or Organization)

(I R S Employer Identification No.)

55 East 52nd Street, New York, NY 10055
(Address of Principal Executive Offices)
(Zip Code)

(212) 810-5300
(Registrant's Telephone Number, Including Area Code)

(Former Name, Former Address and Former Fiscal Year, if Changed Since Last Report)

Securities registered pursuant to Section 12(b) of the Act

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, \$ 01 par value 1 250% Notes due 2025	BLK BLK25	New York Stock Exchange New York Stock Exchange

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes ☒ X

No ☐

Indicate by check mark whether the registrant has submitted electronically, every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files).

Yes ☒ X

No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer ☒

Non-accelerated filer ☐

Accelerated filer ☐

Smaller reporting company ☐

Emerging growth company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act)

Yes ☐

No ☒ X

As of October 31, 2019, there were 154,370,706 shares of the registrant's common stock outstanding

BlackRock, Inc.
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PART I – FINANCIAL INFORMATION

Item 1. Financial Statements

BlackRock, Inc.

Condensed Consolidated Statements of Financial Condition

(unaudited)

(in millions, except shares and per share data)

	September 30, 2019	December 31, 2018
Assets		
Cash and cash equivalents	\$ 4,476	\$ 6,302
Accounts receivable	3,026	2,657
Investments	2,117	1,796
Assets of consolidated variable interest entities		
Cash and cash equivalents	131	186
Investments	2,898	2,680
Other assets	54	876
Separate account assets	95,501	90,285
Separate account collateral held under securities lending agreements	18,699	20,655
Property and equipment (net of accumulated depreciation of \$876 and \$750 at September 30, 2019 and December 31, 2018, respectively)	669	643
Intangible assets (net of accumulated amortization of \$313 and \$244 at September 30, 2019 and December 31, 2018, respectively)	18,407	17,839
Goodwill	14,552	13,526
Other assets	3,342	2,128
Total assets	\$ 163,872	\$ 159,573
Liabilities		
Accrued compensation and benefits	\$ 1,500	\$ 1,988
Accounts payable and accrued liabilities	1,252	1,292
Liabilities of consolidated variable interest entities		
Borrowings	186	84
Other liabilities	530	1,290
Borrowings	5,932	4,979
Separate account liabilities	95,501	90,285
Separate account collateral liabilities under securities lending agreements	18,699	20,655
Deferred income tax liabilities	3,792	3,571
Other liabilities	2,876	1,889
Total liabilities	130,268	126,033
Commitments and contingencies (Note 14)		
Temporary equity		
Redeemable noncontrolling interests	1,137	1,107
Permanent Equity		
BlackRock, Inc. stockholders' equity		
Common stock, \$0.01 par value,	2	2
Shares authorized 500,000,000 at September 30, 2019 and December 31, 2018,		
Shares issued 171,252,185 at September 30, 2019 and December 31, 2018,		
Shares outstanding 154,349,915 and 157,553,501 at September 30, 2019 and December 31, 2018, respectively		
Preferred stock (Note 19)	—	—
Additional paid-in capital	19,058	19,168
Retained earnings	20,873	19,282
Accumulated other comprehensive loss	(784)	(691)
Treasury stock, common, at cost (16,902,270 and 13,698,684 shares held at September 30, 2019 and December 31, 2018, respectively)	(6,742)	(5,387)
Total BlackRock, Inc. stockholders' equity	32,407	32,374
Nonredeemable noncontrolling interests	60	59
Total permanent equity	32,467	32,433
Total liabilities, temporary equity and permanent equity	\$ 163,872	\$ 159,573

See accompanying notes to condensed consolidated financial statements.

BlackRock, Inc.
Condensed Consolidated Statements of Income
(unaudited)

(in millions, except shares and per share data)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Revenue				
Investment advisory, administration fees and securities lending revenue				
Related parties	\$ 2,105	\$ 2,045	\$ 6,155	\$ 6,244
Other third parties	875	838	2,533	2,530
Total investment advisory, administration fees and securities lending revenue	2,980	2,883	8,688	8,774
Investment advisory performance fees	121	151	211	312
Technology services revenue	259	200	700	582
Distribution fees	270	279	799	884
Advisory and other revenue	62	63	164	212
Total revenue	3,692	3,576	10,562	10,764
Expense				
Employee compensation and benefits	1,111	1,097	3,258	3,300
Distribution and servicing costs	427	408	1,247	1,255
Direct fund expense	239	249	733	774
General and administration	385	413	1,243	1,189
Amortization of intangible assets	28	13	68	35
Total expense	2,190	2,180	6,549	6,553
Operating income	1,502	1,396	4,013	4,211
Nonoperating income (expense)				
Net gain (loss) on investments	(7)	50	224	68
Interest and dividend income	19	29	68	63
Interest expense	(54)	(46)	(152)	(138)
Total nonoperating income (expense)	(42)	33	140	(7)
Income before income taxes	1,460	1,429	4,153	4,204
Income tax expense	341	226	961	829
Net income	1,119	1,203	3,192	3,375
Less:				
Net income (loss) attributable to noncontrolling interests	—	(13)	17	(3)
Net income attributable to BlackRock, Inc.	\$ 1,119	\$ 1,216	\$ 3,175	\$ 3,378
Earnings per share attributable to BlackRock, Inc. common stockholders:				
Basic	\$ 7.21	\$ 7.59	\$ 20.31	\$ 21.01
Diluted	\$ 7.15	\$ 7.54	\$ 20.17	\$ 20.83
Weighted-average common shares outstanding:				
Basic	155,280,877	160,141,506	156,290,212	160,786,768
Diluted	156,447,387	161,378,217	157,385,956	162,140,879

See accompanying notes to condensed consolidated financial statements

BlackRock, Inc.
Condensed Consolidated Statements of Income
(unaudited)

(in millions, except shares and per share data)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Revenue				
Investment advisory, administration fees and securities lending revenue				
Related parties	\$ 2,105	\$ 2,045	\$ 6,155	\$ 6,244
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Distribution and servicing costs	427	408	1,247	1,255
Direct fund expense	239	249	733	774
General and administration	385	413	1,243	1,189
Amortization of intangible assets	28	13	68	35
Total expense	2,190	2,180	6,549	6,553
Operating income	1,502	1,396	4,013	4,211
Nonoperating income (expense)				
Net gain (loss) on investments	(7)	50	224	68
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Less				
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Earnings per share attributable to BlackRock, Inc. common stockholders:				
Basic	\$ 7.21	\$ 7.59	\$ 20.31	\$ 21.01
Diluted	\$ 7.15	\$ 7.54	\$ 20.17	\$ 20.83
Weighted-average common shares outstanding:				
Basic	155,280,877	160,141,506	156,290,212	160,786,768
Diluted	156,447,387	161,378,217	157,385,956	162,140,879

See accompanying notes to condensed consolidated financial statements

BlackRock, Inc.
Condensed Consolidated Statements of Comprehensive Income
(unaudited)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
(in millions)				
Net income	\$ 1,119	\$ 1,203	\$ 3,192	\$ 3,375
Other comprehensive income (loss):				
Foreign currency translation adjustments ⁽¹⁾	(120)	(41)	(93)	(178)
Comprehensive income (loss)	999	1,162	3,099	3,197
Less: Comprehensive income (loss) attributable to noncontrolling interests	—	(13)	17	(3)
Comprehensive income attributable to BlackRock, Inc.	<u>\$ 999</u>	<u>\$ 1,175</u>	<u>\$ 3,082</u>	<u>\$ 3,200</u>

⁽¹⁾ Amounts for the three months ended September 30, 2019 and 2018 include gains from a net investment hedge of \$25 million (net of tax expense of \$8 million) and \$4 million (net of tax expense of \$1 million), respectively. Amounts for the nine months ended September 30, 2019 and 2018 include gains from a net investment hedge of \$28 million (net of tax expense of \$9 million) and \$22 million (net of tax expense of \$7 million), respectively.

See accompanying notes to condensed consolidated financial statements

BlackRock, Inc.
Condensed Consolidated Statements of Changes in Equity
(unaudited)

For the Nine Months Ended September 30, 2019

(in millions)	Additional Paid-in Capital ⁽¹⁾	Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Treasury Stock Common	Total BlackRock Stockholders' Equity	Nonredeemable Noncontrolling Interests	Total Permanent Equity	Redeemable Noncontrolling Interests / Temporary Equity
December 31, 2018	\$ 19,170	\$ 19,282	\$ (691)	\$ (5,387)	\$ 32,374	\$ 59	\$ 32,433	\$ 1,107
Net income	—	3,175	—	—	3,175	—	3,175	17
Dividends declared (\$9.90 per share)	—	(1,584)	—	—	(1,584)	—	(1,584)	—
Stock-based compensation	427	—	—	—	427	—	427	—
PNC preferred stock capital contribution	60	—	—	—	60	—	60	—
Retirement of preferred stock	(60)	—	—	—	(60)	—	(60)	—
Issuance of common shares related to employee stock transactions	(537)	—	—	549	12	—	12	—
Employee tax withholdings related to employee stock transactions	—	—	—	(238)	(238)	—	(238)	—
Shares repurchased	—	—	—	(1,666)	(1,666)	—	(1,666)	—
Subscriptions (redemptions/distributions) — noncontrolling interest holders	—	—	—	—	—	1	1	906
Net consolidations (deconsolidations) of sponsored investment funds	—	—	—	—	—	—	—	(893)
Other comprehensive income (loss)	—	—	(93)	—	(93)	—	(93)	—
September 30, 2019	<u>\$ 19,060</u>	<u>\$ 20,873</u>	<u>\$ (784)</u>	<u>\$ (6,742)</u>	<u>\$ 32,407</u>	<u>\$ 60</u>	<u>\$ 32,467</u>	<u>\$ 1,137</u>

⁽¹⁾ Amounts include \$2 million of common stock at both September 30, 2019 and December 31, 2018

For the Three Months Ended September 30, 2019

(in millions)	Additional Paid-in Capital ⁽¹⁾	Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Treasury Stock Common	Total BlackRock Stockholders' Equity	Nonredeemable Noncontrolling Interests	Total Permanent Equity	Redeemable Noncontrolling Interests / Temporary Equity
June 30, 2019	\$ 18,949	\$ 20,267	\$ (664)	\$ (6,659)	\$ 31,893	\$ 57	\$ 31,950	\$ 710
Net income	—	1,119	—	—	1,119	—	1,119	—
Dividends declared (\$3.30 per share)	—	(513)	—	—	(513)	—	(513)	—
Stock-based compensation	133	—	—	—	133	—	133	—
Issuance of common shares related to employee stock transactions	(22)	—	—	26	4	—	4	—
Employee tax withholdings related to employee stock transactions	—	—	—	(9)	(9)	—	(9)	—
Shares repurchased	—	—	—	(100)	(100)	—	(100)	—
Subscriptions (redemptions/distributions) — noncontrolling interest holders	—	—	—	—	—	—	—	463
Net consolidations (deconsolidations) of sponsored investment funds	—	—	—	—	—	3	3	(36)
Other comprehensive income (loss)	—	—	(120)	—	(120)	—	(120)	—
September 30, 2019	<u>\$ 19,060</u>	<u>\$ 20,873</u>	<u>\$ (784)</u>	<u>\$ (6,742)</u>	<u>\$ 32,407</u>	<u>\$ 60</u>	<u>\$ 32,467</u>	<u>\$ 1,137</u>

⁽¹⁾ Amounts include \$2 million of common stock at both September 30, 2019 and June 30, 2019

See accompanying notes to condensed consolidated financial statements.

BlackRock, Inc.
Condensed Consolidated Statements of Changes in Equity
(unaudited)

For the Nine Months Ended September 30, 2018

(in millions)	Additional Paid-in Capital ⁽¹⁾	Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Treasury Stock Common	Total BlackRock Stockholders' Equity	Nonredeemable Noncontrolling Interests	Total Permanent Equity	Redeemable Noncontrolling Interests / Temporary Equity
December 31, 2017	\$ 19,258	\$ 16,939	\$ (432)	\$ (3,967)	\$ 31,798	\$ 50	\$ 31,848	\$ 416
Net income	—	3,378	—	—	3,378	1	3,379	(4)
Dividends declared (\$8.89 per share)	—	(1,471)	—	—	(1,471)	—	(1,471)	—
Stock-based compensation	431	—	—	—	431	—	431	—
PNC preferred stock capital contribution	58	—	—	—	58	—	58	—
Retirement of preferred stock	(58)	—	—	—	(58)	—	(58)	—
Issuance of common shares related to employee stock transactions	(639)	—	—	651	12	—	12	—
Employee tax withholdings related to employee stock transactions	—	—	—	(420)	(420)	—	(420)	—
Shares repurchased	—	—	—	(1,135)	(1,135)	—	(1,135)	—
Subscriptions (redemptions/distributions) — noncontrolling interest holders	—	—	—	—	—	4	4	742
Net consolidations (deconsolidations) of sponsored investment funds	—	—	—	—	—	—	—	(551)
Other comprehensive income (loss)	—	—	(178)	—	(178)	—	(178)	—
Adoption of accounting guidance	—	6	(6)	—	—	—	—	—
September 30, 2018	<u>\$ 19,050</u>	<u>\$ 18,852</u>	<u>\$ (616)</u>	<u>\$ (4,871)</u>	<u>\$ 32,415</u>	<u>\$ 55</u>	<u>\$ 32,470</u>	<u>\$ 603</u>

⁽¹⁾ Amounts include \$2 million of common stock at both September 30, 2018 and December 31, 2017.

For the Three Months Ended September 30, 2018

(in millions)	Additional Paid-in Capital ⁽¹⁾	Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Treasury Stock Common	Total BlackRock Stockholders' Equity	Nonredeemable Noncontrolling Interests	Total Permanent Equity	Redeemable Noncontrolling Interests / Temporary Equity
June 30, 2018	\$ 18,955	\$ 18,138	\$ (575)	\$ (4,388)	\$ 32,130	\$ 54	\$ 32,184	\$ 686
Net income	—	1,216	—	—	1,216	(8)	1,208	(5)
Dividends declared (\$3.13 per share)	—	(502)	—	—	(502)	—	(502)	—
Stock-based compensation	121	—	—	—	121	—	121	—
Issuance of common shares related to employee stock transactions	(26)	—	—	32	6	—	6	—
Employee tax withholdings related to employee stock transactions	—	—	—	(15)	(15)	—	(15)	—
Shares repurchased	—	—	—	(500)	(500)	—	(500)	—
Subscriptions (redemptions/distributions) — noncontrolling interest holders	—	—	—	—	—	9	9	207
Net consolidations (deconsolidations) of sponsored investment funds	—	—	—	—	—	—	—	(285)
Other comprehensive income (loss)	—	—	(41)	—	(41)	—	(41)	—
September 30, 2018	<u>\$ 19,050</u>	<u>\$ 18,852</u>	<u>\$ (616)</u>	<u>\$ (4,871)</u>	<u>\$ 32,415</u>	<u>\$ 55</u>	<u>\$ 32,470</u>	<u>\$ 603</u>

⁽¹⁾ Amounts include \$2 million of common stock at both September 30, 2018 and June 30, 2018.

See accompanying notes to condensed consolidated financial statements

BlackRock, Inc.
Condensed Consolidated Statements of Cash Flows
(unaudited)

(in millions)

	Nine Months Ended September 30,	
	2019	2018
Operating activities		
Net income	\$ 3,192	\$ 3,375
Adjustments to reconcile net income to net cash provided by/(used in) operating activities		
Depreciation and amortization	294	164
Stock-based compensation	427	431
Deferred income tax expense (benefit)	45	(187)
Other gains	(30)	(50)
Net (gains) losses within consolidated VIEs	(128)	21
Net (purchases) proceeds within consolidated VIEs	(932)	(1,107)
(Earnings) losses from equity method investees	(89)	(92)
Distributions of earnings from equity method investees	29	23
Changes in operating assets and liabilities		
Accounts receivable	(330)	(5)
Investments, trading	(189)	161
Other assets	(225)	(191)
Accrued compensation and benefits	(525)	(594)
Accounts payable and accrued liabilities	(61)	164
Other liabilities	150	439
Net cash provided by/(used in) operating activities	1,628	2,552
Investing activities		
Purchases of investments	(572)	(259)
Proceeds from sales and maturities of investments	151	400
Distributions of capital from equity method investees	80	18
Net consolidations (deconsolidations) of sponsored investment funds (VIEs/VREs)	(96)	(52)
Acquisitions, net of cash acquired	(1,510)	(699)
Purchases of property and equipment	(160)	(108)
Net cash provided by/(used in) investing activities	(2,107)	(700)
Financing activities		
Proceeds from long-term borrowings	992	—
Cash dividends paid	(1,584)	(1,471)
Repurchases of common stock	(1,904)	(1,555)
Net proceeds from (repayments of) borrowings by consolidated VIEs	102	—
Net (redemptions/distributions paid)/subscriptions received from noncontrolling interest holders	907	746
Other financing activities	118	(13)
Net cash provided by/(used in) financing activities	(1,369)	(2,293)
Effect of exchange rate changes on cash, cash equivalents and restricted cash	(33)	(58)
Net increase/(decrease) in cash, cash equivalents and restricted cash	(1,881)	(499)
Cash, cash equivalents and restricted cash, beginning of period	6,505	7,096
Cash, cash equivalents and restricted cash, end of period	\$ 4,624	\$ 6,597
Supplemental disclosure of cash flow information:		
Cash paid for		
Interest	\$ 123	\$ 123
Income taxes (net of refunds)	\$ 893	\$ 765
Supplemental schedule of noncash investing and financing transactions:		
Issuance of common stock	\$ 537	\$ 639
PNC preferred stock capital contribution	\$ 60	\$ 58
Increase (decrease) in noncontrolling interests due to net consolidation (deconsolidation) of sponsored investment funds	\$ (893)	\$ (551)

See accompanying notes to condensed consolidated financial statements.

BlackRock, Inc.
Notes to the Condensed Consolidated Financial Statements
(unaudited)

1. Business Overview

BlackRock, Inc. (together, with its subsidiaries, unless the context otherwise indicates, "BlackRock" or the "Company") is a leading publicly traded investment management firm providing a broad range of investment and technology services to institutional and retail clients worldwide.

BlackRock's diverse platform of alpha-seeking active, index and cash management investment strategies across asset classes enables the Company to tailor investment outcomes and asset allocation solutions for clients. Product offerings include single- and multi-asset portfolios investing in equities, fixed income, alternatives and money market instruments. Products are offered directly and through intermediaries in a variety of vehicles, including open-end and closed-end mutual funds, iShares® exchange-traded funds ("ETFs"), separate accounts, collective investment trusts and other pooled investment vehicles. BlackRock also offers technology services, including the investment and risk management technology platform, Aladdin®, Aladdin Wealth, eFront, Cachematrix and FutureAdvisor, as well as advisory services and solutions to a broad base of institutional and wealth management clients.

At September 30, 2019, The PNC Financial Services Group, Inc. ("PNC") held 22.0% of the Company's voting common stock and 22.4% of the Company's capital stock, which includes outstanding common and nonvoting preferred stock.

2. Significant Accounting Policies

Basis of Presentation

These condensed consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States ("GAAP") and include the accounts of the Company and its controlled subsidiaries. Noncontrolling interests ("NCI") on the condensed consolidated statements of financial condition represents the portion of consolidated sponsored investment funds in which the Company does not have direct equity ownership. Accounts and transactions between consolidated entities have been eliminated.

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expense during the reporting periods. Actual results could differ from those estimates.

Certain financial information that normally is included in annual financial statements, including certain financial statement footnotes, is not required for interim reporting purposes and has been condensed or omitted herein. These condensed consolidated financial statements should be read in conjunction with the Company's consolidated financial statements and notes related thereto included in the Company's Annual Report on Form 10-K for the year ended December 31, 2018, which was filed with the Securities and Exchange Commission ("SEC") on February 28, 2019 ("2018 Form 10-K").

The interim financial information at September 30, 2019 and for the three and nine months ended September 30, 2019 and 2018 is unaudited. However, in the opinion of management, the interim information includes all normal recurring adjustments necessary for the fair presentation of the Company's results for the periods presented. The results of operations for interim periods are not necessarily indicative of results to be expected for the full year.

Certain prior period presentations and disclosures were reclassified to ensure comparability with current period classifications.

Accounting Pronouncements Adopted in the Nine Months Ended September 30, 2019

Leases. In February 2016, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") 2016-02, *Leases*, and several amendments (collectively, "ASU 2016-02"), which requires lessees to recognize assets and liabilities arising from most operating leases on the condensed consolidated statements of financial condition.

The Company adopted ASU 2016-02 on its effective date of January 1, 2019 on a modified retrospective basis and elected not to apply ASU 2016-02 to the comparative periods presented. Under this transition method, any cumulative effect adjustment is recognized in the opening balance of retained earnings in the period of adoption. The Company elected the package of practical expedients to alleviate certain operational complexities related to the adoption, which among other things, allowed the Company to carry forward the existing lease classification. The Company elected to account for lease and non-lease components as a single component for its leases. The Company also elected the short-term lease practical expedient. Consequently, leases with an initial term of 12 months or less are not recorded on the condensed consolidated statement of financial condition. Upon adoption of ASU 2016-02, the Company recorded a net increase of approximately \$0.7 billion in its assets and liabilities related to the right-of-use ("ROU") asset and lease liability for its operating leases. The adoption of ASU 2016-02 did not have a material impact on the condensed consolidated statement of income or cash flows. See Note 10, *Leases*, for more information.

Fair Value Measurements

Hierarchy of Fair Value Inputs The Company uses a fair value hierarchy that prioritizes inputs to valuation approaches used to measure fair value. The fair value hierarchy gives the highest priority to quoted prices (unadjusted) in active markets for identical assets or liabilities and the lowest priority to unobservable inputs. Assets and liabilities measured and reported at fair value are classified and disclosed in one of the following categories:

Level 1 Inputs:

Quoted prices (unadjusted) in active markets for identical assets or liabilities at the reporting date

- Level 1 assets may include listed mutual funds, ETFs, listed equities and certain exchange-traded derivatives.

Level 2 Inputs:

Quoted prices for similar assets or liabilities in active markets, quoted prices for identical or similar assets or liabilities that are not active, quotes from pricing services or brokers for which the Company can determine that orderly transactions took place at the quoted price or that the inputs used to arrive at the price are observable, and inputs other than quoted prices that are observable, such as models or other valuation methodologies

- Level 2 assets may include debt securities, investments in collateralized loan obligations ("CLOs"), bank loans, short-term floating-rate notes, asset-backed securities, securities held within consolidated hedge funds, restricted public securities valued at a discount, as well as over-the-counter derivatives, including interest and inflation rate swaps and foreign currency exchange contracts that have inputs to the valuations that generally can be corroborated by observable market data.

Level 3 Inputs:

Unobservable inputs for the valuation of the asset or liability, which may include nonbinding broker quotes. Level 3 assets include investments for which there is little, if any, market activity. These inputs require significant management judgment or estimation

- Level 3 assets may include direct private equity investments held within consolidated funds, investments in CLOs and bank loans of consolidated CLOs.
- Level 3 liabilities include contingent liabilities related to acquisitions valued based upon discounted cash flow analyses using unobservable market data and borrowings of consolidated CLOs

Significance of Inputs. The Company's assessment of the significance of a particular input to the fair value measurement in its entirety requires judgment and considers factors specific to the financial instrument.

Valuation Approaches The fair values of certain Level 3 assets and liabilities were determined using various valuation approaches as appropriate, including third-party pricing vendors, broker quotes and market and income approaches

A significant number of inputs used to value equity, debt securities, investments in CLOs and bank loans is sourced from third-party pricing vendors. Generally, prices obtained from pricing vendors are categorized as Level 1 inputs for identical securities traded in active markets and as Level 2 for other similar securities if the vendor uses observable inputs in determining the price.

In addition, quotes obtained from brokers generally are nonbinding and categorized as Level 3 inputs. However, if the Company is able to determine that market participants have transacted for the asset in an orderly manner near the quoted price or if the Company can determine that the inputs used by the broker are observable, the quote is classified as a Level 2 input.

Investments Measured at Net Asset Values. As a practical expedient, the Company uses net asset value ("NAV") as the fair value for certain investments. The inputs to value these investments may include the Company's capital accounts for its partnership interests in various alternative investments, including hedge funds, real assets and private equity funds, which may be adjusted by using the returns of certain market indices. The various partnerships generally are investment companies, which record their underlying investments at fair value based on fair value policies established by management of the underlying fund. Fair value policies at the underlying fund generally require the fund to utilize pricing/valuation information from third-party sources, including independent appraisals. However, in some instances, current valuation information for illiquid securities or securities in markets that are not active may not be available from any third-party source or fund management may conclude that the valuations that are available from third-party sources are not reliable. In these instances, fund management may perform model-based analytical valuations that could be used as an input to value these investments.

Fair Value of Assets and Liabilities of Consolidated CLO The Company applies the fair value option provisions for eligible assets, including bank loans, held by a consolidated CLO. As the fair value of the financial assets of the consolidated CLO is more observable than the fair value of the borrowings of the consolidated CLO, the Company measures the fair value of the borrowings of the consolidated CLO as the fair value of the assets of the consolidated CLO less the fair value of the Company's economic interest in the CLO.

Derivatives and Hedging Activities The Company does not use derivative financial instruments for trading or speculative purposes. The Company uses derivative financial instruments primarily for purposes of hedging exposures to fluctuations in foreign currency exchange rates of certain assets and liabilities, and market exposures for certain seed investments. However, certain consolidated sponsored investment funds may also utilize derivatives as a part of their investment strategy.

Changes in the fair value of the Company's derivative financial instruments are recognized in earnings and, where applicable, are offset by the corresponding gain or loss on the related foreign-denominated assets or liabilities or hedged investments, on the condensed consolidated statements of income.

The Company may also use financial instruments designated as net investment hedges for accounting purposes to hedge net investments in international subsidiaries whose functional currency is not US dollars. The gain or loss from revaluing accounting hedges of net investments in foreign operations at the spot rate is deferred and reported within accumulated other comprehensive income (loss) on the condensed consolidated statements of financial condition. Amounts excluded from the effectiveness assessment are reported in the condensed consolidated statements of income using a systematic and rational method. The Company reassesses the effectiveness of its net investment hedges at least quarterly.

Leases The Company determines if a contract is a lease or contains a lease at inception. The Company accounts for its office facility leases as operating leases, which may include escalation clauses that are based on an index or market rate. The Company accounts for lease and non-lease components as a single component for its leases. The Company elected the short-term lease exception for leases with an initial term of 12 months or less. Consequently, such leases are not recorded on the condensed consolidated statement of financial condition. The Company's lease terms include options to extend or terminate the lease when it is reasonably certain they will be exercised or not, respectively.

Fixed lease payments are included in ROU assets and lease liabilities within other assets and other liabilities, respectively, on the condensed consolidated statement of financial condition. ROU assets and lease liabilities are recognized based on the present value of the future lease payments over the lease term at the commencement date using the Company's incremental borrowing rate as the discount rate. Fixed lease payments made over the lease term are recorded as lease expense on a straight-line basis. Variable lease payments based on usage, changes in an index or market rate are expensed as incurred.

Upon adoption of ASU 2016-02, for existing leases, the Company elected to determine the discount rate based on the remaining lease term as of January 1, 2019 and for lease payments based on an index or rate to apply the rate at commencement date. For new leases, the discount rates are based on the entire noncancelable lease term.

Separate Account Assets and Liabilities. Separate account assets are maintained by BlackRock Life Limited, a wholly owned subsidiary of the Company, which is a registered life insurance company in the United Kingdom, and represent segregated assets held for purposes of funding individual and group pension contracts. The life insurance company does not underwrite any insurance contracts that involve any insurance risk transfer from the insured to the life insurance company. The separate account assets primarily include equity securities, debt securities, money market funds and derivatives. The separate account assets are not subject to general claims of the creditors of BlackRock. These separate account assets and the related equal and offsetting liabilities are recorded as separate account assets and separate account liabilities on the condensed consolidated statements of financial condition.

The net investment income attributable to separate account assets supporting individual and group pension contracts accrues directly to the contract owner and is not reported on the condensed consolidated statements of income. While BlackRock has no economic interest in these separate account assets and liabilities, BlackRock earns policy administration and management fees associated with these products, which are included in investment advisory, administration fees and securities lending revenue on the condensed consolidated statements of income.

Separate Account Collateral Assets Held and Liabilities Under Securities Lending Agreements. The Company facilitates securities lending arrangements whereby securities held by separate accounts maintained by BlackRock Life Limited are lent to third parties under global master securities lending agreements. In exchange, the Company receives legal title to the collateral with minimum values generally ranging from approximately 102% to 112% of the value of the securities lent in order to reduce counterparty risk. The required collateral value is calculated on a daily basis. The global master securities lending agreements provide the Company the right to request additional collateral or, in the event of borrower default, the right to liquidate collateral. The securities lending transactions entered into by the Company are accompanied by an agreement that entitles the Company to request the borrower to return the securities at any time, therefore, these transactions are not reported as sales.

The Company records on the condensed consolidated statements of financial condition the cash and noncash collateral received under these BlackRock Life Limited securities lending arrangements as its own asset in addition to an equal and offsetting collateral liability for the obligation to return the collateral. The securities lending revenue earned from lending securities held by the separate accounts is included in investment advisory, administration fees and securities lending revenue on the condensed consolidated statements of income. During the nine months ended September 30, 2019 and 2018, the Company had not resold or repledged any of the collateral received under these arrangements. At September 30, 2019 and December 31, 2018, the fair value of loaned securities held by separate accounts was approximately \$17.5 billion and \$18.9 billion, respectively, and the fair value of the collateral held under these securities lending agreements was approximately \$18.7 billion and \$20.7 billion, respectively.

3. Acquisition

On May 10, 2019, the Company acquired 100% of the equity interests of eFront Holding SAS ("eFront Transaction" or "eFront"), a leading alternative investment management software and solutions provider for approximately \$1.3 billion, excluding the settlement of eFront's outstanding debt. The acquisition of eFront expands Aladdin's illiquid alternative capabilities and enables BlackRock to provide individual alternative or whole-portfolio technology solutions to clients.

The purchase price was funded through a combination of existing cash and issuance of commercial paper (subsequently repaid with existing cash) and long-term notes in April 2019. See Note 13, *Borrowings*, for information on the debt issuance in April 2019.

The purchase price for the eFront Transaction was allocated to the assets acquired and liabilities assumed based upon their estimated fair values at the date of the transaction. The goodwill recognized in connection with the acquisition is non-deductible for tax purposes and is primarily attributable to anticipated synergies from the transaction.

During the three months ended September 30, 2019, the amounts of goodwill, finite-lived intangible assets and deferred income tax liabilities were retrospectively adjusted to reflect new information obtained about facts that existed as of May 10, 2019, the eFront acquisition date. There was no material change to the condensed consolidated statements of income for the three and nine months ended September 30, 2019 as a result of these adjustments. A summary of the initial and revised fair values of the assets acquired and liabilities assumed in this acquisition is as follows⁽¹⁾

(in millions)	Initial Estimate of Fair Value	Revised Estimate of Fair Value
Accounts receivable	\$ 65	\$ 65
Finite-lived intangible assets:		
Customer relationships ⁽²⁾	452	410
Technology-related ⁽³⁾	205	203
Trade name ⁽⁴⁾	21	13
Goodwill	990	1,031
Other assets	31	31
Deferred income tax liabilities	(194)	(183)
Other liabilities assumed	(64)	(70)
Total consideration, net of cash acquired	<u>\$ 1,506</u>	<u>\$ 1,500</u>
Summary of consideration, net of cash acquired		
Cash paid including settlement of outstanding debt of approximately \$0.2 billion	\$ 1,555	\$ 1,555
Cash acquired	(49)	(55)
Total consideration, net of cash acquired	<u>\$ 1,506</u>	<u>\$ 1,500</u>

⁽¹⁾ At this time, the Company does not expect additional material changes to the value of the assets acquired or liabilities assumed in conjunction with the transaction with the exception of intangible assets, deferred income tax liabilities and other liabilities, which were valued using preliminary assumptions.

⁽²⁾ The fair value was determined based on the excess earnings method (a Level 3 input), has a weighted-average estimated useful life of approximately 10 years and is amortized using the accelerated amortization method.

⁽³⁾ The fair value was determined based upon a relief from royalty method (a Level 3 input), has a weighted-average estimated useful life of approximately eight years and is amortized using the accelerated amortization method.

⁽⁴⁾ The fair value was determined using a relief from royalty method (a Level 3 input), has an estimated useful life of approximately four years and is amortized using the accelerated amortization method.

Finite-lived intangible assets are amortized over their estimated useful lives, which range from four to 10 years. Amortization expense related to the finite-lived intangible assets was \$14 million and \$24 million, respectively, for the three and nine months ended September 30, 2019. The finite-lived intangible assets had a weighted-average remaining useful life of approximately nine years with remaining amortization expense as follows:

(in millions)	Amount
Year	
2019 (excluding the nine months ended September 30, 2019)	\$ 14
2020	62
2021	65
2022	69
2023	71
Thereafter	321
Total	<u>\$ 602</u>

For the three and nine months ended September 30, 2019, eFront contributed \$37 million and \$59 million, respectively, of revenue and did not have a material impact to net income attributable to BlackRock, Inc. Consequently, the Company has not presented pro forma combined results of operations for this acquisition.

4. Cash, Cash Equivalents and Restricted Cash

The following table provides a reconciliation of cash and cash equivalents reported within the condensed consolidated statements of financial condition to the cash, cash equivalents, and restricted cash reported within the condensed consolidated statements of cash flows

<i>(in millions)</i>	September 30, 2019	December 31, 2018
Cash and cash equivalents	\$ 4,476	\$ 6,302
Cash and cash equivalents of consolidated VIEs	131	186
Restricted cash included in other assets	17	17
Total cash, cash equivalents and restricted cash	<u>\$ 4,624</u>	<u>\$ 6,505</u>

5. Investments

A summary of the carrying value of total investments is as follows

<i>(in millions)</i>	September 30, 2019	December 31, 2018
Debt securities		
Held-to-maturity investments	\$ 212	\$ 188
Trading securities (debt securities of consolidated sponsored investment funds of \$169 and \$233 at September 30, 2019 and December 31, 2018, respectively)	210	265
Total debt securities	422	453
Equity securities at FVTNI ⁽¹⁾ (equity securities of consolidated sponsored investment funds of \$334 and \$291 at September 30, 2019 and December 31, 2018, respectively)	543	452
Equity method investments ⁽²⁾	930	781
Federal Reserve Bank stock ⁽³⁾	93	92
Carried interest ⁽⁴⁾	16	18
Other investments ⁽⁵⁾	113	—
Total investments	<u>\$ 2,117</u>	<u>\$ 1,796</u>

⁽¹⁾ Fair value recorded through net income ("FVTNI")

⁽²⁾ Equity method investments primarily include BlackRock's direct investments in BlackRock sponsored investment funds

⁽³⁾ At September 30, 2019 and December 31, 2018, there were no indicators of impairment of Federal Reserve Bank stock, which is held for regulatory purposes and is restricted from sale

⁽⁴⁾ Carried interest of consolidated sponsored investment funds accounted for as voting rights entities ("VREs") represents allocations to BlackRock's general partner capital accounts from certain funds. These balances are subject to change upon cash distributions, additional allocations or reallocations back to limited partners within the respective funds

⁽⁵⁾ Other investments include BlackRock's investments in nonmarketable equity securities, which are measured at cost, adjusted for observable price changes. See Note 2, *Significant Accounting Policies*, in the 2018 Form 10-K for more information on investments in nonmarketable equity securities

Held-to-Maturity Investments

The carrying value of held-to-maturity investments was \$212 million and \$188 million at September 30, 2019 and December 31, 2018, respectively. Held-to-maturity investments included foreign government debt held primarily for regulatory purposes and certain investments in CLOs. The amortized cost (carrying value) of these investments approximated fair value (primarily a Level 2 input). At September 30, 2019, \$68 million of these investments mature between five to ten years and \$144 million mature after ten years.

Equity and Trading Debt Securities

A summary of the cost and carrying value of equity and trading debt securities is as follows

(in millions)	September 30, 2019		December 31, 2018	
	Cost	Carrying Value	Cost	Carrying Value
Trading debt securities				
Corporate debt	\$ 125	\$ 126	\$ 144	\$ 140
Government debt	36	35	69	67
Asset/mortgage-backed debt	47	49	67	58
Total trading debt securities	<u>\$ 208</u>	<u>\$ 210</u>	<u>\$ 280</u>	<u>\$ 265</u>
Equity securities at FVTNI				
Deferred compensation plan mutual funds	\$ 6	\$ 22	\$ 21	\$ 34
Equity securities/multi-asset mutual funds	476	521	420	418
Total equity securities at FVTNI	<u>\$ 482</u>	<u>\$ 543</u>	<u>\$ 441</u>	<u>\$ 452</u>

PennyMac

In addition, the Company accounts for its interest in PennyMac Financial Services, Inc. ("PennyMac") as an equity method investment. At September 30, 2019 and December 31, 2018, the Company's investment in PennyMac is included in other assets on the condensed consolidated statements of financial condition. The carrying value and market value of the Company's interest (approximately 20% or 16 million shares) were approximately \$434 million and \$473 million, respectively, at September 30, 2019 and approximately \$397 million and \$331 million, respectively, at December 31, 2018. The market value of the Company's interest reflected the PennyMac stock price at September 30, 2019 and December 31, 2018, respectively (a Level 1 input).

6. Consolidated Voting Rights Entities

The Company consolidates certain sponsored investment funds accounted for as VREs because it is deemed to control such funds. The following table presents the amounts related to these consolidated VREs that were recorded on the condensed consolidated statements of financial condition, including BlackRock's net interest in these funds.

(in millions)	September 30, 2019	December 31, 2018
Cash and cash equivalents	\$ 11	\$ 59
Investments		
Trading debt securities	169	233
Equity securities at FVTNI	334	291
Total investments	503	524
Other assets	7	8
Other liabilities	(11)	(53)
NCI	(52)	(90)
BlackRock's net interests in consolidated VREs	<u>\$ 458</u>	<u>\$ 448</u>

BlackRock's total exposure to consolidated VREs represents the value of its economic ownership interest in these sponsored investment funds. Valuation changes associated with investments held at fair value by these consolidated VREs are reflected in nonoperating income (expense) and partially offset in net income (loss) attributable to noncontrolling interests for the portion not attributable to BlackRock.

The Company cannot readily access cash and cash equivalents held by consolidated VREs to use in its operating activities.

7. Variable Interest Entities

In the normal course of business, the Company is the manager of various types of sponsored investment vehicles, which may be considered variable interest entities ("VIEs"). The Company may from time to time own equity or debt securities or enter into derivatives with the vehicles, each of which are considered variable interests. The Company's involvement in financing the operations of the VIEs is generally limited to its investments in the entity. The Company consolidates entities when it is determined to be the primary beneficiary ("PB").

Consolidated VIEs. The Company's consolidated VIEs include certain sponsored investment products in which BlackRock has an investment and as the investment manager is deemed to have both the power to direct the most significant activities of the products and the right to receive benefits (or the obligation to absorb losses) that could potentially be significant to these sponsored investment products. The assets of these VIEs are not available to creditors of the Company. In addition, the investors in these VIEs have no recourse to the credit of the Company.

Consolidated VIE assets and liabilities are presented after intercompany eliminations in the following table.

<i>(in millions)</i>	September 30, 2019	December 31, 2018
Assets of consolidated VIEs		
Cash and cash equivalents	\$ 131	\$ 186
Investments		
Trading debt securities	1,120	1,395
Equity securities at FVTNI	971	569
Bank loans	183	84
Other investments	182	263
Carried interest	442	369
Total investments	2,898	2,680
Other assets	54	876
Total assets of consolidated VIEs	3,083	3,742
Liabilities of consolidated VIEs		
Borrowings	(186)	(84)
Other liabilities	(530)	(1,290)
NCI	(1,145)	(1,076)
BlackRock's net interests in consolidated VIEs	<u>\$ 1,222</u>	<u>\$ 1,292</u>

Net gain (loss) related to consolidated VIEs is presented in the following table:

<i>(in millions)</i>	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Nonoperating net gain (loss) on consolidated VIEs	\$ (5)	\$ (9)	\$ 128	\$ (21)
Net income (loss) attributable to NCI on consolidated VIEs	\$ —	\$ (14)	\$ 17	\$ (3)

Nonconsolidated VIEs At September 30, 2019 and December 31, 2018, the Company's carrying value of assets and liabilities included on the condensed consolidated statements of financial condition pertaining to nonconsolidated VIEs and its maximum risk of loss related to VIEs for which it held a variable interest, but for which it was not the PB, was as follows

(in millions)

	Investments	Advisory Fee Receivables	Other Net Assets (Liabilities)	Maximum Risk of Loss ⁽¹⁾
At September 30, 2019				
Sponsored investment products	\$ 498	\$ 88	\$ (10)	\$ 603
At December 31, 2018				
Sponsored investment products	\$ 348	\$ 43	\$ (6)	\$ 408

⁽¹⁾ At both September 30, 2019 and December 31, 2018, BlackRock's maximum risk of loss associated with these VIEs primarily related to BlackRock's investments and the collection of advisory fee receivables

The net assets of sponsored investment products that are nonconsolidated VIEs approximated \$12 billion and \$9 billion at September 30, 2019 and December 31, 2018, respectively

8. Fair Value Disclosures

Fair Value Hierarchy

Assets and liabilities measured at fair value on a recurring basis

September 30, 2019 (in millions)	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Investments Measured at NAV ⁽¹⁾	Other ⁽²⁾	September 30, 2019
Assets						
<u>Investments</u>						
Debt securities						
Held-to-maturity securities	\$ —	\$ —	\$ —	\$ —	\$ 212	\$ 212
Trading securities	—	205	5	—	—	210
Total debt securities	—	205	5	—	212	422
Equity securities at FVTNI						
Deferred compensation plan mutual funds	22	—	—	—	—	22
Equity securities/Multi-asset mutual funds	521	—	—	—	—	521
Total equity securities at FVTNI	543	—	—	—	—	543
Equity method						
Equity and fixed income mutual funds	113	—	—	—	—	113
Hedge funds/funds of hedge funds	—	—	—	206	—	206
Private equity funds	—	—	—	260	—	260
Real assets funds	—	—	—	320	—	320
Other	26	—	—	5	—	31
Total equity method	139	—	—	791	—	930
Federal Reserve Bank Stock	—	—	—	—	93	93
Carried interest	—	—	—	—	16	16
Other investments	—	—	—	—	113	113
Total investments	682	205	5	791	434	2,117
<u>Investments of consolidated VIEs</u>						
Trading debt securities	—	1,120	—	—	—	1,120
Equity securities at FVTNI	971	—	—	—	—	971
Bank loans	—	26	157	—	—	183
Private equity ⁽³⁾	1	—	9	27	76	113
Hedge fund	—	—	—	3	—	3
Real assets funds	—	—	—	66	—	66
Carried interest	—	—	—	—	442	442
Total investments of consolidated VIEs	972	1,146	166	96	518	2,898
Other assets ⁽⁴⁾	141	—	—	—	—	141
Separate account assets	66,395	28,446	—	—	660	95,501
<u>Separate account collateral held under securities lending agreements</u>						
Equity securities	8,577	—	—	—	—	8,577
Debt securities	—	10,122	—	—	—	10,122
Total separate account collateral held under securities lending agreements	8,577	10,122	—	—	—	18,699
Total	\$ 76,767	\$ 39,919	\$ 171	\$ 887	\$ 1,612	\$ 119,356
Liabilities:						
Borrowings of consolidated VIEs ⁽⁵⁾	\$ —	\$ —	\$ 186	\$ —	\$ —	\$ 186
Separate account collateral liabilities under securities lending agreements	8,577	10,122	—	—	—	18,699
Other liabilities ⁽⁶⁾	—	10	167	—	—	177
Total	\$ 8,577	\$ 10,132	\$ 353	\$ —	\$ —	\$ 19,062

⁽¹⁾ Amounts are comprised of certain investments measured at fair value using NAV (or its equivalent) as a practical expedient

⁽²⁾ Amounts are comprised of investments held at cost, adjusted for observable price changes, investments held at amortized cost, carried interest and certain equity method investments, which include sponsored investment funds and other assets, which are not accounted for under a fair value measure. In accordance with GAAP, certain equity method investees do not account for both their financial assets and liabilities under fair value measures, therefore, the Company's investment in such equity method investees may not represent fair value

⁽³⁾ Level 3 amounts primarily include direct investments in private equity companies held by private equity funds

⁽⁴⁾ Amount includes a minority investment in a publicly traded company.

⁽⁵⁾ Borrowings of consolidated VIEs are classified based on the significance of unobservable inputs used for calculating the fair value of consolidated CLO assets

⁽⁶⁾ Amounts primarily include contingent liabilities related to certain acquisitions (see Note 14, *Commitments and Contingencies* for more information)

Assets and liabilities measured at fair value on a recurring basis

December 31, 2018 (in millions)	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Investments Measured at NAV ⁽¹⁾	Other ⁽²⁾	December 31, 2018
Assets:						
<u>Investments</u>						
Debt securities						
Held-to-maturity securities	\$ —	\$ —	\$ —	\$ —	\$ 188	\$ 188
Trading securities	—	261	4	—	—	265
Total debt securities	—	261	4	—	188	453
Equity securities at FVTNI						
Deferred compensation plan mutual funds	34	—	—	—	—	34
Equity securities/Multi-asset mutual funds	418	—	—	—	—	418
Total equity securities at FVTNI	452	—	—	—	—	452
Equity method						
Equity and fixed income mutual funds	122	—	—	—	—	122
Hedge funds/funds of hedge funds	—	—	—	173	—	173
Private equity funds	—	—	—	116	—	116
Real assets funds	—	—	—	353	—	353
Other	—	—	—	14	3	17
Total equity method	122	—	—	656	3	781
Federal Reserve Bank Stock	—	—	—	—	92	92
Carried interest	—	—	—	—	18	18
Total investments	574	261	4	656	301	1,796
<u>Investments of consolidated VIEs</u>						
Trading debt securities	—	1,395	—	—	—	1,395
Equity securities at FVTNI	569	—	—	—	—	569
Bank loans	—	14	70	—	—	84
Private equity ⁽³⁾	—	—	82	48	75	205
Hedge fund	—	—	—	3	—	3
Real assets funds	—	—	—	55	—	55
Carried interest	—	—	—	—	369	369
Total investments of consolidated VIEs	569	1,409	152	106	444	2,680
Other assets ⁽⁴⁾	122	—	—	—	—	122
Separate account assets	63,610	25,810	—	—	865	90,285
<u>Separate account collateral held under securities lending agreements</u>						
Equity securities	15,066	—	—	—	—	15,066
Debt securities	—	5,589	—	—	—	5,589
Total separate account collateral held under securities lending agreements	15,066	5,589	—	—	—	20,655
Total	\$ 79,941	\$ 33,069	\$ 156	\$ 762	\$ 1,610	\$ 115,538
Liabilities:						
Borrowings of consolidated VIEs ⁽⁵⁾	\$ —	\$ —	\$ 84	\$ —	\$ —	\$ 84
Separate account collateral liabilities under securities lending agreements	15,066	5,589	—	—	—	20,655
Other liabilities ⁽⁶⁾	—	6	287	—	—	293
Total	\$ 15,066	\$ 5,595	\$ 371	\$ —	\$ —	\$ 21,032

⁽¹⁾ Amounts are comprised of certain investments measured at fair value using NAV (or its equivalent) as a practical expedient

⁽²⁾ Amounts are comprised of investments held at cost or amortized cost, carried interest and certain equity method investments, which include sponsored investment funds and other assets, which are not accounted for under a fair value measure. In accordance with GAAP, certain equity method investees do not account for both their financial assets and liabilities under fair value measures, therefore, the Company's investment in such equity method investees may not represent fair value

⁽³⁾ Level 3 amounts include direct investments in private equity companies held by private equity funds

⁽⁴⁾ Amount includes a minority investment in a publicly traded company

⁽⁵⁾ Borrowings of consolidated VIEs are classified based on the significance of unobservable inputs used for calculating the fair value of consolidated CLO assets

⁽⁶⁾ Amounts primarily include contingent liabilities related to certain acquisitions (see Note 14, *Commitments and Contingencies*, for more information)

Level 3 Assets. Level 3 assets may include investments in CLOs and bank loans of consolidated CLOs which were valued based on single-broker nonbinding quotes and direct private equity investments which were valued using the market or income approach as described below

Level 3 investments of consolidated VIEs of \$166 million and \$152 million at September 30, 2019 and December 31, 2018, respectively, related to direct investments in private equity companies held by consolidated private equity funds. At both September 30, 2019 and December 31, 2018, Level 3 investments of consolidated VIEs also included bank loans of a consolidated CLO which were valued based on single-broker nonbinding quotes

Direct investments in private equity companies may be valued using the market approach or the income approach, or a combination thereof, and were valued based on an assessment of each underlying investment, incorporating evaluation of additional significant third-party financing, changes in valuations of comparable peer companies, the business environment of the companies, market indices, assumptions relating to appropriate risk adjustments for nonperformance and legal restrictions on disposition, among other factors. The fair value derived from the methods used is evaluated and weighted, as appropriate, considering the reasonableness of the range of values indicated. Under the market approach, fair value may be determined by reference to multiples of market-comparable companies or transactions, including earnings before interest, taxes, depreciation and amortization multiples. Under the income approach, fair value may be determined by discounting the expected cash flows to a single present value amount using current expectations about those future amounts. Unobservable inputs used in a discounted cash flow model may include projections of operating performance generally covering a five-year period and a terminal value of the private equity direct investment. For investments utilizing a discounted cash flow valuation technique, a significant increase (decrease) in the discount rate, risk premium or discount for lack of marketability in isolation could have resulted in a significantly lower (higher) fair value measurement as of September 30, 2019. For investments utilizing the market-comparable valuation technique, a significant increase (decrease) in a valuation multiple in isolation could have resulted in a significantly higher (lower) fair value measurement as of September 30, 2019.

Level 3 Liabilities. Level 3 liabilities primarily include contingent liabilities associated with certain acquisitions, which were valued based upon discounted cash flow analyses using unobservable market data inputs and borrowings of consolidated VIEs, which were valued based on the fair value of the assets of the consolidated CLO less the fair value of the Company's economic interest in the CLO.

Changes in Level 3 Assets and Liabilities Measured at Fair Value on a Recurring Basis for the Three Months Ended September 30, 2019

(in millions)	June 30, 2019	Realized and Unrealized Gains (Losses)	Purchases	Sales and Maturities	Issuances and other Settlements ⁽¹⁾	Transfers into Level 3	Transfers out of Level 3	September 30, 2019	Total Net Unrealized Gains (Losses) Included in Earnings ⁽²⁾
Assets:									
Investments:									
Debt securities									
Trading	\$ 2	\$ —	\$ 3	\$ —	\$ —	\$ —	\$ —	\$ 5	\$ —
Total investments	2	—	3	—	—	—	—	5	—
Assets of consolidated VIEs									
Bank loans ⁽³⁾	125	—	32	—	—	—	—	157	—
Private equity	9	1	—	—	—	—	(1)	9	1
Total Assets of consolidated VIEs	134	1	32	—	—	—	(1)	166	1
Total Level 3 assets	\$ 136	\$ 1	\$ 35	\$ —	\$ —	\$ —	\$ (1)	\$ 171	\$ 1
Liabilities:									
Borrowings of consolidated VIEs ⁽³⁾	\$ 142	\$ —	\$ —	\$ —	\$ 44	\$ —	\$ —	\$ 186	\$ —
Other liabilities ⁽⁴⁾	168	1	—	—	—	—	—	167	1
Total Level 3 liabilities	\$ 310	\$ 1	\$ —	\$ —	\$ 44	\$ —	\$ —	\$ 353	\$ 1

⁽¹⁾ Amounts include proceeds from borrowings of a consolidated CLO and contingent liability payments in connection with certain prior acquisitions

⁽²⁾ Earnings attributable to the change in unrealized gains (losses) relating to assets and liabilities still held at the reporting date

⁽³⁾ Bank loans and borrowings of consolidated VIEs amounts are related to a consolidated CLO

⁽⁴⁾ Amounts include contingent liabilities in connection with certain acquisitions

Changes in Level 3 Assets and Liabilities Measured at Fair Value on a Recurring Basis for the Nine Months Ended September 30, 2019

<i>(in millions)</i>	December 31, 2018	Realized and Unrealized Gains (Losses)	Purchases	Sales and Maturities	Issuances and other Settlements ⁽¹⁾	Transfers into Level 3	Transfers out of Level 3 ⁽²⁾	September 30, 2019	Total Net Unrealized Gains (Losses) Included in Earnings ⁽³⁾
Assets									
<u>Investments</u>									
Debt securities									
Trading	\$ 4	\$ —	\$ 5	\$ —	\$ —	\$ —	\$ (4)	\$ 5	\$ —
Total investments	4	—	5	—	—	—	(4)	5	—
<u>Assets of consolidated VIEs</u>									
Bank loans ⁽⁴⁾	70	—	87	—	—	—	—	157	—
Private equity	82	—	—	—	—	—	(73)	9	—
Total Assets of consolidated VIEs	152	—	87	—	—	—	(73)	166	—
Total Level 3 assets	\$ 156	\$ —	\$ 92	\$ —	\$ —	\$ —	\$ (77)	\$ 171	\$ —
Liabilities:									
Borrowings of consolidated VIEs ⁽⁴⁾	\$ 84	\$ —	\$ —	\$ —	\$ 102	\$ —	\$ —	\$ 186	\$ —
Other liabilities ⁽⁵⁾	287	(18)	—	—	(138)	—	—	167	(18)
Total Level 3 liabilities	\$ 371	\$ (18)	\$ —	\$ —	\$ (36)	\$ —	\$ —	\$ 353	\$ (18)

⁽¹⁾ Amounts include proceeds from borrowings of a consolidated CLO and contingent liability payments in connection with certain prior acquisitions

⁽²⁾ Amounts include an investment in a consolidated entity that no longer qualifies as an investment company and is no longer accounted for under a fair value measure

⁽³⁾ Earnings attributable to the change in unrealized gains (losses) relating to assets and liabilities still held at the reporting date

⁽⁴⁾ Bank loans and borrowings of consolidated VIEs amounts are related to a consolidated CLO

⁽⁵⁾ Amounts include contingent liabilities in connection with certain acquisitions

Changes in Level 3 Assets and Liabilities Measured at Fair Value on a Recurring Basis for the Nine Months Ended September 30, 2018

(in millions)	December 31, 2017	Realized and Unrealized Gains (Losses)	Purchases	Sales and Maturities	Issuances and other Settlements ⁽¹⁾	Transfers into Level 3	Transfers out of Level 3	September 30, 2018	Total Net Unrealized Gains (Losses) Included in Earnings ⁽²⁾
Assets:									
Investments									
Available-for-sale securities ⁽³⁾	\$ —	\$ —	\$ 26	\$ —	\$ —	\$ —	\$ (26)	\$ —	\$ —
Trading	—	—	5	—	—	—	(5)	—	—
Total investments	—	—	31	—	—	—	(31)	—	—
Assets of consolidated VIEs									
Private equity	116	1	—	(12)	—	—	—	105	1
Bank loans ⁽⁴⁾	—	—	—	—	44	—	—	44	—
Total Assets of consolidated VIEs	116	1	—	(12)	44	—	—	149	1
Total Level 3 assets	\$ 116	\$ 1	\$ 31	\$ (12)	\$ 44	\$ —	\$ (31)	\$ 149	\$ 1
Liabilities:									
Borrowings of consolidated VIEs ⁽⁴⁾	\$ —	\$ —	\$ —	\$ —	\$ 44	\$ —	\$ —	\$ 44	\$ —
Other liabilities ⁽⁵⁾	236	(33)	—	—	(10)	—	—	259	(33)
Total Level 3 liabilities	\$ 236	\$ (33)	\$ —	\$ —	\$ 34	\$ —	\$ —	\$ 303	\$ (33)

⁽¹⁾ Issuances and other settlements amount includes a contingent liability in connection with an acquisition, partially offset by a contingent liability payment in connection with a prior acquisition

⁽²⁾ Earnings attributable to the change in unrealized gains (losses) relating to assets and liabilities still held at the reporting date

⁽³⁾ Amounts include investments in CLOs

⁽⁴⁾ Bank loans and borrowings of consolidated VIEs amounts are related to the consolidation of one additional CLO

⁽⁵⁾ Amounts include contingent liabilities in connection with certain acquisitions

Realized and Unrealized Gains (Losses) for Level 3 Assets and Liabilities Realized and unrealized gains (losses) recorded for Level 3 assets and liabilities are reported in nonoperating income (expense) on the condensed consolidated statements of income. A portion of net income (loss) for consolidated sponsored investment funds is allocated to noncontrolling interests to reflect net income (loss) not attributable to the Company.

Transfers in and/or out of Levels. Transfers in and/or out of levels are reflected when significant inputs, including market inputs or performance attributes, used for the fair value measurement become observable/unobservable, or when the carrying value of certain equity method investments no longer represents fair value as determined under valuation methodologies.

Disclosures of Fair Value for Financial Instruments Not Held at Fair Value At September 30, 2019 and December 31, 2018, the fair value of the Company's financial instruments not held at fair value are categorized in the table below.

(in millions)	September 30, 2019		December 31, 2018		Fair Value Hierarchy
	Carrying Amount	Estimated Fair Value	Carrying Amount	Estimated Fair Value	
Financial Assets⁽¹⁾					
Cash and cash equivalents	\$ 4,476	\$ 4,476	\$ 6,302	\$ 6,302	Level 1 ^{(2) (3)}
Cash and cash equivalents of consolidated VIEs	\$ 131	\$ 131	\$ 186	\$ 186	Level 1 ^{(2) (3)}
Other assets	\$ 61	\$ 61	\$ 18	\$ 18	Level 1 ^{(2) (4)}
Financial Liabilities					
Long-term borrowings	\$ 5,932	\$ 6,257	\$ 4,979	\$ 5,034	Level 2 ⁽⁵⁾
Other liabilities	\$ 250	\$ 250	\$ —	\$ —	Level 3 ⁽⁶⁾

⁽¹⁾ See Note 5, *Investments*, for further information on investments not held at fair value.

⁽²⁾ Cash and cash equivalents are carried at either cost or amortized cost, which approximates fair value due to their short-term maturities.

⁽³⁾ At September 30, 2019 and December 31, 2018, approximately \$120 million and \$173 million, respectively, of money market funds were recorded within cash and cash equivalents on the condensed consolidated statements of financial condition. In addition, at September 30, 2019 and December 31, 2018, approximately \$21 million and \$7 million, respectively, of money market funds were recorded within cash and cash equivalents of consolidated VIEs. Money market funds are valued based on quoted market prices, or \$1.00 per share, which generally is the NAV of the fund.

⁽⁴⁾ Other assets include restricted cash and cash collateral deposited with certain derivative counterparties. The carrying values of these assets approximate fair value due to their short-term maturities.

⁽⁵⁾ Long-term borrowings are recorded at amortized cost net of debt issuance costs. The fair value of the long-term borrowings, including the current portion of long-term borrowings, is determined using market prices at the end of September 2019 and December 2018, respectively. See Note 13, *Borrowings*, for the fair value of each of the Company's long-term borrowings.

⁽⁶⁾ Amount includes a liability recorded at amortized cost, which approximates fair value at September 30, 2019.

Investments in Certain Entities that Calculate Net Asset Value Per Share

As a practical expedient to value certain investments that do not have a readily determinable fair value and have attributes of an investment company, the Company uses NAV as the fair value. The following tables list information regarding all investments that use a fair value measurement to account for both their financial assets and financial liabilities in their calculation of a NAV per share (or equivalent).

September 30, 2019

<i>(in millions)</i>	Ref	Fair Value	Total Unfunded Commitments	Redemption Frequency	Redemption Notice Period
Equity method: ⁽¹⁾					
Hedge funds/funds of hedge funds	(a)	\$ 206	\$ 111	Daily/Monthly (28%) Quarterly (17%) N/R (55%)	1 – 90 days
Private equity funds	(b)	260	204	N/R	N/R
Real assets funds	(c)	320	109	Quarterly (61%) N/R (39%)	60 days
Other		5	10	N/R	N/R
Consolidated VIEs:					
Private equity funds of funds	(d)	27	11	N/R	N/R
Hedge fund	(a)	3	—	Quarterly	90 days
Real assets funds	(c)	66	101	N/R	N/R
Total		\$ 887	\$ 546		

December 31, 2018

<i>(in millions)</i>	Ref	Fair Value	Total Unfunded Commitments	Redemption Frequency	Redemption Notice Period
Equity method: ⁽¹⁾					
Hedge funds/funds of hedge funds	(a)	\$ 173	\$ 96	Daily/Monthly (30%) Quarterly (18%) N/R (52%)	1 – 90 days
Private equity funds	(b)	116	83	N/R	N/R
Real assets funds	(c)	353	93	Quarterly (68%) N/R (32%)	60 days
Other		14	16	Daily (80%) N/R (20%)	5 days
Consolidated VIEs:					
Private equity funds of funds	(d)	48	18	N/R	N/R
Hedge fund	(a)	3	—	Quarterly	90 days
Real assets funds	(c)	55	37	N/R	N/R
Total		\$ 762	\$ 343		

N/R – not redeemable

- (1) Comprised of equity method investments, which include investment companies, which account for their financial assets and most financial liabilities under fair value measures, therefore, the Company's investment in such equity method investees approximates fair value
- (a) This category includes hedge funds and funds of hedge funds that invest primarily in equities, fixed income securities, distressed credit, opportunistic and mortgage instruments and other third-party hedge funds. The fair values of the investments have been estimated using the NAV of the Company's ownership interest in partners' capital. The liquidation period for the investments in the funds that are not subject to redemption is unknown at both September 30, 2019 and December 31, 2018.
- (b) This category includes several private equity funds that initially invest in nonmarketable securities of private companies, which ultimately may become public in the future. The fair values of these investments have been estimated using capital accounts representing the Company's ownership interest in the funds as well as other performance inputs. The Company's investment in each fund is not subject to redemption and is normally returned through distributions as a result of the liquidation of the underlying assets of the private equity funds. The liquidation period for the investments in these funds is unknown at both September 30, 2019 and December 31, 2018.

- (c) This category includes several real assets funds that invest directly and indirectly in real estate or infrastructure. The fair values of the investments have been estimated using capital accounts representing the Company's ownership interest in the funds. The Company's investments that are not subject to redemption or are not currently redeemable are normally returned through distributions and realizations of the underlying assets of the funds. The liquidation periods for the investments in the funds that are not subject to redemptions is unknown at both September 30, 2019 and December 31, 2018. The total remaining unfunded commitments to real assets funds were \$210 million and \$130 million at September 30, 2019 and December 31, 2018, respectively. The Company had contractual obligations to the real assets funds of \$173 million at September 30, 2019 and \$117 million at December 31, 2018.
- (d) This category includes the underlying third-party private equity funds within consolidated BlackRock sponsored private equity funds of funds. The fair values of the investments in the third-party funds have been estimated using capital accounts representing the Company's ownership interest in each fund in the portfolio as well as other performance inputs. These investments are not subject to redemption or are not currently redeemable, however, for certain funds, the Company may sell or transfer its interest which may need approval by the general partner of the underlying funds. Due to the nature of the investments in this category, the Company reduces its investment by distributions that are received through the realization of the underlying assets of the funds. The liquidation period for the underlying assets of these funds is unknown at both September 30, 2019 and December 31, 2018. The total remaining unfunded commitments to other third-party funds were \$11 million and \$18 million at September 30, 2019 and December 31, 2018, respectively. The Company had contractual obligations to the consolidated funds of \$22 million at both September 30, 2019 and December 31, 2018.

Fair Value Option

At September 30, 2019 and December 31, 2018, the Company elected the fair value option for certain investments in CLOs of approximately \$33 million and \$32 million, respectively, reported within investments.

In addition, the Company elected the fair value option for bank loans and borrowings of a consolidated CLO, recorded within investments and borrowings of consolidated VIEs, respectively. The following table summarizes the information related to these bank loans and borrowings at September 30, 2019 and December 31, 2018.

(in millions)	September 30, 2019	December 31, 2018
CLO Bank loans:		
Aggregate principal amounts outstanding	\$ 183	\$ 84
Fair value	183	84
Aggregate unpaid principal balance in excess of (less than) fair value	\$ —	\$ —
CLO Borrowings:		
Aggregate principal amounts outstanding	\$ 186	\$ 84
Fair value	186	84

At September 30, 2019, the principal amounts outstanding of the borrowings issued by the CLOs mature in 2030.

During the three and nine months ended September 30, 2019 and December 31, 2018, the net gains (losses) from the change in fair value of the bank loans and borrowings held by the consolidated CLO were not material and were recorded in net gain (loss) on consolidated VIEs on the condensed consolidated statements of income. The change in fair value of the assets and liabilities included interest income and expense, respectively.

9. Derivatives and Hedging

The Company maintains a program to enter into swaps to hedge against market price and interest rate exposures with respect to certain seed investments in sponsored investment products. At September 30, 2019 and December 31, 2018, the Company had outstanding total return swaps with aggregate notional values of approximately \$533 million and \$483 million, respectively.

At both September 30, 2019 and December 31, 2018, the Company had a derivative providing credit protection of approximately \$17 million to a counterparty, representing the Company's maximum risk of loss with respect to the provision of credit protection. The Company carries the derivative at fair value based on the expected discounted future cash outflows under the arrangement.

The Company executes forward foreign currency exchange contracts to mitigate the risk of certain foreign exchange movements. At September 30, 2019 and December 31, 2018, the Company had outstanding forward foreign currency exchange contracts with aggregate notional values of approximately \$2.4 billion and \$2.2 billion, respectively.

The fair values of the outstanding total return swaps, credit default swap and forward foreign currency exchange contracts were not material to the condensed consolidated statement of financial condition at both September 30, 2019 and December 31, 2018.

The following table presents gains (losses) recognized in the condensed consolidated statements of income on derivative instruments:

(in millions)	Statement of Income Classification	Three Months Ended September 30,		Nine Months Ended September 30,	
		2019	2018	2019	2018
		Gains (Losses)		Gains (Losses)	
Derivative Instruments					
Total return swaps	Nonoperating income (expense)	\$ 2	\$ (12)	\$ (62)	\$ (5)
Forward foreign currency exchange contracts	General and administration expense	(43)	(27)	(56)	(90)
Total gain (loss) from derivative instruments		<u>\$ (41)</u>	<u>\$ (39)</u>	<u>\$ (118)</u>	<u>\$ (95)</u>

The Company consolidates certain sponsored investment funds, which may utilize derivative instruments as a part of the funds' investment strategies. The change in fair value of such derivatives, which is recorded in nonoperating income (expense), was not material for the three and nine months ended September 30, 2019 and 2018

See Note 13, *Borrowings*, in the 2018 Form 10-K for more information on the Company's net investment hedge

10. Leases

The following table presents components of lease cost included in general and administration expense on the condensed consolidated statement of income

(in millions)	Three Months Ended September 30, 2019	Nine Months Ended September 30, 2019
Lease cost:		
Operating lease cost ⁽¹⁾	\$ 36	\$ 104
Variable lease cost ⁽²⁾	10	28
Total lease cost	<u>\$ 46</u>	<u>\$ 132</u>

⁽¹⁾ Amount includes short-term leases, which are immaterial for the three and nine months ended September 30, 2019

⁽²⁾ Amount includes operating lease payments, which may be adjusted based on usage, changes in an index or market rate

(in millions)	Statement of Financial Condition Classification	September 30, 2019
Statement of Financial Condition information:		
Operating lease ROU assets	Other assets	\$ 617
Operating lease liabilities	Other liabilities	\$ 724

Supplemental information related to operating lease is summarized below

(in millions)

Supplemental cash flow information:

Cash paid for amounts included in the measurement of operating lease liabilities

Nine Months Ended September 30, 2019	
\$	105

Supplemental noncash information:

ROU assets in exchange for operating lease liabilities in connection with the adoption of ASU 2016-02

\$	661
\$	54

ROU assets in exchange for operating lease liabilities

**Nine Months Ended
September 30, 2019**

Lease term and discount rate:

Weighted-average remaining lease term

9 years

Weighted-average discount rate

3 %

(in millions)

Maturity of operating lease liabilities at September 30, 2019

Remainder of 2019

Amount ⁽¹⁾	
\$	37

2020

144

2021

136

2022

124

2023

73

Thereafter

311

Total lease payments

\$	825
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Less imputed interest

101

Present value of lease liabilities

\$	724
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⁽¹⁾ Amount excludes \$1.3 billion of legally binding minimum lease payments for leases signed but not yet commenced. See Note 14, *Commitments and Contingencies*, for more information.

11. Goodwill

Goodwill activity during the nine months ended September 30, 2019 was as follows:

(in millions)

December 31, 2018

\$	13,526
----	--------

Acquisition ⁽¹⁾

1,031

Goodwill adjustments related to Quellos and other ⁽²⁾

(5)

September 30, 2019

\$	14,552
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⁽¹⁾ The increase in goodwill during the nine months ended September 30, 2019 resulted from the \$1,031 million of goodwill associated with the eFront Transaction, which closed on May 10, 2019. See Note 3, *Acquisition*, for information on the eFront Transaction.

⁽²⁾ The decrease in goodwill during the nine months ended September 30, 2019 primarily resulted from a decline related to tax benefits realized from tax-deductible goodwill in excess of book goodwill from the acquisition of the fund-of-funds business of Quellos Group, LLC in October 2007 (the "Quellos Transaction"). Goodwill related to the Quellos Transaction will continue to be reduced in future periods by the amount of tax benefits realized from tax-deductible goodwill in excess of book goodwill from the Quellos Transaction. The balance of the Quellos tax-deductible goodwill in excess of book goodwill was approximately \$114 million and \$137 million at September 30, 2019 and December 31, 2018, respectively.

12. Intangible Assets

The carrying amounts of identifiable intangible assets are summarized as follows

(in millions)

	Indefinite-lived	Finite-lived	Total
December 31, 2018	\$ 17,578	\$ 261	\$ 17,839
Amortization expense	—	(68)	(68)
Acquisitions ⁽¹⁾	—	636	636
September 30, 2019	<u>\$ 17,578</u>	<u>\$ 829</u>	<u>\$ 18,407</u>

⁽¹⁾ Amount primarily contains intangible assets acquired in connection with the eFront Transaction. The Company acquired \$410 million of finite-lived customer relationships, \$203 million of finite-lived technology-related intangible assets and \$13 million of a finite-lived trade name, with weighted-average estimated lives of approximately 10 years, eight years and four years, respectively. See Note 3, *Acquisition*, for information on the eFront Transaction.

13. Borrowings

Short-Term Borrowings

2019 Revolving Credit Facility. The Company's credit facility has an aggregate commitment amount of \$4.0 billion and was amended in March 2019 to extend the maturity date to March 2024 (the "2019 credit facility"). The 2019 credit facility permits the Company to request up to an additional \$1.0 billion of borrowing capacity, subject to lender credit approval, increasing the overall size of the 2019 credit facility to an aggregate principal amount not to exceed \$5.0 billion. Interest on borrowings outstanding accrues at a rate based on the applicable London Interbank Offered Rate plus a spread. The 2019 credit facility requires the Company not to exceed a maximum leverage ratio (ratio of net debt to earnings before interest, taxes, depreciation and amortization, where net debt equals total debt less unrestricted cash) of 3 to 1, which was satisfied with a ratio of less than 1 to 1 at September 30, 2019. The 2019 credit facility provides back-up liquidity to fund ongoing working capital for general corporate purposes and various investment opportunities. At September 30, 2019, the Company had no amount outstanding under the credit facility.

Commercial Paper Program. The Company can issue unsecured commercial paper notes (the "CP Notes") on a private-placement basis up to a maximum aggregate amount outstanding at any time of \$4.0 billion. The commercial paper program is currently supported by the 2019 credit facility. At September 30, 2019, BlackRock had no CP Notes outstanding.

Long-Term Borrowings

The carrying value and fair value of long-term borrowings determined using market prices and EUR/USD foreign exchange rate at September 30, 2019 included the following

	Maturity Amount	Unamortized Discount and Debt Issuance Costs	Carrying Value	Fair Value
(in millions)				
5.00% Notes due 2019	\$ 1,000	\$ —	\$ 1,000	\$ 1,005
4.25% Notes due 2021	750	(1)	749	778
3.375% Notes due 2022	750	(2)	748	781
3.50% Notes due 2024	1,000	(4)	996	1,066
1.25% Notes due 2025	763	(5)	758	818
3.20% Notes due 2027	700	(5)	695	741
3.25% Notes due 2029	1,000	(14)	986	1,068
Total Long-term Borrowings	<u>\$ 5,963</u>	<u>\$ (31)</u>	<u>\$ 5,932</u>	<u>\$ 6,257</u>

2029 Notes. In April 2019, the Company issued \$1.0 billion in aggregate principal amount of 3.25% senior unsecured and unsubordinated notes maturing on April 30, 2029 (the "2029 Notes"). Interest is payable semi-annually on April 30 and October 30 of each year, commencing October 30, 2019, and is approximately \$33 million per year. The 2029 Notes may be redeemed prior to January 30, 2029 in whole or in part at any time, at the option of the Company, at a "make-whole" redemption price or at par thereafter. The unamortized discount and debt issuance costs are being amortized over the remaining term of the 2029 Notes.

See Note 13, *Borrowings*, in the 2018 Form 10-K for more information regarding the Company's borrowings.

14. Commitments and Contingencies

Investment Commitments. At September 30, 2019, the Company had \$533 million of various capital commitments to fund sponsored investment funds, including consolidated VIEs. These funds include private equity funds, real assets funds and opportunistic funds. This amount excludes additional commitments made by consolidated funds of funds to underlying third-party funds as third-party noncontrolling interest holders have the legal obligation to fund the respective commitments of such funds of funds. Generally, the timing of the funding of these commitments is unknown and the commitments are callable on demand at any time prior to the expiration of the commitment. These unfunded commitments are not recorded on the condensed consolidated statements of financial condition. These commitments do not include potential future commitments approved by the Company that are not yet legally binding. The Company intends to make additional capital commitments from time to time to fund additional investment products for, and with, its clients.

Lease Commitment. As of September 30, 2019, there were no material changes to the lease commitments as reported in the 2018 Form 10-K. At December 31, 2018, future minimum commitments under the operating leases were as follows.

(in millions)

Year	Amount
2019	\$ 145
2020	139
2021	130
2022	121
2023	106
Thereafter	1,516
Total	<u>\$ 2,157</u>

In May 2017, the Company entered into an agreement with 50 HYMC Owner LLC, for the lease of approximately 847,000 square feet of office space located at 50 Hudson Yards, New York, New York. The term of the lease is twenty years from the date that rental payments begin, expected to occur in May 2023, with the option to renew for a specified term. The lease requires annual base rental payments of approximately \$51 million per year during the first five years of the lease term, increasing every five years to \$58 million, \$66 million and \$74 million per year (or approximately \$1.2 billion in base rent over its twenty-year term).

Contingencies

Contingent Payments Related to Business Acquisitions. In connection with certain acquisitions, BlackRock is required to make contingent payments, subject to achieving specified performance targets, which may include revenue related to acquired contracts or new capital commitments for certain products. The fair value of the remaining aggregate contingent payments at September 30, 2019 totaled \$167 million and is included in other liabilities on the condensed consolidated statements of financial condition.

Other Contingent Payments. The Company acts as the portfolio manager in a derivative transaction and has a maximum potential exposure of \$17 million between the Company and counterparty. See Note 9, *Derivatives and Hedging*, for further discussion.

Legal Proceedings. From time to time, BlackRock receives subpoenas or other requests for information from various US federal and state governmental and regulatory authorities and international governmental and regulatory authorities in connection with industry-wide or other investigations or proceedings. It is BlackRock's policy to cooperate fully with such matters. The Company, certain of its subsidiaries and employees have been named as defendants in various legal actions, including arbitrations and other litigation arising in connection with BlackRock's activities. Additionally, BlackRock-advised investment portfolios may be subject to lawsuits, any of which potentially could harm the investment returns of the applicable portfolio or result in the Company being liable to the portfolios for any resulting damages.

On May 27, 2014, certain investors in the BlackRock Global Allocation Fund, Inc. and the BlackRock Equity Dividend Fund (collectively, the "Funds") filed a consolidated complaint (the "Consolidated Complaint") in the US District Court for the District of New Jersey against BlackRock Advisors, LLC, BlackRock Investment Management, LLC and

BlackRock International Limited under the caption *In re BlackRock Mutual Funds Advisory Fee Litigation*. In the lawsuit, which purports to be brought derivatively on behalf of the Funds, the plaintiffs allege that the defendants violated Section 36(b) of the Investment Company Act by receiving allegedly excessive investment advisory fees from the Funds. On June 13, 2018, the court granted in part and denied in part the defendants' motion for summary judgment. On July 25, 2018, the plaintiffs served a pleading that supplemented the time period of their alleged damages to run through the date of trial. The lawsuit seeks, among other things, to recover on behalf of the Funds all allegedly excessive advisory fees received by the defendants beginning twelve months preceding the start of the lawsuit with respect to each Fund and ending on the date of judgment, along with purported lost investment returns on those amounts, plus interest. The trial on the remaining issues was completed on August 29, 2018. On February 8, 2019, the court issued an order dismissing the claims in their entirety. The plaintiffs filed a notice of appeal on March 8, 2019, which remains pending. The defendants believe the claims in this lawsuit are without merit.

On June 16, 2016, iShares Trust, BlackRock, Inc. and certain of its advisory subsidiaries, and the directors and certain officers of the iShares ETFs were named as defendants in a purported class action lawsuit filed in California state court. The lawsuit was filed by investors in certain iShares ETFs (the "ETFs"), and alleges the defendants violated the federal securities laws by failing to adequately disclose in prospectuses issued by the ETFs the risks to the ETFs' shareholders in the event of a "flash crash." The plaintiffs seek unspecified monetary and rescission damages. The plaintiffs' complaint was dismissed in December 2016 and on January 6, 2017, the plaintiffs filed an amended complaint. On April 27, 2017, the court partially granted the defendants' motion for judgment on the pleadings, dismissing certain of the plaintiffs' claims. On September 18, 2017, the court issued a decision dismissing the remainder of the lawsuit after a one-day bench trial. On December 1, 2017, the plaintiffs appealed the dismissal of their lawsuit, which remains pending. The defendants believe the claims in this lawsuit are without merit.

On April 5, 2017, BlackRock, Inc., BlackRock Institutional Trust Company, N.A. ("BTC"), the BlackRock, Inc. Retirement Committee and various sub-committees, and a BlackRock employee were named as defendants in a purported class action lawsuit brought in the US District Court for the Northern District of California by a former employee on behalf of all participants and beneficiaries in the BlackRock employee 401(k) Plan (the "Plan") from April 5, 2011 to the present. The lawsuit generally alleges that the defendants breached their duties towards Plan participants in violation of the Employee Retirement Income Security Act of 1974 by, among other things, offering investment options that were overly expensive, underperformed unaffiliated peer funds, focused disproportionately on active versus passive strategies, and were unduly concentrated in investment options managed by BlackRock. On October 18, 2017, the plaintiffs filed an Amended Complaint, which, among other things, added as defendants certain current and former members of the BlackRock Retirement and Investment Committees. The Amended Complaint also included a new purported class claim on behalf of investors in certain Collective Trust Funds ("CTFs") managed by BTC. Specifically, the plaintiffs allege that BTC, as fiduciary to the CTFs, engaged in self-dealing by, most significantly, selecting itself as the securities lending agent on terms that the plaintiffs claim were excessive. The Amended Complaint also alleged that BlackRock took undue risks in its management of securities lending cash reinvestment vehicles during the financial crisis. On August 23, 2018, the court granted permission to the plaintiffs to file a Second Amended Complaint ("SAC") which added as defendants the BlackRock, Inc. Management Development and Compensation Committee, the Plan's independent investment consultant and the Plan's Administrative Committee and its members. On October 22, 2018, BlackRock filed a motion to dismiss the SAC, and on June 3, 2019, the plaintiffs filed a motion seeking to certify both the Plan and the CTF classes. On September 3, 2019, the court granted BlackRock's motion to dismiss part of the plaintiffs' claim seeking to recover alleged losses in the securities lending vehicles, but denied the motion to dismiss in all other respects. Plaintiffs' motion to certify the Plan and CTF classes remains pending. The defendants believe the claims in this lawsuit are without merit.

Management, after consultation with legal counsel, currently does not anticipate that the aggregate liability arising out of regulatory matters or lawsuits will have a material effect on BlackRock's results of operations, financial position, or cash flows. However, there is no assurance as to whether any such pending or threatened matters will have a material effect on BlackRock's results of operations, financial position or cash flows in any future reporting period. Due to uncertainties surrounding the outcome of these matters, management cannot reasonably estimate the possible loss or range of loss that may arise from these matters.

Indemnifications In the ordinary course of business or in connection with certain acquisition agreements, BlackRock enters into contracts pursuant to which it may agree to indemnify third parties in certain circumstances. The terms of these indemnities vary from contract to contract and the amount of indemnification liability, if any, cannot be determined or the likelihood of any liability is considered remote. Consequently, no liability has been recorded on the condensed consolidated statements of financial condition.

In connection with securities lending transactions, BlackRock has issued certain indemnifications to certain securities lending clients against potential loss resulting from a borrower's failure to fulfill its obligations under the securities lending agreement should the value of the collateral pledged by the borrower at the time of default be insufficient to cover the borrower's obligation under the securities lending agreement. At September 30, 2019, the Company indemnified certain of its clients for their securities lending loan balances of approximately \$211 billion. The Company held, as agent, cash and securities totaling \$225 billion as collateral for indemnified securities on loan at September 30, 2019. The fair value of these indemnifications was not material at September 30, 2019.

15. Revenue

The table below presents detail of revenue for the three and nine months ended September 30, 2019 and 2018. See Note 2, *Significant Accounting Policies*, in the 2018 Form 10-K for more information on the Company's revenue recognition.

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
<i>(in millions)</i>				
Investment advisory, administration fees and securities lending revenue:				
Equity:				
Active	\$ 391	\$ 405	\$ 1,151	\$ 1,269
iShares ETFs	872	885	2,589	2,722
Non-ETF Index	168	169	495	532
Equity subtotal	1,431	1,459	4,235	4,523
Fixed income				
Active	496	460	1,427	1,374
iShares ETFs	251	205	705	620
Non-ETF Index	98	98	293	292
Fixed income subtotal	845	763	2,425	2,286
Multi-asset	288	298	852	889
Alternatives				
Illiquid alternatives	122	89	350	249
Liquid alternatives	105	96	301	290
Currency and commodities ⁽¹⁾	30	24	78	75
Alternatives subtotal	257	209	729	614
Long-term	2,821	2,729	8,241	8,312
Cash management	159	154	447	462
Total base fees	2,980	2,883	8,688	8,774
Investment advisory performance fees				
Equity	1	7	5	68
Fixed income	—	—	2	2
Multi-asset	1	1	7	15
Alternatives				
Illiquid alternatives	5	20	40	22
Liquid alternatives	114	123	157	205
Alternatives subtotal	119	143	197	227
Total performance fees	121	151	211	312
Technology services revenue	259	200	700	582
Distribution fees:				
Retrocessions	166	168	491	541
12b-1 fees (US mutual fund distribution fees)	90	102	267	313
Other	14	9	41	30
Total distribution fees	270	279	799	884
Advisory and other revenue:				
Advisory	21	26	62	80
Other	41	37	102	132
Total advisory and other revenue	62	63	164	212
Total revenue	\$ 3,692	\$ 3,576	\$ 10,562	\$ 10,764

⁽¹⁾ Amount includes commodity iShares ETFs

The tables below present the investment advisory, administration fees and securities lending revenue by client type and investment style, respectively

(in millions)

By client type:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Retail	\$ 862	\$ 860	\$ 2,534	\$ 2,573
iShares ETFs	1,151	1,113	3,370	3,414
Institutional				
Active	558	504	1,595	1,542
Index	250	252	742	783
Total institutional	808	756	2,337	2,325
Long-term	2,821	2,729	8,241	8,312
Cash management	159	154	447	462
Total	\$ 2,980	\$ 2,883	\$ 8,688	\$ 8,774

By investment style:

Active	\$ 1,401	\$ 1,346	\$ 4,073	\$ 4,063
Index and iShares ETFs	1,420	1,383	4,168	4,249
Long-term	2,821	2,729	8,241	8,312
Cash management	159	154	447	462
Total	\$ 2,980	\$ 2,883	\$ 8,688	\$ 8,774

Investment advisory and administration fees – remaining performance obligation

The tables below present estimated investment advisory and administration fees expected to be recognized in the future related to the unsatisfied portion of the performance obligations at September 30, 2019 and 2018

September 30, 2019

<i>(in millions)</i>	Remainder of 2019	2020	2021	2022	Thereafter	Total
Investment advisory and administration fees Alternatives ⁽¹⁾⁽²⁾	\$ 22	\$ 85	\$ 71	\$ 62	\$ 59	\$ 299

⁽¹⁾ Investment advisory and administration fees include management fees related to certain alternative products, which are based on contractual committed capital outstanding at September 30, 2019. Actual management fees could be higher to the extent additional committed capital is raised. These fees are generally billed on a quarterly basis in arrears.

⁽²⁾ The Company elected the following practical expedients and therefore does not include amounts related to (1) performance obligations with an original duration of one year or less, and (2) variable consideration related to future service periods.

September 30, 2018

<i>(in millions)</i>	Remainder of 2018	2019	2020	2021	Thereafter	Total
Investment advisory and administration fees Alternatives ⁽¹⁾⁽²⁾	\$ 21	\$ 74	\$ 63	\$ 49	\$ 46	\$ 253

⁽¹⁾ Investment advisory and administration fees include management fees related to certain alternative products, which are based on contractual committed capital outstanding at September 30, 2018. Actual management fees could be higher to the extent additional committed capital is raised. These fees are generally billed on a quarterly basis in arrears.

⁽²⁾ The Company elected the following practical expedients and therefore does not include amounts related to (1) performance obligations with an original duration of one year or less, and (2) variable consideration related to future service periods.

Change in Deferred Carried Interest Liability

The table below presents changes in the deferred carried interest liability (including the portion related to consolidated VIEs), which is included in other liabilities/other liabilities of consolidated VIEs on the condensed consolidated statements of financial condition, for the three and nine months ended September 30, 2019 and 2018

<i>(in millions)</i>	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Beginning balance	\$ 365	\$ 242	\$ 293	\$ 219
Net increase (decrease) in unrealized allocations	17	17	116	44
Performance fee revenue recognized	—	(2)	(27)	(6)
Other	6	—	6	—
Ending balance	\$ 388	\$ 257	\$ 388	\$ 257

Technology services revenue – remaining performance obligation

The tables below present estimated technology services revenue expected to be recognized in the future related to the unsatisfied portion of the performance obligations at September 30, 2019 and 2018

September 30, 2019

(in millions)	Remainder of 2019	2020	2021	2022	Thereafter	Total
Technology services revenue ⁽¹⁾⁽²⁾	\$ 36	\$ 54	\$ 37	\$ 21	\$ 12	\$ 160

(1) Technology services revenue primarily includes upfront payments from customers, which the Company generally recognizes as services are performed

(2) The Company elected the following practical expedients and therefore does not include amounts related to (1) performance obligations with an original duration of one year or less, and (2) variable consideration related to future service periods

September 30, 2018

(in millions)	Remainder of 2018	2019	2020	2021	Thereafter	Total
Technology services revenue ⁽¹⁾⁽²⁾	\$ 8	\$ 27	\$ 23	\$ 18	\$ 15	\$ 91

(1) Technology services revenue primarily includes upfront payments from customers, which the Company generally recognizes as services are performed

(2) The Company elected the following practical expedients and therefore does not include amounts related to (1) performance obligations with an original duration of one year or less, and (2) variable consideration related to future service periods

In addition to amounts disclosed in the tables above, certain technology services contracts require fixed minimum fees, which are billed on a monthly or quarterly basis in arrears. The Company recognizes such revenue as services are performed. As of September 30, 2019 and 2018, the estimated fixed minimum fees for currently outstanding contracts approximated \$156 million and \$133 million for the remainder of each respective year. The term for these contracts, which are either in their initial or renewal period, ranges from one to five years

The table below presents changes in the technology services deferred revenue liability, which is included in other liabilities on the condensed consolidated statements of financial condition, for the three and nine months ended September 30, 2019 and 2018.

(in millions)	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Beginning balance	\$ 100	\$ 64	\$ 70	\$ 62
Acquisition, net of revenue recognized ⁽¹⁾	—	—	24	—
Additions	8	11	31	31
Revenue recognized that was included in the beginning balance	(21)	(10)	(38)	(28)
Ending balance	\$ 87	\$ 65	\$ 87	\$ 65

(1) The increase during the nine months ended September 30, 2019 resulted from the eFront Transaction, which closed on May 10, 2019. See Note 3, *Acquisition*, for information on the eFront Transaction.

16. Stock-Based Compensation

Restricted Stock and RSUs.

Restricted stock and restricted stock units ("RSUs") activity for the nine months ended September 30, 2019 is summarized below

<u>Outstanding at</u>	<u>Restricted Stock and RSUs</u>	<u>Weighted- Average Grant Date Fair Value</u>
December 31, 2018	2,139,890	\$ 429.19
Granted	1,205,230	\$ 414.40
Converted	(1,001,009)	\$ 377.41
Forfeited	(60,961)	\$ 426.45
September 30, 2019⁽¹⁾	2,283,150	\$ 444.15

⁽¹⁾ At September 30, 2019, approximately 2.1 million awards are expected to vest and 0.2 million awards have vested but have not been converted

In January 2019, the Company granted 674,206 RSUs or shares of restricted stock to employees as part of 2018 annual incentive compensation that vest ratably over three years from the date of grant and 377,291 RSUs or shares of restricted stock to employees that cliff vest 100% on January 31, 2022. The Company values restricted stock and RSUs at their grant-date fair value as measured by BlackRock's common stock price. The total fair market value of RSUs/restricted stock granted to employees during the nine months ended September 30, 2019 was \$499 million.

At September 30, 2019, the intrinsic value of outstanding RSUs was \$1.0 billion, reflecting a closing stock price of \$445.64.

At September 30, 2019, total unrecognized stock-based compensation expense related to unvested RSUs was \$432 million. The unrecognized compensation cost is expected to be recognized over the remaining weighted-average period of 1.3 years.

Performance-Based RSUs.

Performance-based RSU activity for the nine months ended September 30, 2019 is summarized below

<u>Outstanding at</u>	<u>Performance- Based RSUs</u>	<u>Weighted- Average Grant Date Fair Value</u>
December 31, 2018	845,285	\$ 386.13
Granted	283,014	\$ 410.32
Additional shares granted due to attainment of performance measures	2,117	\$ 296.57
Converted	(360,927)	\$ 296.57
Forfeited	(11,024)	\$ 456.66
September 30, 2019	758,465	\$ 436.50

In January 2019, the Company granted 283,014 performance-based RSUs to certain employees that cliff vest 100% on January 31, 2022. These awards are amortized over a service period of three years. The number of shares distributed at vesting could be higher or lower than the original grant based on the level of attainment of predetermined Company performance measures. In January 2019, the Company granted 2,117 additional RSUs to certain employees based on the attainment of Company performance measures during the performance period.

The Company initially values performance-based RSUs at their grant-date fair value as measured by BlackRock's common stock price. The total grant-date fair market value of performance-based RSUs granted to employees during the nine months ended September 30, 2019 was \$117 million.

At September 30, 2019, the intrinsic value of outstanding performance-based RSUs was \$338 million, reflecting a closing stock price of \$445.64.

At September 30, 2019, total unrecognized stock-based compensation expense related to unvested performance-based awards was \$131 million. The unrecognized compensation cost is expected to be recognized over the remaining weighted-average period of 1.4 years.

See Note 16, *Stock-Based Compensation*, in the 2018 Form 10-K for more information on performance-based RSUs.

Long-Term Incentive Plans Funded by PNC. Under a share surrender agreement, PNC committed to provide up to 4 million shares of BlackRock stock, held by PNC, to fund certain BlackRock long-term incentive plans, including performance-based and market performance-based RSUs. The share surrender agreement commits PNC to provide BlackRock Series C nonvoting participating preferred stock to fund the remaining committed shares. On January 31, 2019, PNC surrendered its remaining 143,458 shares to BlackRock and has completed its share delivery obligation in connection with the agreement.

Performance-based Stock Options.

Stock option activity for the nine months ended September 30, 2019 is summarized below.

	Shares Under Option	Weighted Average Exercise Price
Outstanding at		
December 31, 2018	2,106,482	\$ 513.50
Forfeited	(125,538)	\$ 513.50
September 30, 2019	1,980,944	\$ 513.50

At September 30, 2019, total unrecognized stock-based compensation expense related to unvested performance-based stock options was \$140 million. The unrecognized compensation cost is expected to be recognized over the remaining weighted-average period of 4.2 years.

See Note 16, *Stock-Based Compensation*, in the 2018 Form 10-K for more information on performance-based stock options.

17. Net Capital Requirements

The Company is required to maintain net capital in certain regulated subsidiaries within a number of jurisdictions, which is partially maintained by retaining cash and cash equivalent investments in those subsidiaries or jurisdictions. As a result, such subsidiaries of the Company may be restricted in their ability to transfer cash between different jurisdictions and to their parents. Additionally, transfers of cash between international jurisdictions may have adverse tax consequences that could discourage such transfers.

At September 30, 2019, the Company was required to maintain approximately \$1.8 billion in net capital in certain regulated subsidiaries, including BlackRock Institutional Trust Company, N.A. (a wholly owned subsidiary of the Company that is chartered as a national bank whose powers are limited to trust and other fiduciary activities and which is subject to regulatory capital requirements administered by the Office of the Comptroller of the Currency), entities regulated by the Financial Conduct Authority and Prudential Regulation Authority in the United Kingdom, and the Company's broker-dealers. The Company was in compliance with all applicable regulatory net capital requirements.

18. Accumulated Other Comprehensive Income (Loss)

The following table presents changes in accumulated other comprehensive income (loss) for the three and nine months ended September 30, 2019 and 2018

(in millions)	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Beginning balance	\$ (664)	\$ (575)	\$ (691)	\$ (432)
Foreign currency translation adjustments ⁽¹⁾	(120)	(41)	(93)	(178)
Reclassification as a result of adoption of accounting guidance	—	—	—	(6)
Ending balance	<u>\$ (784)</u>	<u>\$ (616)</u>	<u>\$ (784)</u>	<u>\$ (616)</u>

⁽¹⁾ Amounts for the three months ended September 30, 2019 and 2018 include gains from a net investment hedge of \$25 million (net of tax expense of \$8 million) and \$4 million (net of tax expense of \$1 million), respectively. Amounts for the nine months ended September 30, 2019 and 2018 include gains from a net investment hedge of \$28 million (net of tax expense of \$9 million) and \$22 million (net of tax expense of \$7 million), respectively.

19. Capital Stock

Nonvoting Participating Preferred Stock The Company's preferred shares authorized, issued and outstanding consisted of the following

	September 30, 2019	December 31, 2018
Series A		
Shares authorized, \$0.01 par value	20,000,000	20,000,000
Shares issued and outstanding	—	—
Series B		
Shares authorized, \$0.01 par value	150,000,000	150,000,000
Shares issued and outstanding ⁽¹⁾	823,188	823,188
Series C		
Shares authorized, \$0.01 par value	6,000,000	6,000,000
Shares issued and outstanding ⁽¹⁾	—	143,458
Series D		
Shares authorized, \$0.01 par value	20,000,000	20,000,000
Shares issued and outstanding	—	—

⁽¹⁾ Shares held by PNC

Share Repurchases. During the nine months ended September 30, 2019, the Company repurchased 4.0 million common shares under the share repurchase program for approximately \$1.7 billion, including a \$1.3 billion private transaction that closed on March 25, 2019. At September 30, 2019, there were 5.9 million shares still authorized to be repurchased.

PNC Capital Contribution On January 31, 2019, PNC surrendered to BlackRock its remaining 143,458 of BlackRock Series C Preferred shares and has completed its share delivery obligation in connection with its share surrender agreement.

20. Restructuring

A restructuring charge of \$60 million (\$47 million after-tax), comprised of \$53 million of severance and \$7 million of expense related to the accelerated amortization of previously granted equity compensation awards, was recorded in the fourth quarter of 2018 in connection with an initiative to modify the size and shape of the workforce.

The table below presents a rollforward of the Company's restructuring liability, which is included in other liabilities on the condensed consolidated statements of financial condition, for the nine months ended September 30, 2019.

	Nine Months Ended September 30, 2019
<i>(in millions)</i>	
Liability as of December 31, 2018	\$ 53
Cash payments	(51)
Liability as of September 30, 2019	<u>\$ 2</u>

21. Income Taxes

The nine months ended September 30, 2019 income tax expense included \$22 million of discrete tax benefits related to stock-based compensation awards that vested in the first quarter of 2019.

The three months ended September 30, 2018 income tax expense included \$90 million of discrete tax benefits, primarily related to changes in the Company's organizational entity structure. The nine months ended September 30, 2018 income tax expense also included \$58 million of discrete tax benefits related to stock-based compensation awards that vested in the first quarter of 2018.

22. Earnings Per Share

Due to the similarities in terms between BlackRock nonvoting participating preferred stock and the Company's common stock, the Company considers its participating preferred stock to be a common stock equivalent for purposes of earnings per share ("EPS") calculations. As such, the Company has included the outstanding nonvoting participating preferred stock in the calculation of average basic and diluted shares outstanding.

The following table sets forth the computation of basic and diluted EPS for the three and nine months ended September 30, 2019 and 2018 under the treasury stock method.

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
<i>(in millions, except shares and per share data)</i>				
Net income attributable to BlackRock	\$ 1,119	\$ 1,216	\$ 3,175	\$ 3,378
Basic weighted-average shares outstanding	155,280,877	160,141,506	156,290,212	160,786,768
Dilutive effect of nonparticipating RSUs and stock options	1,166,510	1,236,711	1,095,744	1,354,111
Total diluted weighted-average shares outstanding	<u>156,447,387</u>	<u>161,378,217</u>	<u>157,385,956</u>	<u>162,140,879</u>
Basic earnings per share	\$ 7.21	\$ 7.59	\$ 20.31	\$ 21.01
Diluted earnings per share	\$ 7.15	\$ 7.54	\$ 20.17	\$ 20.83

23. Segment Information

The Company's management directs BlackRock's operations as one business, the asset management business. The Company utilizes a consolidated approach to assess performance and allocate resources. As such, the Company operates in one business segment.

The following table illustrates total revenue for the three and nine months ended September 30, 2019 and 2018 by geographic region. These amounts are aggregated on a legal entity basis and do not necessarily reflect where the customer resides or affiliated services are provided.

(in millions)	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Revenue				
Americas	\$ 2,445	\$ 2,328	\$ 7,051	\$ 6,989
Europe	1,080	1,083	3,018	3,258
Asia-Pacific	167	165	493	517
Total revenue	<u>\$ 3,692</u>	<u>\$ 3,576</u>	<u>\$ 10,562</u>	<u>\$ 10,764</u>

See Note 15, *Revenue*, for further information on the Company's sources of revenue.

The following table illustrates long-lived assets that consist of goodwill and property and equipment at September 30, 2019 and December 31, 2018 by geographic region. These amounts are aggregated on a legal entity basis and do not necessarily reflect where the asset is physically located.

(in millions)	September 30, 2019	December 31, 2018
Long-lived Assets		
Americas	\$ 13,797	\$ 13,780
Europe	1,337	303
Asia-Pacific	87	86
Total long-lived assets	<u>\$ 15,221</u>	<u>\$ 14,169</u>

Americas is primarily comprised of the United States, Latin America and Canada, while Europe is primarily comprised of the United Kingdom, the Netherlands and Luxembourg. Asia-Pacific is primarily comprised of Hong Kong, Australia, Japan and Singapore.

24. Subsequent Events

The Company conducted a review for subsequent events and determined that no subsequent events had occurred that would require accrual or additional disclosures.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

FORWARD-LOOKING STATEMENTS

This report, and other statements that BlackRock may make, may contain forward-looking statements within the meaning of the Private Securities Litigation Reform Act, with respect to BlackRock's future financial or business performance, strategies or expectations. Forward-looking statements are typically identified by words or phrases such as "trend," "potential," "opportunity," "pipeline," "believe," "comfortable," "expect," "anticipate," "current," "intention," "estimate," "position," "assume," "outlook," "continue," "remain," "maintain," "sustain," "seek," "achieve," and similar expressions, or future or conditional verbs such as "will," "would," "should," "could," "may" and similar expressions.

BlackRock cautions that forward-looking statements are subject to numerous assumptions, risks and uncertainties, which change over time. Forward-looking statements speak only as of the date they are made, and BlackRock assumes no duty to and does not undertake to update forward-looking statements. Actual results could differ materially from those anticipated in forward-looking statements and future results could differ materially from historical performance.

BlackRock has previously disclosed risk factors in its Securities and Exchange Commission ("SEC") reports. These risk factors and those identified elsewhere in this report, among others, could cause actual results to differ materially from forward-looking statements or historical performance and include: (1) the introduction, withdrawal, success and timing of business initiatives and strategies, (2) changes and volatility in political, economic or industry conditions, the interest rate environment, foreign exchange rates or financial and capital markets, which could result in changes in demand for products or services or in the value of assets under management ("AUM"), (3) the relative and absolute investment performance of BlackRock's investment products; (4) the impact of increased competition, (5) the impact of future acquisitions or divestitures, (6) the unfavorable resolution of legal proceedings, (7) the extent and timing of any share repurchases, (8) the impact, extent and timing of technological changes and the adequacy of intellectual property, information and cyber security protection; (9) the potential for human error in connection with BlackRock's operational systems; (10) the impact of legislative and regulatory actions and reforms and regulatory, supervisory or enforcement actions of government agencies relating to BlackRock or The PNC Financial Services Group, Inc. ("PNC"), (11) changes in law and policy and uncertainty pending any such changes, (12) terrorist activities, international hostilities and natural disasters, which may adversely affect the general economy, domestic and local financial and capital markets, specific industries or BlackRock; (13) the ability to attract and retain highly talented professionals, (14) fluctuations in the carrying value of BlackRock's economic investments, (15) the impact of changes to tax legislation, including income, payroll and transaction taxes, and taxation on products or transactions, which could affect the value proposition to clients and, generally, the tax position of the Company, (16) BlackRock's success in negotiating distribution arrangements and maintaining distribution channels for its products, (17) the failure by a key vendor of BlackRock to fulfill its obligations to the Company; (18) any disruption to the operations of third parties whose functions are integral to BlackRock's exchange-traded funds ("ETF") platform; (19) the impact of BlackRock electing to provide support to its products from time to time and any potential liabilities related to securities lending or other indemnification obligations, and (20) the impact of problems at other financial institutions or the failure or negative performance of products at other financial institutions.

OVERVIEW

BlackRock, Inc. (together, with its subsidiaries, unless the context otherwise indicates, "BlackRock" or the "Company") is a leading publicly traded investment management firm with \$6.96 trillion of AUM at September 30, 2019. With approximately 16,100 employees in more than 30 countries, BlackRock provides a broad range of investment and technology services to institutional and retail clients worldwide.

BlackRock's diverse platform of alpha-seeking active, index and cash management investment strategies across asset classes enables the Company to tailor investment outcomes and asset allocation solutions for clients. Product offerings include single- and multi-asset portfolios investing in equities, fixed income, alternatives and money market instruments. Products are offered directly and through intermediaries in a variety of vehicles, including open-end and closed-end mutual funds, iShares® ETFs, separate accounts, collective investment trusts and other pooled investment vehicles. BlackRock also offers technology services, including the investment and risk management technology platform, *Aladdin*®, Aladdin Wealth, eFront, Cachematrix and FutureAdvisor, as well as advisory services and solutions to a broad base of institutional and wealth management clients.

BlackRock serves a diverse mix of institutional and retail clients across the globe. Clients include tax-exempt institutions, such as defined benefit and defined contribution pension plans, charities, foundations and endowments, official institutions, such as central banks, sovereign wealth funds, supranationals and other government entities, taxable institutions, including insurance companies, financial institutions, corporations and third-party fund sponsors, and retail investors.

BlackRock maintains a significant global sales and marketing presence that is focused on establishing and maintaining retail and institutional investment management and technology service relationships by marketing its services to investors directly and through third-party distribution relationships, including financial professionals and pension consultants.

At September 30, 2019, PNC held 22.0% of the Company's voting common stock and 22.4% of the Company's capital stock, which includes outstanding common and nonvoting preferred stock.

Certain items previously reported have been reclassified to conform to the current period classifications.

United Kingdom Exit from European Union

Following the June 2016 vote to exit the European Union ("EU"), the United Kingdom ("UK") served notice under Article 50 of the Treaty on European Union on March 29, 2017 to initiate the process of exiting from the EU, commonly referred to as "Brexit". At the Emergency EU Summit held on April 10, 2019, an agreement was reached to extend the deadline by which the UK is required to exit the EU to October 31, 2019. The deadline was further extended to January 31, 2020 at the European Council on October 29, 2019.

Substantial uncertainty remains surrounding the terms upon which the UK will ultimately exit the EU. The impact of Brexit will depend in part on any arrangements that are put in place between the UK and the EU and, to the extent they are, whether the UK continues to apply laws that are based on EU legislation. As a result, the UK's relationship with the EU remains unclear and the passage of time without a resolution in place has become a source of economic, political and regulatory instability.

BlackRock is implementing a number of steps to prepare for various outcomes, including effecting organizational, governance and operational changes, applying for and receiving licenses and permissions in the EU, and engaging in client communications. These steps, many of which have been time-consuming and costly, are expected to add complexity to BlackRock's European operations. In addition, depending on the terms of the future relationship between the UK and the EU, BlackRock may experience organizational and operational challenges and incur additional costs in connection with its European operations post-Brexit, which may impede the Company's growth or impact its financial performance.

Acquisition

On May 10, 2019, the Company acquired 100% of the equity interests of eFront Holding SAS ("eFront Transaction" or "eFront"), a leading alternative investment management software and solutions provider for approximately \$1.3 billion, excluding the settlement of eFront's outstanding debt. The acquisition of eFront expands *Aladdin*'s illiquid alternative capabilities and enables BlackRock to provide individual alternative or whole-portfolio technology solutions to clients.

EXECUTIVE SUMMARY

(in millions, except shares and per share data)

GAAP basis:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Total revenue	\$ 3,692	\$ 3,576	\$ 10,562	\$ 10,764
Total expense	2,190	2,180	6,549	6,553
Operating income	\$ 1,502	\$ 1,396	\$ 4,013	\$ 4,211
Operating margin	40.7 %	39.0 %	38.0 %	39.1 %
Nonoperating income (expense), less net income (loss) attributable to noncontrolling interests	(42)	46	123	(4)
Income tax expense	(341)	(226)	(961)	(829)
Net income attributable to BlackRock	\$ 1,119	\$ 1,216	\$ 3,175	\$ 3,378
Diluted earnings per common share	\$ 7.15	\$ 7.54	\$ 20.17	\$ 20.83
Effective tax rate	23.3 %	15.7 %	23.2 %	19.7 %

As adjusted⁽¹⁾:

Operating income	\$ 1,502	\$ 1,400	\$ 4,013	\$ 4,221
Operating margin	46.0 %	44.2 %	43.7 %	44.5 % ²
Nonoperating income (expense), less net income (loss) attributable to noncontrolling interests	\$ (42)	\$ 46	\$ 123	\$ (4)
Net income attributable to BlackRock	\$ 1,119	\$ 1,214	\$ 3,175	\$ 3,386
Diluted earnings per common share	\$ 7.15	\$ 7.52	\$ 20.17	\$ 20.88
Effective tax rate	23.3 %	16.0 %	23.2 %	19.7 %

Other:

Assets under management (end of period)	\$ 6,963,932	\$ 6,444,100	\$ 6,963,932	\$ 6,444,100
Diluted weighted-average common shares outstanding ⁽²⁾	156,447,387	161,378,217	157,385,956	162,140,879
Common and preferred shares outstanding (end of period)	155,173,103	159,804,364	155,173,103	159,804,364
Book value per share ⁽³⁾	\$ 208.84	\$ 202.84	\$ 208.84	\$ 202.84
Cash dividends declared and paid per share	\$ 3.30	\$ 3.13	\$ 9.90	\$ 8.89

⁽¹⁾ As adjusted items are described in more detail in *Non-GAAP Financial Measures*

⁽²⁾ Nonvoting participating preferred shares are considered to be common stock equivalents for purposes of determining basic and diluted earnings per share calculations

⁽³⁾ Total BlackRock stockholders' equity divided by total common and preferred shares outstanding at September 30 of the respective period-end

THREE MONTHS ENDED SEPTEMBER 30, 2019 COMPARED WITH THREE MONTHS ENDED SEPTEMBER 30, 2018

GAAP. Operating income of \$1,502 million increased \$106 million and operating margin of 40.7% increased 170 bps from the third quarter of 2018. Operating income and operating margin reflected higher base fees and technology services revenue, partially offset by lower performance fees and lower transaction-related expense in the current quarter. Nonoperating income (expense) less net income (loss) attributable to noncontrolling interests ("NCI") decreased \$88 million from the third quarter of 2018, primarily driven by the revaluation of certain minority investments. Nonoperating results for the three months ended September 30, 2018 included a \$40 million pre-tax gain related to the sale of the Company's minority interest in DSP BlackRock Investment Managers Pvt. Ltd. to The DSP Group ("DSP Transaction").

Third quarter 2018 income tax expense included \$90 million of discrete tax benefits, primarily related to changes in the Company's organizational entity structure. See *Income Tax Expense* within *Discussion of Financial Results* for more information.

Earnings per diluted common share decreased \$0.39, or 5%, from the third quarter of 2018, reflecting lower nonoperating income and a higher effective tax rate in the current quarter, partially offset by higher operating income and a lower diluted share count.

As Adjusted. Operating income of \$1,502 million increased \$102 million and operating margin of 46.0% increased 180 bps from the third quarter of 2018. Earnings per diluted common share decreased \$0.37, or 5%, from the third quarter of 2018.

NINE MONTHS ENDED SEPTEMBER 30, 2019 COMPARED WITH NINE MONTHS ENDED SEPTEMBER 30, 2018

GAAP Operating income of \$4,013 million decreased \$198 million and operating margin of 38.0% decreased 110 bps from the nine months ended September 30, 2018. The decline in operating income and operating margin reflected lower base and performance fees, partially offset by higher technology services revenue and lower employee compensation and benefits and volume-related expense. Operating income for the nine months ended September 30, 2019 also included \$61 million of product launch costs associated with the close of the \$1.4 billion BlackRock Science and Technology Trust II, a closed-end active equity fund. Nonoperating income (expense) less net income (loss) attributable to NCI increased \$127 million from the nine months ended September 30, 2018, driven by higher marks on unhedged seed capital investments and the revaluation of certain minority investments. Nonoperating results for the nine months ended September 30, 2018 included a \$40 million pre-tax gain related to the DSP Transaction.

Income tax expense for the nine months ended September 30, 2019 and 2018 included \$22 million and \$58 million, respectively, of discrete tax benefits related to stock-based compensation awards that vested in the first quarter of each respective year. Income tax expense for the nine months ended September 30, 2018 also included the previously mentioned \$90 million of discrete tax benefits. See *Income Tax Expense* within *Discussion of Financial Results* for more information.

Earnings per diluted common share decreased \$0.66, or 3%, from the nine months ended September 30, 2018, driven primarily by lower operating income and a higher effective tax rate, partially offset by higher nonoperating income and a lower diluted share count.

As Adjusted Operating income of \$4,013 million decreased \$208 million and operating margin of 43.7% decreased 80 bps from the nine months ended September 30, 2018. Earnings per diluted common share decreased \$0.71, or 3%, from the nine months ended September 30, 2018.

See *Non-GAAP Financial Measures* for further information on as adjusted items and the reconciliation to accounting principles generally accepted in the United States ("GAAP").

For further discussion of BlackRock's revenue, expense, nonoperating results and income tax expense, see *Discussion of Financial Results* herein.

NON-GAAP FINANCIAL MEASURES

BlackRock reports its financial results in accordance with GAAP, however, management believes evaluating the Company's ongoing operating results may be enhanced if investors have additional non-GAAP financial measures. Management reviews non-GAAP financial measures to assess ongoing operations and considers them to be helpful, for both management and investors, in evaluating BlackRock's financial performance over time. Management also uses non-GAAP financial measures as a benchmark to compare its performance with other companies and to enhance the comparability of this information for the reporting periods presented. Non-GAAP measures may pose limitations because they do not include all of BlackRock's revenue and expense. BlackRock's management does not advocate that investors consider such non-GAAP financial measures in isolation from, or as a substitute for, financial information prepared in accordance with GAAP. Non-GAAP measures may not be comparable to other similarly titled measures of other companies.

Management uses both GAAP and non-GAAP financial measures in evaluating BlackRock's financial performance. Adjustments to GAAP financial measures ("non-GAAP adjustments") include certain items management deems nonrecurring or that occur infrequently, transactions that ultimately will not impact BlackRock's book value or certain tax items that do not impact cash flow.

Computations for all periods are derived from the condensed consolidated statements of income as follows:

(1) Operating income, as adjusted, and operating margin, as adjusted:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
(in millions)				
Operating income, GAAP basis	\$ 1,502	\$ 1,396	\$ 4,013	\$ 4,211
Non-GAAP expense adjustment:				
PNC LTIP funding obligation	—	4	—	10
Operating income, as adjusted	1,502	1,400	4,013	4,221
Product launch costs and commissions	—	1	61	13
Operating income used for operating margin measurement	\$ 1,502	\$ 1,401	\$ 4,074	\$ 4,234
Revenue, GAAP basis	\$ 3,692	\$ 3,576	\$ 10,562	\$ 10,764
Non-GAAP adjustments:				
Distribution fees	(270)	(279)	(799)	(884)
Investment advisory fees	(157)	(129)	(448)	(371)
Revenue used for operating margin measurement	\$ 3,265	\$ 3,168	\$ 9,315	\$ 9,509
Operating margin, GAAP basis	40.7%	39.0%	38.0%	39.1%
Operating margin, as adjusted	46.0%	44.2%	43.7%	44.5%

Management believes operating income, as adjusted, and operating margin, as adjusted, are effective indicators of BlackRock's financial performance over time, and, therefore, provide useful disclosure to investors. Management believes that operating margin, as adjusted, reflects the Company's long-term ability to manage ongoing costs in relation to its revenues. The Company uses operating margin, as adjusted, to assess the Company's financial performance and to determine the long-term and annual compensation of the Company's senior-level employees. Furthermore, this metric is used to evaluate the Company's relative performance against industry peers, as it eliminates margin variability arising from the accounting of revenues and expenses related to distributing different product structures in multiple distribution channels utilized by asset managers.

- Operating income, as adjusted, includes a non-GAAP expense adjustment. In the three and nine months ended September 30, 2018, the portion of compensation expense associated with certain long-term incentive plans ("LTIP") funded, or to be funded, through share distributions to participants of BlackRock stock held by PNC has been excluded because it ultimately does not impact BlackRock's book value.
- Operating income used for measuring operating margin, as adjusted, is equal to operating income, as adjusted, excluding the impact of product launch costs (e.g. closed-end fund launch costs) and related commissions. Management believes the exclusion of such costs and related commissions is useful because these costs can fluctuate considerably and revenue associated with the expenditure of these costs will not fully impact BlackRock's results until future periods.

Revenue used for calculating operating margin, as adjusted, is reduced to exclude all of the Company's distribution fees, which are recorded as a separate line item on the condensed consolidated statements of income, as well as a portion of investment advisory fees received that is used to pay distribution and servicing costs. For certain products, based on distinct arrangements, distribution fees are collected by the Company and then passed-through to third-party client intermediaries. For other products, investment advisory fees are collected by the Company and a portion is passed-through to third-party client intermediaries. However, in both structures, the third-party client intermediary similarly owns the relationship with the retail client and is responsible for distributing the product and servicing the client. The amount of distribution and investment advisory fees fluctuates each period primarily based on a predetermined percentage of the value of AUM during the period. These fees also vary based on the type of investment product sold and the geographic location where it is sold. In addition, the Company may waive fees on certain products that could result in the reduction of payments to the third-party intermediaries.

(2) Net income attributable to BlackRock, Inc., as adjusted

(in millions, except per share data)

Net income attributable to BlackRock, Inc., GAAP basis

Non-GAAP adjustments:

PNC LTIP funding obligation, net of tax

Income tax matters

Net income attributable to BlackRock, Inc., as adjusted

Diluted weighted-average common shares outstanding (3)

Diluted earnings per common share, GAAP basis (3)

Diluted earnings per common share, as adjusted (3)

Three Months Ended September 30,		Nine Months Ended September 30,	
2019	2018	2019	2018
\$ 1,119	\$ 1,216	\$ 3,175	\$ 3,378
—	3	—	9
—	(5)	—	(1)
<u>\$ 1,119</u>	<u>\$ 1,214</u>	<u>\$ 3,175</u>	<u>\$ 3,386</u>
156.4	161.4	157.4	162.1
\$ 7.15	\$ 7.54	\$ 20.17	\$ 20.83
\$ 7.15	\$ 7.52	\$ 20.17	\$ 20.88

Management believes net income attributable to BlackRock, Inc., as adjusted, and diluted earnings per common share, as adjusted, are useful measures of BlackRock's profitability and financial performance. Net income attributable to BlackRock, Inc., as adjusted, equals net income attributable to BlackRock, Inc., GAAP basis, adjusted for significant nonrecurring items, charges that ultimately will not impact BlackRock's book value or certain tax items that do not impact cash flow.

See aforementioned discussion regarding operating income, as adjusted, and operating margin, as adjusted, for information on the PNC LTIP funding obligation.

For each period presented, the non-GAAP adjustment related to the PNC LTIP funding obligation was tax effected at the respective blended rates applicable to the adjustment. Amounts for income tax matters represent net noncash (benefits) expense primarily associated with the revaluation of certain deferred tax liabilities related to intangible assets and goodwill as a result of tax rate changes. Amounts have been excluded from the as adjusted results as these items will not have a cash flow impact and to ensure comparability among periods presented.

Per share amounts reflect net income attributable to BlackRock, Inc., as adjusted divided by diluted weighted average common shares outstanding.

(3) Nonvoting participating preferred stock is considered to be a common stock equivalent for purposes of determining basic and diluted earnings per share calculations.

ASSETS UNDER MANAGEMENT

AUM for reporting purposes generally is based upon how investment advisory and administration fees are calculated for each portfolio. Net asset values, total assets, committed assets or other measures may be used to determine portfolio AUM.

AUM and Net Inflows (Outflows) by Client Type and Product Type

(in millions)	AUM				Net inflows (outflows)		
	September 30, 2019	June 30, 2019	December 31, 2018	September 30, 2018	Three Months Ended September 30, 2019	Nine Months Ended September 30, 2019	Twelve Months Ended September 30, 2019
Retail	\$ 668,118	\$ 664,906	\$ 610,850	\$ 664,867	\$ 6,698	\$ 7,799	\$ 3,014
iShares ETFs	2,046,818	2,008,867	1,731,425	1,853,188	41,504	108,289	189,692
Institutional:							
Active	1,283,064	1,272,532	1,079,979	1,129,315	(4,379)	84,161	78,200
Index	2,453,181	2,413,191	2,103,230	2,351,785	8,437	36,375	9,310
Institutional subtotal	3,736,245	3,685,723	3,183,209	3,481,100	4,058	120,536	87,510
Long-term	6,451,181	6,359,496	5,525,484	5,999,155	52,260	236,624	280,216
Cash management	510,984	481,208	448,565	443,185	31,988	63,275	69,422
Advisory ⁽¹⁾	1,767	1,778	1,769	1,760	(2)	(2)	33
Total	\$ 6,963,932	\$ 6,842,482	\$ 5,975,818	\$ 6,444,100	\$ 84,246	\$ 299,897	\$ 349,671

AUM and Net Inflows (Outflows) by Investment Style and Product Type

(in millions)	AUM				Net inflows (outflows)		
	September 30, 2019	June 30, 2019	December 31, 2018	September 30, 2018	Three Months Ended September 30, 2019	Nine Months Ended September 30, 2019	Twelve Months Ended September 30, 2019
Active	\$ 1,865,437	\$ 1,853,393	\$ 1,617,780	\$ 1,713,576	\$ 741	\$ 89,327	\$ 77,042
Index and iShares ETFs	4,585,744	4,506,103	3,907,704	4,285,579	51,519	147,297	203,174
Long-term	6,451,181	6,359,496	5,525,484	5,999,155	52,260	236,624	280,216
Cash management	510,984	481,208	448,565	443,185	31,988	63,275	69,422
Advisory ⁽¹⁾	1,767	1,778	1,769	1,760	(2)	(2)	33
Total	\$ 6,963,932	\$ 6,842,482	\$ 5,975,818	\$ 6,444,100	\$ 84,246	\$ 299,897	\$ 349,671

AUM and Net Inflows (Outflows) by Product Type

(in millions)	AUM				Net inflows (outflows)		
	September 30, 2019	June 30, 2019	December 31, 2018	September 30, 2018	Three Months Ended September 30, 2019	Nine Months Ended September 30, 2019	Twelve Months Ended September 30, 2019
Equity	\$ 3,488,503	\$ 3,485,869	\$ 3,035,825	\$ 3,482,687	\$ 9,916	\$ (10,246)	\$ 18,047
Fixed income	2,267,431	2,191,130	1,884,417	1,883,806	34,990	225,304	228,403
Multi-asset	527,721	523,728	461,884	492,810	(605)	3,932	11,229
Alternatives:							
Illiquid alternatives	70,516	67,910	59,827	57,418	3,117	10,038	12,415
Liquid alternatives	55,544	55,514	51,718	52,047	383	1,661	3,344
Currency and commodities ⁽²⁾	41,466	35,345	31,813	30,387	4,459	5,935	6,778
Alternatives subtotal	167,526	158,769	143,358	139,852	7,959	17,634	22,537
Long-term	6,451,181	6,359,496	5,525,484	5,999,155	52,260	236,624	280,216
Cash management	510,984	481,208	448,565	443,185	31,988	63,275	69,422
Advisory ⁽¹⁾	1,767	1,778	1,769	1,760	(2)	(2)	33
Total	\$ 6,963,932	\$ 6,842,482	\$ 5,975,818	\$ 6,444,100	\$ 84,246	\$ 299,897	\$ 349,671

(1) Advisory AUM represents long-term portfolio liquidation assignments

(2) Amounts include commodity iShares ETFs

Component Changes in AUM for the Three Months Ended September 30, 2019

The following table presents the component changes in AUM by client type and product type for the three months ended September 30, 2019

(in millions)	June 30, 2019	Net inflows (outflows)	Market change	FX impact ⁽¹⁾	September 30, 2019	Average AUM ⁽²⁾
Retail						
Equity	\$ 232,429	\$ 2,838	\$ (1,575)	\$ (2,047)	\$ 231,645	\$ 231,417
Fixed income	291,772	4,951	2,408	(1,945)	297,186	294,416
Multi-asset	118,135	(1,972)	248	(371)	116,040	117,101
Alternatives	22,570	881	(59)	(145)	23,247	22,894
Retail subtotal	664,906	6,698	1,022	(4,508)	668,118	665,828
iShares ETFs						
Equity	1,462,623	13,079	(1,810)	(5,181)	1,468,711	1,459,509
Fixed income	513,843	23,676	5,296	(3,555)	539,260	526,863
Multi-asset	4,442	210	10	(3)	4,659	4,529
Alternatives	27,959	4,539	1,725	(35)	34,188	31,634
iShares ETFs subtotal	2,008,867	41,504	5,221	(8,774)	2,046,818	2,022,535
Institutional						
Active						
Equity	125,884	3,945	172	(1,278)	128,723	125,960
Fixed income	649,924	(12,144)	16,149	(4,046)	649,883	652,333
Multi-asset	393,101	1,236	9,912	(5,312)	398,937	394,801
Alternatives	103,623	2,584	366	(1,052)	105,521	104,198
Active subtotal	1,272,532	(4,379)	26,599	(11,688)	1,283,064	1,277,292
Index						
Equity	1,664,933	(9,946)	16,714	(12,277)	1,659,424	1,652,937
Fixed income	735,591	18,507	40,259	(13,255)	781,102	756,790
Multi-asset	8,050	(79)	138	(24)	8,085	8,044
Alternatives	4,617	(45)	38	(40)	4,570	4,533
Index subtotal	2,413,191	8,437	57,149	(25,596)	2,453,181	2,422,304
Institutional subtotal	3,685,723	4,058	83,748	(37,284)	3,736,245	3,699,596
Long-term	6,359,496	52,260	89,991	(50,566)	6,451,181	6,387,959
Cash management	481,208	31,988	623	(2,835)	510,984	505,145
Advisory ⁽³⁾	1,778	(2)	8	(17)	1,767	1,769
Total	\$ 6,842,482	\$ 84,246	\$ 90,622	\$ (53,418)	\$ 6,963,932	\$ 6,894,873

⁽¹⁾ Foreign exchange reflects the impact of translating non-US dollar denominated AUM into US dollars for reporting purposes

⁽²⁾ Average AUM is calculated as the average of the month-end spot AUM amounts for the trailing four months

⁽³⁾ Advisory AUM represents long-term portfolio liquidation assignments

The following table presents component changes in AUM by investment style and product type for the three months ended September 30, 2019

(in millions)	June 30, 2019	Net inflows (outflows)	Market change	FX impact ⁽¹⁾	September 30, 2019	Average AUM ⁽²⁾
Active						
Equity	\$ 289,870	\$ 5,331	\$ (2,287)	\$ (2,395)	\$ 290,519	\$ 288,592
Fixed income	926,097	(7,314)	18,003	(5,607)	931,179	931,013
Multi-asset	511,236	(740)	10,160	(5,683)	514,973	511,901
Alternatives	126,190	3,464	309	(1,197)	128,766	127,092
Active subtotal	1,853,393	741	26,185	(14,882)	1,865,437	1,858,598
Index and iShares ETFs						
iShares ETFs						
Equity	1,462,623	13,079	(1,810)	(5,181)	1,468,711	1,459,509
Fixed income	513,843	23,676	5,296	(3,555)	539,260	526,863
Multi-asset	4,442	210	10	(3)	4,659	4,529
Alternatives	27,959	4,539	1,725	(35)	34,188	31,634
iShares ETFs subtotal	2,008,867	41,504	5,221	(8,774)	2,046,818	2,022,535
Non-ETF Index						
Equity	1,733,376	(8,494)	17,598	(13,207)	1,729,273	1,721,722
Fixed income	751,190	18,628	40,813	(13,639)	796,992	772,526
Multi-asset	8,050	(75)	138	(24)	8,089	8,045
Alternatives	4,620	(44)	36	(40)	4,572	4,533
Non-ETF Index subtotal	2,497,236	10,015	58,585	(26,910)	2,538,926	2,506,826
Index & iShares ETFs subtotal	4,506,103	51,519	63,806	(35,684)	4,585,744	4,529,361
Long-term	6,359,496	52,260	89,991	(50,566)	6,451,181	6,387,959
Cash management	481,208	31,988	623	(2,835)	510,984	505,145
Advisory ⁽³⁾	1,778	(2)	8	(17)	1,767	1,769
Total	\$ 6,842,482	\$ 84,246	\$ 90,622	\$ (53,418)	\$ 6,963,932	\$ 6,894,873

The following table presents component changes in AUM by product type for the three months ended September 30, 2019

(in millions)	June 30, 2019	Net inflows (outflows)	Market change	FX impact ⁽¹⁾	September 30, 2019	Average AUM ⁽²⁾
Equity	\$ 3,485,869	\$ 9,916	\$ 13,501	\$ (20,783)	\$ 3,488,503	\$ 3,469,823
Fixed income	2,191,130	34,990	64,112	(22,801)	2,267,431	2,230,402
Multi-asset	523,728	(605)	10,308	(5,710)	527,721	524,475
Alternatives						
Illiquid alternatives	67,910	3,117	134	(645)	70,516	68,764
Liquid alternatives	55,514	383	192	(545)	55,544	55,582
Currency and commodities ⁽⁴⁾	35,345	4,459	1,744	(82)	41,466	38,913
Alternatives subtotal	158,769	7,959	2,070	(1,272)	167,526	163,259
Long-term	6,359,496	52,260	89,991	(50,566)	6,451,181	6,387,959
Cash management	481,208	31,988	623	(2,835)	510,984	505,145
Advisory ⁽³⁾	1,778	(2)	8	(17)	1,767	1,769
Total	\$ 6,842,482	\$ 84,246	\$ 90,622	\$ (53,418)	\$ 6,963,932	\$ 6,894,873

(1) Foreign exchange reflects the impact of translating non-US dollar denominated AUM into US dollars for reporting purposes.

(2) Average AUM is calculated as the average of the month-end spot AUM amounts for the trailing four months

(3) Advisory AUM represents long-term portfolio liquidation assignments

(4) Amounts include commodity iShares ETFs

AUM increased \$121.5 billion to \$6.96 trillion at September 30, 2019, driven by net market appreciation and positive net inflows, partially offset by the impact of foreign exchange movements

Net market appreciation of \$90.6 billion was primarily driven by fixed income appreciation and higher US equity markets

Long-term net inflows of \$52.3 billion included \$41.5 billion, \$6.7 billion and \$4.1 billion from *iShares* ETFs, retail and institutional clients, respectively. Net flows in long-term products are described below

- *iShares* ETFs net inflows of \$41.5 billion were led by growth in Fixed Income, Factor, Core and European ETFs. Core and non-Core *iShares* ETFs saw net inflows of \$18.3 billion and \$23.2 billion, respectively. By region, *iShares* ETFs inflows were diversified with \$24.9 billion of net inflows in US-listed *iShares* ETFs and \$15.1 billion of net inflows in European-listed *iShares* ETFs
- Retail net inflows of \$6.7 billion reflected net inflows of \$5.5 billion in the United States and net inflows of \$1.2 billion internationally. Retail inflows reflected strength in active fixed income, led by municipals, short duration and total return strategies, active equity and liquid alternatives funds, partially offset by outflows from multi-asset world allocation products.
- Institutional index net inflows of \$8.4 billion were led by fixed income net inflows of \$18.5 billion, reflecting continued demand for liability-driven investment solutions, partially offset by equity index outflows of \$9.9 billion, linked to client asset allocation, rebalancing and liquidity needs
- Institutional active net outflows of \$4.4 billion were driven by active fixed income outflows of \$12.1 billion, primarily due to several client-specific redemptions, partially offset by net inflows into active equity, alternatives and multi-asset strategies

Cash management AUM increased to \$511 billion, driven by net inflows of \$32 billion.

AUM decreased \$53.4 billion due to the impact of foreign exchange movements, primarily due to the strengthening of the US dollar against the Euro and British pound

Component Changes in AUM for the Nine Months Ended September 30, 2019

The following table presents the component changes in AUM by client type and product for the nine months ended September 30, 2019

<i>(in millions)</i>	December 31, 2018	Net inflows (outflows)	Market change	FX impact ⁽¹⁾	September 30, 2019	Average AUM ⁽²⁾
Retail						
Equity	\$ 205,714	\$ (2,588)	\$ 30,760	\$ (2,241)	\$ 231,645	\$ 225,107
Fixed income	271,588	16,230	11,131	(1,763)	297,186	285,933
Multi-asset	113,417	(8,703)	11,679	(353)	116,040	116,916
Alternatives	20,131	2,860	420	(164)	23,247	21,741
Retail subtotal	610,850	7,799	53,990	(4,521)	668,118	649,697
iShares ETFs						
Equity	1,274,262	15,633	182,800	(3,984)	1,468,711	1,417,194
Fixed income	427,596	87,381	27,527	(3,244)	539,260	487,266
Multi-asset	4,485	(267)	438	3	4,659	4,335
Alternatives	25,082	5,542	3,581	(17)	34,188	28,103
iShares ETFs subtotal	1,731,425	108,289	214,346	(7,242)	2,046,818	1,936,898
Institutional						
Active						
Equity	110,976	1,329	17,582	(1,164)	128,723	121,261
Fixed income	538,961	60,155	53,921	(3,154)	649,883	599,105
Multi-asset	336,237	13,566	53,925	(4,791)	398,937	375,173
Alternatives	93,805	9,111	3,546	(941)	105,521	101,328
Active subtotal	1,079,979	84,161	128,974	(10,050)	1,283,064	1,196,867
Index						
Equity	1,444,873	(24,620)	250,459	(11,288)	1,659,424	1,608,044
Fixed income	646,272	61,538	84,536	(11,244)	781,102	715,922
Multi-asset	7,745	(664)	998	6	8,085	8,090
Alternatives	4,340	121	120	(11)	4,570	4,528
Index subtotal	2,103,230	36,375	336,113	(22,537)	2,453,181	2,336,584
Institutional subtotal	3,183,209	120,536	465,087	(32,587)	3,736,245	3,533,451
Long-term	5,525,484	236,624	733,423	(44,350)	6,451,181	6,120,046
Cash management	448,565	63,275	2,046	(2,902)	510,984	473,267
Advisory ⁽³⁾	1,769	(2)	(4)	4	1,767	1,772
Total	\$ 5,975,818	\$ 299,897	\$ 735,465	\$ (47,248)	\$ 6,963,932	\$ 6,595,085

(1) Foreign exchange reflects the impact of translating non-US dollar denominated AUM into US dollars for reporting purposes

(2) Average AUM is calculated as the average of the month-end spot AUM amounts for the trailing ten months

(3) Advisory AUM represents long-term portfolio liquidation assignments

The following table presents component changes in AUM by investment style and product type for the nine months ended September 30, 2019

(in millions)	December 31, 2018	Net inflows (outflows)	Market change	FX impact ⁽¹⁾	September 30, 2019	Average AUM ⁽²⁾
Active						
Equity	\$ 258,205	\$ (3,602)	\$ 38,255	\$ (2,339)	\$ 290,519	\$ 280,485
Fixed income	795,985	76,099	63,604	(4,509)	931,179	869,509
Multi-asset	449,654	4,859	65,604	(5,144)	514,973	492,089
Alternatives	113,936	11,971	3,964	(1,105)	128,766	123,068
Active subtotal	1,617,780	89,327	171,427	(13,097)	1,865,437	1,765,151
Index and iShares ETFs						
iShares ETFs						
Equity	1,274,262	15,633	182,800	(3,984)	1,468,711	1,417,194
Fixed income	427,596	87,381	27,527	(3,244)	539,260	487,266
Multi-asset	4,485	(267)	438	3	4,659	4,335
Alternatives	25,082	5,542	3,581	(17)	34,188	28,103
iShares ETFs subtotal	1,731,425	108,289	214,346	(7,242)	2,046,818	1,936,898
Non-ETF Index						
Equity	1,503,358	(22,277)	260,546	(12,354)	1,729,273	1,673,927
Fixed income	660,836	61,824	85,984	(11,652)	796,992	731,451
Multi-asset	7,745	(660)	998	6	8,089	8,090
Alternatives	4,340	121	122	(11)	4,572	4,529
Non-ETF Index subtotal	2,176,279	39,008	347,650	(24,011)	2,538,926	2,417,997
Index & iShares ETFs subtotal	3,907,704	147,297	561,996	(31,253)	4,585,744	4,354,895
Long-term	5,525,484	236,624	733,423	(44,350)	6,451,181	6,120,046
Cash management	448,565	63,275	2,046	(2,902)	510,984	473,267
Advisory ⁽³⁾	1,769	(2)	(4)	4	1,767	1,772
Total	\$ 5,975,818	\$ 299,897	\$ 735,465	\$ (47,248)	\$ 6,963,932	\$ 6,595,085

The following table presents component changes in AUM by product type for the nine months ended September 30, 2019

(in millions)	December 31, 2018	Net inflows (outflows)	Market change	FX impact ⁽¹⁾	September 30, 2019	Average AUM ⁽²⁾
Equity	\$ 3,035,825	\$ (10,246)	\$ 481,601	\$ (18,677)	\$ 3,488,503	\$ 3,371,606
Fixed income	1,884,417	225,304	177,115	(19,405)	2,267,431	2,088,226
Multi-asset	461,884	3,932	67,040	(5,135)	527,721	504,514
Alternatives						
Illiquid alternatives	59,827	10,038	1,252	(601)	70,516	66,395
Liquid alternatives	51,718	1,661	2,706	(541)	55,544	54,062
Currency and commodities ⁽⁴⁾	31,813	5,935	3,709	9	41,466	35,243
Alternatives subtotal	143,358	17,634	7,667	(1,133)	167,526	155,700
Long-term	5,525,484	236,624	733,423	(44,350)	6,451,181	6,120,046
Cash management	448,565	63,275	2,046	(2,902)	510,984	473,267
Advisory ⁽³⁾	1,769	(2)	(4)	4	1,767	1,772
Total	\$ 5,975,818	\$ 299,897	\$ 735,465	\$ (47,248)	\$ 6,963,932	\$ 6,595,085

⁽¹⁾ Foreign exchange reflects the impact of translating non-US dollar denominated AUM into US dollars for reporting purposes

⁽²⁾ Average AUM is calculated as the average of the month-end spot AUM amounts for the trailing ten months

⁽³⁾ Advisory AUM represents long-term portfolio liquidation assignments

⁽⁴⁾ Amounts include commodity iShares ETFs

AUM increased \$988.1 billion to \$6.96 trillion at September 30, 2019, driven by net market appreciation and positive net inflows, partially offset by the impact of foreign exchange movements

Net market appreciation of \$735.5 billion was driven by higher US markets and fixed income appreciation

Long-term net inflows of \$236.6 billion included \$120.5 billion, \$108.3 billion and \$7.8 billion from institutional clients, *iShares* ETFs and retail clients, respectively. Net flows in long-term products are described below

- *iShares* ETFs net inflows of \$108.3 billion were led by fixed income ETFs, which generated \$87.4 billion of net inflows, across treasuries, investment grade corporate bond, high yield and emerging markets debt ETFs. *iShares* ETFs reflected \$57.5 billion and \$50.8 billion of net inflows into Core and non-Core ETFs, respectively. By region, *iShares* ETFs inflows were diversified with \$68.9 billion of net inflows in US-listed *iShares* ETFs and \$38.3 billion of net inflows in European-listed *iShares* ETFs
- Institutional active net inflows of \$84.1 billion were primarily driven by active fixed income, multi-asset and alternative net inflows of \$60.2 billion, \$13.6 billion and \$9.1 billion, respectively. Active fixed income net inflows included strong flows from two significant strategic client mandates and active multi-asset net inflows reflected continued growth in *LifePath*® target-date funds. Alternatives net inflows were led by flows into illiquid alternatives, including infrastructure, real estate and the first close of Long Term Private Capital ("LTPC"), a perpetual, direct private equity fund
- Institutional index net inflows of \$36.4 billion were primarily driven by fixed income net inflows of \$61.5 billion, led by continued demand for liability-driven investment solutions, partially offset by equity net outflows of \$24.6 billion, linked to client asset allocation, rebalancing and liquidity needs
- Retail net inflows of \$7.8 billion reflected net inflows of \$15.3 billion in the United States, partially offset by net outflows of \$7.5 billion internationally. Retail net inflows reflected strength in municipal fixed income funds

Cash management AUM increased to \$511 billion, primarily due to net inflows of \$63.3 billion.

AUM decreased \$47.2 billion due to the impact of foreign exchange movements, primarily due to the strengthening of the US dollar against the Euro and British pound

Component Changes in AUM for the Twelve Months Ended September 30, 2019

The following table presents the component changes in AUM by client type and product for the twelve months ended September 30, 2019

<i>(in millions)</i>	September 30, 2018	Net inflows (outflows)	Market change	FX impact ⁽¹⁾	September 30, 2019	Average AUM ⁽²⁾
Retail						
Equity	\$ 237,544	\$ (292)	\$ (2,007)	\$ (3,600)	\$ 231,645	\$ 225,307
Fixed income	282,879	8,351	9,186	(3,230)	297,186	284,212
Multi-asset	124,304	(8,532)	977	(709)	116,040	117,860
Alternatives	20,140	3,487	(154)	(226)	23,247	21,409
Retail subtotal	664,867	3,014	8,002	(7,765)	668,118	648,788
iShares ETFs						
Equity	1,413,925	76,142	(13,808)	(7,548)	1,468,711	1,404,161
Fixed income	412,343	106,240	25,589	(4,912)	539,260	469,183
Multi-asset	3,814	721	126	(2)	4,659	4,205
Alternatives	23,106	6,589	4,541	(48)	34,188	26,986
iShares ETFs subtotal	1,853,188	189,692	16,448	(12,510)	2,046,818	1,904,535
Institutional						
Active						
Equity	128,975	(312)	1,928	(1,868)	128,723	121,483
Fixed income	551,591	46,840	56,110	(4,658)	649,883	586,479
Multi-asset	356,887	19,241	30,481	(7,672)	398,937	369,684
Alternatives	91,862	12,431	2,592	(1,364)	105,521	99,153
Active subtotal	1,129,315	78,200	91,111	(15,562)	1,283,064	1,176,799
Index						
Equity	1,702,243	(57,491)	29,922	(15,250)	1,659,424	1,609,791
Fixed income	636,993	66,972	94,678	(17,541)	781,102	696,383
Multi-asset	7,805	(201)	380	101	8,085	8,023
Alternatives	4,744	30	(176)	(28)	4,570	4,549
Index subtotal	2,351,785	9,310	124,804	(32,718)	2,453,181	2,318,746
Institutional subtotal	3,481,100	87,510	215,915	(48,280)	3,736,245	3,495,545
Long-term	5,999,155	280,216	240,365	(68,555)	6,451,181	6,048,868
Cash management	443,185	69,422	2,595	(4,218)	510,984	466,738
Advisory ⁽³⁾	1,760	33	3	(29)	1,767	1,769
Total	\$ 6,444,100	\$ 349,671	\$ 242,963	\$ (72,802)	\$ 6,963,932	\$ 6,517,375

⁽¹⁾ Foreign exchange reflects the impact of translating non-US dollar denominated AUM into US dollars for reporting purposes

⁽²⁾ Average AUM is calculated as the average of the month-end spot AUM amounts for the trailing thirteen months

⁽³⁾ Advisory AUM represents long-term portfolio liquidation assignments

The following table presents component changes in AUM by investment style and product type for the twelve months ended September 30, 2019

(in millions)	September 30, 2018	Net inflows (outflows)	Market change	FX impact ⁽¹⁾	September 30, 2019	Average AUM ⁽²⁾
Active						
Equity	\$ 301,049	\$ (4,915)	\$ (1,833)	\$ (3,782)	\$ 290,519	\$ 281,517
Fixed income	819,332	55,334	63,722	(7,209)	931,179	855,299
Multi-asset	481,192	10,705	31,457	(8,381)	514,973	487,544
Alternatives	112,003	15,918	2,435	(1,590)	128,766	120,561
Active subtotal	1,713,576	77,042	95,781	(20,962)	1,865,437	1,744,921
Index and iShares ETFs						
iShares ETFs						
Equity	1,413,925	76,142	(13,808)	(7,548)	1,468,711	1,404,161
Fixed income	412,343	106,240	25,589	(4,912)	539,260	469,183
Multi-asset	3,814	721	126	(2)	4,659	4,205
Alternatives	23,106	6,589	4,541	(48)	34,188	26,986
iShares ETFs subtotal	1,853,188	189,692	16,448	(12,510)	2,046,818	1,904,535
Non-ETF Index						
Equity	1,767,713	(53,180)	31,676	(16,936)	1,729,273	1,675,064
Fixed income	652,131	66,829	96,252	(18,220)	796,992	711,775
Multi-asset	7,804	(197)	381	101	8,089	8,023
Alternatives	4,743	30	(173)	(28)	4,572	4,550
Non-ETF Index subtotal	2,432,391	13,482	128,136	(35,083)	2,538,926	2,399,412
Index & iShares ETFs subtotal	4,285,579	203,174	144,584	(47,593)	4,585,744	4,303,947
Long-term	5,999,155	280,216	240,365	(68,555)	6,451,181	6,048,868
Cash management	443,185	69,422	2,595	(4,218)	510,984	466,738
Advisory ⁽³⁾	1,760	33	3	(29)	1,767	1,769
Total	\$ 6,444,100	\$ 349,671	\$ 242,963	\$ (72,802)	\$ 6,963,932	\$ 6,517,375

The following table presents component changes in AUM by product type for the twelve months ended September 30, 2019

(in millions)	September 30, 2018	Net inflows (outflows)	Market change	FX impact ⁽¹⁾	September 30, 2019	Average AUM ⁽²⁾
Equity	\$ 3,482,687	\$ 18,047	\$ 16,035	\$ (28,266)	\$ 3,488,503	\$ 3,360,742
Fixed income	1,883,806	228,403	185,563	(30,341)	2,267,431	2,036,257
Multi-asset	492,810	11,229	31,964	(8,282)	527,721	499,772
Alternatives						
Illiquid alternatives	57,418	12,415	1,582	(899)	70,516	64,411
Liquid alternatives	52,047	3,344	942	(789)	55,544	53,566
Currency and commodities ⁽⁴⁾	30,387	6,778	4,279	22	41,466	34,120
Alternatives subtotal	139,852	22,537	6,803	(1,666)	167,526	152,097
Long-term	5,999,155	280,216	240,365	(68,555)	6,451,181	6,048,868
Cash management	443,185	69,422	2,595	(4,218)	510,984	466,738
Advisory ⁽³⁾	1,760	33	3	(29)	1,767	1,769
Total	\$ 6,444,100	\$ 349,671	\$ 242,963	\$ (72,802)	\$ 6,963,932	\$ 6,517,375

⁽¹⁾Foreign exchange reflects the impact of translating non-US dollar denominated AUM into US dollars for reporting purposes

⁽²⁾Average AUM is calculated as the average of the month-end spot AUM amounts for the trailing thirteen months

⁽³⁾Advisory AUM represents long-term portfolio liquidation assignments

⁽⁴⁾Amounts include commodity iShares ETFs

AUM increased \$519.8 billion to \$6.96 trillion at September 30, 2019, driven by net inflows and net market appreciation, partially offset by the impact of foreign exchange movements

Net market appreciation of \$243.0 billion was driven by fixed income appreciation and higher US equity markets

Long-term net inflows of \$280.2 billion were comprised of net inflows of \$189.7 billion, \$87.5 billion and \$3.0 billion from *iShares* ETFs, institutional and retail clients, respectively. Net flows in long-term products are described below

- *iShares* ETFs net inflows of \$189.7 billion reflected \$90.7 billion and \$99.0 billion of net inflows into Core and non-Core ETFs, respectively. By region, *iShares* ETFs inflows were diversified with \$133.2 billion of net inflows in US-listed *iShares* ETFs and \$49.4 billion of net inflows in European-listed *iShares* ETFs. Fixed income net inflows of \$106.2 billion were led by flows into treasuries, investment grade corporate bond, high yield and core bond ETFs. Equity net inflows of \$76.1 billion were driven by both US and international equity market exposures
- Institutional active net inflows of \$78.2 billion primarily reflected active fixed income, multi-asset and alternative net inflows of \$46.8 billion, \$19.2 billion and \$12.4 billion, respectively. Active fixed income net inflows included the previously mentioned significant strategic client mandates and active multi-asset net inflows reflected continued growth in *LifePath* target-date funds and asset allocation strategies. Alternatives net inflows were led by flows into illiquid alternatives, including infrastructure, real estate and LTPC.
- Institutional index net inflows of \$9.3 billion were primarily driven by fixed income net inflows of \$67.0 billion, led by continued demand for liability-driven investment solutions, partially offset by equity net outflows of \$57.5 billion, linked to client asset allocation, rebalancing and liquidity needs
- Retail net inflows of \$3.0 billion reflected net inflows of \$20.2 billion in the United States, partially offset by net outflows of \$17.2 billion internationally. Retail net inflows reflected strength in municipal fixed income funds and continued growth in *LifePath* target-date, partially offset by net outflows from multi-asset asset allocation strategies

Cash management AUM increased to \$511 billion, primarily due to net inflows of \$69.4 billion

AUM decreased \$72.8 billion due to the impact of foreign exchange movements, primarily resulting from the strengthening of the US dollar against the British pound and Euro, partially offset by the weakening of the US dollar against the Japanese yen

DISCUSSION OF FINANCIAL RESULTS

The Company's results of operations for the three and nine months ended September 30, 2019 and 2018 are discussed below. For a further description of the Company's revenue and expense, see the Company's Annual Report on Form 10-K for the year ended December 31, 2018 ("2018 Form 10-K").

Revenue

The table below presents detail of revenue for the three and nine months ended September 30, 2019 and 2018 and includes the asset type mix of investment advisory, administration fees and securities lending revenue (collectively "base fees")

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
<i>(in millions)</i>				
Investment advisory, administration fees and securities lending revenue:				
Equity				
Active	\$ 391	\$ 405	\$ 1,151	\$ 1,269
iShares ETFs	872	885	2,589	2,722
Non-ETF Index	168	169	495	532
Equity subtotal	1,431	1,459	4,235	4,523
Fixed income:				
Active	496	460	1,427	1,374
iShares ETFs	251	205	705	620
Non-ETF Index	98	98	293	292
Fixed income subtotal	845	763	2,425	2,286
Multi-asset	288	298	852	889
Alternatives:				
Illiquid alternatives	122	89	350	249
Liquid alternatives	105	96	301	290
Currency and commodities ⁽¹⁾	30	24	78	75
Alternatives subtotal	257	209	729	614
Long-term	2,821	2,729	8,241	8,312
Cash management	159	154	447	462
Total base fees	2,980	2,883	8,688	8,774
Investment advisory performance fees:				
Equity	1	7	5	68
Fixed income	—	—	2	2
Multi-asset	1	1	7	15
Alternatives:				
Illiquid alternatives	5	20	40	22
Liquid alternatives	114	123	157	205
Alternatives subtotal	119	143	197	227
Total performance fees	121	151	211	312
Technology services revenue	259	200	700	582
Distribution fees				
Retrocessions	166	168	491	541
12b-1 fees (US mutual fund distribution fees)	90	102	267	313
Other	14	9	41	30
Total distribution fees	270	279	799	884
Advisory and other revenue				
Advisory	21	26	62	80
Other	41	37	102	132
Total advisory and other revenue	62	63	164	212
Total revenue	\$ 3,692	\$ 3,576	\$ 10,562	\$ 10,764

⁽¹⁾ Amount include commodity iShares ETFs

The table below lists base fees and mix of average AUM by product type

	Three Months Ended September 30,				Nine Months Ended September 30,			
	Mix of Base Fees		Mix of Average AUM by Asset Class ⁽¹⁾		Mix of Base Fees		Mix of Average AUM by Asset Class ⁽²⁾	
	2019	2018	2019	2018	2019	2018	2019	2018
Equity								
Active	13%	15%	4%	5%	13%	14%	4%	5%
iShares ETFs	29%	31%	21%	22%	30%	31%	21%	22%
Non-ETF Index	6%	6%	25%	27%	6%	6%	26%	27%
Equity subtotal	48%	52%	50%	54%	49%	51%	51%	54%
Fixed income								
Active	17%	16%	14%	13%	17%	17%	13%	12%
iShares ETFs	8%	7%	8%	6%	8%	7%	7%	6%
Non-ETF Index	3%	3%	11%	10%	3%	3%	11%	10%
Fixed income subtotal	28%	26%	33%	29%	28%	27%	31%	28%
Multi-asset	10%	10%	8%	8%	10%	10%	8%	8%
Alternatives								
Illiquid alternatives	4%	3%	1%	1%	4%	3%	1%	1%
Liquid alternatives	4%	3%	1%	1%	3%	3%	1%	1%
Currency and commodities	1%	1%	0%	0%	1%	1%	1%	1%
Alternatives subtotal	9%	7%	2%	2%	8%	7%	3%	3%
Long-term	95%	95%	93%	93%	95%	95%	93%	93%
Cash management	5%	5%	7%	7%	5%	5%	7%	7%
Total excluding Advisory AUM	100%	100%	100%	100%	100%	100%	100%	100%

⁽¹⁾ Average AUM is calculated as the average of the month-end spot AUM amounts for the trailing four months

⁽²⁾ Average AUM is calculated as the average of the month-end spot AUM amounts for the trailing ten months

Three Months Ended September 30, 2019 Compared with Three Months Ended September 30, 2018

Revenue increased \$116 million, or 3%, from the three months ended September 30, 2018, primarily driven by higher base fees and technology services revenue, partially offset by lower performance fees

Investment advisory, administration fees and securities lending revenue of \$2,980 million increased \$97 million from \$2,883 million for the three months ended September 30, 2018, primarily driven by organic growth, the positive impact of market beta and acquisitions, partially offset by the negative impact of foreign exchange movements on average AUM and strategic price changes to certain products. Securities lending revenue of \$150 million in the current quarter compared with \$160 million in third quarter of 2018.

Investment advisory performance fees of \$121 million decreased \$30 million from \$151 million for the three months ended September 30, 2018, primarily reflecting lower revenue from alternative and long-only equity products.

Technology services revenue of \$259 million increased \$59 million from \$200 million for the three months ended September 30, 2018, primarily reflecting the impact of the eFront acquisition and higher revenue from *Aladdin*.

Nine Months Ended September 30, 2019 Compared with Nine Months Ended September 30, 2018

Revenue decreased \$202 million, or 2%, from the nine months ended September 30, 2018, primarily driven by lower performance fees, base fees and advisory and other revenue, partially offset by higher technology services revenue

Investment advisory, administration fees and securities lending revenue of \$8,688 million decreased \$86 million from \$8,774 million for the nine months ended September 30, 2018, primarily driven by lower securities lending revenue, the impact of markets and foreign exchange movements on average AUM and strategic price changes to certain products, partially offset by the positive impact of acquisitions and organic growth. Securities lending revenue of \$448 million for the nine months ended September 30, 2019 decreased \$50 million from \$498 million for the nine months ended September 30, 2018, primarily reflecting reduced European seasonal demand and lower cash spreads

Investment advisory performance fees of \$211 million decreased \$101 million from \$312 million for the nine months ended September 30, 2018, primarily reflecting lower revenue from long-only equity products and liquid alternatives, partially offset by higher revenue from illiquid alternatives

Technology services revenue of \$700 million increased \$118 million from \$582 million for the nine months ended September 30, 2018, primarily reflecting the impact of the eFront acquisition and higher revenue from *Aladdin*

Advisory and other revenue of \$164 million decreased \$48 million from \$212 million for the nine months ended September 30, 2018, primarily reflecting lower fees from advisory and transition management assignments, and lower earnings from equity method investments

Expense

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
(in millions)				
Expense, GAAP:				
Employee compensation and benefits	\$ 1,111	\$ 1,097	\$ 3,258	\$ 3,300
Distribution and servicing costs				
Retrocessions	166	168	491	541
12b-1 costs	89	100	265	307
Other	172	140	491	407
Total distribution and servicing costs	427	408	1,247	1,255
Direct fund expense	239	249	733	774
General and administration:				
Marketing and promotional	79	77	241	253
Occupancy and office related	75	73	224	220
Portfolio services	64	60	191	203
Technology	70	61	206	172
Professional services	38	42	115	111
Communications	10	9	29	28
Foreign exchange remeasurement	(2)	7	18	12
Contingent consideration fair value adjustments	(1)	29	18	34
Product launch costs	—	1	59	12
Other general and administration	52	54	142	144
Total general and administration expense	385	413	1,243	1,189
Amortization of intangible assets	28	13	68	35
Total expense, GAAP	\$ 2,190	\$ 2,180	\$ 6,549	\$ 6,553

Three Months Ended September 30, 2019 Compared with Three Months Ended September 30, 2018

GAAP Expense increased \$10 million from the three months ended September 30, 2018, primarily driven by higher employee compensation and benefits expense and expense linked to the eFront Transaction, partially offset by lower general and administration expense

Employee compensation and benefits expense increased \$14 million from the three months ended September 30, 2018, primarily reflecting higher headcount, partially offset by lower incentive compensation.

General and administration expense decreased \$28 million from the three months ended September 30, 2018, primarily due to lower transaction-related and foreign exchange remeasurement expense, partially offset by higher technology expense

Amortization of intangible assets expense increased \$15 million from the three months ended September 30, 2018, primarily reflecting amortization of intangible assets associated with the eFront Transaction

Nine Months Ended September 30, 2019 Compared with Nine Months Ended September 30, 2018

GAAP Expense decreased \$4 million from the nine months ended September 30, 2018, driven primarily by lower employee compensation and benefits and volume-related expense, partially offset by higher general and administration expense, which reflected the previously mentioned product launch costs, and higher amortization of intangible assets

Employee compensation and benefits expense decreased \$42 million from the nine months ended September 30, 2018, primarily reflecting lower incentive compensation, driven in part by lower operating income, partially offset by higher salaries and headcount

Direct fund expense decreased \$41 million from the nine months ended September 30, 2018, reflecting the negative impact of markets and foreign exchange movements on average AUM

General and administration expense increased \$54 million from the nine months ended September 30, 2018, primarily due to higher product launch costs, technology expense and the impact of foreign exchange remeasurement expense, partially offset by lower contingent consideration fair value adjustments related to prior acquisitions and lower portfolio services, and marketing and promotional expense

Amortization of intangible assets expense increased \$33 million from the nine months ended September 30, 2018, primarily reflecting amortization of intangible assets associated with the eFront Transaction.

Nonoperating Results

The summary and reconciliation of GAAP nonoperating income (expense) to nonoperating income (expense), as adjusted for the three and nine months ended September 30, 2019 and 2018 was as follows

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
(in millions)				
Nonoperating income (expense), GAAP basis ⁽¹⁾	\$ (42)	\$ 33	\$ 140	\$ (7)
Less: Net income (loss) attributable to NCI	—	(13)	17	(3)
Nonoperating income (expense), as adjusted, net of NCI ⁽²⁾⁽³⁾	\$ (42)	\$ 46	\$ 123	\$ (4)

⁽¹⁾ Amounts include losses of \$5 million and \$9 million for the three months ended September 30, 2019 and 2018, respectively, attributable to consolidated variable interest entities ("VIEs"). Amounts include gains of \$128 million and losses of \$21 million for the nine months ended September 30, 2019 and 2018, respectively, attributable to consolidated VIEs.

⁽²⁾ Net of income (loss) attributable to NCI.

⁽³⁾ Management believes nonoperating income (expense), as adjusted, is an effective measure for reviewing BlackRock's nonoperating results. See *Non-GAAP Financial Measures* for further information on non-GAAP financial measures for the three and nine months ended September 30, 2019 and 2018.

The components of nonoperating income (expense), as adjusted, for the three and nine months ended September 30, 2019 and 2018 were as follows

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
(in millions)				
Net gain (loss) on investments ⁽¹⁾⁽²⁾				
Private equity	\$ 6	\$ 4	\$ 38	\$ 10
Real assets	12	10	22	24
Other alternatives ⁽³⁾	3	1	18	5
Other investments ⁽⁴⁾	—	(3)	104	(20)
Subtotal	21	12	182	19
Other gains (losses) ⁽⁵⁾	(28)	51	25	52
Total net gain (loss) on investments ⁽¹⁾⁽²⁾	(7)	63	207	71
Interest and dividend income	19	29	68	63
Interest expense	(54)	(46)	(152)	(138)
Net interest expense	(35)	(17)	(84)	(75)
Nonoperating income (expense), as adjusted ⁽¹⁾⁽²⁾	\$ (42)	\$ 46	\$ 123	\$ (4)

⁽¹⁾ Net of net income (loss) attributable to NCI. Amounts also include net gain (loss) on consolidated VIEs.

⁽²⁾ Management believes nonoperating income (expense), as adjusted, is an effective measure for reviewing BlackRock's nonoperating results. See *Non-GAAP Financial Measures* for further information on non-GAAP financial measures for the three and nine months ended September 30, 2019 and 2018.

⁽³⁾ Amounts primarily include net gains (losses) related to direct hedge fund strategies and hedge fund solutions.

⁽⁴⁾ Amounts primarily include net gains (losses) related to equity and fixed income investments.

⁽⁵⁾ Amounts for the three and nine months ended September 30, 2019 and 2018 primarily include noncash pre-tax gains (losses) related to the revaluation of certain minority investments. Amounts for the three and nine months ended September 30, 2018 also include a \$40 million pre-tax gain related to the DSP Transaction.

Income Tax Expense

(in millions)	GAAP				As Adjusted			
	Three Months Ended September 30,		Nine Months Ended September 30,		Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018	2019	2018	2019	2018
Operating income ⁽¹⁾	\$ 1,502	\$ 1,396	\$ 4,013	\$ 4,211	\$ 1,502	\$ 1,400	\$ 4,013	\$ 4,221
Total nonoperating income (expense) ⁽¹⁾⁽²⁾	\$ (42)	\$ 46	\$ 123	\$ (4)	\$ (42)	\$ 46	\$ 123	\$ (4)
Income before income taxes ⁽²⁾	\$ 1,460	\$ 1,442	\$ 4,136	\$ 4,207	\$ 1,460	\$ 1,446	\$ 4,136	\$ 4,217
Income tax expense	\$ 341	\$ 226	\$ 961	\$ 829	\$ 341	\$ 232	\$ 961	\$ 831
Effective tax rate	23.3 %	15.7 %	23.2 %	19.7 %	23.3 %	16.0 %	23.2 %	19.7 %

⁽¹⁾ Management believes nonoperating income (expense), as adjusted, is an effective measure for reviewing BlackRock's nonoperating results. See *Non-GAAP Financial Measures* for further information.

⁽²⁾ Net of net income (loss) attributable to NCI.

2019. The nine months ended September 30, 2019 income tax expense included a discrete tax benefit of \$22 million related to stock-based compensation awards that vested in 2019.

2018. The three and nine months ended September 30, 2018 income tax expense reflected \$90 million of discrete tax benefits, primarily related to changes in the Company's organizational entity structure. The nine months ended September 30, 2018 income tax expense also included a discrete tax benefit of \$58 million related to stock-based compensation awards that vested in 2018.

BALANCE SHEET OVERVIEW

As Adjusted Balance Sheet

The following table presents a reconciliation of the condensed consolidated statement of financial condition presented on a GAAP basis to the condensed consolidated statement of financial condition, excluding the impact of separate account assets and separate account collateral held under securities lending agreements (directly related to lending separate account securities) and separate account liabilities and separate account collateral liabilities under securities lending agreements and consolidated sponsored investment products

The Company presents the as adjusted balance sheet as additional information to enable investors to exclude certain assets that have equal and offsetting liabilities or noncontrolling interests that ultimately do not have an impact on stockholders' equity or cash flows. Management views the as adjusted balance sheet, a non-GAAP financial measure, as an economic presentation of the Company's total assets and liabilities, however, it does not advocate that investors consider such non-GAAP financial measures in isolation from, or as a substitute for, financial information prepared in accordance with GAAP.

Separate Account Assets and Liabilities and Separate Account Collateral Held under Securities Lending Agreements

Separate account assets are maintained by BlackRock Life Limited, a wholly owned subsidiary of the Company that is a registered life insurance company in the United Kingdom, and represent segregated assets held for purposes of funding individual and group pension contracts. The Company records equal and offsetting separate account liabilities. The separate account assets are not available to creditors of the Company and the holders of the pension contracts have no recourse to the Company's assets. The net investment income attributable to separate account assets accrues directly to the contract owners and is not reported on the condensed consolidated statements of income. While BlackRock has no economic interest in these assets or liabilities, BlackRock earns an investment advisory fee for the service of managing these assets on behalf of its clients.

In addition, the Company records on its condensed consolidated statements of financial condition the separate account collateral received under BlackRock Life Limited securities lending arrangements as its own asset in addition to an equal and offsetting separate account collateral liability for the obligation to return the collateral. The collateral is not available to creditors of the Company and the borrowers under the securities lending arrangements have no recourse to the Company's assets.

Consolidated Sponsored Investment Products

The Company consolidates certain sponsored investment products accounted for as voting rights entities ("VREs") and VIEs, (collectively, "Consolidated Sponsored Investment Products"). See Note 2, *Significant Accounting Policies*, in the notes to the consolidated financial statements contained in the 2018 Form 10-K for more information on the Company's consolidation policy.

The Company cannot readily access cash and cash equivalents or other assets held by Consolidated Sponsored Investment Products to use in its operating activities. In addition, the Company cannot readily sell investments held by Consolidated Sponsored Investment Products in order to obtain cash for use in the Company's operations.

September 30, 2019				
(in millions)	GAAP Basis	Separate Account Assets/ Collateral ⁽¹⁾	Consolidated Sponsored Investment Products ⁽²⁾	As Adjusted
Assets				
Cash and cash equivalents	\$ 4,476	\$ —	\$ 11	\$ 4,465
Accounts receivable	3,026	—	—	3,026
Investments	2,117	—	45	2,072
Assets of consolidated VIEs				
Cash and cash equivalents	131	—	131	—
Investments	2,898	—	1,234	1,664
Other assets	54	—	54	—
Separate account assets and collateral held under securities lending agreements	114,200	114,200	—	—
Other assets ⁽³⁾	4,011	—	(7)	4,018
Subtotal	130,913	114,200	1,468	15,245
Goodwill and intangible assets, net	32,959	—	—	32,959
Total assets	\$ 163,872	\$ 114,200	\$ 1,468	\$ 48,204
Liabilities				
Accrued compensation and benefits	\$ 1,500	\$ —	\$ —	\$ 1,500
Accounts payable and accrued liabilities	1,252	—	—	1,252
Liabilities of consolidated VIEs	716	—	716	—
Borrowings	5,932	—	—	5,932
Separate account liabilities and collateral liabilities under securities lending agreements	114,200	114,200	—	—
Deferred income tax liabilities ⁽⁴⁾	3,792	—	—	3,792
Other liabilities	2,876	—	(445)	3,321
Total liabilities	130,268	114,200	271	15,797
Equity				
Total stockholders' equity	32,407	—	—	32,407
Noncontrolling interests	1,197	—	1,197	—
Total equity	33,604	—	1,197	32,407
Total liabilities and equity	\$ 163,872	\$ 114,200	\$ 1,468	\$ 48,204

⁽¹⁾ Amounts represent segregated client assets and related liabilities. BlackRock has no economic interest in these assets or liabilities, BlackRock earns an investment advisory fee for the service of managing these assets on behalf of its clients.

⁽²⁾ Amounts primarily represent the portion of assets and liabilities of Consolidated Sponsored Investment Products attributable to NCI.

⁽³⁾ Amounts include property and equipment and other assets.

⁽⁴⁾ Amount includes approximately \$4.2 billion of deferred income tax liabilities related to goodwill and intangibles.

The following discussion summarizes the significant changes in assets and liabilities on a GAAP basis. Please see the condensed consolidated statements of financial condition as of September 30, 2019 and December 31, 2018 contained in Part I, Item 1 of this filing. The discussion does not include changes related to assets and liabilities that are equal and offsetting and have no impact on BlackRock's stockholders' equity.

Assets. Cash and cash equivalents at September 30, 2019 and December 31, 2018 included \$11 million and \$59 million, respectively, of cash held by consolidated VREs (see *Liquidity and Capital Resources* for details on the change in cash and cash equivalents during the nine months ended September 30, 2019).

Accounts receivable at September 30, 2019 increased \$369 million from December 31, 2018, primarily due to higher base fees, technology services and performance fee receivables. Investments were \$2,117 million at September 30, 2019 (for more information see *Investments* herein). Goodwill and intangible assets increased \$1,594 million from December 31, 2018, primarily due to the eFront Transaction, partially offset by amortization of intangible assets. Other assets (including operating lease right-of-use ("ROU") assets and property and equipment) increased \$1,240 million from December 31, 2018, primarily due to the recognition of the operating lease ROU assets related to the adoption of the new lease accounting guidance and an increase in certain strategic investments, unit trust receivables (substantially offset by an increase in unit trust payables recorded within other liabilities) and other assets.

Liabilities. Accrued compensation and benefits at September 30, 2019 decreased \$488 million from December 31, 2018, primarily due to 2018 incentive compensation cash payments in the first quarter of 2019, partially offset by 2019 incentive compensation accruals. Other liabilities increased \$987 million from December 31, 2018, primarily due to the recognition of the operating lease liabilities related to the adoption of the new lease accounting guidance and higher unit trust payables (substantially offset by an increase in unit trust receivables recorded within other assets), partially offset by contingent liability payments in connection with certain prior acquisitions. Net deferred income tax liabilities at September 30, 2019 increased \$221 million from December 31, 2018, primarily due to the effects of temporary differences associated with the eFront Transaction, stock-based compensation and investment income.

Investments and Investments of Consolidated VIEs

The Company's investments and investments of consolidated VIEs (collectively, "Total Investments") were \$2,117 million and \$2,898 million, respectively, at September 30, 2019. Total Investments include consolidated investments held by sponsored investment products accounted for as VREs and VIEs. Management reviews BlackRock's Total Investments on an "economic" basis, which eliminates the portion of Total Investments that does not impact BlackRock's book value or net income attributable to BlackRock. BlackRock's management does not advocate that investors consider such non-GAAP financial measures in isolation from, or as a substitute for, financial information prepared in accordance with GAAP.

The Company presents Total Investments, as adjusted, to enable investors to understand the portion of Total Investments that is owned by the Company, net of NCI, as a gauge to measure the impact of changes in net nonoperating income (expense) on investments to net income (loss) attributable to BlackRock.

The Company further presents net "economic" investment exposure, net of deferred compensation investments and hedged investments, to reflect another helpful measure for investors. The economic impact of Total Investments held pursuant to deferred compensation arrangements is offset by a change in compensation expense. The impact of certain investments is substantially mitigated by swap hedges. Carried interest capital allocations are excluded as there is no impact to BlackRock's stockholders' equity until such amounts are realized as performance fees. Finally, the Company's regulatory investment in Federal Reserve Bank stock, which is not subject to market or interest rate risk, is excluded from the Company's net economic investment exposure.

	September 30, 2019	December 31, 2018
(in millions)		
Investments, GAAP	\$ 2,117	\$ 1,796
Investments held by consolidated VIEs, GAAP	2,898	2,680
Total Investments	5,015	4,476
Investments held by consolidated VIEs	(2,898)	(2,680)
Net interest in consolidated VIEs ⁽¹⁾	1,664	1,661
Investments held by consolidated VREs	(503)	(524)
Net interest in consolidated VREs	458	448
Total Investments, as adjusted	3,736	3,381
Federal Reserve Bank stock	(93)	(92)
Deferred compensation investments	(22)	(34)
Hedged investments	(533)	(483)
Carried interest (VIEs/VREs)	(458)	(387)
Total "economic" investment exposure	\$ 2,630	\$ 2,385

⁽¹⁾ Amount includes \$442 million of carried interest (VIEs) as of September 30, 2019 and \$369 million as of December 31, 2018, which has no impact on the Company's "economic" investment exposure.

The following table represents the carrying value of the Company's economic investment exposure, by asset type, at September 30, 2019 and December 31, 2018

<i>(in millions)</i>	September 30, 2019	December 31, 2018
Private equity	\$ 361	\$ 305
Real assets	345	377
Other alternatives ⁽¹⁾	248	199
Other investments ⁽²⁾	1,676	1,504
Total "economic" investment exposure	\$ 2,630	\$ 2,385

⁽¹⁾ Other alternatives include direct hedge fund strategies and hedge fund solutions

⁽²⁾ Other investments primarily include unhedged seed investments in fixed income, equity and multi-asset mutual funds/strategies as well as UK government securities primarily held for regulatory purposes

As adjusted investment activity for the nine months ended September 30, 2019 was as follows

<i>(in millions)</i>	Nine Months Ended September 30, 2019
Total Investments, as adjusted, beginning balance	\$ 3,381
Purchases/capital contributions/acquisitions	709
Sales/maturities	(522)
Distributions ⁽¹⁾	(123)
Market appreciation(depreciation)/earnings from equity method investments	249
Carried interest capital allocations/(distributions)	71
Other	(29)
Total Investments, as adjusted, ending balance	\$ 3,736

⁽¹⁾ Amount includes distributions representing return of capital and return on investments.

LIQUIDITY AND CAPITAL RESOURCES

BlackRock Cash Flows Excluding the Impact of Consolidated Sponsored Investment Products

The condensed consolidated statements of cash flows include the cash flows of the Consolidated Sponsored Investment Products. The Company uses an adjusted cash flow statement, which excludes the impact of Consolidated Sponsored Investment Products, as a supplemental non-GAAP measure to assess liquidity and capital requirements. The Company believes that its cash flows, excluding the impact of the Consolidated Sponsored Investment Products, provide investors with useful information on the cash flows of BlackRock relating to its ability to fund additional operating, investing and financing activities. BlackRock's management does not advocate that investors consider such non-GAAP measures in isolation from, or as a substitute for, its cash flows presented in accordance with GAAP.

The following table presents a reconciliation of the condensed consolidated statements of cash flows presented on a GAAP basis to the condensed consolidated statements of cash flows, excluding the impact of the cash flows of Consolidated Sponsored Investment Products.

	GAAP Basis	Impact on Cash Flows of Consolidated Sponsored Investment Products	Cash Flows Excluding Impact of Consolidated Sponsored Investment Products
<i>(in millions)</i>			
Cash, cash equivalents and restricted cash, December 31, 2018	\$ 6,505	\$ 245	\$ 6,260
Net cash provided by/(used in) operating activities	1,628	(1,016)	2,644
Net cash provided by/(used in) investing activities	(2,107)	(96)	(2,011)
Net cash provided by/(used in) financing activities	(1,369)	1,009	(2,378)
Effect of exchange rate changes on cash, cash equivalents and restricted cash	(33)	—	(33)
Net increase/(decrease) in cash, cash equivalents and restricted cash	(1,881)	(103)	(1,778)
Cash, cash equivalents and restricted cash, September 30, 2019	\$ 4,624	\$ 142	\$ 4,482

Sources of BlackRock's operating cash primarily include investment advisory, administration fees and securities lending revenue, performance fees, technology services revenue, advisory and other revenue and distribution fees. BlackRock uses its cash to pay all operating expense, interest and principal on borrowings, income taxes, dividends on BlackRock's capital stock, repurchases of the Company's stock, acquisitions, capital expenditures and purchases of co-investments and seed investments.

For details of the Company's GAAP cash flows from operating, investing and financing activities, see the condensed consolidated statements of cash flows contained in Part I, Item 1 of this filing.

Cash flows provided by operating activities, excluding the impact of Consolidated Sponsored Investment Products, primarily include the receipt of investment advisory and administration fees, securities lending revenue and performance fees offset by the payment of operating expenses incurred in the normal course of business, including year-end incentive compensation accrued for in the prior year.

Cash flows used in investing activities, excluding the impact of Consolidated Sponsored Investment Products, for the nine months ended September 30, 2019 were \$2,011 million and primarily reflected \$1.5 billion of cash outflow related to the eFront Transaction, \$572 million of investment purchases and \$160 million of purchases of property and equipment, partially offset by \$151 million of net proceeds from sales and maturities of certain investments.

Cash flows used in financing activities, excluding the impact of Consolidated Sponsored Investment Products, for the nine months ended September 30, 2019 were \$2,378 million, primarily resulting from \$1.9 billion of share repurchases, including \$400 million in open market transactions, a \$1.3 billion private transaction and \$238 million of employee tax withholdings related to employee stock transactions, and \$1.6 billion of cash dividend payments, partially offset by \$992 million of proceeds from long-term borrowings.

The Company manages its financial condition and funding to maintain appropriate liquidity for the business. Liquidity resources at September 30, 2019 and December 31, 2018 were as follows

	September 30, 2019	December 31, 2018
(in millions)		
Cash and cash equivalents ⁽¹⁾	\$ 4,476	\$ 6,302
Cash and cash equivalents held by consolidated VREs ⁽²⁾	(11)	(59)
Subtotal	4,465	6,243
Credit facility – undrawn	4,000	4,000
Total liquidity resources ⁽³⁾	\$ 8,465	\$ 10,243

⁽¹⁾ The percentage of cash and cash equivalents held by the Company's US subsidiaries was approximately 50% at both September 30, 2019 and December 31, 2018. See *Net Capital Requirements* herein for more information on net capital requirements in certain regulated subsidiaries.

⁽²⁾ The Company cannot readily access such cash to use in its operating activities.

⁽³⁾ Amount does not reflect year-end incentive compensation accruals, which are paid in the first quarter.

Total liquidity resources decreased \$1,778 million during the nine months ended September 30, 2019, primarily reflecting cash payments of 2018 year-end incentive awards, share repurchases of \$1.9 billion, reflecting the impact of a \$1.3 billion private transaction, approximately \$1.5 billion of cash outflow related to the eFront Transaction, and cash dividend payments of \$1.6 billion, partially offset by \$992 million of proceeds from long-term borrowings and cash flows from other operating activities.

A significant portion of the Company's \$3,736 million of Total Investments, as adjusted, is illiquid in nature and, as such, cannot be readily convertible to cash.

Share Repurchases. In January 2019, the Board of Directors authorized the repurchase of an additional seven million shares under the Company's existing share repurchase program for a total up to approximately 9.9 million shares of BlackRock common stock.

During the nine months ended September 30, 2019, the Company repurchased 4.0 million common shares under the share repurchase program for approximately \$1.7 billion, including a \$1.3 billion private transaction that closed on March 25, 2019. The Company has completed its targeted level of share repurchases for the year, but will remain opportunistic should relative valuation opportunities arise. At September 30, 2019, there were 5.9 million shares still authorized to be repurchased.

Net Capital Requirements. The Company is required to maintain net capital in certain regulated subsidiaries within a number of jurisdictions, which is partially maintained by retaining cash and cash equivalent investments in those subsidiaries or jurisdictions. As a result, such subsidiaries of the Company may be restricted in their ability to transfer cash between different jurisdictions and to their parents. Additionally, transfers of cash between international jurisdictions may have adverse tax consequences that could discourage such transfers.

BlackRock Institutional Trust Company, N.A. ("BTC") is chartered as a national bank that does not accept deposits or make commercial loans and whose powers are limited to trust and other fiduciary activities. BTC provides investment management and other fiduciary services, including investment advisory and securities lending agency services, to institutional clients. BTC is subject to regulatory capital and liquid asset requirements administered by the Office of the Comptroller of the Currency.

At both September 30, 2019 and December 31, 2018, the Company was required to maintain approximately \$1.8 billion in net capital in certain regulated subsidiaries, including BTC, entities regulated by the Financial Conduct Authority and Prudential Regulation Authority in the United Kingdom, and the Company's broker-dealers. The Company was in compliance with all applicable regulatory net capital requirements.

Short-Term Borrowings

2019 Revolving Credit Facility The Company's credit facility has an aggregate commitment amount of \$4.0 billion and was amended in March 2019 to extend the maturity date to March 2024 (the "2019 credit facility"). The 2019 credit facility permits the Company to request up to an additional \$1.0 billion of borrowing capacity, subject to lender credit approval, increasing the overall size of the 2019 credit facility to an aggregate principal amount not to exceed \$5.0 billion. Interest on borrowings outstanding accrues at a rate based on the applicable London Interbank Offered Rate plus a spread. The 2019 credit facility requires the Company not to exceed a maximum leverage ratio (ratio of net debt to earnings before interest, taxes, depreciation and amortization, where net debt equals total debt less unrestricted cash) of 3 to 1, which was satisfied with a ratio of less than 1 to 1 at September 30, 2019. The 2019 credit facility provides back-up liquidity to fund ongoing working capital for general corporate purposes and various investment opportunities. At September 30, 2019, the Company had no amount outstanding under the credit facility.

Commercial Paper Program. The Company can issue unsecured commercial paper notes (the "CP Notes") on a private-placement basis up to a maximum aggregate amount outstanding at any time of \$4.0 billion. The commercial paper program is currently supported by the 2019 credit facility. At September 30, 2019, BlackRock had no CP Notes outstanding.

Long-Term Borrowings

At September 30, 2019, the principal amount of long-term borrowings outstanding was \$6.0 billion. See Note 13, *Borrowings*, in the 2018 Form 10-K for more information on borrowings outstanding as of December 31, 2018.

During the nine months ended September 30, 2019, the Company paid approximately \$121 million of interest on long-term borrowings. Future principal repayments and interest requirements at September 30, 2019 were as follows:

(in millions)

Year	Principal	Interest	Total Payments
Remainder of 2019	\$ 1,000	\$ 70	\$ 1,070
2020	—	157	157
2021	750	141	891
2022	750	112	862
2023	—	99	99
2024	1,000	82	1,082
Thereafter ⁽¹⁾	2,463	212	2,675
Total	<u>\$ 5,963</u>	<u>\$ 873</u>	<u>\$ 6,836</u>

⁽¹⁾ The amount of principal and interest payments for the 2025 Notes (issued in Euros) represents the expected payment amounts using the EUR/USD foreign exchange rate as of September 30, 2019.

In April 2019, the Company issued \$1.0 billion in aggregate principal amount of 3.25% senior unsecured and unsubordinated notes maturing on April 30, 2029 (the "2029 Notes"). Interest is payable semi-annually on April 30 and October 30 of each year, commencing October 30, 2019, and is approximately \$33 million per year. The 2029 Notes may be redeemed prior to January 30, 2029 in whole or in part at any time, at the option of the Company, at a "make-whole" redemption price or at par thereafter. The unamortized discount and debt issuance costs are being amortized over the remaining term of the 2029 Notes.

Commitments and Contingencies

Investment Commitments At September 30, 2019, the Company had \$533 million of various capital commitments to fund sponsored investment products, including consolidated VIEs. These funds include private equity funds, real assets funds and opportunistic funds. This amount excludes additional commitments made by consolidated funds of funds to underlying third-party funds as third-party noncontrolling interest holders have the legal obligation to fund the respective commitments of such funds of funds. Generally, the timing of the funding of these commitments is unknown and the commitments are callable on demand at any time prior to the expiration of the commitment. These unfunded commitments are not recorded on the condensed consolidated statements of financial condition. These commitments do not include potential future commitments approved by the Company that are not yet legally binding. The Company intends to make additional capital commitments from time to time to fund additional investment products for, and with, its clients.

Contingent Payments Related to Business Acquisitions In connection with certain acquisitions, BlackRock is required to make contingent payments, subject to achieving specified performance targets, which may include revenue related to acquired contracts or new capital commitments for certain products. The fair value of the remaining aggregate contingent payments at September 30, 2019 totaled \$167 million and is included in other liabilities on the condensed consolidated statements of financial condition.

Carried Interest Clawback As a general partner in certain investment products, including private equity partnerships and certain hedge funds, the Company may receive carried interest cash distributions from the partnerships in accordance with distribution provisions of the partnership agreements. The Company may, from time to time, be required to return all or a portion of such distributions to the limited partners in the event the limited partners do not achieve a return as specified in the various partnership agreements. Therefore, BlackRock records carried interest subject to such clawback provisions in Total Investments, or cash/cash of consolidated VIEs to the extent that it is distributed, and as a deferred carried interest liability/other liabilities of consolidated VIEs on its condensed consolidated statements of financial condition. Carried interest is recorded as performance fees on BlackRock's condensed consolidated statements of income when the fees are no longer probable of significant reversal.

Indemnifications On behalf of certain clients, the Company lends securities to highly rated banks and broker-dealers. In these securities lending transactions, the borrower is required to provide and maintain collateral at or above regulatory minimums. Securities on loan are marked to market daily to determine if the borrower is required to pledge additional collateral. BlackRock has issued certain indemnifications to certain securities lending clients against potential loss resulting from a borrower's failure to fulfill its obligations under the securities lending agreement should the value of the collateral pledged by the borrower at the time of default be insufficient to cover the borrower's obligation under the securities lending agreement. At September 30, 2019, the Company indemnified certain of its clients for their securities lending loan balances of approximately \$211 billion. The Company held, as agent, cash and securities totaling \$225 billion as collateral for indemnified securities on loan at September 30, 2019. The fair value of these indemnifications was not material at September 30, 2019.

While the collateral pledged by a borrower is intended to be sufficient to offset the borrower's obligations to return securities borrowed and any other amounts owing to the lender under the relevant securities lending agreement, in the event of a borrower default, the Company can give no assurance that the collateral pledged by the borrower will be sufficient to fulfill such obligations. If the amount of such pledged collateral is not sufficient to fulfill such obligations to a client for whom the Company has provided indemnification, BlackRock would be responsible for the amount of the shortfall. These indemnifications cover only the collateral shortfall described above, and do not in any way guarantee, assume or otherwise insure the investment performance or return of any cash collateral vehicle into which securities lending cash collateral is invested.

Critical Accounting Policies

The preparation of condensed consolidated financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the condensed consolidated financial statements and the reported amounts of revenue and expense during the reporting periods. Actual results could differ significantly from those estimates. Management considers the following critical accounting policies important to understanding the condensed consolidated financial statements. For a summary of these and additional accounting policies see Note 2, *Significant Accounting Policies*, in the notes to the condensed consolidated financial statements, including information regarding the adoption of Accounting Standards Update 2016-02, *Leases*. In addition, see *Critical Accounting Policies* in Management's Discussion and Analysis of Financial Condition and Results of Operations and Note 2, *Significant Accounting Policies*, in the 2018 Form 10-K for further information.

Consolidation. In the normal course of business, the Company is the manager of various types of sponsored investment vehicles. The Company performs an analysis for investment products to determine if the product is a VIE or a VRE. Assessing whether an entity is a VIE or a VRE involves judgment and analysis. Factors considered in this assessment include the entity's legal organization, the entity's capital structure and equity ownership, and any related party or de facto agent implications of the Company's involvement with the entity. Investments that are determined to be VREs are consolidated if the Company can exert control over the financial and operating policies of the investee, which generally exists if there is greater than 50% voting interest. See Note 6, *Consolidated Voting Rights Entities*, in the notes to the condensed consolidated financial statements for more information. Investments that are determined to be VIEs are consolidated if the Company is the primary beneficiary ("PB") of the entity. BlackRock is deemed to be the PB of a VIE if it has the power to direct the activities that most significantly impact the entities' economic performance and has the obligation to absorb losses or the right to receive benefits that potentially could be significant to the VIE. The Company generally consolidates VIEs in which it holds an equity ownership interest of 10% or greater and deconsolidates such VIEs once equity ownership falls below 10%. See Note 7, *Variable Interest Entities*, in the notes to the condensed consolidated financial statements for more information.

Fair Value Measurements. The Company's assessment of the significance of a particular input to the fair value measurement according to the fair value hierarchy (i.e., Level 1, 2 and 3 inputs, as defined) in its entirety requires judgment and considers factors specific to the financial instrument. See Note 2, *Significant Accounting Policies*, in the notes to the condensed consolidated financial statements for more information on fair value measurements.

Leases. The Company determines if a contract is a lease or contains a lease at inception. The identification of whether a contract contains a lease requires judgment, including determining whether there are identified assets in the contract and whether the Company has control over such identified assets.

Fixed lease payments are included in ROU assets and lease liabilities on the condensed consolidated statement of financial condition. The Company recognizes ROU assets and lease liabilities based on the present value of the future lease payments over the lease term at the commencement date discounted using the Company's incremental borrowing rate ("IBR"). Management judgment is required in determining the Company's IBR, including assessing the Company's credit rating using various financial metrics, including revenue, operating margin and revenue growth, and, as appropriate, performing market analysis of yields on publicly traded bonds (secured or unsecured) of comparable companies. See Note 2, *Significant Accounting Policies*, in the notes to the condensed consolidated financial statements for more information on leases.

Investment Advisory Performance Fees / Carried Interest. The Company receives investment advisory performance fees, including incentive allocations (carried interest) from certain actively managed investment funds and certain separately managed accounts. These performance fees are dependent upon exceeding specified relative or absolute investment return thresholds, which may vary by product or account, and include monthly, quarterly, annual or longer measurement periods.

Performance fees, including carried interest, are recognized when it is determined that they are no longer probable of significant reversal (such as upon the sale of a fund's investment or when the amount of AUM becomes known as of the end of a specified measurement period). Given the unique nature of each fee arrangement, contracts with customers are evaluated on an individual basis to determine the timing of revenue recognition. Significant judgement is involved in making such determination. Performance fees typically arise from investment management services that began in prior reporting periods. Consequently, a portion of the fees the Company recognizes may be partially related to the services performed in prior periods that meet the recognition criteria in the current period. At each reporting date, the Company considers various factors in estimating performance fees to be recognized, including carried interest. These factors include but are not limited to whether: (1) the fees are dependent on the market and thus are

highly susceptible to factors outside the Company's influence; (2) the fees have a large number and a broad range of possible amounts, and (3) the funds or separately managed accounts have the ability to invest or reinvest their sales proceeds.

The Company is allocated carried interest from certain alternative investment products upon exceeding performance thresholds. The Company may be required to reverse/return all, or part, of such carried interest allocations/distributions depending upon future performance of these funds. Carried interest subject to such clawback provisions is recorded in investments/investments of consolidated VIEs or cash/cash of consolidated VIEs to the extent that it is distributed, on its condensed consolidated statements of financial condition.

The Company records a liability for deferred carried interest to the extent it receives cash or capital allocations related to carried interest prior to meeting the revenue recognition criteria. At September 30, 2019 and December 31, 2018, the Company had \$388 million and \$293 million, respectively, of deferred carried interest recorded in other liabilities/other liabilities of consolidated VIEs on the condensed consolidated statements of financial condition. A portion of the deferred carried interest may also be paid to certain employees. The ultimate timing of the recognition of performance fee revenue and related compensation expense, if any, for these products is unknown. See Note 15, *Revenue*, in the notes to the condensed consolidated financial statements for detailed changes in the deferred carried interest liability balance for the three and nine months ended September 30, 2019 and 2018.

Accounting Developments

For accounting pronouncements that the Company adopted during the nine months ended September 30, 2019, see Note 2, *Significant Accounting Policies*, in the notes to the condensed consolidated financial statements.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

AUM Market Price Risk. BlackRock's investment advisory and administration fees are primarily comprised of fees based on a percentage of the value of AUM and, in some cases, performance fees expressed as a percentage of the returns realized on AUM. At September 30, 2019, the majority of the Company's investment advisory and administration fees were based on average or period end AUM of the applicable investment funds or separate accounts. Movements in equity market prices, interest rates/credit spreads, foreign exchange rates or all three could cause the value of AUM to decline, which would result in lower investment advisory and administration fees.

Corporate Investments Portfolio Risks. As a leading investment management firm, BlackRock devotes significant resources across all of its operations to identifying, measuring, monitoring, managing and analyzing market and operating risks, including the management and oversight of its own investment portfolio. The Board of Directors of the Company has adopted guidelines for the review of investments to be made by the Company, requiring, among other things, that investments be reviewed by certain senior officers of the Company, and that certain investments may be referred to the Audit Committee or the Board of Directors, depending on the circumstances, for approval.

In the normal course of its business, BlackRock is exposed to equity market price risk, interest rate/credit spread risk and foreign exchange rate risk associated with its corporate investments.

BlackRock has investments primarily in sponsored investment products that invest in a variety of asset classes, including real assets, private equity and hedge funds. Investments generally are made for co-investment purposes, to establish a performance track record, to hedge exposure to certain deferred compensation plans or for regulatory purposes. Currently, the Company has a seed capital hedging program in which it enters into swaps to hedge market and interest rate exposure to certain investments. At September 30, 2019, the Company had outstanding total return swaps with an aggregate notional value of approximately \$533 million. At September 30, 2019, there were no outstanding interest rate swaps.

At September 30, 2019, approximately \$3.4 billion of BlackRock's Total Investments were maintained in consolidated sponsored investment funds accounted for as VREs and VIEs. Excluding the impact of the Federal Reserve Bank stock, carried interest, investments made to hedge exposure to certain deferred compensation plans and certain investments that are hedged via the seed capital hedging program, the Company's economic exposure to its investment portfolio is \$2,630 million. See *Balance Sheet Overview- Investments and Investments of Consolidated VIEs* in Management's Discussion and Analysis of Financial Condition and Results of Operations for further information on the Company's Total Investments.

Equity Market Price Risk. At September 30, 2019, the Company's net exposure to equity market price risk in its investment portfolio was approximately \$986 million of the Company's total economic investment exposure. Investments subject to market price risk include private equity and real assets investments, hedge funds and funds of funds as well as mutual funds. The Company estimates that a hypothetical 10% adverse change in market prices would result in a decrease of approximately \$99 million in the carrying value of such investments.

Interest Rate/Credit Spread Risk. At September 30, 2019, the Company was exposed to interest-rate risk and credit spread risk as a result of approximately \$1,644 million of Total Investments in debt securities and sponsored investment products that invest primarily in debt securities. Management considered a hypothetical 100 basis point fluctuation in interest rates or credit spreads and estimates that the impact of such a fluctuation on these investments, in the aggregate, would result in a decrease, or increase, of approximately \$47 million in the carrying value of such investments.

Foreign Exchange Rate Risk. As discussed above, the Company invests in sponsored investment products that invest in a variety of asset classes. The carrying value of the total economic investment exposure denominated in foreign currencies, primarily the British pound and Euro, was \$689 million at September 30, 2019. A 10% adverse change in the applicable foreign exchange rates would result in approximately a \$69 million decline in the carrying value of such investments.

Other Market Risks. The Company executes forward foreign currency exchange contracts to mitigate the risk of certain foreign exchange risk movements. At September 30, 2019, the Company had outstanding forward foreign currency exchange contracts with an aggregate notional value of approximately \$2.4 billion.

Item 4. Controls and Procedures

Disclosure Controls and Procedures. Under the direction of BlackRock's Chief Executive Officer and Chief Financial Officer, BlackRock evaluated the effectiveness of its disclosure controls and procedures (as such term is defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act) as of the end of the period covered by this quarterly report on Form 10-Q. Based on this evaluation, BlackRock's Chief Executive Officer and Chief Financial Officer have concluded that BlackRock's disclosure controls and procedures were effective.

Internal Control over Financial Reporting. There were no changes in our internal control over financial reporting that occurred during the quarter ended September 30, 2019 that have materially affected or are reasonably likely to materially affect our internal control over financial reporting.

PART II – OTHER INFORMATION

Item 1. Legal Proceedings

From time to time, BlackRock receives subpoenas or other requests for information from various US federal and state governmental and regulatory authorities and international governmental and regulatory authorities in connection with industry-wide or other investigations or proceedings. It is BlackRock's policy to cooperate fully with such matters. The Company, certain of its subsidiaries and employees have been named as defendants in various legal actions, including arbitrations and other litigation arising in connection with BlackRock's activities. Additionally, BlackRock-advised investment portfolios may be subject to lawsuits, any of which potentially could harm the investment returns of the applicable portfolio or result in the Company being liable to the portfolios for any resulting damages.

On May 27, 2014, certain investors in the BlackRock Global Allocation Fund, Inc. and the BlackRock Equity Dividend Fund (collectively, the "Funds") filed a consolidated complaint (the "Consolidated Complaint") in the US District Court for the District of New Jersey against BlackRock Advisors, LLC, BlackRock Investment Management, LLC and BlackRock International Limited under the caption *In re BlackRock Mutual Funds Advisory Fee Litigation*. In the lawsuit, which purports to be brought derivatively on behalf of the Funds, the plaintiffs allege that the defendants violated Section 36(b) of the Investment Company Act by receiving allegedly excessive investment advisory fees from the Funds. On June 13, 2018, the court granted in part and denied in part the defendants' motion for summary judgment. On July 25, 2018, the plaintiffs served a pleading that supplemented the time period of their alleged damages to run through the date of trial. The lawsuit seeks, among other things, to recover on behalf of the Funds all allegedly excessive advisory fees received by the defendants beginning twelve months preceding the start of the lawsuit with respect to each Fund and ending on the date of judgment, along with purported lost investment returns on those amounts, plus interest. The trial on the remaining issues was completed on August 29, 2018. On February 8, 2019, the court issued an order dismissing the claims in their entirety. The plaintiffs filed a notice of appeal on March 8, 2019, which remains pending. The defendants believe the claims in this lawsuit are without merit.

On June 16, 2016, iShares Trust, BlackRock, Inc. and certain of its advisory subsidiaries, and the directors and certain officers of the iShares ETFs were named as defendants in a purported class action lawsuit filed in California state court. The lawsuit was filed by investors in certain iShares ETFs (the "ETFs"), and alleges the defendants violated the federal securities laws by failing to adequately disclose in prospectuses issued by the ETFs the risks to the ETFs' shareholders in the event of a "flash crash." The plaintiffs seek unspecified monetary and rescission damages. The plaintiffs' complaint was dismissed in December 2016 and on January 6, 2017, the plaintiffs filed an amended complaint. On April 27, 2017, the court partially granted the defendants' motion for judgment on the pleadings, dismissing certain of the plaintiffs' claims. On September 18, 2017, the court issued a decision dismissing the remainder of the lawsuit after a one-day bench trial. On December 1, 2017, the plaintiffs appealed the dismissal of their lawsuit, which remains pending. The defendants believe the claims in this lawsuit are without merit.

On April 5, 2017, BlackRock, Inc., BlackRock Institutional Trust Company, N.A. ("BTC"), the BlackRock, Inc. Retirement Committee and various sub-committees, and a BlackRock employee were named as defendants in a purported class action lawsuit brought in the US District Court for the Northern District of California by a former employee on behalf of all participants and beneficiaries in the BlackRock employee 401(k) Plan (the "Plan") from April 5, 2011 to the present. The lawsuit generally alleges that the defendants breached their duties towards Plan participants in violation of the Employee Retirement Income Security Act of 1974 by, among other things, offering investment options that were overly expensive, underperformed unaffiliated peer funds, focused disproportionately on active versus passive strategies, and were unduly concentrated in investment options managed by BlackRock. On October 18, 2017, the plaintiffs filed an Amended Complaint, which, among other things, added as defendants certain current and former members of the BlackRock Retirement and Investment Committees. The Amended Complaint also included a new purported class claim on behalf of investors in certain Collective Trust Funds ("CTFs") managed by BTC. Specifically, the plaintiffs allege that BTC, as fiduciary to the CTFs, engaged in self-dealing by, most significantly, selecting itself as the securities lending agent on terms that the plaintiffs claim were excessive. The Amended Complaint also alleged that BlackRock took undue risks in its management of securities lending cash reinvestment vehicles during the financial crisis. On August 23, 2018, the court granted permission to the plaintiffs to file a Second Amended Complaint ("SAC") which added as defendants the BlackRock, Inc. Management Development and Compensation Committee, the Plan's independent investment consultant and the Plan's Administrative Committee and its members. On October 22, 2018, BlackRock filed a motion to dismiss the SAC, and on June 3, 2019, the plaintiffs filed a motion seeking to certify both the Plan and the CTF classes. On September 3, 2019, the court granted

BlackRock's motion to dismiss part of the plaintiffs' claim seeking to recover alleged losses in the securities lending vehicles, but denied the motion to dismiss in all other respects. Plaintiffs' motion to certify the Plan and CTF classes remains pending. The defendants believe the claims in this lawsuit are without merit.

Management, after consultation with legal counsel, currently does not anticipate that the aggregate liability arising out of regulatory matters or lawsuits will have a material effect on BlackRock's results of operations, financial position, or cash flows. However, there is no assurance as to whether any such pending or threatened matters will have a material effect on BlackRock's results of operations, financial position or cash flows in any future reporting period. Due to uncertainties surrounding the outcome of these matters, management cannot reasonably estimate the possible loss or range of loss that may arise from these matters.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

During the three months ended September 30, 2019, the Company made the following purchases of its common stock, which is registered pursuant to Section 12(b) of the Exchange Act

	Total Number of Shares Purchased ⁽¹⁾	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Maximum Number of Shares that May Yet Be Purchased Under the Plans or Programs
July 1, 2019 through July 31, 2019	4,822	\$ 467.70	—	6,077,434
August 1, 2019 through August 31, 2019	247,466	\$ 416.93	240,769	5,836,665
September 1, 2019 through September 30, 2019	7,982	\$ 423.05	—	5,836,665
Total	<u>260,270</u>	<u>\$ 418.06</u>	<u>240,769</u>	

⁽¹⁾ Consists of purchases made by the Company primarily to satisfy income tax withholding obligations of employees and members of the Company's Board of Directors related to the vesting of certain restricted stock or restricted stock unit awards and purchases made by the Company as part of the publicly announced share repurchase program

Item 6. Exhibits

Exhibit No.	Description
31 1	<u>Section 302 Certification of Chief Executive Officer</u>
31 2	<u>Section 302 Certification of Chief Financial Officer</u>
32 1	<u>Section 906 Certification of Chief Executive Officer and Chief Financial Officer</u>
101 INS	Inline XBRL Instance Document – the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document
101 SCH	Inline XBRL Taxonomy Extension Schema Document
101 CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document
101 DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document
101 PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101)

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized

BLACKROCK, INC.
(Registrant)

By /s/ Gary S. Shedlin
Gary S. Shedlin
Senior Managing Director &
Chief Financial Officer

Date November 8, 2019

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Section 2: EX-31.1 (SECTION 302 CERTIFICATION OF CHIEF EXECUTIVE OFFICER)

Exhibit 31.1

CEO CERTIFICATION

I, Laurence D. Fink, certify that

- 1 I have reviewed this Quarterly Report on Form 10-Q, for the period ended September 30, 2019 of BlackRock, Inc. ,
- 2 Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report,
- 3 Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report,
- 4 The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)), for the registrant and have
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared,
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles,
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
- 5 The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting, which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information, and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting

Date November 8, 2019

By /s/ Laurence D. Fink
Laurence D. Fink
Chairman & Chief Executive Officer

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Section 3: EX-31.2 (SECTION 302 CERTIFICATION OF CHIEF FINANCIAL OFFICER)

Exhibit 31.2

CFO CERTIFICATION

I, Gary S. Shedlin, certify that

- 1 I have reviewed this Quarterly Report on Form 10-Q, for the period ended September 30, 2019 of BlackRock, Inc. ,
- 2 Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report,
- 3 Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report,
- 4 The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)), for the registrant and have
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries is made known to us by others within those entities,

particularly during the period in which this report is being prepared.

- (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles.
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation, and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
- 5 The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions)
- (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting, which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting

Date November 8, 2019

By /s/ Gary S. Shedlin
Gary S. Shedlin
Senior Managing Director & Chief Financial Officer

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Section 4: EX-32.1 (SECTION 906 CERTIFICATION OF CHIEF EXECUTIVE OFFICER AND CHIEF FINANCIAL OFFICER)

Exhibit 32.1

Certification of CEO and CFO Pursuant to
18 U.S.C. Section 1350,
as Adopted Pursuant to
Section 906 of the Sarbanes-Oxley Act of 2002

In connection with the Quarterly Report on Form 10-Q of BlackRock, Inc. (the "Company") for the quarterly period ended September 30, 2019 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), Laurence D. Fink, as Chief Executive Officer of the Company, and Gary S. Shedlin, as Chief Financial Officer of the Company, each hereby certifies, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company

/s/ Laurence D. Fink
Name Laurence D. Fink
Title Chairman & Chief Executive Officer
Date November 8, 2019

/s/ Gary S. Shedlin
Name Gary S. Shedlin
Title Senior Managing Director & Chief Financial Officer
Date November 8, 2019

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