BANK OF AMERICA CORP /DE/
Form 10-K
February 23, 2017

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

(Mark One)

[ü] ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended December 31, 2016

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:
1-6523

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.:
56-0906609
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 London Stock Exchange Tokyo Stock Exchange
Warrants to purchase Common Stock (expiring October 28, 2018)	New York Stock Exchange
Warrants to purchase Common Stock (expiring January 16, 2019)	New York Stock Exchange
Depositary Shares, each representing a 1/1,000th interest in a share of 6.204% Non-Cumulative Preferred Stock, Series D	New York Stock Exchange
Depositary Shares, each representing a 1/1,000th interest in a share of Floating Rate Non-Cumulative Preferred Stock, Series E	New York Stock Exchange

Depositary Shares, each representing a 1/1,000th interest in a share of 6.625% Non-Cumulative Preferred Stock, Series I	New York Stock Exchange
Depositary Shares, each representing a 1/1,000th interest in a share of 6.625% Non-Cumulative Preferred Stock, Series W	New York Stock Exchange
Depositary Shares, each representing a 1/1,000th interest in a share of 6.500% Non-Cumulative Preferred Stock, Series Y	New York Stock Exchange
Depositary Shares, each representing a 1/1,000th interest in a share of 6.200% Non-Cumulative Preferred Stock, Series CC	New York Stock Exchange
Depositary Shares, each representing a 1/1,000th interest in a share of 6.000% Non-Cumulative Preferred Stock, Series EE	New York Stock Exchange

Title of each class	Name of each exchange on which registered
7.25% Non-Cumulative Perpetual Convertible Preferred Stock, Series L	New York Stock Exchange
Depositary 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
Depositary 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
Depositary Shares, each representing a 1/1,200th interest in a share of Bank of America Corporation 6.375% Non-Cumulative Preferred Stock, Series 3	New York Stock Exchange
Depositary 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
Depositary 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
7.00% Capital Securities of Countrywide Capital V (and the guarantees related thereto)	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
MBNA Capital B Floating Rate Capital Securities, Series B (and the guarantee related thereto)	New York Stock Exchange
Trust Preferred Securities of Merrill Lynch Capital Trust I (and the guarantee of the Registrant with respect thereto)	New York Stock Exchange
Trust Preferred Securities of Merrill Lynch Capital Trust III (and the guarantee of the Registrant with respect thereto)	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 ü
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 ü
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 ü 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 ü 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. ü
Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer ü	Accelerated filer	Non-accelerated filer (do not check if a smaller reporting company)	Smaller reporting company

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes No ü

The aggregate market value of the registrant's common stock ("Common Stock") held on June 30, 2016 by non-affiliates was approximately $135,576,678,761 (based on the June 30, 2016 closing price of Common Stock of $13.27 per share as reported on the New York Stock Exchange). At February 22, 2017, there were 10,025,121,972 shares of Common Stock outstanding.

Documents incorporated by reference: Portions of the definitive proxy statement relating to the registrant's annual meeting of stockholders scheduled to be held on April 26, 2017 are incorporated by reference in this Form 10-K in response to Items 10, 11, 12, 13 and 14 of Part III.

Table of Contents
Bank of America Corporation and Subsidiaries

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. 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 Securities Exchange Act of 1934 (Exchange Act) are available on our website at http://investor.bankofamerica.com under the heading Financial Information SEC Filings as soon as reasonably practicable after we electronically file such reports with, or furnish them to, the U.S. Securities and Exchange Commission (SEC). Also, we make available on http://investor.bankofamerica.com 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), and we also intend to disclose any amendments to our Code of Conduct, or waivers of our Code of Conduct on behalf of our Chief Executive Officer, Chief Financial Officer or Chief Accounting Officer, on 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 29 through 40 of Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations (MD&A) and Note 24 – Business Segment Information to the Consolidated Financial Statements in Item 8. Financial Statements and Supplementary Data (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, and e-commerce and other internet-based companies. We compete with some of these competitors globally and with others on a regional or product 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, 2016, we had approximately 208,000 full-time equivalent 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 previously defined 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. banking 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 2010 Dodd-Frank Wall Street Reform and Consumer Protection Act (Financial Reform Act) enacted sweeping financial regulatory reform across the financial services industry, including significant changes regarding capital adequacy and capital planning, stress testing, resolution planning, derivatives activities, prohibitions on proprietary trading and restrictions on debit interchange fees. As a result of the Financial Reform Act, we have altered and will continue to alter the way in which we conduct certain businesses.

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, the New York Stock Exchange and the 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 and National Futures Association or the 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 and supervision of the Prudential Regulatory Authority for prudential matters, and the Financial Conduct Authority for the conduct of business matters.

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 banking 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 (U.S. 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 were permanently increased to $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. The FDIC has adopted regulations that establish a long-term target DIF ratio of greater than two percent. The DIF ratio is currently below the required targets and the FDIC has adopted a restoration plan that may result in increased deposit insurance assessments. Beginning in the third quarter of 2016, the FDIC implemented a surcharge to accelerate compliance to the 1.35 percentage requirement. 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 12.

Capital, Liquidity and Operational Requirements

As a financial holding company, we and our bank subsidiaries are subject to the risk-based capital 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 for, 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 BHC's and national banks' risk governance frameworks. The Federal Reserve has also issued a final rule requiring us to maintain minimum amounts of long-term debt meeting specified eligibility 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 45, 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 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 annually 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 a BHC and 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 Corporation's plan is not credible, the Federal Reserve and the FDIC may jointly impose on us more stringent capital, leverage or liquidity requirements or restrictions on our 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 also 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.

Similarly, in the U.K., rules have been issued requiring the submission of significant information about certain U.K.-incorporated subsidiaries and other financial institutions, as well as branches of non-U.K. banks located in the U.K. (including information on intra-group dependencies, legal entity separation and barriers to resolution) to allow the Bank of England to develop resolution plans. As a result of the Bank of England'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, see Item 1A. Risk Factors – Regulatory, Compliance and Legal on page 12.

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.

In 2013, the FDIC issued a notice describing its preferred "single point of entry" strategy for resolving SIFIs. Under this approach, 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 Board has finalized regulations regarding the minimum levels of long-term debt required for BHCs to ensure there is adequate loss absorbing capacity in the event of a resolution.

For more information regarding our resolution, see Item 1A. Risk Factors – Regulatory, Compliance and Legal on page 12.

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, 2016,

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, 2016, 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, although the Federal Reserve extended the conformance period for certain existing covered investments and relationships to July 2017 and has issued a process for seeking additional extensions related to certain legacy covered 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. Various regulations have been promulgated since the financial crisis, including those under the Financial Reform Act, the European Union Markets in Financial Instruments Directive II/Regulation and the European Market Infrastructure Regulation, that regulate or will regulate the derivatives market by: 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 requiring the registration of U.S.-based derivatives dealers as swap dealers. In addition, in support of efforts to enhance the resolvability of SIFIs in an orderly manner, we and 23 other SIFIs have adhered to a protocol published by International Swaps and Derivatives Association, Inc. (ISDA) amending certain financial contracts to provide for contractual recognition of stays of termination rights under various statutory resolution regimes. In addition, the U.K., Germany, and Japan have adopted resolution stay regulations and other G-20 prudential regulators, including U.S. regulators, are expected to adopt similar resolution stay regulations in the near future.

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, but not limited to, the Equal Credit Opportunity Act, the Home Mortgage Disclosure Act, the Electronic Fund Transfer Act, the Fair Credit Reporting Act, the Real Estate Settlement Procedures Act, the 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 the Banks 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. The Gramm-Leach-Bliley Act also requires the Banks 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. The European Union (EU) has adopted the General Data Protection Regulation (GDPR) which replaces the Data Protection Directive and related implementing national laws in the Member States. The compliance date for the GDPR is May 25, 2018. It will have impacts across the enterprise and impact assessments are underway. Meanwhile other legislation, regulatory activity (the proposed e-Privacy Regulation, elements of the Fourth Money Laundering Directive) and court proceedings, and any impact of 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 in the EU.

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 41.

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 abroad, including the level and volatility of interest rates, gross domestic product (GDP) growth, inflation, consumer spending, employment levels, 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, investor sentiment and confidence, and the sustainability of economic growth all affect our business.

In the U.S. and abroad, uncertainties surrounding monetary and fiscal policies present economic challenges. Actions taken by the Federal Reserve and other central banks are beyond our control and difficult to predict and can affect the value of financial instruments and other assets, such as debt securities and mortgage servicing rights (MSRs), and impact our borrowers, potentially increasing delinquency rates.

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, including tax changes and new spending programs, may increase uncertainty surrounding the formulation of U.S. monetary policy and direction, 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 to certain trade policies or measures could upset financial markets, and disrupt world trade and commerce.

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.

For more information about economic conditions and challenges discussed above, see Executive Summary – 2016 Economic and Business Environment in the MD&A on page 21.

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, equity and futures prices, the implied volatility of interest rates, 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, and (viii) the general profitability and risk level of the transactions in which we engage. 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, while we expect our net interest income to benefit from increases in interest rates that occurred in the fourth quarter of 2016, if the ongoing low interest rate environment continues, this 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 15. In times of market stress or other unforeseen circumstances, such as the market conditions experienced in 2008 and 2009, previously uncorrelated indicators may become correlated and vice versa. These types of market movements have at times limited the effectiveness of our hedging strategies and have caused us to incur significant losses, and they may do so in the future. These changes in correlation can be exacerbated where other market participants are using risk or trading models with assumption or algorithms that are 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 79.

We may incur losses if the value of certain assets decline, including due to changes in interest rates and prepayment speeds.

We have a large portfolio of financial instruments, including, among others, 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, certain MSRs and certain other assets and liabilities that we measure at fair value. We determine the fair values of these instruments based on applicable accounting guidance which 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, 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 affect 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 about fair value measurements, see Note 20 – Fair Value Measurements to the Consolidated Financial Statements. For more information about our asset management businesses, see GWIM in the MD&A on page 33. For more information about interest rate risk management, see Interest Rate Risk Management for the Banking Book in the MD&A on page 84.

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; changes to our relationships with our funding providers based on real or perceived changes in our risk profile; changes in regulations or guidance that impact our funding avenues or ability to access certain funding sources; increased regulatory liquidity, capital and margin requirements for our U.S. or international banks and their nonbank subsidiaries; significant failure by a 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 a general market disruption or shock, negative views about the 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, redeem investments or unforeseen outflows of cash, including customer deposits, additional funding for

commitments and contingencies, as well as unexpected collateral calls, among other things.
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. 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 51.
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 when we 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 that downgrades will not occur.
A reduction in certain of our credit ratings could 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 ratings 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 information about the amount of additional collateral required and derivative liabilities that would be subject to unilateral termination at December 31, 2016 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 2 – 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 54 and Note 2 – Derivatives to the Consolidated Financial Statements.
Bank of America Corporation is a holding company and we depend upon our subsidiaries for liquidity, including our ability to pay dividends to shareholders and to fund payments on our 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 our subsidiaries to Bank of America Corporation or other subsidiaries.
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, 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. 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 Corporation from our subsidiaries in certain severely adverse liquidity scenarios. For more information regarding our resolution plan, see Item 1A. Risk Factors – Other on page 15.

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 45 and Note 13 – Shareholders' Equity to the Consolidated Financial Statements.

In the event of our resolution under our preferred single point of entry resolution strategy, such resolution could materially adversely affect our liquidity and financial condition and our ability to pay dividends to shareholders and to pay our obligations.

Bank of America Corporation, our parent holding company, is required annually to 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. Bank of America Corporation and key subsidiaries have entered into intercompany arrangements governing the contribution of capital and liquidity. As part of these arrangements, Bank of America Corporation transferred certain of its assets (and has agreed to transfer additional assets) to a wholly-owned holding company subsidiary in exchange for a subordinated note. Certain remaining assets secure ongoing obligations under these intercompany arrangements. The wholly-owned holding company subsidiary has also provided a committed line of credit which, in addition to cash, dividends and interest payments, including interest payments received in respect of the subordinated note, may be used to fund its obligations. These intercompany arrangements include provisions to terminate the line of credit, forgive the subordinated note and require Bank of America Corporation to contribute its remaining financial assets to the wholly-owned holding company subsidiary if its projected liquidity resources deteriorate so severely that resolution becomes imminent, which could materially and adversely affect our liquidity and ability to meet our payment obligations.

Further, 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, and 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.

In addition, under the Financial Reform Act, when a global systemically important bank (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 is 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.

We are subject to the Federal Reserve Board's recently finalized rules requiring U.S. G-SIBs to maintain minimum amounts of external total loss-absorbing capacity (TLAC).

On December 15, 2016, the Federal Reserve issued a final rule establishing external TLAC requirements to improve the resolvability and resiliency of large, interconnected BHCs. The rule will be effective January 1, 2019 and U.S. G-SIBs, including Bank of America, will be required to maintain a minimum external TLAC. We estimate our minimum required external TLAC would be the greater of 22.5 percent of risk-weighted assets or 9.5 percent of SLR leverage exposure. In addition, U.S. G-SIBS must meet a minimum long-term debt requirement. Our minimum required long-term debt is estimated to be the greater of 8.5 percent of risk-weighted assets or 4.5 percent of SLR leverage exposure. Actions required to comply with the minimum external TLAC requirement by January 1, 2019 could impact our cost of funding and liquidity risk management plans.

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 and counterparties could adversely affect our financial condition and results of operations.

Global and U.S. economic conditions may impact our credit portfolios. Economic or market disruptions would likely increase the risk that borrowers or counterparties would default or become delinquent in their obligations to us. 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 provisions for credit losses. Additionally, increased credit risk could also adversely affect our commercial loan portfolios with weakened customer and collateral positions.

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 estimate. 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 become less predictive of 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, 2016, 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 realized 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 loans, including home equity lines of credit (HELOCs), auto loans, consumer credit card and commercial real estate portfolios, which represent a large percentage of our overall credit portfolio. In addition, our commercial portfolios include exposures to certain industries, including the energy sector, which may result in higher credit losses for us due to adverse business conditions, market disruptions or greater volatility in those industries as the result of low energy prices or other factors. Economic weakness or deterioration in real estate values or household incomes could result in higher credit losses.

In addition, our home equity portfolio contains a significant percentage of loans in second-lien or more junior-lien positions, and such loans have elevated risk characteristics. Our home equity portfolio is largely comprised of HELOCs that have not yet entered their amortization period. 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. Loans in our HELOC portfolio generally have an initial draw period of 10 years and 23 percent of these loans will enter the amortization period during 2017. As a result, delinquencies and defaults may increase in future periods.

For additional information, see Consumer Portfolio Credit Risk Management in the MD&A on page 56.

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 increasing 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 55, Note 1 – Summary of Significant Accounting Principles and Note 4 – Outstanding Loans and Leases 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.

Although U.S. home prices continued to improve during 2016, the declines in prior years have negatively impacted 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. Conditions in the U.S. housing market in prior years have also resulted in 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 negatively affect our exposure to representations and warranties and 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 in the development, structuring or pricing of a derivative instrument. The terms of certain of our OTC derivative contracts and other trading agreements provide that upon the occurrence of certain specified events, such as a change in our credit ratings or that of certain of our subsidiaries, we may be required to provide additional collateral or other remedies, or our counterparties may have the right to terminate or otherwise diminish our rights under these contracts or agreements.

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.

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 derivative contracts and other trading agreements. The parent company's ability to substitute or make changes to these agreements to meet counterparties’ requests may be subject to certain limitations, including counterparty willingness, regulatory limitations on naming BANA as the new counterparty and the type or amount of collateral required. It is possible that such limitations on our ability to substitute or make changes to these agreements, including naming BANA as the new counterparty, could adversely affect our results of operations.

For more information on our derivatives exposure, see Note 2 – Derivatives to the Consolidated Financial Statements.

Geopolitical

We are subject to numerous political, economic, market, reputational, operational, legal, regulatory and other risks in the non-U.S. 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, exchange controls 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 negatively impacted by slow growth rates or recessionary conditions, market volatility and/or political unrest. The political and economic environment in Europe remains challenging and the current degree of political and economic uncertainty could increase. In the U.K., the impact of the vote to leave the EU remains uncertain.

Potential risks of default on 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 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, 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 international operations are subject to U.S. laws on foreign corrupt practices, the Office of Foreign Assets Control, know-your-customer requirements and anti-money laundering regulations. Our ability to

comply with these laws is dependent on our ability to improve detection and reporting capabilities and reduce variation in control processes and oversight accountability.

We are 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 74.

The U.K. Referendum, and the potential exit of the U.K. from the EU, could adversely affect us.

We conduct business in Europe primarily through our U.K. subsidiaries. For the year ended December 31, 2016, our operations in Europe, Middle East and Africa, including the U.K., represented approximately eight percent of our total revenue, net of interest expense. A referendum was held in the U.K. on June 23, 2016, which resulted in a majority vote in favor of exiting the EU. The vote outcome increased global economic and market uncertainty and volatility, and resulted in significant declines in the value of the British Pound. Market volatility has since reduced but the British Pound has continued to show weakness. The U.K. government has announced an intention to formally commence the exit process. Once the exit process begins, negotiations on the terms of the exit are expected to be a multi-year process. During this transition period, the ultimate impact of the U.K.'s exit from the EU may remain unclear and economic and market volatility may continue to occur. If uncertainty resulting from the U.K.'s potential exit from the EU negatively impacts economic conditions, financial markets and consumer confidence, our business, results of operations, financial position and/or operational model could be adversely affected.

In addition, if the terms of the exit limit the ability of our U.K. entities to conduct business in the EU or otherwise result in a significant increase in economic barriers between the U.K. and the EU, it is possible these changes could impose additional costs on us, cause us to be subject to different laws, regulations and/or regulatory authorities, cause adverse tax consequences to us, and could adversely impact our business, financial condition and operational model.

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 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, 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 third-party systems or infrastructure, expose us to risk. We have taken measures to implement 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 and rely. For example, large-scale strategic 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 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 these transactions or provide these services. There could be 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; and events arising from local or larger scale political or social matters, including terrorist acts. We continuously update these systems 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 cyberattack, 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 reputational harm.

Our businesses are highly dependent on the security and efficacy of our infrastructure, computer and data management systems, as well as those of third parties with whom we interact. Cybersecurity risks for financial institutions have significantly increased in recent years in part because of the proliferation of new technologies, the use of the Internet and telecommunications technologies to conduct financial transactions, and the increased sophistication and activities of organized crime, hackers, terrorists and other external parties, including foreign state actors. Our businesses rely 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. We, our customers, regulators and other third parties have been subject to, and are likely to continue to be the target of, cyberattacks. These cyberattacks include computer viruses, malicious or destructive code, 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, or otherwise materially disrupt our or our customers’ or other third parties’ network access or business operations.

Although to date we have not experienced any material losses or other material consequences relating to technology failure, cyberattacks or other information or security breaches, whether directed at us or third parties, there can be no assurance that we will not suffer such losses or other 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, the continued uncertain global economic environment, 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 priority for us. As cyberthreats 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.

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, cyberattack 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, cyberattack 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 businesses.

Any of the matters discussed above could result in our loss of customers and business opportunities, significant business disruption to our operations and business, misappropriation or destruction of our confidential information and/or that of our customers, or damage to 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.

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, 2016, we had approximately $18.3 billion of unresolved repurchase claims, net of duplicate claims and excluding claims where the statute of limitations has expired without litigation being commenced. We have also received notifications pertaining to loans for which we have not received a repurchase request from sponsors of third-party securitizations with whom we engaged in whole-loan transactions and for which we may owe indemnity obligations.

We have recorded a liability of $2.3 billion for obligations under representations and warranties exposures. We also have an estimated range of possible loss of up to $2 billion over our recorded liability. The recorded liability and estimated range of possible loss are based on currently available information, significant judgment and a number of assumptions that are subject to change. Future representations and warranties losses may occur in excess of our recorded liability and estimated range of possible loss and such losses could have an adverse effect on our liquidity, financial condition and results of operations.

Additionally, our recorded liability for representations and warranties exposures and the corresponding estimated range of possible loss do not consider certain losses related to servicing, including foreclosure and related costs, fraud, indemnity, or claims (including for residential mortgage-backed securities (RMBS)) related to securities law or monoline insurance litigation. 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, including the estimated range of possible loss, see Off-Balance Sheet Arrangements and Contractual Obligations – Representations and Warranties in the MD&A on page 40, Consumer Portfolio Credit Risk Management in the MD&A on page 56 and Note 7 – Representations and Warranties Obligations and Corporate Guarantees 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 large 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 were 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 2016, we sold approximately $15.3 billion of loans to Fannie Mae and Freddie Mac. Each is currently in a conservatorship with its primary regulator, the Federal Housing Finance Agency, acting as conservator. We cannot predict if, when or how the conservatorships will end, any associated changes to their business structure that could result or whether the conservatorships will end in receivership. 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. We cannot predict the prospects for the enactment, timing or content of legislative or rulemaking proposals regarding the future status of any GSEs. Accordingly, there continues to be uncertainty regarding their future, including whether they will continue to exist in their current form.

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 identify, measure, monitor, report and control our exposure to 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 risk monitoring and mitigation techniques, including hedging strategies and techniques that seek to balance our ability to profit from trading positions with our exposure to potential losses, those techniques are inherently limited because they cannot anticipate the existence or development of currently unanticipated or unknown risks and rely upon our ability to manage and aggregate data. For instance, we use various models to assess and control risk, which are subject to inherent limitations.

Our risk management framework is also dependent on ensuring that a sound risk culture exists throughout the Corporation, and that we manage risks associated with third parties and vendors. Uncertain economic conditions, heightened legislative and regulatory scrutiny of the financial services industry and the overall complexity of our operations, among other developments, have resulted in a heightened level of risk for us. Accordingly, we could suffer losses as a result of our failure to properly anticipate and manage risks.

For more information about our risk management policies and procedures, see Managing Risk in the MD&A on page 41.

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 will 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 or make our products and services more expensive for clients and customers.

Significant new legislation and regulations affecting the financial services industry have been enacted or proposed in recent years, both in the U.S. and globally. In response to the financial crisis, 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, the Federal Reserve, the OCC, the CFPB, Financial Stability Oversight Council, the FDIC, the Department of Labor, the SEC and CFTC. 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 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 new and proposed laws and regulations. However, a number of provisions still require final rulemaking, guidance and interpretation by regulatory authorities. Further, we could become subject to regulatory requirements beyond those currently proposed, adopted or contemplated. Accordingly, the cumulative effect of all of the new and proposed 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 increasingly active oversight, inspection and investigatory role across the financial services industry. Regulatory focus is not limited to laws and regulations applicable to the financial services industry specifically, but also extends to other significant regulations such as the Foreign Corrupt Practices Act and U.S. and international anti-money laundering regulations. The number of investigations and proceedings brought by regulators against the financial services industry generally has increased. 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 continue to 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 complexity of the federal and state regulatory and enforcement regimes in the U.S., coupled with the global scope of our operations and the increasing 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 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, compliance risks will continue to exist, particularly as we adapt to new rules and regulations. 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, 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.

U.S. federal banking agencies may require us to hold higher levels of regulatory capital, increase our regulatory capital ratios or increase liquidity requirements, which could result in the need to issue additional securities that qualify as regulatory capital 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 fail 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, 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 U.S. federal banking agencies. A significant component of regulatory capital ratios is calculating our risk-weighted assets, including operational risk, which may increase. Additionally, in April 2016, the U.S. banking regulators proposed Net Stable Funding Ratio (NSFR) requirements which target longer term liquidity risk and would apply to us and our subsidiary insured depository institutions beginning on January 1, 2018. The Basel Committee on Banking Supervision (BCBS) also has finalized its fundamental review of the trading book, which updates both modeled and standardized approaches for market risk measurement, and a revised standardized model for counterparty credit risk. The U.S. federal banking agencies may update the U.S. capital rules to incorporate the BCBS revisions.

As part of its annual CCAR review, the Federal Reserve conducts economic 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.

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. The Federal Reserve has indicated that it may consider incorporating a stress capital buffer into our capital plan minimum requirements which could increase our capital requirement. For additional information, see Capital Management – Regulatory Capital in the MD&A on page 45.

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 (such as the Financial Accounting Standards Board (FASB), 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 retroactively, resulting in us revising and republishing prior-period financial statements.

In June 2016, the FASB issued new accounting guidance that will require the earlier recognition of credit losses on loans and other financial instruments based on an expected loss model, replacing the incurred loss model that is currently in use. The new guidance is effective on January 1, 2020, with early adoption permitted on January 1, 2019. This new accounting standard is expected, on the date of adoption, to increase the allowance for credit losses with a resulting negative adjustment to retained earnings.

For more information on some of our critical accounting policies and recent accounting changes, see Complex Accounting Estimates in the MD&A on page 87 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.

Policy makers have indicated an interest in reforming the U.S. corporate income tax code in 2017. Possible approaches include lowering the 35 percent corporate tax rate, modifying the U.S. taxation of income earned outside the U.S. and limiting or eliminating various deductions, tax credits and/or other tax preferences. It is not possible at this time to quantify either the one-time impacts from the remeasurement of deferred tax assets and liabilities that might result upon tax reform enactment or the ongoing impacts reform proposals might have on income tax expense.
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.

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 employee misconduct, security breaches, unethical behavior, litigation or regulatory outcomes, compensation practices, the suitability or reasonableness of recommending particular trading or investment strategies, sales practices, failing to deliver products, standards of service and quality expected by our customers, clients and the community, compliance failures, inadequacy of responsiveness to internal controls, unintended disclosure of confidential information, 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 websites, 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 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, 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 deal with us, 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 additional information, see Capital Management – Regulatory Capital in the MD&A on page 45.

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 regulatory and government proceedings against us and other financial institutions remains 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 and results of operations or cause significant reputational harm to us, which in turn could adversely impact our business results and prospects. 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, increasingly have been 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. Our experience with certain regulatory authorities suggests continued supervisory focus on enforcement, including in connection with alleged violations of law and customer harm. Recent actions by regulators and government agencies indicate that they may, on an industry basis, increasingly pursue claims under the Financial Institutions Reform, Recovery, and

Enforcement Act of 1989 (FIRREA) and the False Claims Act, as well as claims under the antitrust laws. FIRREA contemplates civil monetary penalties as high as $1.89 million per violation or, if permitted by the court, based on pecuniary gain derived or pecuniary loss suffered as a result of the violation. Treble damages are also potentially available for False Claims Act cases. The ongoing environment of extensive regulation, regulatory compliance burdens, and regulatory and government enforcement, combined with uncertainty related to the evolving regulatory environment, has resulted in operational and compliance costs and risks, which may limit our ability to continue providing certain products and services.

For more information on litigation risks, see Note 12 – Commitments and Contingencies to the Consolidated Financial Statements.

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. Additionally, the changing regulatory environment may create competitive disadvantages for certain financial institutions 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 made it easier for non-depository institutions to offer products and services that traditionally were banking products, and for financial institutions to compete with technology companies in providing electronic and internet-based financial solutions including electronic securities trading, marketplace lending and payment processing. 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.

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 business that provides a broad range of financial products and services, delivered through multiple distribution channels. Our success depends on our ability to adapt our products and services to evolving industry standards. There is increasing pressure by competitors to provide products and services at lower prices and this may impact our ability to grow revenue and/or effectively compete, in part, due to legislative and regulatory developments that affect the competitive landscape. Additionally, the competitive landscape may be impacted by the growth of non-depository institutions that offer products that were traditionally banking products as well as new innovative 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 and payment systems, could require substantial expenditures to modify or adapt our existing products and services as we grow and develop our internet banking and mobile banking channel strategies in addition to remote connectivity solutions. We might not be 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.

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 or other regulators around the world. Recent 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 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 the capital requirements for credit, country, market, operational and strategic risks and to assess and control our operations. These models require oversight and periodic re-validation and are subject to inherent limitations due to the use of historical trends and 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 and illiquidity, especially during severe market downturns or stress events. 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 our models and strategies fail to properly anticipate and manage risks.

Failure to properly manage and aggregate data may result in inaccurate financial, regulatory and operational reporting.

We rely on our ability to manage data and our ability to aggregate data in an accurate and timely manner for effective risk reporting and management which may be limited by the effectiveness of our policies, programs, processes and practices that govern how data is acquired, validated, stored, protected and processed. While we continuously update our policies, programs, processes and practices, many of our data management and aggregation processes are manual and subject to human error or system failure. Failure to manage data effectively and to aggregate data in an accurate and timely 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, 2016, 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	1,200,392
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	565,866
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 81.7 million square feet in 21,194 facility and ATM locations globally, including approximately 76.0 million square feet in the U.S. (all 50 states and the District of Columbia, the U.S. Virgin Islands and Puerto Rico) and approximately 5.7 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. Our common stock is also listed on the London Stock Exchange and the Tokyo Stock Exchange. As of February 22, 2017, there were 183,458 registered shareholders of common stock. The table below sets forth the high and low closing sales prices of the common stock on the New York Stock Exchange for the periods indicated during 2015 and 2016, as well as the dividends we paid on a quarterly basis:

	Quarter	High	Low	Dividend
2015	First	$17.90	$15.15	$ 0.05
	Second	17.67	15.41	0.05
	Third	18.45	15.26	0.05
	Fourth	17.95	15.38	0.05
2016	First	16.43	11.16	0.05
	Second	15.11	12.18	0.05
	Third	16.19	12.74	0.075
	Fourth	23.16	15.63	0.075

For more information regarding our ability to pay dividends, see Note 13 – Shareholders’ Equity and Note 16 – Regulatory Requirements and Restrictions to the Consolidated Financial Statements, which are incorporated herein by reference.

For information on our equity compensation plans, see Note 18 – Stock-based Compensation Plans to the Consolidated Financial Statements and Item 12 on page 218 of this report, which are incorporated herein by reference.

The table below presents share repurchase activity for the three months ended December 31, 2016. The primary source of funds for cash distributions by the Corporation to its shareholders is dividends received from its banking subsidiaries. Each of the banking 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)	Common Shares Repurchased (1)	Weighted-Average Per Share Price	Shares Purchased as Part of Publicly Announced Programs	Remaining Buyback Authority Amounts (2)
October 1 - 31, 2016	18,801	$ 16.45	18,800	$ 3,291
November 1 - 30, 2016	30,128	17.72	30,128	2,757
December 1 - 31, 2016	22,323	21.76	22,320	2,271
Three months ended December 31, 2016	71,252	18.65		

(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 under equity incentive plans.

(2) The Corporation's 2016 CCAR capital plan included a request to repurchase $5.0 billion of common stock over four quarters beginning in the third quarter of 2016 and to repurchase common stock to offset the dilution resulting from certain equity-based compensation awards. On June 29, 2016, following the Federal Reserve's non-objection to the Corporation's 2016 CCAR capital plan, the Board authorized this common stock repurchase beginning July 1, 2016. During the three months ended December 31, 2016, pursuant to the Board's authorization, the Corporation repurchased $1.3 billion of common stock, which included common stock to offset equity-based compensation

awards. On January 13, 2017, the Corporation announced that the Board approved the repurchase of an additional $1.8 billion of common stock during the first and second quarters of 2017. Amounts shown in such column do not include such additional repurchase authority. For additional information, see Capital Management -- CCAR and Capital Planning on page 45 and Note 13 – Shareholders' Equity to the Consolidated Financial Statements.

The Corporation did not have any unregistered sales of its equity securities in 2016.

Item 6. Selected Financial Data

See Table 7 in the MD&A on page 26 and Statistical Table XII in the MD&A on page 105, 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,” “belie “continue,” "suggests" 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, 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 and in any of the Corporation’s subsequent Securities and Exchange Commission filings: the Corporation’s ability to resolve representations and warranties repurchase and related claims, including claims brought by investors or trustees seeking to distinguish certain aspects of the New York Court of Appeals' ACE Securities Corp. v. DB Structured Products, Inc. (ACE) decision or to assert other claims seeking to avoid the impact of the ACE decision; 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; potential claims, damages, penalties, fines and reputational damage resulting from pending or future litigation and regulatory proceedings, including the possibility that amounts may be in excess of the Corporation’s recorded liability and estimated range of possible loss for litigation exposures; the possible outcome of LIBOR, other reference rate, financial instrument and foreign exchange inquiries, investigations and litigation; 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 (including rising, negative or continued low interest rates), currency exchange rates and economic conditions; the possibility that future credit losses may be higher than currently expected due to changes in economic assumptions, customer behavior and other uncertainties; the impact on the Corporation’s business, financial condition and results of operations of a potential higher interest rate environment; the impact on the Corporation’s business, financial condition and results of operations from a protracted period of lower oil prices or ongoing volatility with respect to oil prices; the Corporation's ability to achieve its expense targets or net

interest income or other projections; adverse changes to the Corporation’s credit ratings from the major credit rating agencies; estimates of the fair value of certain of the Corporation’s assets and liabilities; uncertainty regarding the content, timing and impact of regulatory capital and liquidity requirements, including the potential impact of total loss-absorbing capacity requirements; potential adverse changes to our global systemically important bank (G-SIB) surcharge; the potential for payment protection insurance exposure to increase as a result of Financial Conduct Authority actions; the impact of Federal Reserve actions on the Corporation’s capital plans; the possible impact of the Corporation's failure to remediate shortcomings identified by banking regulators in the Corporation's Resolution Plan; 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 (FDIC) 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 cyberattacks; the impact on the Corporation's business, financial condition and results of operations from the potential exit of the United Kingdom (U.K.) from the European Union (EU); 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, 2016, the Corporation had approximately $2.2 trillion in assets and approximately 208,000 full-time equivalent employees.

As of December 31, 2016, we operated in all 50 states, the District of Columbia, the U.S. Virgin Islands, Puerto Rico and more than 35 countries. Our retail banking footprint covers approximately 80 percent of the U.S. population, and we serve approximately 46 million consumer and small business relationships with approximately 4,600 retail financial centers, approximately 15,900 ATMs, and leading online (www.bankofamerica.com) and mobile banking platforms with approximately 34 million active accounts and more than 22 million mobile active users. We offer industry-leading support to approximately three million small business owners. Our wealth management businesses, with client balances of approximately $2.5 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.

2016 Economic and Business Environment

The economy in the U.S. grew in 2016 for the seventh consecutive year. Following a soft start to the year partly reflecting severe winter weather, domestic demand grew at a moderate pace over the remainder of the year. Suppressed by a slowdown in housing gains and a decrease in state and local government purchases, domestic spending growth was less than two percent, while weak exports, in part a lagged response to the sharp U.S. dollar appreciation of recent years, and continued inventory reductions by businesses also had a negative impact on GDP growth.

Meanwhile, the labor market continued to tighten, and average hourly earnings increased at the fastest pace since 2008. Payroll gains remained solid, and the unemployment rate trended downward, with the decline limited by stabilizing labor force participation. With employment and wages both rising, consumer spending, the largest component of the U.S. economy, was an economic bright spot. Core inflation (which, unlike headline inflation, excludes certain items subject to frequent volatile price change such as food and energy) also increased during 2016, but remained below the Federal Reserve System’s (Federal Reserve) longer-term target of two percent. Meanwhile, headline inflation recovered, as energy costs began to reverse some of their large declines of recent years.

Following a weak start, equity markets advanced in 2016. Higher energy costs improved the trajectory of the manufacturing sector and the outlook for business investment. Treasury yields decreased in the first half of the year, but more than reversed their declines during the second half, especially in the fourth quarter. The U.S. dollar followed a similar pattern, depreciating in the first half only to reverse the losses later in the year.

For a second consecutive year, the Federal Open Market Committee raised its target range for the Federal funds rate by 25 basis points (bps) at the year’s final meeting. With a stronger economy, rising inflation and continued labor market tightening, Federal Reserve members raised expectations that if economic growth continued, the pace of rate increases will pick up in 2017, although the removal of accommodation would remain gradual. The contrast between U.S. tightening and quantitative easing in Europe and Japan remained a source of dollar strength.

Internationally, the Eurozone grew moderately in 2016 amid increasing political uncertainty and fragmentation which led to political impasse and fragile governments in many countries, including Italy and Spain. In this context, the European Central Bank extended its quantitative easing program, albeit at a slower pace. At the same time, the U.K. surprised financial markets by voting in favor of leaving the EU. Despite this decision, the U.K. economy proved resilient. Activity in Japan continued to expand in 2016. However, inflation fell back into negative territory for most of the year, forcing the Bank of Japan to adopt a new monetary policy framework aimed at targeting sovereign yields. Aided in part by the increase in oil prices, the Russian and Brazilian economies showed signs of stabilizing following their deep recessions. China’s economy decelerated modestly during the year, as its transition towards a growth model less focused on trade, and public investment continued.

Recent Events

Capital Management

During 2016, we repurchased approximately $5.1 billion of common stock pursuant to the Board of Directors’ (the Board) authorization of our 2016 and 2015 Comprehensive Capital Analysis and Review (CCAR) capital plans and to offset equity-based compensation awards. Also, in addition to the previously announced repurchases associated with the 2016 CCAR capital plan, on January 13, 2017, we announced a plan to repurchase an additional $1.8 billion of common stock during the first half of 2017, to which the Federal Reserve did not object. For additional information, see Capital Management on page 45.

Sale of Non-U.S. Consumer Credit Card Business

On December 20, 2016, we entered into an agreement to sell our non-U.S. consumer credit card business to a third party. Subject to regulatory approval, this transaction is expected to close by mid-2017. After closing, we will retain substantially all payment protection insurance (PPI) exposure above existing reserves. We have considered this exposure in our estimate of a small after-tax gain on the sale. This transaction, once completed, will reduce risk-weighted assets and goodwill, benefiting regulatory capital. At December 31, 2016, the assets of this business, which are presented in assets of business held for sale on the Consolidated Balance Sheet, included non-U.S. credit card loans of $9.2 billion. This business is included in All Other for reporting purposes. For more information on the assets and liabilities of this business, see Note 1 – Summary of Significant Accounting Principles to the Consolidated Financial Statements.

Selected Financial Data

Table 1 provides selected consolidated financial data for 2016 and 2015.

Table 1 Selected Financial Data

(Dollars in millions, except per share information)	2016		2015	
Income statement				
Revenue, net of interest expense	$83,701		$82,965	
Net income	17,906		15,836	
Diluted earnings per common share	1.50		1.31	
Dividends paid per common share	0.25		0.20	
Performance ratios				
Return on average assets	0.82	%	0.73	%
Return on average common shareholders' equity	6.71		6.24	
Return on average tangible common shareholders' equity[(1)]	9.54		9.08	
Efficiency ratio	65.65		69.59	
Balance sheet at year end				
Total loans and leases	$906,683		$896,983	
Total assets	2,187,702		2,144,287	
Total deposits	1,260,934		1,197,259	
Total common shareholders' equity	241,620		233,903	
Total shareholders' equity	266,840		256,176	

(1) Return on average tangible common shareholders' equity is a non-GAAP financial measure. For additional information, see Supplemental Financial Data on page 27, and for corresponding reconciliations to accounting principles generally accepted in the United States of America (GAAP) financial measures, see Statistical Table XV.

Financial Highlights

Net income was $17.9 billion, or $1.50 per diluted share in 2016 compared to $15.8 billion, or $1.31 per diluted share in 2015. The results for 2016 compared to 2015 were driven by higher net interest income and lower noninterest expense, partially offset by a decline in noninterest income and higher provision for credit losses.

Table 2 Summary Income Statement

(Dollars in millions)	2016	2015
Net interest income	$41,096	$38,958
Noninterest income	42,605	44,007
Total revenue, net of interest expense	83,701	82,965
Provision for credit losses	3,597	3,161
Noninterest expense	54,951	57,734
Income before income taxes	25,153	22,070
Income tax expense	7,247	6,234
Net income	17,906	15,836
Preferred stock dividends	1,682	1,483

Net income applicable to common shareholders	$16,224	$14,353
Per common share information		
Earnings	$1.58	$1.37
Diluted earnings	1.50	1.31

Net Interest Income

Net interest income increased $2.1 billion to $41.1 billion in 2016 compared to 2015. The net interest yield increased seven bps to 2.21 percent for 2016. These increases were primarily driven by growth in commercial loans, the impact of higher short-end interest rates and increased debt securities balances, as well as a charge of $612 million in 2015 related to the redemption of certain trust preferred securities, partially offset by lower loan spreads and market-related hedge ineffectiveness. We expect net interest income to increase approximately $600 million per quarter beginning in the first quarter of 2017, assuming interest rates remain at the year-end 2016 level and modest growth in loans and deposits.

Noninterest Income

Table 3 Noninterest Income

(Dollars in millions)	2016	2015
Card income	$5,851	$5,959
Service charges	7,638	7,381
Investment and brokerage services	12,745	13,337
Investment banking income	5,241	5,572
Trading account profits	6,902	6,473
Mortgage banking income	1,853	2,364
Gains on sales of debt securities	490	1,138
Other income	1,885	1,783
Total noninterest income	$42,605	$44,007

Noninterest income decreased $1.4 billion to $42.6 billion for 2016 compared to 2015. The following highlights the significant changes.

Service charges increased $257 million primarily due to higher treasury-related revenue.

Investment and brokerage services income decreased $592 million driven by lower transactional revenue, and decreased asset management fees due to lower market valuations, partially offset by the impact of higher long-term assets under management (AUM) flows.

Investment banking income decreased $331 million driven by lower equity issuance fees and advisory fees due to a decline in market fee pools.

Trading account profits increased $429 million due to a stronger performance across credit products led by mortgages and continued strength in rates products, partially offset by reduced client activity in equities.

Mortgage banking income decreased $511 million primarily driven by a decline in production income, higher representations and warranties provision and lower servicing income, partially offset by more favorable mortgage servicing rights (MSR) results, net of the related hedge performance.

Gains on sales of debt securities decreased $648 million primarily driven by lower sales volume.

Other income increased $102 million primarily due to lower debit valuation adjustment (DVA) losses on structured liabilities, improved results from loans and the related hedging activities in the fair value option portfolio, and lower PPI expense, partially offset by lower gains on asset sales. DVA losses related to structured liabilities were $97 million in 2016 compared to $633 million in 2015.

Provision for Credit Losses

The provision for credit losses increased $436 million to $3.6 billion for 2016 compared to 2015 due to a slower pace of credit quality improvement in the consumer portfolio and an increase in energy sector reserves for the higher risk energy sub-sectors in the commercial portfolio. For more information on the provision for credit losses, see Provision for Credit Losses on page 75. For more information on our energy sector exposure, see Commercial Portfolio Credit Risk Management – Industry Concentrations on page 71.

Noninterest Expense

Table 4 Noninterest Expense

(Dollars in millions)	2016	2015
Personnel	$31,616	$32,868
Occupancy	4,038	4,093
Equipment	1,804	2,039
Marketing	1,703	1,811
Professional fees	1,971	2,264
Amortization of intangibles	730	834
Data processing	3,007	3,115
Telecommunications	746	823
Other general operating	9,336	9,887
Total noninterest expense	$54,951	$57,734

Noninterest expense decreased $2.8 billion to $55.0 billion for 2016 compared to 2015. Personnel expense decreased $1.3 billion as we continue to manage headcount and achieve cost savings. Continued expense management, as well as the expiration of advisor retention awards, more than offset the increases in client-facing professionals. Professional fees decreased $293 million primarily due to lower legal fees. Other general operating expense decreased $551 million primarily driven by lower foreclosed properties expense and lower brokerage fees, partially offset by higher FDIC expense.

We have previously announced an annual noninterest expense target of approximately $53 billion for full-year 2018.

Income Tax Expense

Table 5 Income Tax Expense

(Dollars in millions)	2016		2015	
Income before income taxes	$25,153		$22,070	
Income tax expense	7,247		6,234	
Effective tax rate	28.8	%	28.2	%

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 the U.K. tax law changes discussed below. The effective tax rate for 2015 was driven by our recurring tax preferences and by tax benefits related to certain non-U.S. restructurings, partially offset by a charge for the impact of the U.K. tax law change enacted in 2015.

The U.K. Finance Bill 2016 was enacted on September 15, 2016. The changes included reducing the U.K. corporate income tax rate by one percent to 17 percent, effective April 1, 2020. This reduction favorably affects income tax expense on future U.K. earnings, but required a remeasurement of our U.K. net deferred tax assets using the lower tax rate. Accordingly, upon enactment, we recorded an income tax charge of $348 million. In addition, for banking companies, the portion of U.K. taxable income that can be reduced by existing net operating loss carryforwards in any one taxable year has been reduced from 50 percent to 25 percent retroactive to April 1, 2016.

Our U.K. deferred tax assets, which consist primarily of net operating losses, are expected to be realized by certain subsidiaries over a number of years. Significant changes to management's earnings forecasts for those subsidiaries, changes in applicable laws, further changes in tax laws or changes in the ability of our U.K. subsidiaries to conduct business in the EU, could lead management to reassess our ability to realize the U.K. deferred tax assets. For additional information, see Item 1A. Risk Factors.

Balance Sheet Overview

Table 6 Selected Balance Sheet Data

	December 31		
(Dollars in millions)	2016	2015	% Change
Assets			
Cash and cash equivalents	$147,738	$159,353	(7)%
Federal funds sold and securities borrowed or purchased under agreements to resell	198,224	192,482	3
Trading account assets	180,209	176,527	2
Debt securities	430,731	406,888	6
Loans and leases	906,683	896,983	1
Allowance for loan and lease losses	(11,237)	(12,234)	(8)
All other assets	335,354	324,288	3
Total assets	$2,187,702	$2,144,287	2
Liabilities			
Deposits	$1,260,934	$1,197,259	5
Federal funds purchased and securities loaned or sold under agreements to repurchase	170,291	174,291	(2)
Trading account liabilities	63,031	66,963	(6)
Short-term borrowings	23,944	28,098	(15)
Long-term debt	216,823	236,764	(8)
All other liabilities	185,839	184,736	1
Total liabilities	1,920,862	1,888,111	2
Shareholders' equity	266,840	256,176	4
Total liabilities and shareholders' equity	$2,187,702	$2,144,287	2

Assets

At December 31, 2016, total assets were approximately $2.2 trillion, up $43.4 billion from December 31, 2015. The increase in assets was primarily due to higher debt securities driven by the deployment of deposit inflows, an increase in loans and leases driven by client demand for commercial loans, and higher securities borrowed or purchased under agreements to resell due to increased customer financing activity. These increases were partially offset by a decrease in cash and cash equivalents as excess cash was deployed.

Cash and Cash Equivalents

Cash and cash equivalents decreased $11.6 billion primarily driven by loan growth, net securities purchases and net debt maturities.

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 $5.7 billion due to 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 $3.7 billion primarily driven by client demand within Global Markets.

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 $23.8 billion primarily driven by the deployment of deposit inflows. For more information on debt securities, see Note 3 – Securities to the Consolidated Financial Statements.

Loans and Leases

Loans and leases increased $9.7 billion compared to December 31, 2015. The increase consisted of $18.9 billion in net loan growth driven by strong client demand for commercial loans, partially offset by $9.2 billion in non-U.S. credit card loans that were reclassified from loans and leases to assets of business held for sale, which is included in all other assets in the table above. For more information on the loan portfolio, see Credit Risk Management on page 55.

Allowance for Loan and Lease Losses

The allowance for loan and lease losses decreased $1.0 billion primarily due to the impact of improvements in credit quality from a stronger economy. For additional information, see Allowance for Credit Losses on page 75.

All Other Assets

All other assets increased $11.1 billion driven by the reclassification of $10.7 billion in assets related to our non-U.S. credit card business primarily from loans and leases and debt securities to assets of business held for sale, which is included in all other assets in Table 6.

Liabilities

At December 31, 2016, total liabilities were approximately $1.9 trillion, up $32.8 billion from December 31, 2015, primarily due to an increase in deposits, partially offset by a decrease in long-term debt.

Deposits

Deposits increased $63.7 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 decreased $4.0 billion primarily due to a decrease in repurchase agreements.

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 $3.9 billion primarily due to lower levels of short U.S. Treasury positions driven by less 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 $4.2 billion primarily due to a decrease in short-term bank notes, partially offset by an increase in short-term FHLB Advances. For more information on short-term borrowings, see Note 10 – Federal Funds Sold or Purchased, Securities Financing Agreements and Short-term Borrowings to the Consolidated Financial Statements.

Long-term Debt

Long-term debt decreased $19.9 billion primarily driven by maturities and redemptions outpacing issuances. For more information on long-term debt, see Note 11 – Long-term Debt to the Consolidated Financial Statements.

All Other Liabilities

All other liabilities increased $1.1 billion due to an increase in derivative liabilities.

Shareholders’ Equity

Shareholders’ equity increased $10.7 billion driven by earnings and preferred stock issuances, partially offset by returns of capital to shareholders of $9.4 billion through common and preferred stock dividends and share repurchases, as well as a decrease in accumulated other comprehensive income (OCI) primarily due to an increase in unrealized losses on available-for-sale (AFS) debt securities as a result of higher interest rates.

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 additional information on liquidity, see Liquidity Risk on page 51.

Table 7 Five-year Summary of Selected Financial Data

(In millions, except per share information)	2016	2015	2014	2013	2012
Income statement					
Net interest income	$41,096	$38,958	$40,779	$40,719	$40,135
Noninterest income	42,605	44,007	45,115	46,783	42,663
Total revenue, net of interest expense	83,701	82,965	85,894	87,502	82,798
Provision for credit losses	3,597	3,161	2,275	3,556	8,169
Noninterest expense	54,951	57,734	75,656	69,213	72,094
Income before income taxes	25,153	22,070	7,963	14,733	2,535
Income tax expense (benefit)	7,247	6,234	2,443	4,194	(1,320)
Net income	17,906	15,836	5,520	10,539	3,855
Net income applicable to common shareholders	16,224	14,353	4,476	9,190	2,427
Average common shares issued and outstanding	10,284	10,462	10,528	10,731	10,746
Average diluted common shares issued and outstanding	11,036	11,214	10,585	11,491	10,841
Performance ratios					
Return on average assets	0.82 %	0.73 %	0.26 %	0.49 %	0.18 %
Return on average common shareholders’ equity	6.71	6.24	2.01	4.21	1.12
Return on average tangible common shareholders’ equity [(1)]	9.54	9.08	2.98	6.35	1.71
Return on average shareholder's equity	6.72	6.28	2.32	4.51	1.64
Return on average tangible shareholders’ equity[(1)]	9.19	8.80	3.34	6.58	2.40
Total ending equity to total ending assets	12.20	11.95	11.57	11.06	10.72
Total average equity to total average assets	12.16	11.66	11.11	10.81	10.75
Dividend payout	15.86	14.56	28.20	4.66	18.03
Per common share data					
Earnings	$1.58	$1.37	$0.43	$0.86	$0.23
Diluted earnings	1.50	1.31	0.42	0.83	0.22
Dividends paid	0.25	0.20	0.12	0.04	0.04
Book value	24.04	22.53	21.32	20.69	20.24
Tangible book value [(1)]	16.95	15.62	14.43	13.77	13.36
Market price per share of common stock					
Closing	$22.10	$16.83	$17.89	$15.57	$11.61
High closing	23.16	18.45	18.13	15.88	11.61
Low closing	11.16	15.15	14.51	11.03	5.80
Market capitalization	$222,163	$174,700	$188,141	$164,914	$125,136

(1) Tangible equity ratios and tangible book value per share of common stock are non-GAAP financial measures. For more information on these ratios, see Supplemental Financial Data on page 27, and for corresponding reconciliations to GAAP financial measures, see Statistical Table XV on page 108.

(2) For more information on the impact of the purchased credit-impaired (PCI) loan portfolio on asset quality, see Consumer Portfolio Credit Risk Management on page 56.

(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 64 and corresponding Table 30, and Commercial Portfolio Credit Risk Management – Nonperforming Commercial Loans, Leases and Foreclosed Properties Activity on page 70 and corresponding Table 37.

(5) Asset quality metrics include $243 million of non-U.S. credit card allowance for loan and lease losses and $9.2 billion of non-U.S. credit card loans, which are included in assets of business held for sale on the Consolidated Balance Sheet at December 31, 2016.

(6) Primarily includes amounts allocated to the U.S. credit card and unsecured consumer lending portfolios in Consumer Banking, PCI loans and the non-U.S. credit card portfolio in All Other.

(7) Net charge-offs exclude $340 million, $808 million, $810 million, $2.3 billion and $2.8 billion of write-offs in the PCI loan portfolio for 2016, 2015, 2014, 2013 and 2012 respectively. For more information on PCI write-offs, see Consumer Portfolio Credit Risk Management – Purchased Credit-impaired Loan Portfolio on page 62.

(8) Risk-based capital ratios are reported under Basel 3 Advanced - Transition at December 31, 2016 and 2015. We reported risk-based capital ratios under Basel 3 Standardized - Transition at December 31, 2014 and under the general risk-based approach at December 31, 2013 and 2012. For additional information, see Capital Management on page 45.

n/a = not applicable

Table 7 Five-year Summary of Selected Financial Data (continued)

(Dollars in millions)	2016	2015	2014	2013	2012
Average balance sheet					
Total loans and leases	$900,433	$876,787	$898,703	$918,641	$898,768
Total assets	2,189,971	2,160,197	2,145,393	2,163,296	2,191,361
Total deposits	1,222,561	1,155,860	1,124,207	1,089,735	1,047,782
Long-term debt	228,617	240,059	253,607	263,417	316,393
Common shareholders' equity	241,621	230,173	222,907	218,340	216,999
Total shareholders' equity	266,277	251,981	238,317	233,819	235,681
Asset quality [(2)]					
Allowance for credit losses [(3)]	$11,999	$12,880	$14,947	$17,912	$24,692
Nonperforming loans, leases and foreclosed properties [(4)]	8,084	9,836	12,629	17,772	23,555
Allowance for loan and lease losses as a percentage of total loans and leases outstanding [(4, 5)]	1.26 %	1.37 %	1.66 %	1.90 %	2.69 %

Allowance for loan and lease losses as a percentage of total nonperforming loans and leases (4, 5)	149	130	121	102	107
Allowance for loan and lease losses as a percentage of total nonperforming loans and leases, excluding the PCI loan portfolio (4, 5)	144	122	107	87	82
Amounts included in allowance for loan and lease losses for loans and leases that are excluded from nonperforming loans and leases (6)	$3,951	$4,518	$5,944	$7,680	$12,021
Allowance for loan and	98 %	82 %	71 %	57 %	54 %

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 (4, 6)										
Net charge-offs (7)	$3,821		$4,338		$4,383		$7,897		$14,908	
Net charge-offs as a percentage of average loans and leases outstanding (4, 7)	0.43	%	0.50	%	0.49	%	0.87	%	1.67	%
Net charge-offs as a percentage of average loans and leases outstanding,	0.44		0.51		0.50		0.90		1.73	

excluding the PCI loan portfolio (4)					
Net charge-offs and PCI write-offs as a percentage of average loans and leases outstanding (4)	0.47	0.59	0.58	1.13	1.99
Nonperforming loans and leases as a percentage of total loans and leases outstanding (4, 5)	0.85	1.05	1.38	1.87	2.52
Nonperforming loans, leases and foreclosed properties as a percentage of total loans, leases and foreclosed properties (4, 5)	0.89	1.10	1.45	1.93	2.62
Ratio of the allowance for loan and lease	3.00	2.82	3.29	2.21	1.62

losses at December 31 to net charge-offs (5, 7)										
Ratio of the allowance for loan and lease losses at December 31 to net charge-offs, excluding the PCI loan portfolio (5)	2.89		2.64		2.91		1.89		1.25	
Ratio of the allowance for loan and lease losses at December 31 to net charge-offs and PCI write-offs (5)	2.76		2.38		2.78		1.70		1.36	
Capital ratios at year end (8)										
Risk-based capital:										
Common equity tier 1 capital	11.0	%	10.2	%	12.3	%	n/a		n/a	
Tier 1 common capital	n/a		n/a		n/a		10.9	%	10.8	%
Tier 1 capital	12.4		11.3		13.4		12.2		12.7	
Total capital	14.3		13.2		16.5		15.1		16.1	
	8.9		8.6		8.2		7.7		7.2	

Tier 1 leverage					
Tangible equity [1]	9.2	8.9	8.4	7.8	7.6
Tangible common equity [1]	8.1	7.8	7.5	7.2	6.7

For footnotes see page 26.

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 fully taxable-equivalent (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 use the federal statutory tax rate of 35 percent and a representative state tax rate. In addition, certain performance measures including the efficiency ratio and net interest yield utilize net interest income (and thus total revenue) on an FTE basis. The efficiency ratio measures the costs expended to generate a dollar of revenue, and net interest yield measures the bps we earn over the cost of funds. 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., DVA) which result in non-GAAP financial measures. We believe that the presentation of measures that exclude these items are useful because they 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 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 Table 7 and Statistical Table XII. Statistical Tables XV and XVI on pages 108 and 109 provide reconciliations of these non-GAAP financial measures to GAAP financial measures.

Table 8 Five-year Supplemental Financial Data

(Dollars in millions, except per share information)	2016	2015	2014	2013	2012
Fully taxable-equivalent basis data					
Net interest income	$41,996	$39,847	$41,630	$41,578	$41,036
Total revenue, net of interest expense	84,601	83,854	86,745	88,361	83,699
Net interest yield	2.25 %	2.19 %	2.30 %	2.29 %	2.22 %
Efficiency ratio	64.95	68.85	87.22	78.33	86.13

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. 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 41. The capital allocated to the business segments is referred to as allocated capital. For purposes of goodwill impairment testing, we utilize allocated equity as a proxy for the

carrying value of our 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. For additional information, 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 24 – Business Segment Information to the Consolidated Financial Statements.

Consumer Banking

	Deposits		Consumer Lending		Total Consumer Banking		
(Dollars in millions)	2016	2015	2016	2015	2016	2015	% Change
Net interest income (FTE basis)	$10,701	$9,635	$10,589	$10,793	$21,290	$20,428	4 %
Noninterest income:							
Card income	9	11	4,926	4,926	4,935	4,937	—
Service charges	4,141	4,100	1	1	4,142	4,101	1
Mortgage banking income	—	—	960	1,332	960	1,332	(28)
All other income	403	483	1	244	404	727	(44)
Total noninterest income	4,553	4,594	5,888	6,503	10,441	11,097	(6)
Total revenue, net of interest expense (FTE basis)	15,254	14,229	16,477	17,296	31,731	31,525	1
Provision for credit losses	174	200	2,541	2,146	2,715	2,346	16
Noninterest expense	9,678	9,856	7,975	8,860	17,653	18,716	(6)
Income before income taxes (FTE basis)	5,402	4,173	5,961	6,290	11,363	10,463	9
Income tax expense (FTE basis)	1,992	1,521	2,198	2,293	4,190	3,814	10
Net income	$3,410	$2,652	$3,763	$3,997	$7,173	$6,649	8
Net interest yield (FTE basis)	1.79 %	1.75 %	4.37 %	4.70 %	3.38 %	3.52 %	
Return on average allocated capital	28	22	17	19	21	20	
Efficiency ratio (FTE basis)	63.44	69.27	48.41	51.23	55.63	59.37	

Balance Sheet

Average							
Total loans and leases	$4,809	$4,713	$240,999	$227,719	$245,808	$232,432	6
Total earning assets (1)	598,043	549,600	242,445	229,579	629,990	580,095	9
Total assets (1)	624,592	576,569	254,287	242,707	668,381	620,192	8
Total deposits	592,417	544,685	7,237	8,191	599,654	552,876	8
Allocated capital	12,000	12,000	22,000	21,000	34,000	33,000	3
Year end							
Total loans and leases	$4,938	$4,735	$254,053	$234,116	$258,991	$238,851	8
Total earning assets (1)	631,172	576,108	255,511	235,496	662,704	605,012	10
Total assets (1)	658,316	603,448	268,002	248,571	702,339	645,427	9
Total deposits	625,727	571,467	7,063	6,365	632,790	577,832	10

(1) 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. Our customers and clients have access to a coast to coast network including financial centers in 33 states and the District of Columbia. Our network includes approximately 4,600 financial centers, 15,900 ATMs, nationwide call centers, and online and mobile platforms.

Consumer Banking Results

Net income for Consumer Banking increased $524 million to $7.2 billion in 2016 compared to 2015 primarily driven by lower noninterest expense and higher revenue, partially offset by higher provision for credit losses. Net interest income increased $862 million to $21.3 billion primarily due to the beneficial impact of an increase in investable assets as a result of higher deposits. Noninterest income decreased $656 million to $10.4 billion due to lower mortgage banking income and gains in 2015 on certain divestitures.

The provision for credit losses increased $369 million to $2.7 billion in 2016 primarily driven by a slower pace of improvement in the credit card portfolio. Noninterest expense decreased $1.1 billion to $17.7 billion driven by improved operating efficiencies and lower fraud costs, partially offset by higher FDIC expense.

The return on average allocated capital was 21 percent, up from 20 percent, reflecting higher net income. For additional information on capital allocations, see Business Segment Operations on page 29.

Deposits

Deposits includes 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, noninterest- and interest-bearing checking accounts, as well as investment accounts and products. The revenue 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.

Deposits includes the net impact of migrating customers and their related deposit and brokerage asset balances between Deposits and GWIM as well as other client-managed businesses. For more information on the migration of customer balances to or from GWIM, see GWIM - Net Migration Summary on page 34.

Net income for Deposits increased $758 million to $3.4 billion in 2016 driven by higher revenue and lower noninterest expense. Net interest income increased $1.1 billion to $10.7 billion primarily due to the beneficial impact of an increase in investable assets as a result of higher deposits. Noninterest income decreased $41 million to $4.6 billion due to gains in the prior year on certain divestitures.

The provision for credit losses decreased $26 million to $174 million. Noninterest expense decreased $178 million to $9.7 billion primarily driven by improved operating efficiencies, partially offset by higher FDIC expense.

Average deposits increased $47.7 billion to $592.4 billion in 2016 driven by a continuing customer shift to more liquid products in the low rate environment. Growth in checking, traditional savings and money market savings of $53.8 billion was partially offset by a decline in time deposits of $6.1 billion. As a result of our continued pricing discipline and the shift in the mix of deposits, the rate paid on average deposits declined by one bp to four bps.

Key Statistics – Deposits

	2016	2015
Total deposit spreads (excludes noninterest costs) [1]	1.65 %	1.62 %
Year end		
Client brokerage assets (in millions)	$144,696	$122,721
Online banking active accounts (units in thousands)	33,811	31,674
Mobile banking active users (units in thousands)	21,648	18,705
Financial centers	4,579	4,726
ATMs	15,928	16,038

[1] Includes deposits held in Consumer Lending.

Client brokerage assets increased $22.0 billion in 2016 driven by client flows and strong market performance. Mobile banking active users increased 2.9 million reflecting continuing changes in our customers' banking preferences. The number of financial centers declined 147 driven by 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.

We classify consumer real estate loans as core or 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. Total owned loans in the core portfolio held in Consumer Lending increased $10.6 billion to $101.2 billion in 2016 primarily driven by higher residential mortgage balances, partially offset by a decline in home equity balances. For more information on the core and non-core portfolios, see Consumer Portfolio Credit Risk Management on page 56.

Consumer Lending includes the net impact of migrating customers and their related loan balances between Consumer Lending and GWIM. For more information on the migration of customer balances to or from GWIM, see GWIM on page 33.

Net income for Consumer Lending decreased $234 million to $3.8 billion in 2016 driven by a decline in revenue and higher provision for credit losses, partially offset by lower noninterest expense. Net interest income decreased $204 million to $10.6 billion primarily driven by higher funding costs, partially offset by the impact of an increase in consumer auto lending balances. Noninterest income decreased $615 million to $5.9 billion driven by lower mortgage banking income and gains in 2015 on certain divestitures.

The provision for credit losses increased $395 million to $2.5 billion in 2016 primarily driven by a slower pace of improvement in the credit card portfolio. Noninterest expense decreased $885 million to $8.0 billion primarily driven by improved operating efficiencies and lower fraud costs due to the benefit of the Europay, MasterCard and Visa (EMV) chip implementation, as well as lower personnel expense.

Average loans increased $13.3 billion to $241.0 billion in 2016 primarily driven by increases in residential mortgages and consumer vehicle loans, partially offset by lower home equity loans.

Key Statistics – Consumer Lending

(Dollars in millions)	2016	2015
Total U.S. credit card [1]		
Gross interest yield	9.29 %	9.16 %
Risk-adjusted margin	9.04	9.31
New accounts (in thousands)	4,979	4,973
Purchase volumes	$226,432	$221,378
Debit card purchase volumes	$285,612	$277,695

(1) In addition to the U.S. credit card portfolio in Consumer Banking, the remaining U.S. credit card portfolio is in GWIM.

During 2016, the total U.S. credit card risk-adjusted margin decreased 27 bps primarily driven by the impact of gains in 2015 on certain divestitures and a decrease in net interest margin, partially offset by an improvement in credit quality in the U.S. Card portfolio. Total U.S. credit card purchase volumes increased $5.1 billion to $226.4 billion and debit card purchase volumes increased $7.9 billion to $285.6 billion, reflecting higher levels of consumer spending. The increase in total U.S. credit card purchase volumes was partially offset by the impact of certain divestitures.

Mortgage Banking Income

Mortgage banking income is earned primarily in Consumer Banking and All Other. Total production income within mortgage banking income is comprised primarily of revenue from the fair value gains and losses recognized on our interest rate lock commitments (IRLCs) and loans held-for-sale (LHFS), the related secondary market execution, and costs related to representations and warranties made in the sales transactions along with other obligations incurred in the sales of mortgage loans. Servicing

income within mortgage banking income includes income earned in connection with servicing activities and MSR valuation adjustments, net of results from risk management activities used to hedge certain market risks of the MSRs. Servicing income for the core portfolio is recorded in Consumer Banking. Servicing income for the non-core portfolio, including hedge ineffectiveness on MSR hedges, is recorded in All Other. The costs associated with our servicing activities are included in noninterest expense.
The table below summarizes the components of mortgage banking income. Amounts for mortgage banking income in All Other are included in this Consumer Banking table to show the components of consolidated mortgage banking income.

Mortgage Banking Income

(Dollars in millions)	2016	2015
Consumer Banking mortgage banking income		
Total production income	$663	$950
Net servicing income		
Servicing fees	708	855
Amortization of expected cash flows [1]	(577)	(661)
Fair value changes of MSRs, net of risk management activities used to hedge certain market risks [2]	166	188
Total net servicing income	297	382
Total Consumer Banking mortgage banking income	960	1,332
Other mortgage banking income		
Servicing fees	452	540
Amortization of expected cash flows [1]	(74)	(77)
Fair value changes of MSRs, net of risk management activities used to hedge certain market risks [2]	546	426
Other	(31)	143
Total other mortgage banking income [3]	893	1,032
Total consolidated mortgage banking income	$1,853	$2,364

(1) Represents the net change in fair value of the MSR asset due to the recognition of modeled cash flows.
(2) Includes changes in fair value of MSRs due to changes in inputs and assumptions, net of risk management activities, and gains (losses) on sales of MSRs. For additional information, see Note 23 – Mortgage Servicing Rights to the Consolidated Financial Statements.
(3) Includes $889 million and $1.0 billion of mortgage banking income recorded in All Other for 2016 and 2015.

Total production income for Consumer Banking decreased $287 million to $663 million in 2016 due to a decrease in production volume to be sold, resulting from a decision to retain certain residential mortgage loans in Consumer Banking.

Servicing

The costs associated with servicing activities related to the residential mortgage and home equity loan portfolios, including owned loans and loans serviced for others (collectively, the mortgage serviced portfolio) are allocated to the business segment that owns the loans or MSRs or All Other.

Servicing activities include collecting cash for principal, interest and escrow payments from borrowers, disbursing customer draws for lines of credit, accounting for and remitting principal and interest payments to investors and escrow payments to third parties, and responding to customer inquiries. Our home retention efforts, including single point of contact resources, are also part of our servicing activities, along with supervision of foreclosures and property dispositions. Prior to foreclosure, we evaluate various workout options in an effort to help our customers avoid foreclosure.
Consumer Banking servicing income decreased $85 million to $297 million in 2016 driven by lower servicing fees, partially offset by lower amortization of expected cash flows due to a smaller servicing portfolio. Servicing fees declined $147 million to $708 million in 2016 reflecting the decline in the size of the servicing portfolio.

Mortgage Servicing Rights

At December 31, 2016, the core MSR portfolio, held within Consumer Lending, was $2.1 billion compared to $2.3 billion at December 31, 2015. The decrease was primarily driven by the amortization of expected cash flows, which exceeded new additions, as well as changes in fair value due to changes in inputs and assumptions. For more information on MSRs, see Note 23 – Mortgage Servicing Rights to the Consolidated Financial Statements.

Key Statistics

(Dollars in millions)	2016	2015
Loan production [(1)]:		
Total [(2)]:		
First mortgage	$64,153	$56,930
Home equity	15,214	13,060
Consumer Banking:		
First mortgage	$44,510	$40,878
Home equity	13,675	11,988

(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 also first mortgage and home equity loan production in GWIM.

First mortgage loan originations in Consumer Banking and for the total Corporation increased $3.6 billion and $7.2 billion in 2016 compared to 2015 driven by improving housing trends and a lower rate environment.

Home equity production for the total Corporation increased $2.2 billion in 2016 compared to 2015 due to a higher demand in the market based on improving housing trends, as well as improved financial center engagement with customers and more competitive pricing.

Global Wealth & Investment Management

(Dollars in millions)	2016		2015		% Change	
Net interest income (FTE basis)	$5,759		$5,527		4	%
Noninterest income:						
Investment and brokerage services	10,316		10,792		(4	)
All other income	1,575		1,715		(8	)
Total noninterest income	11,891		12,507		(5	)
Total revenue, net of interest expense (FTE basis)	17,650		18,034		(2	)
Provision for credit losses	68		51		33	
Noninterest expense	13,182		13,943		(5	)
Income before income taxes (FTE basis)	4,400		4,040		9	
Income tax expense (FTE basis)	1,629		1,473		11	
Net income	$2,771		$2,567		8	
Net interest yield (FTE basis)	2.09	%	2.13	%		
Return on average allocated capital	21		21			
Efficiency ratio (FTE basis)	74.68		77.32			
Balance Sheet						
Average						
Total loans and leases	$142,429		$132,499		7	

Total earning assets	275,800	259,020	6
Total assets	291,479	275,950	6
Total deposits	256,425	244,725	5
Allocated capital	13,000	12,000	8
Year end			
Total loans and leases	$ 148,179	$ 139,039	7
Total earning assets	283,152	279,597	1
Total assets	298,932	296,271	1
Total deposits	262,530	260,893	1

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 our 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.

Client assets managed under advisory and/or discretion of GWIM are AUM and are typically held in diversified portfolios. The majority of client AUM have an investment strategy with a duration of greater than one year and are, therefore, considered long-term AUM. Fees earned on long-term AUM are calculated as a percentage of total AUM. The asset management fees charged to clients per year are dependent on various factors, but are generally driven by the breadth of the client's relationship and generally range from 50 to 150 bps on their total AUM. The net client long-term AUM flows represent the net change in clients' long-term AUM balances over a specified period of time, excluding market appreciation/depreciation and other adjustments.

Client assets under advisory and/or discretion of GWIM in which the investment strategy seeks current income, while maintaining liquidity and capital preservation, are considered liquidity AUM. The duration of these strategies is primarily less than one year. The change in AUM balances from the prior year is primarily the net client flows for liquidity AUM.

Net income for GWIM increased $204 million to $2.8 billion in 2016 compared to 2015 driven by a decrease in noninterest expense, partially offset by a decrease in revenue.

Net interest income increased $232 million to $5.8 billion driven by the impact of growth in loan and deposit balances. Noninterest income, which primarily includes investment and brokerage services income, decreased $616 million to $11.9 billion. The decline in noninterest income was driven by lower transactional revenue and decreased asset management fees primarily due to lower market valuations in 2016, partially offset by the impact of long-term AUM flows. Noninterest expense decreased $761 million to $13.2 billion primarily due to the expiration of advisor retention awards, lower revenue-related incentives and lower operating and support costs, partially offset by higher FDIC expense.

Return on average allocated capital was 21 percent for both 2016 and 2015.

Key Indicators and Metrics

(Dollars in millions, except as noted)	2016	2015
Revenue by Business		
Merrill Lynch Global Wealth Management	$14,486	$14,926
U.S. Trust	3,075	3,032
Other [1]	89	76
Total revenue, net of interest expense (FTE basis)	$17,650	$18,034
Client Balances by Business, at year end		
Merrill Lynch Global Wealth Management	$2,102,175	$1,986,502
U.S. Trust	406,392	388,604
Other [1]	—	82,929
Total client balances	$2,508,567	$2,458,035
Client Balances by Type, at year end		
Long-term assets under management	$886,148	$817,938
Liquidity assets under management [1]	—	82,925
Assets under management	886,148	900,863
Brokerage assets	1,085,826	1,040,938
Assets in custody	123,066	113,239
Deposits	262,530	260,893
Loans and leases [2]	150,997	142,102
Total client balances	$2,508,567	$2,458,035
Assets Under Management Rollforward		
Assets under management, beginning of year	$900,863	$902,872
Net long-term client flows	38,572	34,441
Net liquidity client flows	(7,990)	6,133
Market valuation/other [1]	(45,297)	(42,583)
Total assets under management, end of year	$886,148	$900,863
Associates, at year end [3, 4]		
Number of financial advisors	16,830	16,687
Total wealth advisors, including financial advisors	18,688	18,515
Total primary sales professionals, including financial advisors and wealth advisors	19,676	19,462
Merrill Lynch Global Wealth Management Metric [4]		
Financial advisor productivity [5] (in thousands)	$979	$1,024
U.S. Trust Metric, at year end [4]		
Primary sales professionals	1,678	1,595

(1) Includes the results of BofA Global Capital Management, the cash management division of Bank of America, and certain administrative items. Also reflects the sale to a third party of approximately $80 billion of BofA Global Capital Management's AUM during the three months ended June 30, 2016.

(2) Includes margin receivables which are classified in customer and other receivables on the Consolidated Balance Sheet.

(3) Includes financial advisors in the Consumer Banking segment of 2,201 and 2,187 at December 31, 2016 and 2015.

(4) Associate headcount computation is based upon full-time equivalents.

(5) Financial advisor productivity is defined as MLGWM total revenue, excluding the allocation of certain asset and liability management (ALM) activities, divided by the total number of financial advisors (excluding financial advisors in the Consumer Banking segment).

Client balances increased $50.5 billion, or two percent, to more than $2.5 trillion at December 31, 2016, driven by market valuation increases and positive net flows, partially offset by the impact of the sale of BofA Global Capital Management's AUM.

The number of wealth advisors increased one percent, due to continued investment in the advisor development programs, competitive recruiting and near historically low advisor attrition levels.

In 2016, revenue from MLGWM of $14.5 billion was down three percent driven by a decline in noninterest income due to lower transactional revenue and asset management fees primarily related to lower market valuations, partially offset by the impact of long-term AUM flows. Net interest income was up, primarily driven by growth in loan and deposit balances. U.S. Trust revenue of $3.1 billion was up one percent primarily driven by higher net interest income due to higher loan and deposit balances.

Net Migration Summary

GWIM results are impacted by the net migration of clients and their corresponding deposit, loan and brokerage balances primarily to or from Consumer Banking, as presented in the table below. Migrations result from the movement of clients between business segments to better align with client needs.

Net Migration Summary (1)

(Dollars in millions)	2016	2015
Total deposits, net – from GWIM	$(1,319)	$(218)
Total loans, net – from GWIM	(7)	(97)
Total brokerage, net – from GWIM	(1,972)	(2,416)

(1) Migration occurs primarily between GWIM and Consumer Banking.

Global Banking

(Dollars in millions)	2016	2015	% Change
Net interest income (FTE basis)	$9,942	$9,244	8 %
Noninterest income:			
Service charges	3,094	2,914	6
Investment banking fees	2,884	3,110	(7)
All other income	2,510	2,353	7
Total noninterest income	8,488	8,377	1
Total revenue, net of interest expense (FTE basis)	18,430	17,621	5
Provision for credit losses	883	686	29
Noninterest expense	8,486	8,481	—
Income before income taxes (FTE basis)	9,061	8,454	7
Income tax expense (FTE basis)	3,341	3,114	7
Net income	$5,720	$5,340	7
Net interest yield (FTE basis)	2.86 %	2.90 %	
Return on average allocated capital	15	15	
Efficiency ratio (FTE basis)	46.04	48.13	

Balance Sheet

Average			
	$333,820	$303,907	10

Total loans and leases			
Total earning assets	347,489	318,977	9
Total assets	396,705	369,001	8
Total deposits	304,101	294,733	3
Allocated capital	37,000	35,000	6
Year end			
Total loans and leases	$339,271	$323,687	5
Total earning assets	356,241	334,766	6
Total assets	408,268	386,132	6
Total deposits	306,430	296,162	3

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, 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 $380 million to $5.7 billion in 2016 compared to 2015 as higher revenue more than offset an increase in the provision for credit losses.

Revenue increased $809 million to $18.4 billion in 2016 compared to 2015 driven by higher net interest income, which increased $698 million to $9.9 billion driven by the impact of growth in loans and leases and higher deposits. Noninterest income increased $111 million to $8.5 billion primarily due to the impact from loans and the related loan hedging activities in the fair value option portfolio and higher treasury-related revenues, partially offset by lower investment banking fees.

The provision for credit losses increased $197 million to $883 million in 2016 driven by increases in energy-related reserves as well as loan growth. For additional information, see Commercial Portfolio Credit Risk Management – Industry Concentrations on page 71. Noninterest expense of $8.5 billion remained relatively unchanged in 2016 as investments in client-facing professionals in Commercial and Business Banking, higher severance costs and an increase in FDIC expense were largely offset by lower operating and support costs.

The return on average allocated capital remained unchanged at 15 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 29.

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 presents 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	
(Dollars in millions)	2016	2015	2016	2015	2016	2015	2016	2015
Revenue								
Business Lending	$4,285	$3,981	$4,140	$3,968	$376	$352	$8,801	$8,301
Global Transaction Services	2,982	2,793	2,718	2,649	739	703	6,439	6,145
Total revenue, net of interest expense	$7,267	$6,774	$6,858	$6,617	$1,115	$1,055	$15,240	$14,446
Balance Sheet								
Average								
Total loans and leases	$152,944	$138,025	$163,341	$148,735	$17,506	$17,072	$333,791	$303,832
Total deposits	142,593	138,142	126,253	123,007	35,256	33,588	304,102	294,737
Year end								
Total loans and leases	$152,589	$146,803	$168,864	$159,720	$17,846	$17,165	$339,299	$323,688
Total deposits	142,815	133,742	128,210	128,656	35,409	33,767	306,434	296,165

Business Lending revenue increased $500 million in 2016 compared to 2015 driven by the impact of growth in loans and leases, as well as the impact from loans and the related loan hedging activities in the fair value option portfolio.

Global Transaction Services revenue increased $294 million in 2016 compared to 2015 driven by growth in treasury-related revenue as well as higher net interest income driven by the beneficial impact of an increase in investable assets as a result of higher deposits.

Average loans and leases increased 10 percent in 2016 compared to 2015 driven by growth in the commercial and industrial, and leasing portfolios. Average deposits increased three percent due to continued portfolio growth with new and existing clients.

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 under an internal revenue-sharing arrangement. 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.

Investment Banking Fees

	Global Banking		Total Corporation	
(Dollars in millions)	2016	2015	2016	2015
Products				
Advisory	$1,156	$1,354	$1,269	$1,503
Debt issuance	1,407	1,296	3,276	3,033
Equity issuance	321	460	864	1,236
Gross investment banking fees	2,884	3,110	5,409	5,772
Self-led deals	(49)	(57)	(168)	(200)
Total investment banking fees	$2,835	$3,053	$5,241	$5,572

Total Corporation investment banking fees of $5.2 billion, excluding self-led deals, included within Global Banking and Global Markets, decreased six percent in 2016 compared to 2015 driven by lower equity issuance fees and advisory fees due to a decline in market fee pools.

Global Markets

(Dollars in millions)	2016		2015		% Change	
Net interest income (FTE basis)	$4,558		$4,191		9	%
Noninterest income:						
Investment and brokerage services	2,102		2,221		(5	)
Investment banking fees	2,296		2,401		(4	)
Trading account profits	6,550		6,109		7	
All other income	584		91		n/m	
Total noninterest income	11,532		10,822		7	
Total revenue, net of interest expense (FTE basis)	16,090		15,013		7	
Provision for credit losses	31		99		(69	)
Noninterest expense	10,170		11,374		(11	)
Income before income taxes (FTE basis)	5,889		3,540		66	
Income tax expense (FTE basis)	2,072		1,117		85	
Net income	$3,817		$2,423		58	
Return on average allocated capital	10	%	7	%		
Efficiency ratio (FTE basis)	63.21		75.75			

Balance Sheet

Average

Trading-related assets:			
Trading account securities	$185,135	$195,650	(5)
Reverse repurchases	89,715	103,506	(13)
Securities borrowed	87,286	79,494	10
Derivative assets	50,769	54,519	(7)
Total trading-related assets [1]	412,905	433,169	(5)
Total loans and leases	69,641	63,443	10
Total earning assets [1]	423,579	430,468	(2)
Total assets	585,342	594,057	(1)
Total deposits	34,250	38,074	(10)
Allocated capital	37,000	35,000	6
Year end			
Total trading-related assets [1]	$380,562	$373,926	2
Total loans and leases	72,743	73,208	(1)
Total earning assets [1]	397,023	384,046	3
Total assets	566,060	548,790	3
Total deposits	34,927	37,038	(6)

(1) Trading-related assets include derivative assets, which are considered non-earning assets.
n/m = not meaningful

Global Markets offers sales and trading services, including research, to institutional clients across fixed-income, credit, currency, commodity and equity businesses. Global Markets 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 (ABS). 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-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 $1.4 billion to $3.8 billion in 2016 compared to 2015. Net DVA losses were $238 million compared to losses of $786 million in 2015. Excluding net DVA, net income increased $1.1 billion to $4.0 billion in 2016 compared to 2015 primarily driven by higher sales and trading revenue and lower noninterest expense, partially offset by lower investment banking fees and investment and brokerage services revenue. Sales and trading revenue, excluding net DVA, increased $638 million primarily due to a stronger performance globally across credit products led by mortgages and continued strength in rates products. The increase was partially offset by challenging credit market conditions in early 2016 as well as reduced client activity in equities, most notably in Asia, and a less favorable trading environment for equity derivatives. Noninterest expense decreased $1.2 billion to $10.2 billion primarily due to lower litigation expense and lower revenue-related expenses.

Average earning assets decreased $6.9 billion to $423.6 billion in 2016 primarily driven by a decrease in match book financing activity and a reduction in trading inventory, partially offset by higher loans and other customer financing. Year-end trading-related assets increased $6.6 billion in 2016 primarily driven by higher securities borrowed or purchased under agreements to resell due to increased customer financing activity as well as higher trading account assets due to client demand.

The return on average allocated capital was 10 percent, up from seven percent, reflecting an increase in net income, partially offset by an increase in allocated capital.

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 (RMBS), collateralized loan obligations (CLOs), 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 the impact of net DVA, which is a non-GAAP financial measure. We believe the use of this non-GAAP financial measure provides additional useful information to assess the underlying performance of these businesses and to allow better comparison of period-to-period operating performance.

Sales and Trading Revenue (1, 2)

(Dollars in millions)	2016	2015
Sales and trading revenue		
Fixed-income, currencies and commodities	$9,373	$7,869
Equities	4,017	4,335
Total sales and trading revenue	$13,390	$12,204
Sales and trading revenue, excluding net DVA (3)		
Fixed-income, currencies and commodities	$9,611	$8,632
Equities	4,017	4,358
Total sales and trading revenue, excluding net DVA	$13,628	$12,990

(1) Includes FTE adjustments of $184 million and $182 million for 2016 and 2015. For more information on sales and trading revenue, see Note 2 – Derivatives to the Consolidated Financial Statements.

(2) Includes Global Banking sales and trading revenue of $406 million and $424 million for 2016 and 2015.

(3) Fixed-income, currencies and commodities (FICC) and Equities sales and trading revenue, excluding net DVA, is a non-GAAP financial measure. FICC net DVA losses were $238 million for 2016 compared to net DVA losses of $763 million in 2015. Equities net DVA losses were $0 for 2016 compared to net DVA losses of $23 million in 2015.

The explanations for period-over-period changes in sales and trading, FICC and Equities revenue, as set forth below, would be the same if net DVA was included.

FICC revenue, excluding net DVA, increased $979 million as rates products improved on increased customer flow, and mortgages recorded strong results. This was partially offset by a weaker performance in commodities, as lower volatility dampened client activity. Equities revenue, excluding net DVA, decreased $341 million to $4.0 billion primarily driven by lower levels of client activity, primarily in Asia, which benefited in 2015 from increased market volumes relating to stock markets rallies in the region, as well as weaker trading performance in derivatives. For more information on sales and trading revenue, see Note 2 – Derivatives to the Consolidated Financial Statements.

All Other

(Dollars in millions)	2016	2015	% Change
Net interest income (FTE basis)	$447	$457	(2)%
Noninterest income:			
Card income	189	260	(27)
Mortgage banking income	889	1,022	(13)
Gains on sales of debt securities	490	1,126	(56)
All other loss	(1,315)	(1,204)	9
Total noninterest income	253	1,204	(79)
Total revenue, net of interest expense (FTE basis)	700	1,661	(58)
Provision for credit losses	(100)	(21)	n/m
Noninterest expense	5,460	5,220	5
Loss before income taxes (FTE basis)	(4,660)	(3,538)	32

Income tax benefit (FTE basis)	(3,085)	(2,395)	29
Net loss	$(1,575)	$(1,143)	38
Balance Sheet (1)			
Average			
Total loans and leases	$108,735	$144,506	(25)
Total deposits	28,131	25,452	11
Year end			
Total loans and leases (2)	$96,713	$122,198	(21)
Total deposits	24,257	25,334	(4)

(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 those segments to match liabilities (i.e., deposits) and allocated shareholders' equity. Such allocated assets were $500.0 billion and $463.4 billion for 2016 and 2015, and $518.7 billion and $489.0 billion at December 31, 2016 and 2015.

(2) Includes $9.2 billion of non-U.S. credit card loans, which are included in assets of business held for sale on the Consolidated Balance Sheet.

n/m = not meaningful

All Other consists of ALM activities, equity investments, the non-U.S. consumer credit card business, non-core mortgage loans and servicing activities, the net impact of periodic revisions to the MSR valuation model for both core and non-core MSRs, other liquidating businesses, residual expense allocations and other. ALM activities encompass certain residential mortgages, debt securities, interest rate and foreign currency risk management activities, the impact of certain allocation methodologies and accounting hedge ineffectiveness. The results of certain ALM activities are allocated to our business segments. For more information on our ALM activities, see Note 24 – Business Segment Information to the Consolidated Financial Statements. Equity investments include our merchant services joint venture as well as Global Principal Investments (GPI) which is comprised of 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.

On December 20, 2016, we entered into an agreement to sell our non-U.S. consumer credit card business to a third party. Subject to regulatory approval, this transaction is expected to close by mid-2017. For more information on the sale of our non-U.S. consumer credit card business, see Recent Events on page 21 and Note 1 – Summary of Significant Accounting Principles to the Consolidated Financial Statements.

The Corporation classifies consumer real estate loans as core or non-core based on loan and customer characteristics such as origination date, product type, LTV, FICO score and delinquency status. Residential mortgage loans that are held for interest rate or liquidity risk management purposes are presented on the balance sheet of All Other. For more information on our interest rate and liquidity risk management activities, see Liquidity Risk on

page 51 and Interest Rate Risk Management for the Banking Book on page 84. During 2016, residential mortgage loans held for ALM activities decreased $8.5 billion to $34.7 billion at December 31, 2016 primarily as a result of payoffs, paydowns and loan sales outpacing new volume. Non-core residential mortgage and home equity loans, which are principally run-off portfolios, including certain loans accounted for under the fair value option and MSRs pertaining to non-core loans serviced for others, are also held in All Other. During 2016, total non-core loans decreased $15.7 billion to $53.1 billion at December 31, 2016 due largely to payoffs and paydowns, as well as loan sales.

The net loss for All Other increased $432 million to $1.6 billion in 2016 primarily due to lower gains on the sale of debt securities, lower mortgage banking income, lower gains on sales of consumer real estate loans and an increase in noninterest expense, partially offset by an improvement in the provision for credit losses and a decrease of $174 million in PPI costs.

Mortgage banking income decreased $133 million primarily due to higher representations and warranties provision, partially offset by more favorable MSR results, net of the related hedge performance, which includes a net $306 million increase in MSR fair value due to a revision of certain MSR valuation assumptions. Gains on the sales of loans, including nonperforming and other delinquent loans were $232 million compared to gains of $1.0 billion in 2015.

The benefit in the provision for credit losses improved $79 million to a benefit of $100 million in 2016 primarily driven by lower loan and lease balances from continued run-off of non-core consumer real estate loans. Noninterest expense increased $240 million to $5.5 billion driven by litigation expense.

The income tax benefit was $3.1 billion in 2016 compared to a benefit of $2.4 billion in 2015 with the increase driven by the change in the pretax loss and net tax benefits related to various tax audit matters, partially offset by a $348 million tax charge in 2016 related to the change in the U.K. corporate tax rate compared to a $290 million charge in 2015. Both periods include 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 Qualified Pension Plan, Non-U.S. Pension Plans, Nonqualified and Other Pension Plans, and Postretirement Health and Life Plans (collectively, 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 2016 and 2015, we contributed $256 million and $234 million to the Plans, and we expect to make $215 million of contributions during 2017. 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.

Table 9 includes certain contractual obligations at December 31, 2016 and 2015.

Table 9 Contractual Obligations

	December 31, 2016					December 31 2015
(Dollars in millions)	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
Long-term debt	$43,964	$ 60,106	$ 26,034	$ 86,719	$216,823	$ 236,764
Operating lease obligations	2,324	3,877	2,908	4,511	13,620	13,681
Purchase obligations	2,089	2,019	604	1,030	5,742	5,350
Time deposits	65,112	5,961	3,369	502	74,944	73,974
Other long-term liabilities	1,991	837	648	1,091	4,567	4,311
Estimated interest	4,814	9,852	4,910	19,871	39,447	43,898

expense on long-term debt and time deposits (1)						
Total contractual obligations	$120,294	$ 82,652	$ 38,473	$ 113,724	$355,143	$ 377,978

(1) Represents forecasted net interest expense on long-term debt and time deposits based on interest rates at December 31, 2016. Forecasts are based on the contractual maturity dates of each liability, and are net of derivative hedges, where applicable.

Representations and Warranties

We securitize first-lien residential mortgage loans generally in the form of RMBS guaranteed by the government-sponsored enterprises (GSEs), which include Freddie Mac (FHLMC) and Fannie Mae (FNMA), or by the Government National Mortgage Association (GNMA) in the case of Federal Housing Administration (FHA)-insured, U.S. Department of Veterans Affairs (VA)-guaranteed and Rural Housing Service-guaranteed mortgage loans, and sell 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, we or certain of our subsidiaries or legacy companies 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 other remedies to investors, securitization trusts, guarantors, insurers or other parties (collectively, repurchases).

At December 31, 2016, we had $18.3 billion of unresolved repurchase claims, predominately related to subprime and pay option first-lien loans and home equity loans, compared to $18.4 billion at December 31, 2015. Outstanding repurchase claims remain unresolved primarily due to (1) the level of detail, support and analysis accompanying such claims, which impact overall claim quality and, therefore, claim resolution and (2) the lack of an established process to resolve disputes related to these claims.

In addition to unresolved repurchase claims, we have received notifications from sponsors of third-party securitizations with whom we engaged in whole-loan transactions indicating that we may have indemnity obligations with respect to loans for which we have not received a repurchase request. These outstanding notifications totaled $1.3 billion and $1.4 billion at December 31, 2016 and 2015.

The liability for representations and warranties and corporate guarantees is included in accrued expenses and other liabilities on the Consolidated Balance Sheet and the related provision is included in mortgage banking income in the Consolidated

Statement of Income. At December 31, 2016 and 2015, the liability for representations and warranties was $2.3 billion and $11.3 billion. The representations and warranties provision was $106 million for 2016 compared to a benefit of $39 million for 2015.

In addition, we currently estimate that the range of possible loss for representations and warranties exposures could be up to $2 billion over existing accruals at December 31, 2016. The estimated range of possible loss represents a reasonably possible loss, but does not represent a probable loss, and is based on currently available information, significant judgment and a number of assumptions that are subject to change.

Future provisions and/or ranges of possible loss associated with obligations under representations and warranties may be significantly impacted if future experiences are different from historical experience or our understandings, interpretations or assumptions. Adverse developments, with respect to one or more of the assumptions underlying the liability for representations and warranties and the corresponding estimated range of possible loss, such as investors or trustees successfully challenging or avoiding the application of the relevant statute of limitations, could result in significant increases to future provisions and/or the estimated range of possible loss. For more information on representations and warranties, see Note 7 – Representations and Warranties Obligations and Corporate Guarantees to the Consolidated Financial Statements and, for more information related to the sensitivity of the assumptions used to estimate our liability for representations and warranties, see Complex Accounting Estimates – Representations and Warranties Liability on page 90.

Other Mortgage-related Matters

We continue to be subject to additional mortgage-related litigation and disputes, as well as governmental and regulatory scrutiny and investigations, related to our past and current origination, servicing, transfer of servicing and servicing rights, servicing compliance obligations, foreclosure activities, indemnification obligations, and mortgage insurance and captive reinsurance practices with mortgage insurers. The ongoing environment of additional regulation, increased regulatory compliance obligations, and enhanced regulatory enforcement, combined with ongoing uncertainty related to the continuing evolution of the regulatory environment, has resulted in increased operational and compliance costs and may limit our ability to continue providing certain products and services. For more information on management's estimate of the aggregate range of possible loss for certain litigation matters and on regulatory investigations, see Note 12 – Commitments and Contingencies to the Consolidated Financial Statements.

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 risks.

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.

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 with the appropriate funding sources 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, regulations and related self-regulatory organizations' standards and codes of conduct.

Operational risk is the risk of loss resulting from inadequate or failed internal 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 through an inability to establish new or maintain existing customer/client relationships or otherwise adversely impact relationships with key stakeholders, such as investors, regulators, employees and the community.

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 our values and operating principles. 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 is the foundation for comprehensive management of the 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 29.

Our Risk Appetite Statement is how we maintain an acceptable risk profile by providing a common framework and a comparable set of measures for senior management and the Board to clearly indicate the level of risk we are willing to accept. Risk appetite is aligned with the strategic, capital and financial operating plans to maintain consistency with our strategy and financial resources. Our line of business strategies and risk appetite are also similarly aligned. For a more detailed discussion of our risk management activities, see the discussion below and pages 44 through 87.

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 are based on the amount of capital, earnings or liquidity we are willing to put at risk to achieve our strategic objectives and business plans. 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.

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 comprised of 14 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. 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 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.

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 we face. The MRC provides 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

In addition to the role of Executive Officers in managing risk, we have clear ownership and accountability across the 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 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 include the lines of business as well as the Global Technology and Operations Group, and 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. 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 CFO Group, GM&CA and the CAO Group. 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 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 enterprise risk teams, FLU risk teams and control function risk teams that work collaboratively in executing their respective duties.

Within IRM, Global Compliance independently assesses compliance risk, and evaluates adherence to applicable laws, rules and regulations, including identifying compliance issues and risks, performing monitoring and testing, and reporting on the state of compliance activities across the Corporation. Additionally, Global Compliance works with FLUs and control functions so that day-to-day activities operate in a compliant manner.

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 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 a risk management process, referred to as Identify, Measure, Monitor and Control (IMMC), 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. Corporate culture and the actions of our employees are also critical to effective risk management. Through our Code of Conduct, we set a high standard for our employees. The Code of Conduct provides a framework for all of our employees to conduct themselves with the highest integrity. We instill a strong and comprehensive culture of managing risk well through communications, training, policies, procedures and organizational roles and responsibilities. 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 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 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.

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, Contingency Funding Plan 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 its capital is more than adequate to support its business activities and to maintain capital, risk and risk appetite commensurate with one another. 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 29.

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.

In April 2016, we submitted our 2016 CCAR capital plan and related supervisory stress tests. The 2016 CCAR capital plan included requests: (i) to repurchase $5.0 billion of common stock

over four quarters beginning in the third quarter of 2016, (ii) to repurchase common stock to offset the dilution resulting from certain equity-based compensation awards, and (iii) to increase the quarterly common stock dividend from $0.05 per share to $0.075 per share. On June 29, 2016, following the Federal Reserve's non-objection to our 2016 CCAR capital plan, the Board authorized the common stock repurchase beginning July 1, 2016. Also, in addition to the previously announced repurchases associated with the 2016 CCAR capital plan, on January 13, 2017, we announced a plan to repurchase an additional $1.8 billion of common stock during the first half of 2017, to which the Federal Reserve did not object. The common stock repurchase authorization includes both common stock and warrants.

During 2016, we repurchased approximately $5.1 billion of common stock pursuant to the Board’s authorization of our 2016 and 2015 CCAR capital plans and to offset equity-based compensation awards.

The timing and amount of common stock repurchases will be 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 common stock 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 a “well-capitalized” BHC, we may notify the Federal Reserve of our intention to make additional capital distributions not to exceed one percent of Tier 1 capital (0.25 percent of Tier 1 capital beginning April 1, 2017), 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 issued by U.S. banking regulators including Basel 3, which includes certain transition provisions through January 1, 2019. The Corporation and its primary affiliated banking entity, BANA, are Basel 3 Advanced approaches institutions.

Basel 3 Overview

Basel 3 updated the composition of capital and established a Common equity tier 1 capital ratio. Common equity tier 1 capital primarily includes common stock, retained earnings and accumulated OCI, net of deductions and adjustments primarily related to goodwill, deferred tax assets, intangibles, MSRs and defined benefit pension assets. Under the Basel 3 regulatory capital transition provisions, certain deductions and adjustments to Common equity tier 1 capital are phased in through January 1, 2018. In 2016, under the transition provisions, 60 percent of these deductions and adjustments were recognized. Basel 3 also revised minimum capital ratios and buffer requirements, added a supplementary leverage ratio (SLR), and addressed the adequately capitalized minimum requirements under the Prompt Corrective Action (PCA) framework. Finally, Basel 3 established 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 determines risk weights based on internal models.

As an Advanced approaches institution, we 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 PCA framework.

Minimum Capital Requirements

Minimum capital requirements and related buffers are being phased in from January 1, 2014 through January 1, 2019. Effective January 1, 2015, the PCA framework was also amended to reflect the requirements of Basel 3. The PCA framework establishes categories of capitalization, including “well capitalized,” based on 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, which included BANA at December 31, 2016.

On January 1, 2016, we became subject to a capital conservation buffer, a countercyclical capital buffer and a global systemically important bank (G-SIB) surcharge which will be phased in over a three-year period ending January 1, 2019. Once

fully phased in, the Corporation’s risk-based capital ratio requirements will include a capital conservation buffer greater than 2.5 percent, plus any applicable countercyclical capital buffer and a G-SIB surcharge in order to avoid restrictions on capital distributions and discretionary bonus payments. The buffers and surcharge must be composed solely of Common equity tier 1 capital. Under the phase-in provisions, we were required to maintain a capital conservation buffer greater than 0.625 percent plus a G-SIB surcharge of 0.75 percent in 2016. The countercyclical capital buffer is currently set at zero. We estimate that our fully phased-in G-SIB surcharge will be 2.5 percent. The G-SIB surcharge may differ from this estimate over time.

Supplementary Leverage Ratio

Basel 3 also requires Advanced approaches institutions to disclose an SLR. 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. Effective January 1, 2018, the Corporation will be required to maintain a minimum 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. Insured depository institution subsidiaries of BHCs will be required to maintain a minimum 6.0 percent SLR to be considered "well capitalized" under the PCA framework.

Capital Composition and Ratios

Table 10 presents Bank of America Corporation’s transition and fully phased-in capital ratios and related information in accordance with Basel 3 Standardized and Advanced approaches as measured at December 31, 2016 and 2015. Fully phased-in estimates are non-GAAP financial measures that the Corporation considers to be useful measures in evaluating compliance with new regulatory capital requirements that are not yet effective. For reconciliations to GAAP financial measures, see Table 13. As of December 31, 2016 and 2015, the Corporation meets the definition of “well capitalized” under current regulatory requirements.

Table 10 Bank of America Corporation Regulatory Capital under Basel 3 [1]

	December 31, 2016					
	Transition			Fully Phased-in		
(Dollars in millions)	Standardized Approach	Advanced Approaches	Regulatory Minimum [2, 3]	Standardized Approach	Advanced Approaches [4]	Regulatory Minimum [5]
Risk-based capital metrics:						
Common equity tier 1 capital	$168,866	$168,866		$162,729	$162,729	
Tier 1 capital	190,315	190,315		187,559	187,559	
Total capital [6]	228,187	218,981		223,130	213,924	
Risk-weighted assets (in billions)	1,399	1,530		1,417	1,512	
Common equity tier 1 capital ratio	12.1 %	11.0 %	5.875 %	11.5 %	10.8 %	9.5 %
Tier 1 capital ratio	13.6	12.4	7.375	13.2	12.4	11.0
Total capital ratio	16.3	14.3	9.375	15.8	14.2	13.0
Leverage-based metrics:						
Adjusted quarterly average assets (in billions) [7]	$2,131	$2,131		$2,131	$2,131	
Tier 1 leverage ratio	8.9 %	8.9 %	4.0	8.8 %	8.8 %	