平成 28 年 11 月 2 日

会社名	バンク・オブ・アメリカ・コーポレーション (Bank of America Corporation)
代表者名	ブライアン・T・モイニハン (Brian T. Moynihan) 取締役会会長兼最高経営責任者 (Chairman of the Board and Chief Executive Officer)
(コード番号	8648　東証第一部外国株)
問合せ先	東京都港区元赤坂一丁目２番７号 赤坂Ｋタワー アンダーソン・毛利・友常法律事務所 弁護士　田中　収／弁護士　吉井　一浩 TEL　03-6888-1000

米国証券取引委員会への Form 8-K の提出

バンク・オブ・アメリカ・コーポレーションは、2016 年 11 月１日付で、米国証券取引委員会に会計方針の変更に係る Form 8-K を提出いたしました。内容については、添付をご参照ください。

As filed with the Securities and Exchange Commission on November 1, 2016

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 8-K

CURRENT REPORT
PURSUANT TO SECTION 13 OR 15(d) OF THE
SECURITIES EXCHANGE ACT OF 1934

Date of Report (Date of earliest event reported):
November 1, 2016

BANK OF AMERICA CORPORATION
(Exact name of registrant as specified in its charter)

Delaware	**1-6523**	**56-0906609**
(State or Other Jurisdiction of Incorporation)	**(Commission File Number)**	**(IRS Employer Identification No.)**

100 North Tryon Street
Charlotte, North Carolina 28255
(Address of principal executive offices)

(704) 386-5681
(Registrant's telephone number, including area code)

Not Applicable
(Former name or former address, if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

☐ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

☐ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

☐ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

☐ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

ITEM 8.01. OTHER EVENTS.

Effective July 1, 2016, the Corporation changed its accounting method under the Financial Accounting Standards Board (FASB) Accounting Standards Codification (ASC) 310-20, *Nonrefundable fees and other costs*, from the prepayment method (also referred to as the retrospective method) to the contractual method.

Under the prepayment method, the Corporation's amortization of premiums and accretion of discounts related to certain debt securities was based on estimated principal prepayment assumptions on individual debt securities each reporting period. Prepayment experience, which is largely driven by interest rates, is continually evaluated to determine the estimated lives of the securities. When a change is made to the estimated lives of the securities, the related premium or discount is adjusted with a corresponding charge or benefit to interest income as if the current estimated lives had been applied since the acquisition of the securities. Accordingly, the application of the prepayment method results in a cumulative catch-up adjustment in each period, recorded in interest income.

Under the contractual method, premiums and discounts on debt securities are amortized and accreted at a constant effective yield, and no assumption is made concerning prepayments. The cumulative catch-up adjustment that occurs under the prepayment method is therefore not required under the contractual method. Instead, as principal prepayments occur, the contractual method requires the acceleration of a portion of the unamortized premium or discount be recorded in interest income such that the effective yield of the debt security remains constant throughout the life of the debt security.

The Corporation believes that the contractual method is the preferable method of accounting because it is consistent with the accounting method used by peer institutions in terms of net interest income, an important element in the statement of income. Additionally, the contractual method better aligns with the Corporation's asset and liability strategy which acts to mitigate the risk that market conditions may adversely impact the value of the Corporation's assets and liabilities, and its financial results.

Adoption of the contractual method of accounting is a voluntary change required to be adopted retrospectively. Therefore all prior periods presented herein have been restated to conform to the current period presentation.

Under the applicable bank regulatory rules, the Corporation is not required to and, accordingly, will not restate previously-filed capital metrics and ratios. The cumulative impact of the change in accounting method would have resulted in an insignificant pro forma change of the Corporation's capital ratios.

This Current Report on Form 8-K and the exhibits hereto reflect a change in accounting method for the amortization of premiums and accretion of discounts related to certain debt securities as presented in the Annual Report to the extent this information is impacted by the revised accounting methodology. Portions of the following items from the Annual Report have been updated to reflect the revised presentation:

- Part II, Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations (filed as Exhibit 99.1 and incorporated herein by reference).
- Part II, Item 8. Financial Statements and Supplementary Data (filed as Exhibit 99.2 and incorporated herein by reference).

ITEM 9.01. FINANCIAL STATEMENTS AND EXHIBITS.

(d) Exhibits.

EXHIBIT NO.	DESCRIPTION OF EXHIBIT
12	Ratio of Earnings to Fixed Charges [(1)] Ratio of Earnings to Fixed Charges and Preferred Dividends [(1)]
23	Consent of PricewaterhouseCoopers LLP
99.1	Part II, Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations
99.2	Part II, Item 8. Financial Statements and Supplementary Data
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
101.LAB	XBRL Taxonomy Extension Label Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definitions Linkbase Document

[(1)] Filed herewith.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

BANK OF AMERICA CORPORATION

By:	/s/ Rudolf A. Bless
Name:	Rudolf A. Bless
Title:	Chief Accounting Officer

Dated: November 1, 2016

INDEX TO EXHIBITS

EXHIBIT NO.	DESCRIPTION OF EXHIBIT
12	Ratio of Earnings to Fixed Charges [(1)] Ratio of Earnings to Fixed Charges and Preferred Dividends [(1)]
23	Consent of PricewaterhouseCoopers LLP
99.1	Part II, Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations
99.2	Part II, Item 8. Financial Statements and Supplementary Data
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
101.LAB	XBRL Taxonomy Extension Label Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definitions Linkbase Document

[(1)] Filed herewith.

Exhibit 23

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in:

- the Registration Statement on Form S-3 (No. 333-202354);
- the Registration Statements on Form S-8 (Nos. 333-212376; 333-204453; 333-198405; 333-157085; 333-133566; 333-121513; 333-102043; 333-02875; 333-167797; and 333-153771)

of Bank of America Corporation of our report dated February 24, 2016, except with respect to our opinion on the consolidated financial statements insofar as it relates to the effects of changes in segments discussed in Note 1, as to which the date is August 1, 2016, and except with respect to our opinion on the consolidated financial statements insofar as it relates to the change in the manner in which the company accounts for the amortization of premiums and the accretion of discounts related to certain debt securities as discussed in Note 1, as to which the date is November 1, 2016, relating to the financial statements and the effectiveness of internal control over financial reporting, which appears in this Current Report on Form 8-K.

Charlotte, North Carolina
November 1, 2016

Item 7. Bank of America Corporation and Subsidiaries
Management's Discussion and Analysis of Financial Condition and Results of Operations

Table of Contents

	Page
Executive Summary	3
Recent Events	4
Financial Highlights	5
Balance Sheet Overview	8
Supplemental Financial Data	11
Business Segment Operations	13
Consumer Banking	14
Global Wealth & Investment Management	18
Global Banking	20
Global Markets	22
All Other	24
Off-Balance Sheet Arrangements and Contractual Obligations	25
Managing Risk	28
Strategic Risk Management	32
Capital Management	32
Liquidity Risk	39
Credit Risk Management	44
Consumer Portfolio Credit Risk Management	45
Commercial Portfolio Credit Risk Management	56
Non-U.S. Portfolio	65
Provision for Credit Losses	67
Allowance for Credit Losses	67
Market Risk Management	71
Trading Risk Management	72
Interest Rate Risk Management for Non-trading Activities	76
Mortgage Banking Risk Management	78
Compliance Risk Management	78
Operational Risk Management	78
Reputational Risk Management	79
Complex Accounting Estimates	79
2014 Compared to 2013	84
Overview	84
Business Segment Operations	85
Statistical Tables	87
Glossary	106

Management's Discussion and Analysis of Financial Condition and Results of Operations

This report, the documents that it incorporates by reference and the documents into which it may be incorporated by reference may contain, and from time to time Bank of America Corporation (collectively with its subsidiaries, the Corporation) and its management may make certain statements that constitute forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. These statements can be identified by the fact that they do not relate strictly to historical or current facts. Forward-looking statements often use words such as "anticipates," "targets," "expects," "hopes," "estimates," "intends," "plans," "goals," "believes," "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 and revenues, 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 elsewhere in this report, including under Item 1A. Risk Factors of the Corporation's 2015 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 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 servicing, securities, fraud, indemnity, contribution or other claims from one or more counterparties, including trustees, purchasers of loans, underwriters, issuers, other parties involved in securitizations, monolines or private-label and other investors; the possibility that future representations and warranties losses may occur in excess of the Corporation's recorded liability and estimated range of possible loss for its representations and warranties exposures; the possibility that the Corporation may not collect mortgage insurance claims; 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 losses for litigation exposures; the possible outcome of LIBOR, other reference rate and foreign exchange inquiries and investigations; 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, 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; 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 adoption of total loss-absorbing capacity requirements; the potential for payment protection insurance exposure to increase as a result of Financial Conduct Authority actions; the possible impact of Federal Reserve actions on the Corporation's capital plans; the impact of implementation and compliance with new and evolving U.S. and international regulations, including, but not limited to, recovery and resolution planning requirements, the Volcker Rule, and derivatives regulations; a failure in or breach of the Corporation's operational or security systems or infrastructure, or those of third parties, including as a result of cyber attacks 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. We operate our banking activities primarily under the Bank of America, National Association (Bank of America, N.A. or BANA) charter. At December 31, 2015, the Corporation had approximately $2.1 trillion in assets and approximately 213,000 full-time equivalent employees.

Effective April 1, 2016, we realigned the segments to reflect how we are managing the businesses beginning in the second quarter of 2016. For more information on this realignment, see Executive Summary – Business overview on page 3 of Exhibit 99.1 to the Corporation's Current Report on Form 8-K filed on August 1, 2016. Prior periods have been reclassified to conform to current period presentation.

As of December 31, 2015, 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 47 million consumer and small business relationships with approximately 4,700 retail financial centers, approximately 16,000 ATMs, nationwide call centers, and leading online and mobile banking platforms (www.bankofamerica.com). We offer industry-leading support to approximately three million small business owners. Our wealth management businesses, with client balances of nearly $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.

2015 Economic and Business Environment

In the U.S., the economy grew in 2015 for the seventh consecutive year. Following a soft start to the year partly reflecting severe winter weather and other temporary factors, economic growth picked up mid-year before a mild deceleration near year end. While economic growth struggled to reach two percent in the year, the labor market continued to improve. Payroll gains were solid, while the unemployment rate fell to five percent late in the year. With steady employment gains and continued low oil prices, consumer spending increased at a strong pace for most of the year and residential construction gained momentum. Core inflation (which excludes certain items which may be subject to frequent volatile price changes, like food and energy) remained relatively unchanged in 2015, more than half a percentage point below the Board of Governors of the Federal Reserve System's (Federal Reserve) longer-term target of two percent. Inflation was suppressed by falling energy costs.

U.S. household net worth rose for a seventh consecutive year, but at a slower pace in 2015. After a modest first half of the year, home prices rebounded in the second half of 2015 and rose more than five percent in 2015, while equity markets registered little net change. With energy costs continuing to decline in 2015, the consumer spending outlook remained positive, although the negative impacts on energy-related investments hurt the manufacturing economy and continued to impact financial markets. With the sharp U.S. Dollar appreciation in late 2014 and 2015, export gains slowed, further weakening manufacturing, while import growth was steady, resulting in a decline in net exports and a negative impact on 2015 gross domestic product growth.

U.S. Treasury yields were unstable, but rose modestly over the course of the year, as a rate hike from the Federal Reserve neared. At its final meeting of the year, the Federal Open Market Committee (FOMC) raised its target range for the Federal funds rate by 25 basis points (bps), its first rate increase in over nine years. At the same time, the Federal Reserve repeated its expectation that policy would be normalized gradually, and would remain accommodative for the foreseeable future. Amid the contrast between U.S. tightening of monetary policy versus the easing of monetary policy in much of the world, the U.S. Dollar appreciated significantly over the year, especially against emerging market and commodity-oriented currencies.

Internationally, the eurozone continued to grow modestly in 2015, as the European Central Bank (ECB) began a program of significant purchases of sovereign debt, helping to keep bond yields low and to maintain stability in southern European markets. Core inflation in the eurozone stabilized early and then edged higher over the year. The Euro/U.S. Dollar exchange rate continued to decline early in the year driven by the differing directions of U.S. and eurozone monetary policies, further boosting European competitiveness. However, the eurozone remains vulnerable to economic slowing in emerging markets. Late in the year, the ECB extended its horizon for bond purchases, but failed to increase their size.

Economic growth was slow and uncertain in Japan, while the 2014 gains in core inflation were reversed. Declining energy costs continued to hurt Russia's economy, which remained in recession for 2015. Brazil's recession also continued, aggravated by extreme policy uncertainty. Amid continued gradual economic moderation, China eased monetary policy during the year, but continued its focus on longer-run issues including increasing its focus on rebalancing the economy and encouraging consumer spending.

Recent Events

Settlement with Bank of New York Mellon

The final conditions of the settlement with the Bank of New York Mellon (BNY Mellon) have been satisfied and, accordingly, the Corporation made the settlement payment of $8.5 billion in February 2016. The settlement payment was previously fully reserved. Pursuant to the settlement agreement, allocation and distribution of the $8.5 billion settlement payment is the responsibility of the residential mortgage-backed securities (RMBS) trustee, BNY Mellon. On February 5, 2016, BNY Mellon filed an Article 77 proceeding in the New York County Supreme Court asking the court for instruction with respect to certain issues concerning the distribution of each trust's allocable share of the settlement payment and asking that the settlement payment be ordered to be held in escrow pending the outcome of this Article 77 proceeding. The Corporation is not a party to this proceeding. For additional information, see Off-Balance Sheet Arrangements and Contractual Obligations on page 25.

Capital Management

During 2015, we repurchased approximately $2.4 billion of common stock, with an average price of $16.92 per share, in connection with our 2015 Comprehensive Capital Analysis and Review (CCAR) capital plan, which included a request to repurchase $4.0 billion of common stock over five quarters beginning in the second quarter of 2015, and to maintain the quarterly common stock dividend at the current rate of $0.05 per share.

Based on the conditional non-objection we received from the Federal Reserve on our 2015 CCAR submission, we were required to resubmit our CCAR capital plan by September 30, 2015 and address certain weaknesses the Federal Reserve identified in our capital planning process. We have established plans and taken actions which addressed the identified weaknesses, and we resubmitted our CCAR capital plan on September 30, 2015. The Federal Reserve announced that it did not object to our resubmitted CCAR capital plan on December 10, 2015.

As an Advanced approaches institution, under Basel 3, we were required to complete a qualification period (parallel run) to demonstrate compliance with the Basel 3 Advanced approaches capital framework to the satisfaction of U.S. banking regulators. We received approval to begin using the Advanced approaches capital framework to determine risk-based capital requirements beginning in the fourth quarter of 2015. As previously disclosed, with the approval to exit parallel run, U.S. banking regulators requested modifications to certain internal analytical models including the wholesale (e.g., commercial) credit models. All requested modifications were incorporated, which increased our risk-weighted assets, and are reflected in the risk-based ratios in the fourth quarter of 2015. Having exited parallel run on October 1, 2015, 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 Prompt Corrective Action (PCA) framework and was the Advanced approaches in the fourth quarter of 2015. For additional information, see Capital Management on page 32.

Trust Preferred Securities

On December 29, 2015, the Corporation provided notice of the redemption on January 29, 2016 of all trust preferred securities of Merrill Lynch Preferred Capital Trust III, Merrill Lynch Preferred Capital Trust IV and Merrill Lynch Preferred Capital Trust V (the Trust Preferred Securities). In connection with the Corporation's acquisition of Merrill Lynch & Co., Inc. in 2009, the Corporation recorded a discount to par value as purchase accounting adjustments associated with the Trust Preferred Securities. The Corporation recorded a $612 million charge to net interest income related to the discount on these securities.

New Accounting Guidance on Recognition and Measurement of Financial Instruments

In January 2016, the Financial Accounting Standards Board (FASB) issued new accounting guidance on recognition and measurement of financial instruments. The Corporation has early adopted, retrospective to January 1, 2015, the provision that requires the Corporation to present unrealized gains and losses resulting from changes in the Corporation's own credit spreads on liabilities accounted for under the fair value option (referred to as debit valuation adjustments, or DVA) in accumulated other comprehensive income (OCI). The impact of the adoption was to reclassify, as of January 1, 2015, unrealized DVA losses of $2.0 billion pretax ($1.2 billion after tax) from retained earnings to accumulated OCI. Further, pretax unrealized DVA gains of $301 million, $301 million and $420 million were reclassified from other income to accumulated OCI for the third, second and first quarters of 2015, respectively. This had the effect of reducing net income as previously reported for the aforementioned quarters by $187 million, $186 million and $260 million, or approximately $0.02 per share in each quarter. This change is reflected in consolidated results and the *Global Markets* segment results. Results for 2014 were not subject to restatement under the provisions of the new accounting guidance.

Selected Financial Data

Table 1 provides selected consolidated financial data for 2015 and 2014.

Table 1 Selected Financial Data

(Dollars in millions, except per share information)	2015	2014
Income statement		
Revenue, net of interest expense (FTE basis) [1]	**$ 83,854**	$ 86,745
Net income	**15,836**	5,520
Diluted earnings per common share	**1.31**	0.42
Dividends paid per common share	**0.20**	0.12
Performance ratios		
Return on average assets	**0.73%**	0.26%
Return on average tangible common shareholders' equity [1]	**9.08**	2.98
Efficiency ratio (FTE basis) [1]	**68.85**	87.22
Balance sheet at year end		
Total loans and leases [2]	**$ 896,983**	$ 876,104
Total assets	**2,144,287**	2,104,539
Total deposits	**1,197,259**	1,118,936
Total common shareholders' equity	**233,903**	224,167
Total shareholders' equity	**256,176**	243,476

[1] Fully taxable-equivalent (FTE) basis, return on average tangible common shareholders' equity and the efficiency ratio are non-GAAP financial measures. Other companies may define or calculate these measures differently. For additional information, see Supplemental Financial Data on page 11, and for corresponding reconciliations to GAAP financial measures, see Statistical Table XIII.

[2] The Corporation classifies certain leases in other assets. Previously these leases were classified in loans and leases. For December 31, 2015 and 2014, $6.0 billion and $5.3 billion of these leases were reclassified from loans and leases to other assets to conform to this presentation.

Financial Highlights

Net income was $15.8 billion, or $1.31 per diluted share in 2015 compared to $5.5 billion, or $0.42 per diluted share in 2014. The results for 2015 compared to 2014 were primarily driven by a decrease of $15.2 billion in litigation expense, as well as decreases in all other noninterest expense categories, partially offset by a decline in net interest income on a fully taxable-equivalent (FTE) basis, higher provision for credit losses and lower revenue. Included in net interest income on an FTE basis was a charge related to the discount on certain trust preferred securities of $612 million in 2015.

Effective July 1, 2016, the Corporation changed its accounting method for the amortization of premiums and accretion of discounts related to certain debt securities under FASB ASC 310-20, *Nonrefundable fees and other costs*. All periods presented herein have been restated for this change in accounting method. Under the applicable bank regulatory rules, we are not required to and, accordingly, did not restate previously-filed capital metrics and ratios so in discussions of our capital ratios, the underlying financial statement metrics on which the ratios are based are the amounts as previously reported. For additional information, see Executive Summary – Recent Events on page 4 and *Note 1 – Summary of Significant Accounting Principles* to the Consolidated Financial Statements.

Total assets increased $39.7 billion from December 31, 2014 to $2.1 trillion at December 31, 2015 primarily driven by an increase in debt securities due to the deployment of deposit inflows, an increase in loans driven by strong demand for commercial loans outpacing consumer loan sales and run-off, and higher cash and cash equivalents from strong deposit inflows. Total liabilities increased $27.0 billion from December 31, 2014 to $1.9 trillion at December 31, 2015 primarily driven by an increase in deposits, partially offset by declines in securities loaned or sold under agreements to repurchase, trading account liabilities and long-term debt. During 2015, we returned $5.9 billion in capital to shareholders through common and preferred stock dividends and share repurchases. For more information on the balance sheet, see Executive Summary – Balance Sheet Overview on page 8.

From a capital management perspective, during 2015, we maintained our strong capital position with Common equity tier 1 capital of $163.0 billion, risk-weighted assets of $1,602 billion and a Common equity tier 1 capital ratio of 10.2 percent at December 31, 2015 as measured under the Basel 3 Advanced – Transition. On September 3, 2015, we received approval to exit parallel run and begin using the Basel 3 Advanced approaches capital framework to determine risk-based capital requirements in the fourth quarter of 2015. The Corporation's transitional supplementary leverage ratio (SLR) was 6.6 percent and 6.2 percent at December 31, 2015 and 2014, both above the 5.0 percent required minimum. Our Global Excess Liquidity Sources were $504 billion with time-to-required funding at 39 months at December 31, 2015 compared to $439 billion and 39 months at December 31, 2014. For additional information, see Capital Management on page 32 and Liquidity Risk on page 39.

Table 2 Summary Income Statement

(Dollars in millions)	2015	2014
Net interest income (FTE basis) [1]	**$ 39,847**	$ 41,630
Noninterest income	**44,007**	45,115
Total revenue, net of interest expense (FTE basis) [1]	**83,854**	86,745
Provision for credit losses	**3,161**	2,275
Noninterest expense	**57,734**	75,656
Income before income taxes (FTE basis) [1]	**22,959**	8,814
Income tax expense (FTE basis) [1]	**7,123**	3,294
Net income	**15,836**	5,520
Preferred stock dividends	**1,483**	1,044
Net income applicable to common shareholders	**$ 14,353**	$ 4,476
Per common share information		
Earnings	**$ 1.37**	$ 0.43
Diluted earnings	**1.31**	0.42

[1] FTE basis is a non-GAAP financial measure. For more information on this measure, see Supplemental Financial Data on page 11, and for a corresponding reconciliation to GAAP financial measures, see Statistical Table XIII.

Net Interest Income

Net interest income on an FTE basis decreased $1.8 billion to $39.8 billion in 2015 compared to 2014. The net interest yield on an FTE basis decreased 11 bps to 2.19 percent for 2015. These declines were primarily driven by lower loan yields and consumer loan balances, as well as a charge of $612 million in 2015 related to the discount on certain trust preferred securities, partially offset by lower funding costs, higher trading-related net interest income, lower rates paid on deposits and commercial loan growth.

Noninterest Income

Table 3 Noninterest Income

(Dollars in millions)	2015	2014
Card income	**$ 5,959**	$ 5,944
Service charges	**7,381**	7,443
Investment and brokerage services	**13,337**	13,284
Investment banking income	**5,572**	6,065
Equity investment income	**261**	1,130
Trading account profits	**6,473**	6,309
Mortgage banking income	**2,364**	1,563
Gains on sales of debt securities	**1,138**	1,481
Other income	**1,522**	1,896
Total noninterest income	**$ 44,007**	$ 45,115

Noninterest income decreased $1.1 billion to $44.0 billion for 2015 compared to 2014. The following highlights the significant changes.

- Investment banking income decreased $493 million driven by lower debt and equity issuance fees, partially offset by higher advisory fees.
- Equity investment income decreased $869 million as 2014 included a gain on the sale of a portion of an equity investment and gains from an initial public offering (IPO) of an equity investment in *Global Markets*.
- Trading account profits increased $164 million. Excluding DVA, trading account profits decreased $330 million driven by declines in credit-related products reflecting lower client activity, partially offset by strong performance in equity derivatives, increased client activity in equities in the Asia-Pacific region, improvement in currencies on higher client flows and increased volatility. For more information on trading account profits, see *Global Markets* on page 22.
- Mortgage banking income increased $801 million primarily due to lower provision for representations and warranties in 2015 compared to 2014, and to a lesser extent, improved MSR net-of-hedge performance and an increase in core production revenue, partially offset by a decline in servicing fees.
- Other income decreased $374 million primarily due to DVA gains of $407 million in 2014 compared to DVA losses of $633 million in 2015, partially offset by higher gains on asset sales and lower U.K. consumer payment protection insurance (PPI) costs in 2015. For more information on the accounting change related to DVA, see Executive Summary – Recent Events on page 4.

Provision for Credit Losses

Table 4 Credit Quality Data

(Dollars in millions)	2015	2014
Provision for credit losses		
Consumer	**$ 2,208**	$ 1,482
Commercial	**953**	793
Total provision for credit losses	**$ 3,161**	$ 2,275
Net charge-offs [1]	**$ 4,338**	$ 4,383
Net charge-off ratio [2]	**0.50%**	0.49%

[1] Net charge-offs exclude write-offs in the purchased credit-impaired loan portfolio.
[2] Net charge-off ratios are calculated as net charge-offs divided by average outstanding loans and leases excluding loans accounted for under the fair value option.

The provision for credit losses increased $886 million to $3.2 billion for 2015 compared to 2014. The provision for credit losses was $1.2 billion lower than net charge-offs for 2015, resulting in a reduction in the allowance for credit losses. The provision for credit losses in 2014 included $400 million of additional costs associated with the consumer relief portion of the settlement with the U.S. Department of Justice (DoJ). Excluding these additional costs, the provision for credit losses in the consumer portfolio increased $1.1 billion compared to 2014 due to a slower pace of portfolio improvement than in 2014, and also due to a lower level of recoveries on nonperforming loan sales and other recoveries in 2015. The provision for credit losses for the commercial portfolio increased $160 million in 2015 compared to 2014 driven by energy sector exposure and higher unfunded balances. The decrease in net charge-offs was primarily due to credit quality improvement in the consumer portfolio, partially offset by higher net charge-offs in the commercial portfolio primarily due to lower net recoveries in commercial real estate and higher energy-related net charge-offs.

As we look at 2016, reserve releases are expected to decrease from 2015 levels. All else equal, this would result in increased provision expense, assuming sustained stability in underlying asset quality. For more information on the provision for credit losses, see Provision for Credit Losses on page 67.

Noninterest Expense

Table 5 Noninterest Expense

(Dollars in millions)	2015	2014
Personnel	$ 32,868	$ 33,787
Occupancy	4,093	4,260
Equipment	2,039	2,125
Marketing	1,811	1,829
Professional fees	2,264	2,472
Amortization of intangibles	834	936
Data processing	3,115	3,144
Telecommunications	823	1,259
Other general operating	9,887	25,844
Total noninterest expense	**$ 57,734**	$ 75,656

Noninterest expense decreased $17.9 billion to $57.7 billion for 2015 compared to 2014. The following highlights the significant changes.

- Personnel expense decreased $919 million as we continue to streamline processes, reduce headcount and achieve cost savings.
- Occupancy decreased $167 million primarily due to our focus on reducing our rental footprint.
- Professional fees decreased $208 million due to lower default-related servicing expenses and legal fees.
- Telecommunications expense decreased $436 million due to efficiencies gained as we have simplified our operating model, including in-sourcing certain functions.
- Other general operating expense decreased $16.0 billion primarily due to a decrease of $15.2 billion in litigation expense which was primarily related to previously disclosed legacy mortgage-related matters and other litigation charges in 2014.

Income Tax Expense

Table 6 Income Tax Expense

(Dollars in millions)	2015	2014
Income before income taxes	$ 22,070	$ 7,963
Income tax expense	6,234	2,443
Effective tax rate	28.2%	30.7%

The effective tax rate for 2015 was driven by our recurring tax preference benefits and tax benefits related to certain non-U.S. restructurings, partially offset by a charge for the impact of the U.K. tax law changes discussed below. The effective tax rate for 2014 was driven by our recurring tax preference benefits, the resolution of several tax examinations and tax benefits from non-U.S. restructurings, partially offset by the non-deductible treatment of certain litigation charges. We expect an effective tax rate in the low 30 percent range, absent unusual items, for 2016.

On November 18, 2015, the U.K. Finance (No. 2) Act 2015 (the Act) was enacted, reducing the U.K. corporate income tax rate by two percent to 18 percent. The first one percent reduction will be effective on April 1, 2017 and the second on April 1, 2020. The Act also included a tax surcharge on banking companies of eight percent, effective on January 1, 2016, and provided that existing net operating loss carryforwards may not reduce the additional eight percent income tax liability. Lastly, the Act provided that expenses for certain compensation payments, such as PPI, are not deductible to the extent attributable to July 8, 2015 or later. These provisions resulted in a charge of approximately $290 million in 2015, primarily from remeasuring our U.K. deferred tax assets.

Table 7 Selected Balance Sheet Data

(Dollars in millions)	December 31 2015	2014	% Change
Assets			
Cash and cash equivalents	**$ 159,353**	$ 138,589	15%
Federal funds sold and securities borrowed or purchased under agreements to resell	**192,482**	191,823	—
Trading account assets	**176,527**	191,785	(8)
Debt securities	**406,888**	380,452	7
Loans and leases	**896,983**	876,104	2
Allowance for loan and lease losses	**(12,234)**	(14,419)	(15)
All other assets	**324,288**	340,205	(5)
Total assets	**$ 2,144,287**	$ 2,104,539	2
Liabilities			
Deposits	**$ 1,197,259**	$ 1,118,936	7
Federal funds purchased and securities loaned or sold under agreements to repurchase	**174,291**	201,277	(13)
Trading account liabilities	**66,963**	74,192	(10)
Short-term borrowings	**28,098**	31,172	(10)
Long-term debt	**236,764**	243,139	(3)
All other liabilities	**184,736**	192,347	(4)
Total liabilities	**1,888,111**	1,861,063	1
Shareholders' equity	**256,176**	243,476	5
Total liabilities and shareholders' equity	**$ 2,144,287**	$ 2,104,539	2

Assets

At December 31, 2015, total assets were approximately $2.1 trillion, up $39.7 billion from December 31, 2014. The increase in assets was primarily driven by an increase in debt securities due to the deployment of deposit inflows, an increase in loans and leases driven by strong demand for commercial loans outpacing consumer loan sales and run-off, and higher cash and cash equivalents from strong deposit inflows. These increases were partially offset by a decrease in trading account assets due to repositioning activity on the balance sheet, and a decrease in all other assets.

The Corporation took certain actions in 2015 to further strengthen liquidity in response to the Basel 3 Liquidity Coverage Ratio (LCR) requirements. Most notably, we exchanged residential mortgage loans supported by long-term standby agreements with Fannie Mae (FNMA) and Freddie Mac (FHLMC) into debt securities guaranteed by FNMA and FHLMC, which further improved liquidity in the ALM portfolio.

Cash and Cash Equivalents

Cash and cash equivalents increased $20.8 billion primarily due to strong deposit inflows driven by growth in customer and client activity, partially offset by commercial loan growth.

Federal Funds Sold and Securities Borrowed or Purchased Under Agreements to Resell

Federal funds transactions involve lending reserve balances on a short-term basis. Securities borrowed or purchased under agreements to resell are collateralized lending transactions utilized to accommodate customer transactions, earn interest rate spreads, and obtain securities for settlement and for collateral. Federal funds sold and securities borrowed or purchased under agreements to resell remained relatively unchanged compared to December 31, 2014, as an increase in securities borrowed of $3.3 billion was offset by a decrease in reverse repurchase agreements of $2.6 billion.

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 decreased $15.3 billion primarily due to balance sheet repositioning activity 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 $26.4 billion primarily driven by the deployment of deposit inflows and the exchange of certain loans into debt securities. For more information on debt securities, see *Note 3 – Securities* to the Consolidated Financial Statements.

Loans and Leases

Loans and leases increased $20.9 billion driven by strong demand for commercial loans, outpacing consumer loan sales and run-off. For more information on the loan portfolio, see Credit Risk Management on page 44.

Allowance for Loan and Lease Losses

Allowance for loan and lease losses decreased $2.2 billion primarily due to the impact of improvements in credit quality from the improving economy. For additional information, see Allowance for Credit Losses on page 67.

All Other Assets

All other assets decreased $15.9 billion driven by a decrease in other noninterest receivables, loans held-for-sale (LHFS) and derivative assets.

Liabilities

At December 31, 2015, total liabilities were approximately $1.9 trillion, up $27.0 billion from December 31, 2014, primarily driven by an increase in deposits, partially offset by declines in securities loaned or sold under agreements to repurchase, trading account liabilities and long-term debt.

Deposits

Deposits increased $78.3 billion 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 $27.0 billion 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 $7.2 billion primarily due to lower levels of short U.S. Treasury positions due to balance sheet repositioning activity driven by 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 $3.1 billion due to planned reductions in FHLB borrowings. 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 $6.4 billion primarily due to the impact of revaluation of non-U.S. Dollar debt and changes in fair value for debt accounted for under the fair value option. These impacts were substantially offset through derivative hedge transactions. Excluding these two factors, total long-term debt remained relatively unchanged in 2015. For more information on long-term debt, see *Note 11 – Long-term Debt* to the Consolidated Financial Statements.

All Other Liabilities

All other liabilities decreased $7.6 billion due to a decrease in derivative liabilities.

Shareholders' Equity

Shareholders' equity increased $12.7 billion driven by earnings and preferred stock issuances, partially offset by returns of capital to shareholders of $5.9 billion through common and preferred stock dividends and share repurchases, as well as a decrease in accumulated OCI due primarily to an increase in unrealized losses on available-for-sale (AFS) debt securities as a result of the increase in 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 39.

Table 8 Five-year Summary of Selected Financial Data [1]

(In millions, except per share information)	2015	2014	2013	2012	2011
Income statement					
Net interest income	**$ 38,958**	$ 40,779	$ 40,719	$ 40,135	$ 44,953
Noninterest income	**44,007**	45,115	46,783	42,663	48,936
Total revenue, net of interest expense	**82,965**	85,894	87,502	82,798	93,889
Provision for credit losses	**3,161**	2,275	3,556	8,169	13,410
Goodwill impairment	**—**	—	—	—	3,184
Merger and restructuring charges	**—**	—	—	—	638
All other noninterest expense	**57,734**	75,656	69,213	72,094	76,452
Income before income taxes	**22,070**	7,963	14,733	2,535	205
Income tax expense (benefit)	**6,234**	2,443	4,194	(1,320)	(1,511)
Net income	**15,836**	5,520	10,539	3,855	1,716
Net income applicable to common shareholders	**14,353**	4,476	9,190	2,427	355
Average common shares issued and outstanding	**10,462**	10,528	10,731	10,746	10,143
Average diluted common shares issued and outstanding	**11,214**	10,585	11,491	10,841	10,255
Performance ratios					
Return on average assets	**0.73%**	0.26%	0.49%	0.18%	0.07%
Return on average common shareholders' equity	**6.24**	2.01	4.21	1.12	0.17
Return on average tangible common shareholders' equity [2]	**9.08**	2.98	6.35	1.71	0.27
Return on average tangible shareholders' equity [2]	**8.80**	3.34	6.58	2.40	1.14
Total ending equity to total ending assets	**11.95**	11.57	11.06	10.72	10.81
Total average equity to total average assets	**11.66**	11.11	10.81	10.75	9.98
Dividend payout	**14.56**	28.20	4.66	18.03	n/m
Per common share data					
Earnings	**$ 1.37**	$ 0.43	$ 0.86	$ 0.23	$ 0.03
Diluted earnings	**1.31**	0.42	0.83	0.22	0.03
Dividends paid	**0.20**	0.12	0.04	0.04	0.04
Book value	**22.53**	21.32	20.69	20.24	20.09
Tangible book value [2]	**15.62**	14.43	13.77	13.36	12.95
Market price per share of common stock					
Closing	**$ 16.83**	$ 17.89	$ 15.57	$ 11.61	$ 5.56
High closing	**18.45**	18.13	15.88	11.61	15.25
Low closing	**15.15**	14.51	11.03	5.80	4.99
Market capitalization	**$ 174,700**	$ 188,141	$ 164,914	$ 125,136	$ 58,580

[1] The results for 2015 were impacted by the early adoption of new accounting guidance on recognition and measurement of financial instruments. For additional information, see Executive Summary – Recent Events on page 4.

[2] Tangible equity ratios and tangible book value per share of common stock are non-GAAP financial measures. Other companies may define or calculate these measures differently. For more information on these ratios, see Supplemental Financial Data on page 11, and for corresponding reconciliations to GAAP financial measures, see Statistical Table XIII on page 103.

[3] 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 45.

[4] Includes the allowance for loan and lease losses and the reserve for unfunded lending commitments.

[5] 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 54 and corresponding Table 35, and Commercial Portfolio Credit Risk Management – Nonperforming Commercial Loans, Leases and Foreclosed Properties Activity on page 61 and corresponding Table 44.

[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 $808 million, $810 million and $2.3 billion of write-offs in the PCI loan portfolio for 2015, 2014 and 2013, respectively. For more information on PCI write-offs, see Consumer Portfolio Credit Risk Management – Purchased Credit-impaired Loan Portfolio on page 52.

[8] There were no write-offs of PCI loans in 2011.

[9] Capital ratios reported under Advanced approaches at December 31, 2015. Prior to 2015, we were required to report regulatory capital ratios under the Standardized approach only. For additional information, see Capital Management on page 32.

n/a = not applicable
n/m = not meaningful

Table 8 Five-year Summary of Selected Financial Data [1] (continued)

(Dollars in millions)	2015	2014	2013	2012	2011
Average balance sheet					
Total loans and leases	**$ 876,787**	$ 898,703	$ 918,641	$ 898,768	$ 938,096
Total assets	**2,160,197**	2,145,393	2,163,296	2,191,361	2,296,322
Total deposits	**1,155,860**	1,124,207	1,089,735	1,047,782	1,035,802
Long-term debt	**240,059**	253,607	263,417	316,393	421,229
Common shareholders' equity	**230,173**	222,907	218,340	216,999	211,844
Total shareholders' equity	**251,981**	238,317	233,819	235,681	229,230
Asset quality [3]					
Allowance for credit losses [4]	**$ 12,880**	$ 14,947	$ 17,912	$ 24,692	$ 34,497
Nonperforming loans, leases and foreclosed properties [5]	**9,836**	12,629	17,772	23,555	27,708
Allowance for loan and lease losses as a percentage of total loans and leases outstanding [5]	**1.37%**	1.66%	1.90%	2.69%	3.68%
Allowance for loan and lease losses as a percentage of total nonperforming loans and leases [5]	**130**	121	102	107	135
Allowance for loan and lease losses as a percentage of total nonperforming loans and leases, excluding the PCI loan portfolio [5]	**122**	107	87	82	101
Amounts included in allowance for loan and lease losses for loans and leases that are excluded from nonperforming loans and leases [6]	**$ 4,518**	$ 5,944	$ 7,680	$ 12,021	$ 17,490
Allowance for loan and lease losses as a percentage of total nonperforming loans and leases, excluding the allowance for loan and lease losses for loans and leases that are excluded from nonperforming loans and leases [5, 6]	**82%**	71%	57%	54%	65%
Net charge-offs [7]	**$ 4,338**	$ 4,383	$ 7,897	$ 14,908	$ 20,833
Net charge-offs as a percentage of average loans and leases outstanding [5, 7]	**0.50%**	0.49%	0.87%	1.67%	2.24%
Net charge-offs as a percentage of average loans and leases outstanding, excluding the PCI loan portfolio [5]	**0.51**	0.50	0.90	1.73	2.32
Net charge-offs and PCI write-offs as a percentage of average loans and leases outstanding [5, 8]	**0.59**	0.58	1.13	1.99	2.24
Nonperforming loans and leases as a percentage of total loans and leases outstanding [5]	**1.05**	1.38	1.87	2.52	2.74
Nonperforming loans, leases and foreclosed properties as a percentage of total loans, leases and foreclosed properties [5]	**1.10**	1.45	1.93	2.62	3.01
Ratio of the allowance for loan and lease losses at December 31 to net charge-offs [7]	**2.82**	3.29	2.21	1.62	1.62
Ratio of the allowance for loan and lease losses at December 31 to net charge-offs, excluding the PCI loan portfolio	**2.64**	2.91	1.89	1.25	1.22
Ratio of the allowance for loan and lease losses at December 31 to net charge-offs and PCI write-offs [8]	**2.38**	2.78	1.70	1.36	1.62
Capital ratios at year end [9]					
Risk-based capital:					
Common equity tier 1 capital	**10.2%**	12.3%	n/a	n/a	n/a
Tier 1 common capital	**n/a**	n/a	10.9%	10.8%	9.7%
Tier 1 capital	**11.3**	13.4	12.2	12.7	12.2
Total capital	**13.2**	16.5	15.1	16.1	16.6
Tier 1 leverage	**8.6**	8.2	7.7	7.2	7.4
Tangible equity [2]	**8.9**	8.4	7.8	7.6	7.5
Tangible common equity [2]	**7.8**	7.5	7.2	6.7	6.6

For footnotes see page 10.

Supplemental Financial Data

We view net interest income and related ratios and analyses on an FTE basis, which when presented on a consolidated basis, are non-GAAP financial measures. We believe managing the business with net interest income on an FTE basis provides a more accurate picture of the interest margin for comparative purposes. 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. This measure ensures comparability of net interest income arising from taxable and tax-exempt sources.

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 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 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 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 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.

The aforementioned supplemental data and performance measures are presented in Table 8 and Statistical Table X.

We evaluate our business segment results based on measures that utilize average allocated capital. Return on average allocated capital is calculated as net income adjusted for cost of funds and earnings credits and certain expenses related to intangibles, divided by average allocated capital. Allocated capital and the related return both represent non-GAAP financial measures.

Statistical Tables XIII, XIV and XV on pages 103, 104 and 105 provide reconciliations of these non-GAAP financial measures to GAAP financial measures. We believe the use of these non-GAAP financial measures provides additional clarity in assessing the results of the Corporation and our segments. Other companies may define or calculate these measures and ratios differently.

Table 9 Five-year Supplemental Financial Data

(Dollars in millions, except per share information)	2015	2014	2013	2012	2011
Fully taxable-equivalent basis data					
Net interest income	**$ 39,847**	$ 41,630	$ 41,578	$ 41,036	$ 45,925
Total revenue, net of interest expense [1]	**83,854**	86,745	88,361	83,699	94,861
Net interest yield	**2.19%**	2.30%	2.29%	2.22%	2.50%
Efficiency ratio [1]	**68.85**	87.22	78.33	86.13	81.27

[1] The results for 2015 were impacted by the early adoption of new accounting guidance on recognition and measurement of financial instruments. For additional information, see Executive Summary – Recent Events on page 4.

Net Interest Income Excluding Trading-related Net Interest Income

We manage net interest income on an FTE basis and excluding the impact of trading-related activities. We evaluate our sales and trading results and strategies on a total market-based revenue approach by combining net interest income and noninterest income for *Global Markets.* An analysis of net interest income, average earning assets and net interest yield on earning assets, all of which adjust for the impact of trading-related net interest income from reported net interest income on an FTE basis, is shown below. We believe the use of this non-GAAP presentation in Table 10 provides additional clarity in assessing our results.

Table 10 Net Interest Income Excluding Trading-related Net Interest Income

(Dollars in millions)	2015	2014
Net interest income (FTE basis)		
As reported	**$ 39,847**	$ 41,630
Impact of trading-related net interest income	**(3,777)**	(3,455)
Net interest income excluding trading-related net interest income (FTE basis) [1]	**$ 36,070**	$ 38,175
Average earning assets		
As reported	**$ 1,824,931**	$1,809,468
Impact of trading-related earning assets	**(412,754)**	(442,442)
Average earning assets excluding trading-related earning assets [1]	**$ 1,412,177**	$1,367,026
Net interest yield contribution (FTE basis)		
As reported	**2.19%**	2.30%
Impact of trading-related activities	**0.37**	0.49
Net interest yield on earning assets excluding trading-related activities (FTE basis) [1]	**2.56%**	2.79%

[1] Represents a non-GAAP financial measure.

Net interest income excluding trading-related net interest income decreased $2.1 billion to $36.1 billion for 2015 compared to 2014. The decline was primarily driven by lower loan yields and consumer loan balances, as well as a charge of $612 million in 2015 related to the discount on certain trust preferred securities. This was partially offset by lower funding costs, lower rates paid on deposits and commercial loan growth. For more information on the impact of interest rates, see Interest Rate Risk Management for Non-trading Activities on page 76.

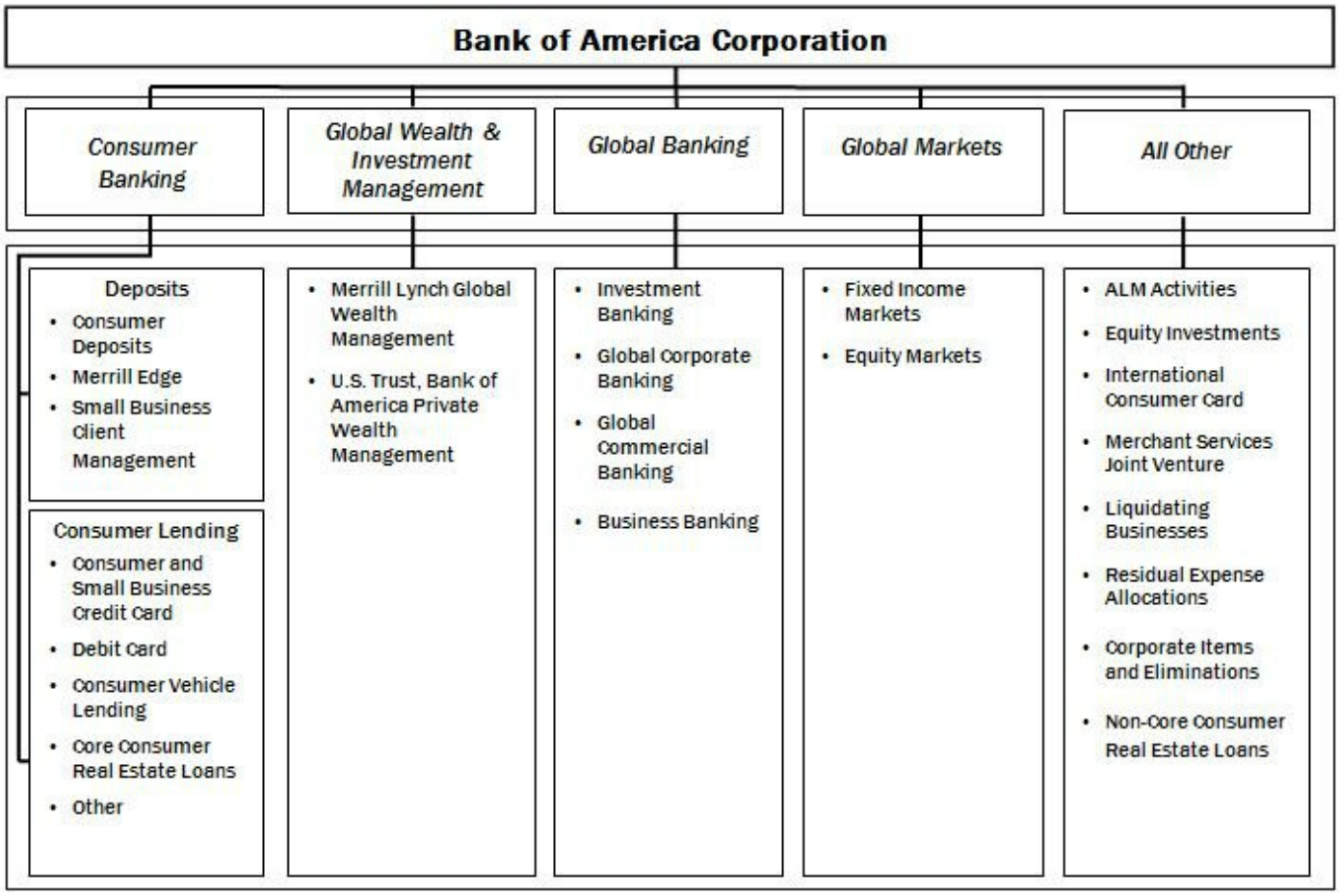
Average earning assets excluding trading-related earning assets increased $45.2 billion to $1,412.2 billion for 2015 compared to 2014. The increase was primarily in debt securities, commercial loans and cash held at central banks, partially offset by a decline in consumer loans.

Net interest yield on earning assets excluding trading-related activities decreased 23 bps to 2.56 percent for 2015 compared to 2014 due to the same factors as described above.

Business Segment Operations

Segment Description and Basis of Presentation

Effective April 1, 2016, we realigned the segments to reflect how we manage the businesses beginning in the second quarter of 2016. For more information on this segment realignment, see *Note 24 – Business Segment Information* to the Consolidated Financial Statements on page 116 of Exhibit 99.2 to the Corporation's Current Report on Form 8-K filed on August 1, 2016.



The Corporation periodically reviews capital allocated to its businesses and allocates 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. The Corporation's 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 28. The capital allocated to the business segments is referred to as allocated capital, which represents a non-GAAP financial measure. For purposes of goodwill impairment testing, the Corporation utilizes allocated equity as a proxy for the carrying value of its reporting units. Allocated equity in the reporting units is comprised of allocated capital plus capital for the portion of goodwill and intangibles specifically assigned to the reporting unit. For additional information, see *Note 8 – Goodwill and Intangible Assets* to the Consolidated Financial Statements.

During 2015, we made refinements to the amount of capital allocated to each of our businesses based on multiple considerations that included, but were not limited to, risk-weighted assets measured under Basel 3 Standardized and Advanced approaches, business segment exposures and risk profile, and strategic plans. As a result of this process, effective January 1, 2015, we adjusted the amount of capital being allocated to our business segments. For more information on Basel 3 risk-weighted assets measured under the Standardized and Advanced approaches, see Capital Management on page 32.

The change in accounting method for certain debt securities, as described in *Note 1 – Summary of Significant Accounting Principles* to the Consolidated Financial Statements, impacted the amount of residual net interest income that is allocated to the business segments.

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

(Dollars in millions)	Deposits 2015	Deposits 2014	Consumer Lending 2015	Consumer Lending 2014	Total Consumer Banking 2015	Total Consumer Banking 2014	% Change
Net interest income (FTE basis)	**$ 9,635**	$ 9,391	**$ 10,793**	$ 11,399	**$ 20,428**	$ 20,790	(2)%
Noninterest income:							
Card income	**11**	10	**4,926**	4,833	**4,937**	4,843	2
Service charges	**4,100**	4,159	**1**	1	**4,101**	4,160	(1)
Mortgage banking income	**—**	—	**1,332**	1,394	**1,332**	1,394	(4)
All other income	**483**	416	**244**	225	**727**	641	13
Total noninterest income	**4,594**	4,585	**6,503**	6,453	**11,097**	11,038	1
Total revenue, net of interest expense (FTE basis)	**14,229**	13,976	**17,296**	17,852	**31,525**	31,828	(1)
Provision for credit losses	**200**	268	**2,146**	2,202	**2,346**	2,470	(5)
Noninterest expense	**9,856**	10,024	**8,860**	9,366	**18,716**	19,390	(3)
Income before income taxes (FTE basis)	**4,173**	3,684	**6,290**	6,284	**10,463**	9,968	5
Income tax expense (FTE basis)	**1,521**	1,373	**2,293**	2,344	**3,814**	3,717	3
Net income	**$ 2,652**	$ 2,311	**$ 3,997**	$ 3,940	**$ 6,649**	$ 6,251	6
Net interest yield (FTE basis)	**1.75%**	1.82%	**4.70%**	4.95%	**3.52%**	3.80%	
Return on average allocated capital	**22**	21	**19**	17	**20**	18	
Efficiency ratio (FTE basis)	**69.27**	71.73	**51.23**	52.46	**59.37**	60.92	
Balance Sheet							
Average							
Total loans and leases	**$ 4,713**	$ 5,147	**$ 227,719**	$228,361	**$ 232,432**	$233,508	—
Total earning assets [1]	**549,600**	515,948	**229,579**	230,453	**580,095**	546,831	6
Total assets [1]	**576,569**	542,684	**242,707**	245,299	**620,192**	588,413	5
Total deposits	**544,685**	511,925	**8,191**	8,261	**552,876**	520,186	6
Allocated capital	**12,000**	11,000	**21,000**	23,000	**33,000**	34,000	(3)
Year end							
Total loans and leases	**$ 4,735**	$ 4,950	**$ 234,116**	$229,293	**$ 238,851**	$234,243	2
Total earning assets [1]	**576,108**	526,780	**235,496**	231,842	**605,012**	557,541	9
Total assets [1]	**603,448**	554,106	**248,571**	246,041	**645,427**	599,066	8
Total deposits	**571,467**	523,350	**6,365**	7,291	**577,832**	530,641	9

[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 franchise network that stretches coast to coast through 33 states and the District of Columbia. The franchise network includes approximately 4,700 financial centers, 16,000 ATMs, nationwide call centers, and online and mobile platforms.

Consumer Banking Results

Net income for *Consumer Banking* increased $398 million to $6.6 billion in 2015 compared to 2014 primarily driven by lower noninterest expense, lower provision for credit losses and higher noninterest income, partially offset by lower net interest income. Net interest income decreased $362 million to $20.4 billion as the beneficial impact of an increase in investable assets as a result of higher deposits was more than offset by the impact of the allocation of ALM activities, higher funding costs, lower card yields and lower average card loan balances. Noninterest income increased $59 million to $11.1 billion driven by higher card income and the impact on revenue of certain divestitures, partially offset by lower mortgage banking income and service charges.

The provision for credit losses decreased $124 million to $2.3 billion in 2015 driven by continued improvement in credit quality primarily related to our small business and credit card portfolios. Noninterest expense decreased $674 million to $18.7 billion primarily driven by lower operating and personnel expenses, partially offset by higher fraud costs in advance of Europay, MasterCard and Visa (EMV) chip implementation.

The return on average allocated capital was 20 percent, up from 18 percent, reflecting higher net income and a decrease in allocated capital. For more information on capital allocations, see Business Segment Operations on page 13.

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 *Global Wealth & Investment Management (GWIM)* as well as other client-managed businesses. For more information on the migration of customer balances to or from *GWIM*, see *GWIM* on page 18.

Net income for Deposits increased $341 million to $2.7 billion in 2015 driven by higher net interest income, and lower noninterest expense and provision for credit losses. Net interest income increased $244 million to $9.6 billion primarily due to the beneficial impact of an increase in investable assets as a result of higher deposits, partially offset by the impact of the allocation of ALM activities. Noninterest income of $4.6 billion remained relatively unchanged.

The provision for credit losses decreased $68 million to $200 million driven by continued improvement in credit quality. Noninterest expense decreased $168 million to $9.9 billion due to lower operating expenses.

Average deposits increased $32.8 billion to $544.7 billion in 2015 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 $43.5 billion was partially offset by a decline in time deposits of $10.7 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 five bps.

Key Statistics – Deposits

	2015	2014
Total deposit spreads (excludes noninterest costs) [1]	**1.62%**	1.59%
Year end		
Client brokerage assets (in millions)	**$ 122,721**	$113,763
Online banking active accounts (units in thousands)	**31,674**	30,904
Mobile banking active users (units in thousands)	**18,705**	16,539
Financial centers	**4,726**	4,855
ATMs	**16,038**	15,834

[1] Includes deposits held in Consumer Lending.

Client brokerage assets increased $9.0 billion in 2015 driven by strong account flows, partially offset by lower market valuations. Mobile banking active users increased 2.2 million reflecting continuing changes in our customers' banking preferences. The number of financial centers declined 129 driven by changes in customer preferences to self-service options and 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, marine, aircraft, 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.

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. Total owned loans in the core portfolio held in Consumer Lending increased $2.4 billion in 2015 to $90.6 billion at December 31, 2015 largely due to 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 45.

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 18.

Net income for Consumer Lending remained relatively unchanged at $4.0 billion in 2015 as lower noninterest expense, lower provision for credit losses and higher noninterest income largely offset the decline in net interest income. Net interest income decreased $606 million to $10.8 billion driven by higher funding costs, lower card yields and average card loan balances, and the impact of the allocation of ALM activities. Noninterest income increased $50 million to $6.5 billion due to higher card income, partially offset by lower mortgage banking income.

The provision for credit losses decreased $56 million to $2.1 billion in 2015 driven by continued credit quality improvement within the small business and credit card portfolios. Noninterest expense decreased $506 million to $8.9 billion primarily driven by lower operating expense and personnel expense, partially offset by higher fraud costs in advance of EMV chip implementation.

Average loans decreased $642 million to $227.7 billion in 2015 primarily driven by lower home equity loans and continued decline of unsecured lending portfolios, partially offset by increases in consumer vehicle loans and residential mortgages.

Key Statistics – Consumer Lending

(Dollars in millions)	2015	2014
Total U.S. credit card [1]		
Gross interest yield	**9.16%**	9.34%
Risk-adjusted margin	**9.31**	9.39
New accounts (in thousands)	**4,973**	4,541
Purchase volumes	**$221,378**	$212,088
Debit card purchase volumes	**$277,695**	$272,576

[1] In addition to the U.S. credit card portfolio in *Consumer Banking*, the remaining U.S. credit card portfolio is in *GWIM*.

During 2015, the total U.S. credit card risk-adjusted margin decreased 8 bps due to a decrease in net interest margin and the net impact of gains on asset sales, partially offset by an improvement in credit quality in the U.S. Card portfolio. Total U.S. credit card purchase volumes increased $9.3 billion to $221.4 billion and debit card purchase volumes increased $5.1 billion to $277.7 billion, reflecting higher levels of consumer spending.

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 LHFS, the related secondary market execution, and costs related to representations and warranties 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 other mortgage banking income are included in this *Consumer Banking* table to show the components of consolidated mortgage banking income.

Mortgage Banking Income

(Dollars in millions)	2015	2014
Mortgage banking income		
Consumer Banking mortgage banking income		
Total production income	**$ 950**	$ 888
Net servicing income		
Servicing fees	**855**	1,045
Amortization of expected cash flows [1]	**(661)**	(761)
Fair value changes of MSRs, net of risk management activities used to hedge certain market risks [2]	**188**	222
Total net servicing income	**382**	506
Total Consumer Banking mortgage banking income	**1,332**	1,394
Other mortgage banking income		
Other production income	**107**	74
Representations and warranties provision	**28**	(694)
Net servicing income		
Servicing fees	**538**	764
Amortization of expected cash flows [1]	**(77)**	(57)
Fair value changes of MSRs, net of risk management activities used to hedge certain market risks [2]	**328**	72
Total net servicing income	**789**	779
Eliminations [3]	**108**	10
Total other mortgage banking income	**1,032**	169
Total consolidated mortgage banking income	**$ 2,364**	$ 1,563

[1] Represents the net change in fair value of the MSR asset due to the recognition of modeled cash flows.
[2] Includes gains (losses) on sales of MSRs.
[3] Includes the effect of transfers of mortgage loans from *Consumer Banking* to the ALM portfolio included in *All Other* and net gains or losses on intercompany trades related to MSR risk management.

Total production income for *Consumer Banking* increased $62 million to $950 million in 2015 primarily due to an increase in margins.

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 $124 million to $382 million in 2015 primarily driven by lower servicing fees due to a smaller servicing portfolio, partially offset by improved MSR net-of-hedge performance. Servicing fees declined 18 percent to $855 million in 2015 as the size of the servicing portfolio continued to decline.

Mortgage Servicing Rights

At December 31, 2015, the balance of consumer MSRs managed within Consumer Lending and *All Other*, which excludes $407 million of certain non-U.S. residential mortgage MSRs recorded in *Global Markets*, was $2.7 billion compared to $3.3 billion at December 31, 2014. The decrease was primarily driven by the recognition of modeled cash flows and sales of MSRs, partially offset by new loan originations. The core MSR portfolio, held in *Consumer Banking*, totaled $2.3 billion and $2.9 billion and the non-core MSR portfolio, held in *All Other*, totaled $401 million and $414 million at December 31, 2015 and 2014. For more information on MSRs, see *Note 23 – Mortgage Servicing Rights* to the Consolidated Financial Statements.

Key Statistics

(Dollars in millions)	2015	2014
Loan production [1]**:**		
Total [2]:		
First mortgage	**$ 56,930**	$ 43,290
Home equity	**13,060**	11,233
Consumer Banking:		
First mortgage	**$ 40,878**	$ 32,339
Home equity	**11,988**	10,286

(1) The above 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 $8.5 billion and $13.6 billion in 2015 compared to 2014 reflecting growth in the overall mortgage market as lower interest rates beginning in late 2014 drove an increase in refinances.

During 2015, 63 percent of the total Corporation first mortgage production volume was for refinance originations and 37 percent was for purchase originations compared to 60 percent and 40 percent in 2014. Home Affordable Refinance Program (HARP) originations were two percent of all refinance originations compared to six percent in 2014. Making Home Affordable non-HARP originations were eight percent of all refinance originations compared to 17 percent in 2014. The remaining 90 percent of refinance originations were conventional refinances compared to 77 percent in 2014.

Home equity production for the total Corporation was $13.1 billion for 2015 compared to $11.2 billion for 2014, with the increase due to a higher demand in the market based on improving housing trends, and increased market share driven by improved financial center engagement with customers and more competitive pricing.

Global Wealth & Investment Management

(Dollars in millions)	2015	2014	% Change
Net interest income (FTE basis)	**$ 5,527**	$ 5,830	(5)%
Noninterest income:			
Investment and brokerage services	**10,792**	10,722	1
All other income	**1,715**	1,851	(7)
Total noninterest income	**12,507**	12,573	(1)
Total revenue, net of interest expense (FTE basis)	**18,034**	18,403	(2)
Provision for credit losses	**51**	14	n/m
Noninterest expense	**13,943**	13,836	1
Income before income taxes (FTE basis)	**4,040**	4,553	(11)
Income tax expense (FTE basis)	**1,473**	1,698	(13)
Net income	**$ 2,567**	$ 2,855	(10)
Net interest yield (FTE basis)	**2.13%**	2.34%	
Return on average allocated capital	**21**	24	
Efficiency ratio (FTE basis)	**77.32**	75.18	
Balance Sheet			
Average			
Total loans and leases	**$ 132,499**	$ 120,687	10
Total earning assets	**259,020**	249,043	4
Total assets	**275,950**	267,575	3
Total deposits	**244,725**	240,242	2
Allocated capital	**12,000**	12,000	—
Year end			
Total loans and leases	**$ 139,039**	$ 126,432	10
Total earning assets	**279,597**	256,586	9
Total assets	**296,271**	274,954	8
Total deposits	**260,893**	245,391	6

n/m = not meaningful

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 assets under management (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* decreased $288 million to $2.6 billion in 2015 compared to 2014 driven by a decrease in revenue and increases in noninterest expense and the provision for credit losses.

Net interest income decreased $303 million to $5.5 billion due to the impact of the allocation of ALM activities, partially offset by the impact of loan and deposit growth. Noninterest income, which primarily includes investment and brokerage services income, decreased $66 million to $12.5 billion driven by lower transactional revenue, partially offset by increased asset management fees due to the impact of long-term AUM flows and higher average market levels. Noninterest expense increased $107 million to $13.9 billion primarily due to higher amortization of previously issued stock awards and investments in client-facing professionals, partially offset by lower revenue-related expenses.

Return on average allocated capital was 21 percent, down from 24 percent due to a decrease in net income.

Key Indicators and Metrics

(Dollars in millions, except as noted)	2015	2014
Revenue by Business		
Merrill Lynch Global Wealth Management	**$ 14,926**	$ 15,256
U.S. Trust	**3,032**	3,083
Other [1]	**76**	64
Total revenue, net of interest expense (FTE basis)	**$ 18,034**	$ 18,403
Client Balances by Business, at year end		
Merrill Lynch Global Wealth Management	**$ 1,986,502**	$ 2,034,802
U.S. Trust	**388,604**	387,491
Other [1]	**82,929**	76,705
Total client balances	**$ 2,458,035**	$ 2,498,998
Client Balances by Type, at year end		
Long-term assets under management	**$ 817,938**	$ 826,171
Liquidity assets under management	**82,925**	76,701
Assets under management	**900,863**	902,872
Brokerage assets	**1,040,938**	1,081,434
Assets in custody	**113,239**	139,555
Deposits	**260,893**	245,391
Loans and leases [2]	**142,102**	129,746
Total client balances	**$ 2,458,035**	$ 2,498,998
Assets Under Management Rollforward		
Assets under management, beginning of year	**$ 902,872**	$ 821,449
Net long-term client flows	**34,441**	49,800
Net liquidity client flows	**6,133**	3,361
Market valuation/other	**(42,583)**	28,262
Total assets under management, end of year	**$ 900,863**	$ 902,872
Associates, at year end [3, 4]		
Number of financial advisors	**16,687**	16,147
Total wealth advisors, including financial advisors	**18,131**	17,561
Total client-facing professionals, including financial advisors and wealth advisors	**20,605**	20,085
Merrill Lynch Global Wealth Management Metric [4]		
Financial advisor productivity [5] (in thousands)	**$ 1,024**	$ 1,059
U.S. Trust Metric, at year end [4]		
Client-facing professionals	**2,186**	2,181

[1] Includes the results of BofA Global Capital Management, the cash management division of Bank of America, and certain administrative items.
[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 2,187 and 1,978 at December 31, 2015 and 2014.
[4] Headcount computation is based upon full-time equivalents.
[5] Financial advisor productivity is defined as Merrill Lynch Global Wealth Management total revenue, excluding the allocation of certain ALM activities, divided by the total number of financial advisors (excluding financial advisors in the *Consumer Banking* segment).

Client balances decreased $41.0 billion, or two percent, to nearly $2.5 trillion driven by market declines, partially offset by client balance flows.

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

In 2015, revenue from MLGWM of $14.9 billion and U.S. Trust of $3.0 billion were each down two percent primarily driven by lower net interest income due to the impact of the allocation of ALM activities. Additionally, noninterest income was down in MLGWM driven by lower transactional revenue, partially offset by the impact of long-term AUM flows.

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)	2015	2014
Total deposits, net – to (from) *GWIM*	**$ (218)**	$ 1,350
Total loans, net – to (from) *GWIM*	**(97)**	(61)
Total brokerage, net – to (from) *GWIM*	**(2,416)**	(2,710)

[1] Migration occurs primarily between *GWIM* and *Consumer Banking*.

Global Banking

(Dollars in millions)	2015	2014	% Change
Net interest income (FTE basis)	**$ 9,244**	$ 9,752	(5)%
Noninterest income:			
Service charges	**2,914**	2,901	—
Investment banking fees	**3,110**	3,213	(3)
All other income	**2,353**	2,400	(2)
Total noninterest income	**8,377**	8,514	(2)
Total revenue, net of interest expense (FTE basis)	**17,621**	18,266	(4)
Provision for credit losses	**686**	325	111
Noninterest expense	**8,481**	8,806	(4)
Income before income taxes (FTE basis)	**8,454**	9,135	(7)
Income tax expense (FTE basis)	**3,114**	3,353	(7)
Net income	**$ 5,340**	$ 5,782	(8)
Net interest yield (FTE basis)	**2.90%**	3.13%	
Return on average allocated capital	**15**	17	
Efficiency ratio (FTE basis)	**48.13**	48.21	
Balance Sheet			
Average			
Total loans and leases	**$ 303,907**	$ 285,344	7
Total earning assets	**318,977**	311,651	2
Total assets	**369,001**	362,273	2
Total deposits	**294,733**	288,010	2
Allocated capital	**35,000**	33,500	4
Year end			
Total loans and leases	**$ 323,687**	$ 287,648	13
Total earning assets	**334,766**	303,080	10
Total assets	**386,132**	353,637	9
Total deposits	**296,162**	279,792	6

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 to clients, 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* decreased $442 million to $5.3 billion in 2015 compared to 2014 primarily driven by lower revenue and higher provision for credit losses, partially offset by lower noninterest expense.

Revenue decreased $645 million to $17.6 billion in 2015 primarily due to lower net interest income. The decline in net interest income reflects the impact of the allocation of ALM activities, including liquidity costs as well as loan spread compression, partially offset by loan growth. Noninterest income of $8.4 billion remained relatively unchanged in 2015.

The provision for credit losses increased $361 million to $686 million in 2015 primarily driven by energy exposure and loan growth. For additional information, see Commercial Portfolio Credit Risk Management – Industry Concentrations on page 62. Noninterest expense decreased $325 million to $8.5 billion in 2015 primarily due to lower litigation expense and technology initiative costs.

The return on average allocated capital was 15 percent in 2015, down from 17 percent in 2014, due to increased capital allocations and lower net income. For more information on capital allocated to the business segments, see Business Segment Operations on page 13.

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 presents a summary of the results, which exclude certain capital markets activity in *Global Banking*.

Global Corporate, Global Commercial and Business Banking

(Dollars in millions)	Global Corporate Banking		Global Commercial Banking		Business Banking		Total	
	2015	2014	**2015**	2014	**2015**	2014	**2015**	2014
Revenue								
Business Lending	**$ 3,981**	$ 4,118	**$ 3,968**	$ 3,931	**$ 352**	$ 372	**$ 8,301**	$ 8,421
Global Transaction Services	**2,793**	2,958	**2,649**	2,855	**703**	712	**6,145**	6,525
Total revenue, net of interest expense	**$ 6,774**	$ 7,076	**$ 6,617**	$ 6,786	**$ 1,055**	$ 1,084	**$ 14,446**	$ 14,946
Balance Sheet								
Average								
Total loans and leases	**$ 138,025**	$128,443	**$ 148,735**	$140,096	**$ 17,072**	$ 16,790	**$ 303,832**	$285,329
Total deposits	**138,142**	140,526	**123,007**	117,389	**33,588**	30,096	**294,737**	288,011
Year end								
Total loans and leases	**$ 146,803**	$129,795	**$ 159,720**	$141,051	**$ 17,165**	$ 16,803	**$ 323,688**	$287,649
Total deposits	**133,742**	127,823	**128,656**	120,079	**33,767**	31,890	**296,165**	279,792

Business Lending revenue of $8.3 billion remained relatively unchanged in 2015 compared to 2014 as loan spread compression was offset by the benefit of loan growth.

Global Transaction Services revenue decreased $380 million in 2015 primarily due to lower net interest income as a result of the impact of the allocation of ALM activities, including liquidity costs.

Average loans and leases increased six percent in 2015 compared to 2014 due to strong origination volumes and increased revolver utilization. Average deposits remained relatively unchanged in 2015.

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 most 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

(Dollars in millions)	Global Banking		Total Corporation	
	2015	2014	**2015**	2014
Products				
Advisory	**$ 1,354**	$ 1,098	**$ 1,503**	$ 1,205
Debt issuance	**1,296**	1,532	**3,033**	3,583
Equity issuance	**460**	583	**1,236**	1,490
Gross investment banking fees	**3,110**	3,213	**5,772**	6,278
Self-led deals	**(57)**	(91)	**(200)**	(213)
Total investment banking fees	**$ 3,053**	$ 3,122	**$ 5,572**	$ 6,065

Total Corporation investment banking fees of $5.6 billion, excluding self-led deals, included within *Global Banking* and *Global Markets,* decreased eight percent in 2015 compared to 2014 driven by lower debt and equity issuance fees, partially offset by higher advisory fees. Underwriting fees for debt products declined primarily as a result of lower debt issuance volumes mainly in leveraged finance transactions.

Global Markets

(Dollars in millions)	2015	2014	% Change
Net interest income (FTE basis)	**$ 4,191**	$ 3,851	9%
Noninterest income:			
Investment and brokerage services	**2,221**	2,205	1
Investment banking fees	**2,401**	2,743	(12)
Trading account profits	**6,109**	6,027	1
All other income	**91**	1,304	(93)
Total noninterest income	**10,822**	12,279	(12)
Total revenue, net of interest expense (FTE basis)	**15,013**	16,130	(7)
Provision for credit losses	**99**	110	(10)
Noninterest expense	**11,374**	11,989	(5)
Income before income taxes (FTE basis)	**3,540**	4,031	(12)
Income tax expense (FTE basis)	**1,117**	1,441	(22)
Net income	**$ 2,423**	$ 2,590	(6)
Return on average allocated capital	**7%**	8%	
Efficiency ratio (FTE basis)	**75.75**	74.33	
Balance Sheet			
Average			
Trading-related assets:			
Trading account securities	**$ 195,650**	$ 201,951	(3)
Reverse repurchases	**103,506**	115,897	(11)
Securities borrowed	**79,494**	85,098	(7)
Derivative assets	**54,519**	46,677	17
Total trading-related assets [1]	**433,169**	449,623	(4)
Total loans and leases	**63,443**	61,750	3
Total earning assets [1]	**430,468**	457,871	(6)
Total assets	**594,057**	604,198	(2)
Total deposits	**38,074**	40,221	(5)
Allocated capital	**35,000**	34,000	3
Year end			
Total trading-related assets [1]	**$ 373,926**	$ 418,847	(11)
Total loans and leases	**73,208**	58,996	24
Total earning assets [1]	**384,046**	418,849	(8)
Total assets	**548,790**	576,552	(5)
Total deposits	**37,038**	40,665	(9)

[1] Trading-related assets include derivative assets, which are considered non-earning assets.

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 most investment banking and underwriting activities are shared primarily between *Global Markets* and *Global Banking* based on the activities performed by each segment. *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 21.

Retrospective to January 1, 2015, we early adopted new accounting guidance that requires the Corporation to present unrealized DVA gains and losses on certain liabilities accounted for under the fair value option in accumulated OCI. This change, which is reflected entirely in *Global Markets*, resulted in a reclassification of pretax unrealized DVA gains of $1.0 billion from other income to accumulated OCI for 2015. Results for 2014 were not subject to restatement under the provisions of the new accounting guidance. Net DVA on derivatives is still reported in *Global Markets* segment results. For additional information, see Executive Summary – Recent Events on page 4. In 2014, we implemented a funding valuation adjustment (FVA) into our valuation estimates primarily to include funding costs on uncollateralized derivatives and derivatives where we are not permitted to use the collateral we receive. This change in estimate resulted in a net FVA pretax charge of $497 million in 2014, which is included in net DVA.

Net income for *Global Markets* decreased $167 million to $2.4 billion in 2015 compared to 2014. Excluding net DVA, net income increased $170 million to $2.9 billion in 2015 compared to 2014, primarily driven by lower noninterest expense and lower tax expense, partially offset by lower revenue. Revenue, excluding net DVA, decreased due to lower trading account profits due to declines in credit-related businesses, lower investment banking fees and lower equity investment gains (not included in sales and trading revenue) as 2014 included gains related to the IPO of an equity investment, partially offset by an increase in net interest income. Net DVA losses were $786 million compared to losses of $240 million in 2014. Sales and trading revenue, excluding net DVA, decreased $139 million due to lower fixed-income, currencies and commodities (FICC) revenue, partially offset by increased Equities revenue. Noninterest expense decreased $615 million to $11.4 billion largely due to lower litigation expense and, to a lesser extent, lower revenue-related incentive compensation and support costs. The effective tax rate for 2014 reflected the impact of non-deductible litigation expense.

Average earning assets decreased $27.4 billion to $430.5 billion in 2015 largely driven by a decrease in reverse repurchases, securities borrowed and trading securities primarily due to a reduction in client financing activity and continuing balance sheet optimization efforts across *Global Markets*.

Year-end loans and leases increased $14.2 billion in 2015 primarily due to growth in mortgage and securitization finance.

The return on average allocated capital was seven percent, down from eight percent, reflecting a decrease in net income and 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, 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 clarity in assessing the underlying performance of these businesses.

Sales and Trading Revenue [1, 2]

(Dollars in millions)	2015	2014
Sales and trading revenue		
Fixed-income, currencies and commodities	**$ 7,869**	$ 8,695
Equities	**4,335**	4,194
Total sales and trading revenue	**$ 12,204**	$ 12,889
Sales and trading revenue, excluding net DVA [3]		
Fixed-income, currencies and commodities	**$ 8,632**	$ 9,003
Equities	**4,358**	4,126
Total sales and trading revenue, excluding net DVA	**$ 12,990**	$ 13,129

(1) Includes FTE adjustments of $181 million and $178 million for 2015 and 2014. 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 $424 million and $381 million for 2015 and 2014.

(3) FICC and Equities sales and trading revenue, excluding the impact of net DVA, is a non-GAAP financial measure. FICC net DVA losses were $763 million for 2015 compared to net DVA losses of $308 million in 2014. Equities net DVA losses were $23 million for 2015 compared to net DVA gains of $68 million in 2014.

FICC revenue, excluding net DVA, decreased $371 million to $8.6 billion primarily driven by declines in credit-related businesses due to lower client activity, partially offset by stronger results in rates, currencies and commodities products. Equities revenue, excluding net DVA, increased $232 million to $4.4 billion primarily driven by strong performance in derivatives and increased client activity in the Asia-Pacific region.

All Other

(Dollars in millions)	2015	2014	% Change
Net interest income (FTE basis)	**$ 457**	$ 1,407	(68)%
Noninterest income:			
Card income	**260**	357	(27)
Mortgage banking income	**1,022**	160	n/m
Gains on sales of debt securities	**1,126**	1,468	(23)
All other loss	**(1,204)**	(1,274)	(5)
Total noninterest income	**1,204**	711	69
Total revenue, net of interest expense (FTE basis)	**1,661**	2,118	(22)
Provision for credit losses	**(21)**	(644)	(97)
Noninterest expense	**5,220**	21,635	(76)
Loss before income taxes (FTE basis)	**(3,538)**	(18,873)	(81)
Income tax benefit (FTE basis)	**(2,395)**	(6,915)	(65)
Net loss	**$ (1,143)**	$ (11,958)	(90)
Balance Sheet			
Average			
Total loans and leases	**$ 144,506**	$ 197,414	(27)
Total assets [1]	**300,997**	322,934	(7)
Total deposits	**25,452**	35,548	(28)
Year end			
Total loans and leases	**$ 122,198**	$ 168,785	(28)
Total assets [1]	**267,667**	300,330	(11)
Total deposits	**25,334**	22,447	13

[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 $463.4 billion and $445.5 billion for 2015 and 2014, and $489.0 billion and $443.5 billion at December 31, 2015 and 2014.

n/m = not meaningful

All Other consists of ALM activities, equity investments, the international consumer 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, 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. Beginning with new originations in 2014, we retain certain residential mortgages in *Consumer Banking*, consistent with where the overall relationship is managed; previously such mortgages were in *All Other*. 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.

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 39 and Interest Rate Risk Management for Non-trading Activities on page 76. During 2015, residential mortgage loans held for ALM activities decreased $26.5 billion to $43.1 billion at December 31, 2015 primarily as a result of sales, payoffs and paydowns. 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 2015, total non-core loans decreased $18.7 billion to $68.8 billion at December 31, 2015 due largely to payoffs and paydowns, as well as loan sales.

The net loss for *All Other* decreased $10.8 billion to a loss of $1.1 billion in 2015 primarily driven by significantly lower litigation expense, which is included in noninterest expense, an increase in mortgage banking income, an increase in gains on sales of consumer real estate loans and lower U.K. PPI costs. These were partially offset by a decrease in equity investment income, a decrease in the benefit in the provision for credit losses and lower gains on sales of debt securities.

Net interest income decreased $950 million primarily driven by a $612 million charge in 2015 related to the discount on certain trust preferred securities. Mortgage banking income increased $862 million primarily due to a lower representations and warranties provision compared to 2014. Equity investment income decreased $727 million as the prior year included a gain on the sale of a portion of an equity investment. Gains on the sales of loans, including nonperforming and other delinquent loans, net of hedges, were $1.0 billion compared to gains of $672 million in 2014. Also included in all other loss were U.K. PPI costs of $319 million compared to $621 million, and negative FTE adjustments of $1.6 billion compared to $1.3 billion to eliminate the FTE treatment of certain tax credits recorded in *Global Banking*. The

benefit in the provision for credit losses decreased $623 million to a benefit of $21 million in 2015 primarily driven by lower recoveries, including those recorded in connection with residential mortgage loan sales.

Noninterest expense decreased $16.4 billion to $5.2 billion reflecting a decrease in litigation expense and lower personnel, infrastructure and support costs, partially offset by higher professional fees related in part to our CCAR resubmission.

The income tax benefit was $2.4 billion on a pretax loss of $3.5 billion in 2015 compared to a benefit of $6.9 billion on a pretax loss of $18.9 billion in 2014. The decrease in the income tax benefit is attributable to the decline in the pretax loss which in 2014 included the settlement with the DoJ, a portion of which was non-deductible. In addition, 2014 included tax benefits from the resolution of several tax examinations, and 2015 included the charge of approximately $290 million related to the U.K. tax law change. 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. Other long-term liabilities include our contractual funding obligations related to the Qualified Pension Plans, 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 2015 and 2014, we contributed $234 million each year to the Plans, and we expect to make $261 million of contributions during 2016. The Plans are more fully discussed in *Note 17 – Employee Benefit Plans* to the Consolidated Financial Statements.

Debt, lease, equity and other obligations are more fully discussed in *Note 11 – Long-term Debt* and *Note 12 – Commitments and Contingencies* 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 11 includes certain contractual obligations at December 31, 2015 and 2014.

Table 11 Contractual Obligations

	December 31, 2015					December 31 2014
(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	$ 43,334	$ 75,377	$ 36,513	$ 81,540	**$ 236,764**	$ 243,139
Operating lease obligations	2,456	3,846	2,798	4,581	**13,681**	14,406
Purchase obligations	2,007	1,905	629	809	**5,350**	5,544
Time deposits	65,567	5,207	2,517	683	**73,974**	84,843
Other long-term liabilities	1,663	870	668	1,110	**4,311**	4,232
Estimated interest expense on long-term debt and time deposits [1]	4,753	7,124	5,064	26,957	**43,898**	45,462
Total contractual obligations	$ 119,780	$ 94,329	$ 48,189	$ 115,680	**$ 377,978**	$ 397,626

[1] Represents forecasted net interest expense on long-term debt and time deposits based on interest rates at December 31, 2015. 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 FHLMC and 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 (in certain of these securitizations, monoline insurers or other financial guarantee providers insured all or some of the securities) 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 the GSEs, U.S. Department of Housing and Urban Development with respect to FHA-insured loans, VA, whole-loan investors, securitization trusts, monoline insurers or other financial guarantors as applicable (collectively, repurchases). In all such cases, subsequent to repurchasing the loan, we would be exposed to any credit loss on the repurchased mortgage loans

after accounting for any mortgage insurance (MI) or mortgage guarantee payments that we may receive.

We have vigorously contested any request for repurchase where we have concluded that a valid basis for repurchase does not exist and will continue to do so in the future. However, in an effort to resolve legacy mortgage-related issues, we have reached settlements, certain of which have been for significant amounts, in lieu of a loan-by-loan review process, including with the GSEs, four monoline insurers and BNY Mellon, as trustee for certain securitization trusts.

For more information on accounting for representations and warranties, repurchase claims and exposures, see *Note 7 – Representations and Warranties Obligations and Corporate Guarantees* and *Note 12 – Commitments and Contingencies* to the Consolidated Financial Statements and Item 1A. Risk Factors of the Corporation's 2015 Annual Report on Form 10-K.

Settlement with the Bank of New York Mellon, as Trustee

On April 22, 2015, the New York County Supreme Court entered final judgment approving the BNY Mellon Settlement. In October 2015, BNY Mellon obtained certain state tax opinions and an IRS private letter ruling confirming that the settlement will not impact the real estate mortgage investment conduit tax status of the trusts. The final conditions of the settlement have been satisfied and, accordingly, the Corporation made the settlement payment to BNY Mellon of $8.5 billion in February 2016. Pursuant to the settlement agreement, allocation and distribution of the $8.5 billion settlement payment is the responsibility of the RMBS trustee, BNY Mellon. On February 5, 2016, BNY Mellon filed an Article 77 proceeding in the New York County Supreme Court asking the court for instruction with respect to certain issues concerning the distribution of each trust's allocable share of the settlement payment and asking that the settlement payment be ordered to be held in escrow pending the outcome of this Article 77 proceeding. The Corporation is not a party to this proceeding.

New York Court Decision on Statute of Limitations

On June 11, 2015, the New York Court of Appeals, New York's highest appellate court, issued its opinion on the statute of limitations applicable to representations and warranties claims in *ACE Securities Corp. v. DB Structured Products, Inc.* (ACE). The Court of Appeals held that, under New York law, a claim for breach of contractual representations and warranties begins to run at the time the representations and warranties are made, and rejected the argument that the six-year statute of limitations does not begin to run until the time repurchase is refused. The Court of Appeals also held that compliance with the contractual notice and cure period was a pre-condition to filing suit, and claims that did not comply with such contractual requirements prior to the expiration of the statute of limitations period were invalid. While no entity affiliated with the Corporation was a party to this litigation, the vast majority of the private-label RMBS trusts into which entities affiliated with the Corporation sold loans and made representations and warranties are governed by New York law. While the Corporation treats claims where the statute of limitations has expired, as determined in accordance with the ACE decision, as time-barred and therefore resolved and no longer outstanding, investors or trustees have sought to distinguish certain aspects of the ACE decision or to assert other claims against RMBS counterparties seeking to avoid or circumvent the impact of the ACE decision. For example, a recent ruling by a New York intermediate appellate court allowed a counterparty to pursue litigation on loans in the entire trust even though only some of the loans complied with the condition precedent of timely pre-suit notice and opportunity to cure or repurchase. The potential impact on the Corporation, if any, of judicial limitations on the ACE decision, or claims seeking to distinguish or avoid the ACE decision is unclear at this time. For additional information, see *Note 7 – Representations and Warranties Obligations and Corporate Guarantees* to the Consolidated Financial Statements.

Unresolved Repurchase Claims

Unresolved representations and warranties repurchase claims represent the notional amount of repurchase claims made by counterparties, typically the outstanding principal balance or the unpaid principal balance at the time of default. In the case of first-lien mortgages, the claim amount is often significantly greater than the expected loss amount due to the benefit of collateral and, in some cases, MI or mortgage guarantee payments. Claims received from a counterparty remain outstanding until the underlying loan is repurchased, the claim is rescinded by the counterparty, we determine that the applicable statute of limitations has expired, or representations and warranties claims with respect to the applicable trust are settled, and fully and finally released. When a claim is denied and we do not receive a response from the counterparty, the claim remains in the unresolved repurchase claims balance until resolution in one of the ways described above.

At December 31, 2015, we had $18.4 billion of unresolved repurchase claims, net of duplicate claims, compared to $22.8 billion at December 31, 2014. These repurchase claims primarily relate to private-label securitizations and exclude claims in the amount of $7.4 billion at December 31, 2015 where the statute of limitations has expired without litigation being commenced. At December 31, 2014, time-barred claims of $5.2 billion were included in unresolved repurchase claims. The notional amount of unresolved repurchase claims at both December 31, 2015 and 2014 includes $3.5 billion of claims related to loans in specific private-label securitization groups or tranches where we own substantially all of the outstanding securities. For additional information, see *Note 7 – Representations and Warranties Obligations and Corporate Guarantees* to the Consolidated Financial Statements.

The overall decrease in the notional amount of outstanding unresolved repurchase claims in 2015 is primarily due to the impact of time-barred claims under the ACE decision, partially offset by new claims from private-label securitization trustees. 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, claims resolution and (2) the lack of an established process to resolve disputes related to these claims.

As a result of various bulk settlements with the GSEs, we have resolved substantially all outstanding and potential representations and warranties repurchase claims on whole loans sold by legacy Bank of America and Countrywide Financial Corporation (Countrywide) to FNMA and FHLMC through June 30, 2012 and December 31, 2009, respectively. At December 31, 2015, the notional amount of unresolved repurchase claims submitted by the GSEs was $14 million for loans originated prior to 2009. For more information on the monolines and experience with the GSEs, see *Note 7 – Representations and Warranties Obligations and Corporate Guarantees* to the Consolidated Financial Statements.

During 2015 and 2014, we had limited loan-level representations and warranties repurchase claims experience with the monoline insurers due to bulk settlements in prior years and ongoing litigation with a single monoline insurer. For additional information, see *Note 12 – Commitments and Contingencies* to the Consolidated Financial Statements.

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 $1.4 billion and $2.0 billion at December 31, 2015 and 2014.

We also from time to time receive correspondence purporting to raise representations and warranties breach issues from entities that do not have contractual standing or ability to bring such claims. We believe such communications to be procedurally and/or substantively invalid, and generally do not respond.

The presence of repurchase claims on a given trust, receipt of notices of indemnification obligations and receipt of other communications, as discussed above, are all factors that inform our liability for representations and warranties and the corresponding estimated range of possible loss.

Representations and Warranties Liability

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. For more information on the representations and warranties liability and the corresponding estimated range of possible loss, see Off-Balance Sheet Arrangements and Contractual Obligations – Estimated Range of Possible Loss on page 28 and *Note 7 – Representations and Warranties Obligations and Corporate Guarantees* to the Consolidated Financial Statements.

At December 31, 2015 and 2014, the liability for representations and warranties was $11.3 billion and $12.1 billion, which included $8.5 billion related to the BNY Mellon Settlement. The representations and warranties benefit was $39 million for 2015 compared to a provision of $683 million for 2014. The benefit in the provision for representations and warranties for 2015 compared to a provision in 2014 was primarily driven by the impact of the ACE decision.

Our liability for representations and warranties is necessarily dependent on, and limited by, a number of factors including for private-label securitizations the implied repurchase experience based on the BNY Mellon Settlement, as well as certain other assumptions and judgmental factors. Where relevant, we also consider more recent experience, such as claim activity, notification of potential indemnification obligations, our experience with various counterparties, the ACE decision, other recent court decisions related to the statute of limitations, and other facts and circumstances, such as bulk settlements, as we believe appropriate. Accordingly, future provisions associated with obligations under representations and warranties may be materially impacted if future experiences are different from historical experience or our understandings, interpretations or assumptions.

Experience with Investors Other than Government-sponsored Enterprises

Prior to 2009, 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 to investors other than the GSEs (although the GSEs are investors in certain private-label securitizations). The majority of the loans sold were included in private-label securitizations, including third-party sponsored transactions. We provided representations and warranties to the whole-loan investors and these investors may retain those rights even when the whole loans were aggregated with other collateral into private-label securitizations sponsored by the whole-loan investors. Such loans originated from 2004 through 2008 had an original principal balance of $970 billion, including $786 billion sold to private-label and whole-loan investors without monoline insurance. Taking into account settlements and the application of the statute of limitations for repurchase claims for these trusts, we believe the remaining open exposure for repurchase claims exists on loans with an original principal balance of $102 billion. Of the $102 billion, $45 billion has been paid in full and $42 billion has defaulted or was severely delinquent at December 31, 2015. At least 25 payments have been made on approximately 62 percent of these defaulted and severely delinquent loans. These remaining loans with open exposure predominantly relate to legacy Countrywide and First Franklin Financial Corporation originations of pay option and subprime first mortgages.

As it relates to private-label securitizations, a contractual liability to repurchase mortgage loans generally arises if there is a breach of representations and warranties that materially and adversely affects the interest of the investor or all the investors in a securitization trust or of the monoline insurer or other financial guarantor (as applicable).

We have received approximately $32.7 billion of representations and warranties repurchase claims related to loans originated between 2004 and 2008 including $23.7 billion from private-label securitization trustees and a financial guarantee provider, $8.2 billion from whole-loan investors and $816 million from one private-label securitization counterparty. New private-label claims are primarily related to repurchase requests received from trustees for private-label securitization transactions not included in the BNY Mellon Settlement. Of the $32.7 billion in claims, we have resolved $16.0 billion of these claims with losses of $1.9 billion. Approximately $3.6 billion of these claims were resolved through repurchase or indemnification, $4.7 billion were rescinded by the investor, $325 million were resolved through settlements and $7.4 billion are time-barred under the applicable statute of limitations and are therefore considered resolved.

At December 31, 2015, for these vintages, the notional amount of unresolved repurchase claims submitted by private-label securitization trustees, whole-loan investors, including third-party securitization sponsors and others was $16.7 billion. We have performed an initial review with respect to substantially all of these claims and although we do not believe a valid basis for repurchase has been established by the claimant, we consider such claims activity in the computation of our liability for representations and warranties. Until we receive a repurchase claim, we generally do not review loan files related to private-label securitizations and believe we are not required by the governing documents to do so, unless particular facts suggest we should review an individual loan file.

Estimated Range of Possible Loss

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, 2015. We treat claims that are time-barred as resolved and do not consider such claims in the estimated range of possible loss. The estimated range of possible loss reflects principally exposures related to loans in private-label securitization trusts. It 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.

For more information on the methodology used to estimate the representations and warranties liability, the corresponding estimated range of possible loss and the types of losses not considered in such estimates, see Item 1A. Risk Factors of the Corporation's 2015 Annual Report on Form 10-K and *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 83.

Department of Justice Settlement

On August 20, 2014, we reached a comprehensive settlement with the DoJ and certain federal and state agencies (DoJ Settlement). As part of the DoJ Settlement, we paid civil monetary penalties and compensatory remediation payments in 2014. In 2014 and 2015, we provided creditable consumer relief activities primarily in the form of mortgage modifications, including first-lien principal forgiveness and forbearance modifications and second- and junior-lien extinguishments, low- to moderate-income mortgage originations, and community reinvestment and neighborhood stabilization efforts, with initiatives focused on communities experiencing, or at risk of, blight. Also, we have provided support for the expansion of available affordable rental housing. Our actions are well ahead of the DoJ agreement calling for us to complete delivery of the consumer relief by no later than August 31, 2018. The consumer relief requirements are subject to oversight by an independent monitor.

Other Mortgage-related Matters

We continue to be subject to additional borrower and non-borrower litigation and 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, and MI 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 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. The Corporation takes 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 Corporation's Board of Directors (the Board).

The seven 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 potential inability to meet expected or unexpected cash flow and collateral needs while continuing to support our business and customer needs 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 will adversely affect its profitability or operations through an inability to establish or maintain existing customer/client relationships.

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 2016 Risk Framework (Risk Framework) that, as part of its annual review process, was approved by the ERC and the Board in December 2015. The key enhancements from the 2015 Risk Framework include further increasing the focus on our strong risk culture and emphasizing our risk identification practices and the involvement and input of Front Line Units (FLUs) and control functions. It continues to recognize the same seven key risk types as discussed above and our risk management approach as outlined below.

A strong risk culture 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 strong risk culture throughout the organization is critical to the success of the Corporation 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 13.

Our Risk Appetite Statement is intended to ensure that the Corporation maintains 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 the Corporation is willing to accept. Risk appetite is set at least annually in conjunction with the strategic, capital and financial operating plans to align risk appetite with the Corporation's 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 32 through 79.

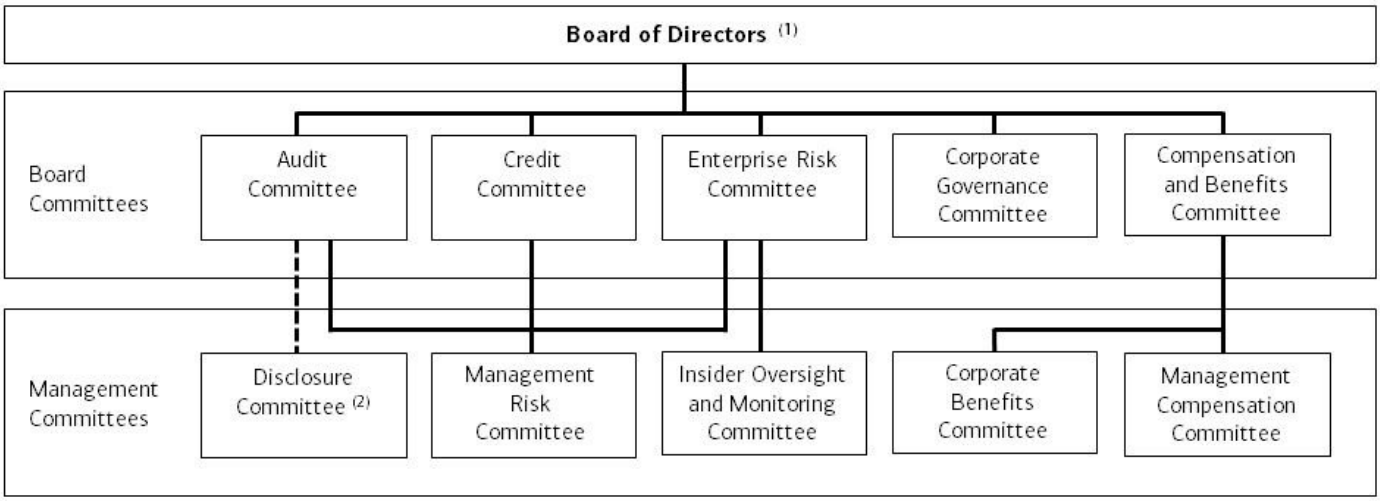
Our overall capacity to take risk is limited; therefore, we prioritize the risks we take in order to maintain a strong and flexible financial position so we can withstand challenging economic conditions and take advantage of organic growth opportunities. Therefore, we set objectives and targets for capital and liquidity that are intended to permit the Corporation to continue to operate in a safe and sound manner at all times, 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. This chart reflects the current Risk Framework as approved by the Board in December 2015.



(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, which consists of a substantial majority of independent directors, 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 appropriate inquiries of, and receive reports from management on risk-related matters to determine whether there are scope or resource limitations that impede the ability of independent risk management and/or Corporate Audit to execute its responsibilities. The following Board committees have the principal responsibility for enterprise-wide oversight of our risk management activities. These committees and other Board committees, as applicable, regularly report to the Board on risk-related matters. Through these activities, the Board and applicable committees are provided with thorough information on the Corporation's risk profile, and challenge executive management to appropriately address key risks facing the Corporation. 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, thorough insight about our management of enterprise-wide risks.

Enterprise Risk Committee

The Enterprise Risk Committee (ERC) has primary responsibility for oversight of the Risk Framework and material risks facing the Corporation. 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 all key risks facing the Corporation. The ERC may consult with other Board committees on risk-related matters.

Audit Committee

The Audit Committee oversees the qualifications, performance and independence of the Independent Registered Public Accounting Firm, the performance of the Corporation's corporate audit function, the integrity of the Corporation's consolidated financial statements, compliance by the Corporation 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.

Credit Committee

The Credit Committee provides additional oversight of senior management's responsibilities for the identification and management of Corporation-wide credit exposures. Our Credit Committee oversees, among other things, the identification and management of our credit exposures on an enterprise-wide basis, our responses to trends affecting those exposures, the adequacy of the allowance for credit losses and our credit-related policies.

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. The primary management-level risk committee for the Corporation is the Management Risk Committee (MRC). Subject to Board oversight, the MRC is responsible for management oversight of all key risks facing the Corporation. The MRC provides management oversight of the Corporation's 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. The MRC is responsible for holistic risk management, including an integrated evaluation of risk, earnings, capital and liquidity, and it reports on these matters to the Board or Board committees.

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: FLUs, independent risk management and Corporate Audit. The Corporation also has control functions outside of FLUs and independent risk management (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 the Corporation's 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 and an organizational unit, the Global Technology and Operations Group. FLUs are held accountable by the CEO and the Board for appropriately assessing and effectively managing all of the risks associated with their activities.

Three organizational units that include FLU and control function activities, but are not part of independent risk management are the Chief Financial Officer (CFO) Group, Global Marketing and Corporate Affairs (GM&CA) and the Chief Administrative Officer (CAO) Group.

Independent Risk Management

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 and FLU 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 all 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 immediate 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.

Among the key tools in the risk management process are the Risk and Control Self Assessments (RCSAs). The RCSA process, consistent with IMMC, is one of our primary methods for capturing the identification and assessment of operational risk exposures, including inherent and residual operational risk ratings, and control effectiveness ratings. The end-to-end RCSA process incorporates risk identification and assessment of the control environment; monitoring, reporting and escalating risk; quality assurance and data validation; and integration with the risk appetite. This results in a comprehensive risk management view that enables understanding of and action on operational risks and controls for our processes, products, activities and systems.

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 risk management culture 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 the Corporation's Capital Planning, Financial Planning and Strategic Planning processes is stress testing, which the Corporation conducts on a periodic basis to better understand balance sheet, earnings, capital and liquidity sensitivities to certain economic and business scenarios, including economic and market conditions that are more severe than anticipated. These stress tests provide an understanding of the potential impacts from the Corporation's risk profile on the balance sheet, earnings, capital and liquidity, and serve as a key component of the Corporation's capital and risk management. 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 Routines

We have developed and maintain contingency plans that are designed to prepare us in advance to respond in the event of potential adverse outcomes and scenarios. These contingency planning routines include capital contingency planning, liquidity contingency funding plans, recovery planning and enterprise resiliency, and provide monitoring, escalation routines and response plans. Contingency response plans are designed to enable us to increase capital, access funding sources and reduce

risk through consideration of potential actions that include asset sales, business sales, capital or debt issuances, and other de-risking strategies. We also maintain contingency plans as part of our resolution plan to limit adverse systemic impacts that could be associated with a potential resolution.

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. It is the risk that results from incorrect assumptions, 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 and specifically addresses strategic risks.

The strategic plan is reviewed and approved annually by the Board, as is the capital plan, financial operating plan and risk appetite statement. With oversight by the Board, executive management ensures that consistency is applied while executing the Corporation's strategic plan, core operating principles and risk appetite. The executive management team continuously monitors business performance throughout the year to assess strategic risk and find early warning signals so that risks can be proactively managed. Executive management regularly reviews performance versus the plan, updates the Board via quarterly reporting routines (and more frequently as relevant) and implements changes as deemed appropriate. The following are assessed in the regular executive reviews: forecasted earnings and returns on capital, the current risk profile, current capital and liquidity requirements, staffing levels and changes required to support the 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 recovery and resolution plans are reviewed and approved by the Board as required. At the business level, as we introduce new products, we monitor their performance relative to expectations (e.g., for earnings and returns on capital). 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.

We use proprietary models 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 exposures. 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. For more information on how this measure is calculated, see Supplemental Financial Data on page 11.

Capital Management

The Corporation manages its capital position to maintain sufficient capital 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, 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.

Effective July 1, 2016, we changed our accounting method for the amortization of premiums and accretion of discounts related to certain debt securities. Under the applicable bank regulatory rules, we are not required to and, accordingly, will not restate previously-filed capital ratios in connection with the change in accounting method related to certain debt securities. The cumulative impact of this change would have resulted in an insignificant pro forma change of the Corporation's capital metrics and ratios. For additional information, see *Note 1 – Summary of Significant Accounting Principles* to the Consolidated Financial Statements.

The Corporation periodically reviews capital allocated to its businesses and allocates capital annually during the strategic and capital planning processes. For additional information, see Business Segment Operations on page 13.

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 January 2015, we submitted our 2015 CCAR capital plan and related supervisory stress tests. The requested capital actions included a request to repurchase $4.0 billion of common stock over five quarters beginning in the second quarter of 2015, and to maintain the quarterly common stock dividend at the current rate of $0.05 per share. On March 11, 2015, the Federal Reserve advised that it did not object to our 2015 capital plan but gave a conditional non-objection under which we were required to resubmit our CCAR capital plan and address certain weaknesses the Federal Reserve identified in our capital planning process. We have established plans and taken actions which addressed the identified weaknesses, and we resubmitted our CCAR capital plan on September 30, 2015. The Federal Reserve announced on

December 10, 2015 that it did not object to our resubmitted CCAR capital plan.

As of December 31, 2015, in connection with our 2015 CCAR capital plan, we have repurchased approximately $2.4 billion of common stock. The timing and amount of additional common stock repurchases and common stock dividends will continue to be consistent with our 2015 CCAR capital plan. In addition, 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.

Regulatory Capital

As a financial services holding company, we are subject to regulatory capital rules issued by U.S. banking regulators. On January 1, 2014, we became subject to Basel 3, which includes certain transition provisions through January 1, 2019. The Corporation and its primary affiliated banking entity, BANA, are Advanced approaches institutions under Basel 3.

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. Basel 3 revised minimum capital ratios and buffer requirements, added a SLR, and addressed the adequately capitalized minimum requirements under the PCA framework. Finally, Basel 3 established two methods of calculating risk-weighted assets, the Standardized approach and the Advanced approaches. For additional information, see Capital Management – Standardized Approach and Capital Management – Advanced Approaches on page 34.

As an Advanced approaches institution, under Basel 3, we were required to complete a qualification period (parallel run) to demonstrate compliance with the Basel 3 Advanced approaches to the satisfaction of U.S. banking regulators. We received approval to begin using the Advanced approaches capital framework to determine risk-based capital requirements in the fourth quarter of 2015. As previously disclosed, with the approval to exit parallel run, U.S. banking regulators requested modifications to certain internal analytical models including the wholesale (e.g., commercial) credit models. All requested modifications were incorporated, which increased our risk-weighted assets, and are reflected in the risk-based ratios in the fourth quarter of 2015. Having exited parallel run on October 1, 2015, 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, and was the Advanced approaches in the fourth quarter of 2015. Prior to the fourth quarter of 2015, we were required to report our capital adequacy under the Standardized approach only.

Regulatory Capital Composition

Basel 3 requires certain deductions from and adjustments to capital, which are primarily those related to MSRs, deferred tax assets and defined benefit pension assets. Also, any assets that are a direct deduction from the computation of capital are excluded from risk-weighted assets and adjusted average total assets. Basel 3 also provides for the inclusion in capital of net unrealized gains and losses on AFS debt and certain marketable equity securities recorded in accumulated OCI. These changes are impacted by, among other factors, fluctuations in interest rates, earnings performance and corporate actions. Under Basel 3 regulatory capital transition provisions, changes to the composition of regulatory capital are generally recognized in 20 percent annual increments, and will be fully recognized as of January 1, 2018.

Table 12 summarizes how certain regulatory capital deductions and adjustments have been or will be transitioned from 2014 through 2018 for Common equity tier 1 and Tier 1 capital.

Table 12 Summary of Certain Basel 3 Regulatory Capital Transition Provisions

Beginning on January 1 of each year	2014	2015	2016	2017	2018
Common equity tier 1 capital					
Percent of total amount deducted from Common equity tier 1 capital includes:	20%	40%	60%	80%	100%
Deferred tax assets arising from net operating loss and tax credit carryforwards; intangibles, other than mortgage servicing rights and goodwill; defined benefit pension fund net assets; net unrealized cumulative gains (losses) related to changes in own credit risk on liabilities, including derivatives, measured at fair value; direct and indirect investments in our own Common equity tier 1 capital instruments; certain amounts exceeding the threshold by 10 percent individually and 15 percent in aggregate					
Percent of total amount used to adjust Common equity tier 1 capital includes [1]:	80%	60%	40%	20%	0%
Net unrealized gains (losses) on AFS debt and certain marketable equity securities recorded in accumulated OCI; employee benefit plan adjustments recorded in accumulated OCI					
Tier 1 capital					
Percent of total amount deducted from Tier 1 capital includes:	80%	60%	40%	20%	0%
Deferred tax assets arising from net operating loss and tax credit carryforwards; defined benefit pension fund net assets; net unrealized cumulative gains (losses) related to changes in own credit risk on liabilities, including derivatives, measured at fair value					

[1] Represents the phase-out percentage of the exclusion by year (e.g., 40 percent of net unrealized gains (losses) on AFS debt and certain marketable equity securities recorded in accumulated OCI was included in 2015).

Additionally, Basel 3 revised the regulatory capital treatment for Trust Securities, requiring them to be transitioned from Tier 1 capital into Tier 2 capital in 2014 and 2015, until fully excluded from Tier 1 capital in 2016, and transitioned from Tier 2 capital beginning in 2016 with the full exclusion in 2022. As of December 31, 2015, our qualifying Trust Securities were $1.4 billion, approximately nine bps of the Tier 1 capital ratio.

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, 2015. Also effective January 1, 2015, Common equity tier 1 capital is included in the measurement of "well-capitalized" for depository institutions.

Beginning January 1, 2016, we are 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 G-SIB surcharge in order to avoid certain restrictions on capital distributions and discretionary bonus payments. The buffers and surcharge must be composed solely of Common equity tier 1 capital. The countercyclical capital buffer is currently set at zero. U.S. banking regulators must jointly decide on any increase in the countercyclical buffer, after which time institutions will have up to one year for implementation. Based on the Federal Reserve final rule published in July 2015, we estimate that our G-SIB surcharge will increase our risk-based capital ratio requirements by 3.0 percent once fully phased in. The G-SIB surcharge is calculated annually and may differ from this estimate over time. For more information on our G-SIB surcharge, see Capital Management – Regulatory Developments on page 38.

Standardized Approach

Total risk-weighted assets under the Basel 3 Standardized approach consist of credit risk and market risk measures. Credit risk-weighted assets are measured by applying fixed risk weights to on- and off-balance sheet exposures (excluding securitizations), determined based on the characteristics of the exposure, such as type of obligor, Organization for Economic Cooperation and Development country risk code and maturity, among others. Off-balance sheet exposures primarily include financial guarantees, unfunded lending commitments, letters of credit and potential future derivative exposures. Market risk applies to covered positions which include trading assets and liabilities, foreign exchange exposures and commodity exposures. Market risk capital is modeled for general market risk and specific risk for products where specific risk regulatory approval has been granted; in the absence of specific risk model approval, standard specific risk charges apply. For securitization exposures, risk-weighted assets are determined using the Simplified Supervisory Formula Approach (SSFA). Under the Standardized approach, no distinction is made for variations in credit quality for corporate exposures, and the economic benefit of collateral is restricted to a limited list of eligible securities and cash.

Advanced Approaches

In addition to the credit risk and market risk measures, Basel 3 Advanced approaches include measures of operational risk and risks related to the credit valuation adjustment (CVA) for over-the-counter (OTC) derivative exposures. The Advanced approaches rely on internal analytical models to measure risk weights for credit risk exposures and allow the use of models to estimate the exposure at default (EAD) for certain exposure types. Market risk capital measurements are consistent with the Standardized approach, except for securitization exposures. For both trading and non-trading securitization exposures, institutions are permitted to use the Supervisory Formula Approach (SFA) and would use the SSFA if the SFA is unavailable for a particular exposure. Non-securitization credit risk exposures are measured using internal ratings-based models to determine the applicable risk weight by estimating the probability of default, loss given default (LGD) and, in certain instances, EAD. The internal analytical models primarily rely on internal historical default and loss experience. Operational risk is measured using internal analytical models which rely on both internal and external operational loss experience and data. The calculations require management to make estimates, assumptions and interpretations, including with respect to the probability of future events based on historical experience. Actual results could differ from those estimates and assumptions. Under the Federal Reserve's reservation of authority, they may require us to hold an amount of capital greater than otherwise required under the capital rules if they determine that our risk-based capital requirement using our internal analytical models is not commensurate with our credit, market, operational or other risks.

Supplementary Leverage Ratio

Basel 3 also requires Advanced approaches institutions to disclose a SLR. The numerator of the SLR is quarter-end Basel 3 Tier 1 capital reflective of Basel 3 numerator transition provisions. 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. Off-balance sheet exposures primarily include undrawn lending commitments, letters of credit, potential future derivative exposures and repo-style transactions. Total leverage exposure includes the effective notional principal amount of credit derivatives and similar instruments through which credit protection is sold. The credit conversion factors (CCFs) applied to certain off-balance sheet exposures conform to the graduated CCF utilized under the Basel 3 Standardized approach, but are subject to a minimum 10 percent CCF. Effective January 1, 2018, the Corporation will be required to maintain a minimum SLR of 3.0 percent, plus a supplementary leverage buffer of 2.0 percent, in order to avoid certain restrictions on capital distributions and discretionary bonuses. Insured depository institution subsidiaries of BHCs, including BANA, will be required to maintain a minimum 6.0 percent SLR to be considered "well capitalized" under the PCA framework.

Capital Composition and Ratios

Under the applicable bank regulatory rules, we are not required to and, accordingly, did not restate previously-filed regulatory capital metrics and ratios in connection with the change in accounting method related to certain debt securities. Therefore, the December 31, 2015 and 2014 amounts in Tables 13 through 16 are as originally reported. The cumulative impact of this change in accounting method would have resulted in an immaterial pro forma decrease in the Corporation's Common equity tier 1 capital of approximately one basis point and two bps at December 31,

2015 and 2014. For additional information, see *Note 1 – Summary of Significant Accounting Principles* to the Consolidated Financial Statements.

Table 13 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, 2015 and 2014. As of December 31, 2015 and 2014, the Corporation meets the definition of "well capitalized" under current regulatory requirements.

Table 13 Bank of America Corporation Regulatory Capital under Basel 3 (1, 2)

	December 31, 2015						
	Transition				Fully Phased-in		
(Dollars in millions)	Standardized Approach	Advanced Approaches	Regulatory Minimum	Well-capitalized (3)	Standardized Approach	Advanced Approaches (4)	Regulatory Minimum (5)
Risk-based capital metrics:							
Common equity tier 1 capital	$ 163,026	$ 163,026			$ 154,084	$ 154,084	
Tier 1 capital	180,778	180,778			175,814	175,814	
Total capital (6)	220,676	210,912			211,167	201,403	
Risk-weighted assets (in billions)	1,403	1,602			1,427	1,575	
Common equity tier 1 capital ratio	11.6%	10.2%	4.5%	n/a	10.8%	9.8%	10.0%
Tier 1 capital ratio	12.9	11.3	6.0	6.0%	12.3	11.2	11.5
Total capital ratio	15.7	13.2	8.0	10.0	14.8	12.8	13.5
Leverage-based metrics:							
Adjusted quarterly average assets (in billions) (7)	$ 2,103	$ 2,103			$ 2,102	$ 2,102	
Tier 1 leverage ratio	8.6%	8.6%	4.0	n/a	8.4%	8.4%	4.0
SLR leverage exposure (in billions)	$ 2,728	$ 2,728			$ 2,727	$ 2,727	
SLR	6.6%	6.6%	5.0	n/a	6.4%	6.4%	5.0
	December 31, 2014						
Risk-based capital metrics:							
Common equity tier 1 capital	$ 155,361	n/a			$ 141,217	$ 141,217	
Tier 1 capital	168,973	n/a			160,480	160,480	
Total capital (6)	208,670	n/a			196,115	185,986	
Risk-weighted assets (in billions) (8)	1,262	n/a			1,415	1,465	
Common equity tier 1 capital ratio	12.3%	n/a	4.0%	n/a	10.0%	9.6%	10.0%
Tier 1 capital ratio	13.4	n/a	5.5	6.0%	11.3	11.0	11.5
Total capital ratio	16.5	n/a	8.0	10.0	13.9	12.7	13.5
Leverage-based metrics:							
Adjusted quarterly average assets (in billions) (7)	$ 2,060	$ 2,060			$ 2,057	$ 2,057	
Tier 1 leverage ratio	8.2%	8.2%	4.0	n/a	7.8%	7.8%	4.0
SLR leverage exposure (in billions)	$ 2,732	$ 2,732			$ 2,728	$ 2,728	
SLR	6.2%	6.2%	5.0	n/a	5.9%	5.9%	5.0

(1) We received approval to begin using the Advanced approaches capital framework to determine risk-based capital requirements in the fourth quarter of 2015. With the approval to exit parallel run, we are required to report regulatory capital risk-weighted assets and ratios under both the Standardized and Advanced approaches. The approach that yields the lower ratio is to be used to assess capital adequacy and was the Advanced approaches at December 31, 2015. Prior to exiting parallel run, we were required to report regulatory capital risk-weighted assets and ratios under the Standardized approach only. As previously disclosed, with the approval to exit parallel run, U.S. banking regulators requested modifications to certain internal analytical models including the wholesale (e.g., commercial) credit models which increased our risk-weighted assets in the fourth quarter of 2015.

(2) Under the applicable bank regulatory rules, we are not required to and, accordingly, did not restate previously-filed regulatory capital metrics and ratios in connection with the change in accounting method related to certain debt securities. As such, the December 31, 2015 and 2014 amounts in the Table are as originally reported.

(3) To be "well capitalized" under the current U.S. banking regulatory agency definitions, a bank holding company must maintain these or higher ratios and not be subject to a Federal Reserve order or directive to maintain higher capital levels.

(4) Basel 3 fully phased-in Advanced approaches estimates assume approval by U.S. banking regulators of our internal analytical models, including approval of the internal models methodology (IMM). As of December 31, 2015, we had not received IMM approval.

(5) Fully phased-in regulatory minimums assume a capital conservation buffer of 2.5 percent and estimated G-SIB surcharge of 3.0 percent. The estimated fully phased-in countercyclical capital buffer is zero. We will be subject to fully phased-in regulatory minimums on January 1, 2019.

(6) Total capital under the Advanced approaches differs from the Standardized approach due to differences in the amount permitted in Tier 2 capital related to the qualifying allowance for credit losses.

(7) Reflects adjusted average total assets for the three months ended December 31, 2015 and 2014.

(8) On a pro-forma basis, under Basel 3 Standardized – Transition as measured at January 1, 2015, the December 31, 2014 risk-weighted assets would have been $1,392 billion.

n/a = not applicable

Common equity tier 1 capital under Basel 3 Advanced – Transition was $163.0 billion at December 31, 2015, an increase of $7.7 billion compared to December 31, 2014 driven by earnings, partially offset by dividends, common stock repurchases and the impact of certain transition provisions under Basel 3 rules. For more information on Basel 3 transition provisions, see Table 12. During 2015, Total capital increased $2.2 billion primarily driven by the same factors that drove the increase in Common equity tier 1 capital as well as issuances of preferred stock and subordinated debt, partially offset by lower eligible credit reserves included in additional Tier 2 capital. The decrease in eligible credit reserves included in additional Tier 2 capital is due to the change in the calculation of eligible credit reserves under the Advanced approaches. The Corporation began using the Advanced approaches capital framework to determine risk-based capital

requirements in the fourth quarter of 2015. For additional information, see Table 14.

Risk-weighted assets increased $341 billion during 2015 to $1,602 billion primarily due to the change in the calculation of risk-weighted assets from the general risk-based approach at December 31, 2014 to the Basel 3 Advanced approaches.

Table 14 presents the capital composition as measured under Basel 3 – Transition at December 31, 2015 and 2014.

Table 14 Capital Composition under Basel 3 – Transition [1, 2]

(Dollars in millions)	December 31 2015	2014
Total common shareholders' equity	**$ 233,932**	$ 224,162
Goodwill	**(69,215)**	(69,234)
Deferred tax assets arising from net operating loss and tax credit carryforwards	**(3,434)**	(2,226)
Unamortized net periodic benefit costs recorded in accumulated OCI, net-of-tax	**1,774**	2,680
Net unrealized (gains) losses on AFS debt and equity securities and net (gains) losses on derivatives recorded in accumulated OCI, net-of-tax	**1,220**	573
Intangibles, other than mortgage servicing rights and goodwill	**(1,039)**	(639)
DVA related to liabilities and derivatives	**204**	231
Other	**(416)**	(186)
Common equity tier 1 capital	**163,026**	155,361
Qualifying preferred stock, net of issuance cost	**22,273**	19,308
Deferred tax assets arising from net operating loss and tax credit carryforwards	**(5,151)**	(8,905)
Trust preferred securities	**1,430**	2,893
Defined benefit pension fund assets	**(568)**	(599)
DVA related to liabilities and derivatives under transition	**307**	925
Other	**(539)**	(10)
Total Tier 1 capital	**180,778**	168,973
Long-term debt qualifying as Tier 2 capital	**22,579**	21,186
Allowance for loan and lease losses included in Tier 2 capital	**n/a**	14,634
Eligible credit reserves included in Tier 2 capital	**3,116**	n/a
Nonqualifying capital instruments subject to phase out from Tier 2 capital	**4,448**	3,881
Other	**(9)**	(4)
Total Basel 3 Capital	**$ 210,912**	$ 208,670

[1] See Table 13, footnote 1.

[2] Under the applicable bank regulatory rules, we are not required to and, accordingly, did not restate previously-filed regulatory capital metrics and ratios in connection with the change in accounting method related to certain debt securities. Therefore, the December 31, 2015 and 2014 amounts in the Table are as originally reported. The cumulative impact of this change in accounting method would have resulted in an immaterial pro forma decrease in the Corporation's Common equity tier 1 capital of approximately one basis point and two bps at December 31, 2015 and 2014. For additional information, see *Note 1 – Summary of Significant Accounting Principles* to the Consolidated Financial Statements.

n/a = not applicable

Table 15 presents the components of our risk-weighted assets as measured under Basel 3 – Transition at December 31, 2015 and 2014.

Table 15 Risk-weighted assets under Basel 3 – Transition [1]

(Dollars in billions)	December 31 2015 Standardized Approach	2015 Advanced Approaches	2014 Standardized Approach	2014 Advanced Approaches
Credit risk	**$ 1,314**	**$ 940**	$ 1,169	n/a
Market risk	**89**	**86**	93	n/a
Operational risk	**n/a**	**500**	n/a	n/a
Risks related to CVA	**n/a**	**76**	n/a	n/a
Total risk-weighted assets	**$ 1,403**	**$ 1,602**	$ 1,262	n/a

[1] Under the applicable bank regulatory rules, we are not required to and, accordingly, did not restate previously-filed regulatory capital metrics and ratios in connection with the change in accounting method related to certain debt securities. As such, the December 31, 2015 and 2014 amounts in the Table are as originally reported.

n/a = not applicable

Table 16 presents a reconciliation of regulatory capital in accordance with Basel 3 Standardized – Transition to the Basel 3 Standardized approach fully phased-in estimates and Basel 3 Advanced approaches fully phased-in estimates at December 31, 2015 and 2014.

Table 16 Regulatory Capital Reconciliations between Basel 3 Transition to Fully Phased-in [1, 2]

(Dollars in millions)	December 31 2015	2014
Common equity tier 1 capital (transition)	**$ 163,026**	$ 155,361
Deferred tax assets arising from net operating loss and tax credit carryforwards phased in during transition	**(5,151)**	(8,905)
Accumulated OCI phased in during transition	**(1,917)**	(1,592)
Intangibles phased in during transition	**(1,559)**	(2,556)
Defined benefit pension fund assets phased in during transition	**(568)**	(599)
DVA related to liabilities and derivatives phased in during transition	**307**	925
Other adjustments and deductions phased in during transition	**(54)**	(1,417)
Common equity tier 1 capital (fully phased-in)	**154,084**	141,217
Additional Tier 1 capital (transition)	**17,752**	13,612
Deferred tax assets arising from net operating loss and tax credit carryforwards phased out during transition	**5,151**	8,905
Trust preferred securities phased out during transition	**(1,430)**	(2,893)
Defined benefit pension fund assets phased out during transition	**568**	599
DVA related to liabilities and derivatives phased out during transition	**(307)**	(925)
Other transition adjustments to additional Tier 1 capital	**(4)**	(35)
Additional Tier 1 capital (fully phased-in)	**21,730**	19,263
Tier 1 capital (fully phased-in)	**175,814**	160,480
Tier 2 capital (transition)	**30,134**	39,697
Nonqualifying capital instruments phased out during transition	**(4,448)**	(3,881)
Changes in Tier 2 qualifying allowance for credit losses and others	**9,667**	(181)
Tier 2 capital (fully phased-in)	**35,353**	35,635
Basel 3 Standardized approach Total capital (fully phased-in)	**211,167**	196,115
Change in Tier 2 qualifying allowance for credit losses	**(9,764)**	(10,129)
Basel 3 Advanced approaches Total capital (fully phased-in)	**$ 201,403**	$ 185,986
Risk-weighted assets – As reported to Basel 3 (fully phased-in)		
Basel 3 Standardized approach risk-weighted assets as reported	**$ 1,403,293**	$ 1,261,544
Changes in risk-weighted assets from reported to fully phased-in	**24,089**	153,722
Basel 3 Standardized approach risk-weighted assets (fully phased-in)	**$ 1,427,382**	$ 1,415,266
Basel 3 Advanced approaches risk-weighted assets as reported	**$ 1,602,373**	n/a
Changes in risk-weighted assets from reported to fully phased-in	**(27,690)**	n/a
Basel 3 Advanced approaches risk-weighted assets (fully phased-in) [3]	**$ 1,574,683**	$ 1,465,479

[1] See Table 13, footnote 1.
[2] Under the applicable bank regulatory rules, we are not required to and, accordingly, did not restate previously-filed regulatory capital metrics and ratios in connection with the change in accounting method related to certain debt securities. As such, the December 31, 2015 and 2014 amounts in the Table are as originally reported.
[3] Basel 3 fully phased-in Advanced approaches estimates assume approval by U.S. banking regulators of our internal analytical models, including approval of the internal models methodology (IMM). As of December 31, 2015, we had not received IMM approval.
n/a = not applicable

Bank of America, N.A. Regulatory Capital

Table 17 presents transition regulatory information for BANA in accordance with Basel 3 Standardized and Advanced Approaches as measured at December 31, 2015 and 2014.

Table 17 Bank of America, N.A. Regulatory Capital under Basel 3

	December 31, 2015					
	Standardized Approach			Advanced Approaches		
(Dollars in millions)	Ratio	Amount	Minimum Required [1]	Ratio	Amount	Minimum Required [1]
Common equity tier 1 capital	12.2%	$ 144,869	6.5%	13.1%	$ 144,869	6.5%
Tier 1 capital	12.2	144,869	8.0	13.1	144,869	8.0
Total capital	13.5	159,871	10.0	13.6	150,624	10.0
Tier 1 leverage	9.2	144,869	5.0	9.2	144,869	5.0
	December 31, 2014					
Common equity tier 1 capital	13.1%	$ 145,150	4.0%	n/a	n/a	4.0%
Tier 1 capital	13.1	145,150	6.0	n/a	n/a	6.0
Total capital	14.6	161,623	10.0	n/a	n/a	10.0
Tier 1 leverage	9.6	145,150	5.0	n/a	n/a	5.0

[1] Percent required to meet guidelines to be considered "well capitalized" under the Prompt Corrective Action framework, except for the December 31, 2014 Common equity tier 1 capital which reflects capital adequacy minimum requirements as an Advanced approaches bank under Basel 3 during a transition period that ended in 2014.

n/a = not applicable

Regulatory Developments

Global Systemically Important Bank Surcharge

We have been designated as a G-SIB and as such, are subject to a risk-based capital surcharge (G-SIB surcharge) that must be satisfied with Common equity tier 1 capital. The surcharge assessment methodology published by the Basel Committee on Banking Supervision (Basel Committee) relies on an indicator-based measurement approach (e.g., size, complexity, cross-jurisdictional activity, inter-connectedness and substitutability/financial institution infrastructure) to determine a score relative to the global banking industry. Institutions with the highest scores are designated as G-SIBs and are assigned to one of four loss absorbency buckets from 1.0 percent to 2.5 percent, in 0.5 percent increments based on each institution's relative score and supervisory judgment. A fifth loss absorbency bucket of 3.5 percent serves to discourage banks from becoming more systemically important.

In July 2015, the Federal Reserve finalized a regulation that will implement G-SIB surcharge requirements for the largest U.S. BHCs. Under the final rule, assignment to loss absorbency buckets will be determined by the higher score as calculated according to two methods. Method 1 is consistent with the Basel Committee's methodology, whereas method 2 replaces the substitutability/financial institution infrastructure indicator with a measure of short-term wholesale funding and then determines the overall score by applying a fixed multiplier for each of the other systemic indicators. Under the final U.S. rules, the G-SIB surcharge is being phased in beginning on January 1, 2016, becoming fully effective on January 1, 2019. Once fully phased in, we estimate that our G-SIB surcharge will increase our risk-based capital ratio requirements by 3.0 percent under method 2 and 1.5 percent under method 1.

For more information on regulatory capital, see *Note 16 – Regulatory Requirements and Restrictions* to the Consolidated Financial Statements.

Minimum Total Loss-Absorbing Capacity

On October 30, 2015, the Federal Reserve issued a notice of proposed rulemaking to establish external total loss-absorbing capacity (TLAC) requirements to improve the resolvability and resiliency of large, interconnected BHCs. Under the proposal, U.S. G-SIBs would be required to maintain a minimum external TLAC of the greater of (1) 16 percent of risk-weighted assets in 2019, increasing to 18 percent of risk-weighted assets in 2022 (plus additional TLAC equal to enough Common equity tier 1 capital as a percentage of risk-weighted assets to cover the capital conservation buffer, any applicable countercyclical capital buffer plus the applicable method 1 G-SIB surcharge), or (2) 9.5 percent of the denominator of the SLR. In addition, U.S. G-SIBs must meet a minimum long-term debt requirement equal to the greater of (1) 6.0 percent of risk-weighted assets plus the applicable method 2 G-SIB surcharge, or (2) 4.5 percent of the denominator of the SLR.

Revisions to Approaches for Measuring Risk-Weighted Assets

The Basel Committee has several open proposals to revise key methodologies for measuring risk-weighted assets. The proposals include a standardized approach for credit risk, standardized approaches for operational risk, revisions to the securitization framework and revisions to the CVA risk framework. In January 2016, the Basel Committee finalized its fundamental review of the trading book, which updates both modeled and standardized approaches for market risk measurement. A revised standardized model for counterparty credit risk has also previously been finalized. These revisions would be coupled with a proposed capital floor framework to limit the extent to which banks can reduce risk-weighted asset levels through the use of internal models. The Basel Committee expects to finalize the outstanding proposals by the end of 2016. Once the proposals are finalized, U.S. banking regulators may update the U.S. Basel 3 rules to incorporate the Basel Committee revisions.

Broker-dealer Regulatory Capital and Securities Regulation

The Corporation's principal U.S. broker-dealer subsidiaries are Merrill Lynch, Pierce, Fenner & Smith (MLPF&S) and Merrill Lynch Professional Clearing Corp (MLPCC). MLPCC is a fully-guaranteed subsidiary of MLPF&S and provides clearing and settlement services. Both entities are subject to the net capital requirements of SEC Rule 15c3-1. Both entities are also registered as futures commission merchants and are subject to the Commodity Futures Trading Commission Regulation 1.17.

MLPF&S has elected to compute the minimum capital requirement in accordance with the Alternative Net Capital Requirement as permitted by SEC Rule 15c3-1. At December 31, 2015, MLPF&S's regulatory net capital as defined by Rule 15c3-1 was $11.4 billion and exceeded the minimum requirement of $1.5 billion by $9.9 billion. MLPCC's net capital of $3.3 billion exceeded the minimum requirement of $473 million by $2.8 billion.

In accordance with the Alternative Net Capital Requirements, MLPF&S is required to maintain tentative net capital in excess of $1.0 billion, net capital in excess of $500 million and notify the SEC in the event its tentative net capital is less than $5.0 billion. At December 31, 2015, MLPF&S had tentative net capital and net capital in excess of the minimum and notification requirements.

Merrill Lynch International (MLI), a U.K. investment firm, is regulated by the Prudential Regulation Authority and the Financial Conduct Authority, and is subject to certain regulatory capital requirements. At December 31, 2015, MLI's capital resources were $34.4 billion which exceeded the minimum requirement of $16.6 billion.

Common Stock Dividends

For a summary of our declared quarterly cash dividends on common stock during 2015 and through February 24, 2016, see *Note 13 – Shareholders' Equity* to the Consolidated Financial Statements.

Liquidity Risk

Funding and Liquidity Risk Management

Liquidity risk is the potential inability to meet expected or unexpected cash flow and collateral needs while continuing to support our business and customer needs under a range of economic conditions. Our primary liquidity risk management objective is to meet all contractual and contingent financial obligations at all times, including during periods of stress. To achieve that objective, we analyze and monitor our liquidity risk under expected and stressed conditions, maintain excess liquidity and access to diverse funding sources, including our stable deposit base, and seek to align liquidity-related incentives and risks.

We define excess liquidity as readily available assets, limited to cash and high-quality, liquid, unencumbered securities that we can use to meet our contractual and contingent financial obligations as those obligations arise. We manage our liquidity position through line of business and ALM activities, as well as through our legal entity funding strategy, on both a forward and current (including intraday) basis under both expected and stressed conditions. We believe that a centralized approach to funding and liquidity risk management within Corporate Treasury enhances our ability to monitor liquidity requirements, maximizes access to funding sources, minimizes borrowing costs and facilitates timely responses to liquidity events.

The Board approves the Corporation's liquidity policy and the ERC approves the contingency funding plan, including establishing liquidity risk tolerance levels. The MRC monitors our liquidity position and reviews the impact of strategic decisions on our liquidity. The MRC is responsible for overseeing liquidity risks and maintaining exposures within the established tolerance levels. MRC reviews and monitors our liquidity position, cash flow forecasts, stress testing scenarios and results, and implements our liquidity limits and guidelines. For additional information, see Managing Risk on page 28. Under this governance framework, we have developed certain funding and liquidity risk management practices which include: maintaining excess liquidity at the parent company and selected subsidiaries, including our bank subsidiaries and other regulated entities; determining what amounts of excess liquidity are appropriate for these entities based on analysis of debt maturities and other potential cash outflows, including those that we may experience during stressed market conditions; diversifying funding sources, considering our asset profile and legal entity structure; and performing contingency planning.

Global Excess Liquidity Sources and Other Unencumbered Assets

We maintain excess liquidity available to Bank of America Corporation, including the parent company and selected subsidiaries, in the form of cash and high-quality, liquid, unencumbered securities. Our liquidity buffer, or Global Excess Liquidity Sources (GELS), is comprised of assets that are readily available to the parent company and selected subsidiaries, including bank and broker-dealer subsidiaries, even during stressed market conditions. Our cash is primarily on deposit with the Federal Reserve and, to a lesser extent, central banks outside of the U.S. We limit the composition of high-quality, liquid, unencumbered securities to U.S. government securities, U.S. agency securities, U.S. agency MBS and a select group of non-U.S. government and supranational securities. We believe we can quickly obtain cash for these securities, even in stressed conditions, through repurchase agreements or outright sales. We hold our GELS in legal entities that allow us to meet the liquidity requirements of our global businesses, and we consider the impact of potential regulatory, tax, legal and other restrictions that could limit the transferability of funds among entities. Our GELS are substantially the same in composition to what qualifies as High Quality Liquid Assets (HQLA) under the final U.S. LCR rules. For more information on the final rules, see Liquidity Risk – Basel 3 Liquidity Standards on page 41.

Our GELS were $504 billion and $439 billion at December 31, 2015 and 2014, and were maintained as presented in Table 18.

Table 18 Global Excess Liquidity Sources

(Dollars in billions)	December 31 2015	2014	Average for Three Months Ended December 31 2015
Parent company	$ 96	$ 98	$ 96
Bank subsidiaries	361	306	369
Other regulated entities	47	35	45
Total Global Excess Liquidity Sources	**$ 504**	$ 439	**$ 510**

As shown in Table 18, parent company GELS totaled $96 billion and $98 billion at December 31, 2015 and 2014. The decrease in parent company liquidity was primarily due to derivative cash collateral outflows, common stock buy-backs and dividends, partially offset by net subsidiary inflows. Typically, parent company excess liquidity is in the form of cash deposited with BANA.

GELS available to our bank subsidiaries totaled $361 billion and $306 billion at December 31, 2015 and 2014. The increase in bank subsidiaries' liquidity was primarily due to deposit inflows, partially offset by loan growth. GELS at bank subsidiaries exclude the cash deposited by the parent company. Our bank subsidiaries can also generate incremental liquidity by pledging a range of other unencumbered loans and securities to certain Federal Home Loan Banks (FHLBs) and the Federal Reserve Discount Window. The cash we could have obtained by borrowing against this pool of specifically-identified eligible assets was $252 billion and $214 billion at December 31, 2015 and 2014. We have established operational procedures to enable us to borrow against these assets, including regularly monitoring our total pool of eligible loans and securities collateral. Eligibility is defined in guidelines from the FHLBs and the Federal Reserve and is subject to change at their discretion. Due to regulatory restrictions, liquidity generated by the bank subsidiaries can generally be used only to fund obligations within the bank subsidiaries and can only be transferred to the parent company or nonbank subsidiaries with prior regulatory approval.

GELS available to our other regulated entities, comprised primarily of broker-dealer subsidiaries, totaled $47 billion and $35 billion at December 31, 2015 and 2014. The increase in liquidity in other regulated entities is largely driven by parent company liquidity contributions to the Corporation's primary U.S. broker-dealer. Our other regulated entities also held other unencumbered investment-grade securities and equities that we believe could be used to generate additional liquidity. Liquidity held in an other regulated entity is primarily available to meet the obligations of that entity and transfers to the parent company or to any other subsidiary may be subject to prior regulatory approval due to regulatory restrictions and minimum requirements.

Table 19 presents the composition of GELS at December 31, 2015 and 2014.

Table 19 Global Excess Liquidity Sources Composition

(Dollars in billions)	December 31 2015	2014
Cash on deposit	$ 119	$ 97
U.S. Treasury securities	38	74
U.S. agency securities and mortgage-backed securities	327	252
Non-U.S. government and supranational securities	20	16
Total Global Excess Liquidity Sources	**$ 504**	$ 439

Time-to-required Funding and Stress Modeling

We use a variety of metrics to determine the appropriate amounts of excess liquidity to maintain at the parent company, our bank subsidiaries and other regulated entities. One metric we use to evaluate the appropriate level of excess liquidity at the parent company is "time-to-required funding." This debt coverage measure indicates the number of months that the parent company can continue to meet its unsecured contractual obligations as they come due using only the parent company's liquidity sources without issuing any new debt or accessing any additional liquidity sources. We define unsecured contractual obligations for purposes of this metric as maturities of senior or subordinated debt issued or guaranteed by Bank of America Corporation. These include certain unsecured debt instruments, primarily structured liabilities, which we may be required to settle for cash prior to maturity. Our time-to-required funding was 39 months at December 31, 2015. For purposes of calculating time-to-required funding, at December 31, 2015, we have included in the amount of unsecured contractual obligations $8.5 billion related to the BNY Mellon Settlement. The final conditions of the settlement have been satisfied and, accordingly, the Corporation made the settlement payment in February 2016. For more information on the BNY Mellon Settlement, see *Note 7 – Representations and Warranties Obligations and Corporate Guarantees* to the Consolidated Financial Statements.

We also utilize liquidity stress analysis to assist us in determining the appropriate amounts of excess liquidity to maintain at the parent company, our bank subsidiaries and other regulated entities. The liquidity stress testing process is an integral part of analyzing our potential contractual and contingent cash outflows beyond the outflows considered in the time-to-required funding analysis. We evaluate the liquidity requirements under a range of scenarios with varying levels of severity and time horizons. The scenarios we consider and utilize incorporate market-wide and Corporation-specific events, including potential credit rating downgrades for the parent company and our subsidiaries, and are based on historical experience, regulatory guidance, and both expected and unexpected future events.

The types of potential contractual and contingent cash outflows we consider in our scenarios may include, but are not limited to, upcoming contractual maturities of unsecured debt and reductions in new debt issuance; diminished access to secured financing markets; potential deposit withdrawals; increased draws on loan commitments, liquidity facilities and letters of credit; additional collateral that counterparties could call if our credit ratings were downgraded; collateral and margin requirements arising from market value changes; and potential liquidity required to maintain businesses and finance customer activities. Changes in certain market factors, including, but not limited to, credit rating downgrades, could negatively impact potential contractual and contingent outflows and the related financial instruments, and in some cases these impacts could be material to our financial results.

We consider all sources of funds that we could access during each stress scenario and focus particularly on matching available sources with corresponding liquidity requirements by legal entity. We also use the stress modeling results to manage our asset-liability profile and establish limits and guidelines on certain funding sources and businesses.

Basel 3 Liquidity Standards

The Basel Committee has issued two liquidity risk-related standards that are considered part of the Basel 3 liquidity standards: the LCR and the Net Stable Funding Ratio (NSFR).

In 2014, U.S. banking regulators finalized LCR requirements for the largest U.S. financial institutions on a consolidated basis and for their subsidiary depository institutions with total assets greater than $10 billion. The LCR is calculated as the amount of a financial institution's unencumbered HQLA relative to the estimated net cash outflows the institution could encounter over a 30-day period of significant liquidity stress, expressed as a percentage. Under the final rule, an initial minimum LCR of 80 percent was required as of January 2015, increased to 90 percent as of January 2016 and will increase to 100 percent in January 2017. These minimum requirements are applicable to the Corporation on a consolidated basis and to our insured depository institutions. As of December 31, 2015, we estimate that the consolidated Corporation was above the 2017 LCR requirements. The Corporation's LCR may fluctuate from period to period due to normal business flows from customer activity.

In 2014, the Basel Committee issued a final standard for the NSFR, the standard that is intended to reduce funding risk over a longer time horizon. The NSFR is designed to ensure an appropriate amount of stable funding, generally capital and liabilities maturing beyond one year, given the mix of assets and off-balance sheet items. The final standard aligns the NSFR to the LCR and gives more credit to a wider range of funding. The final standard also includes adjustments to the stable funding required for certain types of assets, some of which reduce the stable funding requirement and some of which increase it. Basel Committee standards generally do not apply directly to U.S. financial institutions, but require adoption by U.S. banking regulators. U.S. banking regulators are expected to propose a similar NSFR regulation applicable to U.S. financial institutions in the near future. We expect to meet the NSFR requirement within the regulatory timeline.

Diversified Funding Sources

We fund our assets primarily with a mix of deposits and secured and unsecured liabilities through a centralized, globally coordinated funding strategy. We diversify our funding globally across products, programs, markets, currencies and investor groups.

The primary benefits of our centralized funding strategy include greater control, reduced funding costs, wider name recognition by investors and greater flexibility to meet the variable funding requirements of subsidiaries. Where regulations, time zone differences or other business considerations make parent company funding impractical, certain other subsidiaries may issue their own debt.

We fund a substantial portion of our lending activities through our deposits, which were $1.20 trillion and $1.12 trillion at December 31, 2015 and 2014. Deposits are primarily generated by our *Consumer Banking*, *GWIM* and *Global Banking* segments. These deposits are diversified by clients, product type and geography, and the majority of our U.S. deposits are insured by the Federal Deposit Insurance Corporation (FDIC). We consider a substantial portion of our deposits to be a stable, low-cost and consistent source of funding. We believe this deposit funding is generally less sensitive to interest rate changes, market volatility or changes in our credit ratings than wholesale funding sources. Our lending activities may also be financed through secured borrowings, including credit card securitizations and securitizations with GSEs, the FHA and private-label investors, as well as FHLBs loans.

Our trading activities in other regulated entities are primarily funded on a secured basis through securities lending and repurchase agreements and these amounts will vary based on customer activity and market conditions. We believe funding these activities in the secured financing markets is more cost-efficient and less sensitive to changes in our credit ratings than unsecured financing. Repurchase agreements are generally short-term and often overnight. Disruptions in secured financing markets for financial institutions have occurred in prior market cycles which resulted in adverse changes in terms or significant reductions in the availability of such financing. We manage the liquidity risks arising from secured funding by sourcing funding globally from a diverse group of counterparties, providing a range of securities collateral and pursuing longer durations, when appropriate. For more information on secured financing agreements, see *Note 10 – Federal Funds Sold or Purchased, Securities Financing Agreements and Short-term Borrowings* to the Consolidated Financial Statements.

We issue long-term unsecured debt in a variety of maturities and currencies to achieve cost-efficient funding and to maintain an appropriate maturity profile. While the cost and availability of unsecured funding may be negatively impacted by general market conditions or by matters specific to the financial services industry or the Corporation, we seek to mitigate refinancing risk by actively managing the amount of our borrowings that we anticipate will mature within any month or quarter.

During 2015, we issued $43.7 billion of long-term debt, consisting of $26.4 billion for Bank of America Corporation, $10.0 billion for Bank of America, N.A. and $7.3 billion of other debt.

Table 20 presents our long-term debt by major currency at December 31, 2015 and 2014.

Table 20 Long-term Debt by Major Currency

(Dollars in millions)	December 31 2015	2014
U.S. Dollar	**$ 190,381**	$ 191,264
Euro	**29,797**	30,687
British Pound	**7,080**	7,881
Japanese Yen	**3,099**	6,058
Australian Dollar	**2,534**	2,135
Canadian Dollar	**1,428**	1,779
Swiss Franc	**872**	897
Other	**1,573**	2,438
Total long-term debt	**$ 236,764**	$ 243,139

Total long-term debt decreased $6.4 billion, or three percent, in 2015, primarily due to the impact of revaluation of non-U.S. Dollar debt and changes in fair value for debt accounted for under the fair value option. These impacts were substantially offset through derivative hedge transactions. Excluding these two factors, total long-term debt remained relatively unchanged in 2015. We may, from time to time, purchase outstanding debt instruments in various transactions, depending on prevailing market conditions, liquidity and other factors. In addition, our other regulated entities may make markets in our debt instruments to provide liquidity for investors. For more information on long-term debt funding, see *Note 11 – Long-term Debt* to the Consolidated Financial Statements.

We use derivative transactions to manage the duration, interest rate and currency risks of our borrowings, considering the characteristics of the assets they are funding. For further details on our ALM activities, see Interest Rate Risk Management for Non-trading Activities on page 76.

We may also issue unsecured debt in the form of structured notes for client purposes. During 2015, we issued $7.2 billion of structured notes, a majority of which was issued by Bank of America Corporation. Structured notes are debt obligations that pay investors returns linked to other debt or equity securities, indices, currencies or commodities. We typically hedge the returns we are obligated to pay on these liabilities with derivatives and/or investments in the underlying instruments, so that from a funding perspective, the cost is similar to our other unsecured long-term debt. We could be required to settle certain structured liability obligations for cash or other securities prior to maturity under certain circumstances, which we consider for liquidity planning purposes. We believe, however, that a portion of such borrowings will remain outstanding beyond the earliest put or redemption date. We had outstanding structured liabilities with a carrying value of $32.6 billion and $38.8 billion at December 31, 2015 and 2014.

Substantially all of our senior and subordinated debt obligations contain no provisions that could trigger a requirement for an early repayment, require additional collateral support, result in changes to terms, accelerate maturity or create additional financial obligations upon an adverse change in our credit ratings, financial ratios, earnings, cash flows or stock price.

Contingency Planning

We maintain contingency funding plans that outline our potential responses to liquidity stress events at various levels of severity. These policies and plans are based on stress scenarios and include potential funding strategies and communication and notification procedures that we would implement in the event we experienced stressed liquidity conditions. We periodically review and test the contingency funding plans to validate efficacy and assess readiness.

Our U.S. bank subsidiaries can access contingency funding through the Federal Reserve Discount Window. Certain non-U.S. subsidiaries have access to central bank facilities in the jurisdictions in which they operate. While we do not rely on these sources in our liquidity modeling, we maintain the policies, procedures and governance processes that would enable us to access these sources if necessary.

Credit Ratings

Our borrowing costs and ability to raise funds are impacted by our credit ratings. In addition, credit ratings may be important to customers or counterparties when we compete in certain markets and when we seek to engage in certain transactions, including OTC derivatives. Thus, it is our objective to maintain high-quality credit ratings, and management maintains an active dialogue with the major rating agencies.

Credit ratings and outlooks are opinions expressed by rating agencies on our creditworthiness and that of our obligations or securities, including long-term debt, short-term borrowings, preferred stock and other securities, including asset securitizations. Our credit ratings are subject to ongoing review by the rating agencies and they consider a number of factors, including our own financial strength, performance, prospects and operations as well as factors not under our control. The rating agencies could make adjustments to our ratings at any time and they provide no assurances that they will maintain our ratings at current levels.

Other factors that influence our credit ratings include changes to the rating agencies' methodologies for our industry or certain security types; the rating agencies' assessment of the general operating environment for financial services companies; our relative positions in the markets in which we compete; our various risk exposures and risk management policies and activities; pending litigation and other contingencies or potential tail risks; our reputation; our liquidity position, diversity of funding sources and funding costs; the current and expected level and volatility of our earnings; our capital position and capital management practices; our corporate governance; the sovereign credit ratings of the U.S. government; current or future regulatory and legislative initiatives; and the agencies' views on whether the U.S. government would provide meaningful support to the Corporation or its subsidiaries in a crisis.

On December 8, 2015, Fitch Ratings (Fitch) completed its latest semi-annual review of 12 large, complex securities trading and universal banks, including Bank of America. The agency affirmed all of our ratings and maintained the outlooks it established upon completion of its prior review on May 19, 2015. Following that review, Fitch revised the support rating floors for the U.S. G-SIBs to No Floor from A, effectively removing the implied government support uplift from those institutions' ratings. The rating agency also upgraded Bank of America Corporation's stand-alone rating, or Viability Rating, to 'a' from 'a-', while affirming its long-term and short-term senior debt ratings at A and F1. Fitch concurrently upgraded Bank of America, N.A.'s long-term senior debt rating to A+ from A, and its long-term deposit rating to AA- from A+. Fitch set the outlook on those ratings at stable. Fitch also revised the

outlook to positive on the ratings of Bank of America's material international operating subsidiaries, including MLI.

On December 2, 2015, Standard & Poor's Ratings Services (S&P) concluded its review of the ratings of eight U.S. G-SIBs, including Bank of America. Consistent with prior guidance, S&P downgraded our holding company long-term senior debt rating to BBB+ from A- due to the removal of the remaining notch of uplift for U.S. government support and revised the outlook to Stable from CreditWatch Negative. The Corporation's short-term ratings were not affected. This action reflected S&P's view that extraordinary U.S. government support of the banking system is less likely under the current U.S. resolution framework. S&P concurrently left the long-term and short-term senior debt ratings of Bank of America's core rated operating subsidiaries, including Bank of America, N.A., MLPF&S, MLI, and Bank of America Merrill Lynch International Limited, unchanged at A and A-1, respectively. S&P eliminated the remaining notch of uplift for potential government support from those entities' senior long-term debt ratings, but the agency subsequently added a notch of uplift upon implementing its new framework for incorporating loss-absorbing holding company debt and equity capital buffers into operating subsidiary credit ratings. Those ratings remain on CreditWatch positive pending further clarity on what debt instruments will count toward TLAC requirements. Additionally, S&P concluded its CreditWatch Developing on the subordinated debt rating of Bank of America, N.A., which the agency downgraded to BBB+ from A-.

On May 28, 2015, Moody's Investors Service, Inc. (Moody's) concluded its previously announced review of several global investment banking groups, including Bank of America, which followed the publication of the agency's new bank rating methodology. Moody's upgraded Bank of America Corporation's long-term senior debt rating to Baa1 from Baa2, and the preferred stock rating to Ba2 from Ba3. Moody's also upgraded the long-term senior debt and long-term deposit ratings of Bank of America, N.A. to A1 from A2. Moody's affirmed the short-term ratings at P-2 for Bank of America Corporation and P-1 for Bank of America, N.A. Moody's now has a stable outlook on all of our ratings.

Table 21 presents the Corporation's current long-term/short-term senior debt ratings and outlooks expressed by the rating agencies.

Table 21 Senior Debt Ratings

	Moody's Investors Service			Standard & Poor's			Fitch Ratings		
	Long-term	Short-term	Outlook	Long-term	Short-term [1]	Outlook	Long-term	Short-term	Outlook
Bank of America Corporation	Baa1	P-2	Stable	BBB+	A-2	Stable	A	F1	Stable
Bank of America, N.A.	A1	P-1	Stable	A	A-1	CreditWatch Positive	A+	F1	Stable
Merrill Lynch, Pierce, Fenner & Smith	NR	NR	NR	A	A-1	CreditWatch Positive	A+	F1	Stable
Merrill Lynch International	NR	NR	NR	A	A-1	CreditWatch Positive	A	F1	Positive

[1] S&P short-term ratings are not on CreditWatch.
NR = not rated

A reduction in certain of our credit ratings or the ratings of certain asset-backed securitizations may have a material adverse effect on our liquidity, potential loss of access to credit markets, the related cost of funds, our businesses and on certain trading revenues, particularly in those businesses where counterparty creditworthiness is critical. In addition, under the terms of certain OTC derivative contracts and other trading agreements, in the event of downgrades of our or our rated subsidiaries' credit ratings, the counterparties to those agreements may require us to provide additional collateral, or to terminate these contracts or agreements, which could cause us to sustain losses and/or adversely impact our liquidity. If the short-term credit ratings of our parent company, bank or broker-dealer subsidiaries were downgraded by one or more levels, the potential loss of access to short-term funding sources such as repo financing and the effect on our incremental cost of funds could be material.

While certain potential impacts are contractual and quantifiable, the full scope of the consequences of a credit rating downgrade to a financial institution is inherently uncertain, as it depends upon numerous dynamic, complex and inter-related factors and assumptions, including whether any downgrade of a company's long-term credit ratings precipitates downgrades to its short-term credit ratings, and assumptions about the potential behaviors of various customers, investors and counterparties. For more information on potential impacts of credit rating downgrades, see Liquidity Risk – Time-to-required Funding and Stress Modeling on page 40.

For more information on the additional collateral and termination payments that could be required in connection with certain OTC derivative contracts and other trading agreements as a result of such a credit rating downgrade, see *Note 2 – Derivatives* to the Consolidated Financial Statements.

Credit Risk Management

Credit quality remained stable during 2015 driven by lower U.S. unemployment and improving home prices as well as our proactive credit risk management activities positively impacting our credit portfolio as nonperforming loans and delinquencies continued to improve. For additional information, see Executive Summary – 2015 Economic and Business Environment on page 3.

Credit risk is the risk of loss arising from the inability or failure of a borrower or counterparty to meet its obligations. Credit risk can also arise from operational failures that result in an erroneous advance, commitment or investment of funds. We define the credit exposure to a borrower or counterparty as the loss potential arising from all product classifications including loans and leases, deposit overdrafts, derivatives, assets held-for-sale and unfunded lending commitments which include loan commitments, letters of credit and financial guarantees. Derivative positions are recorded at fair value and assets held-for-sale are recorded at either fair value or the lower of cost or fair value. Certain loans and unfunded commitments are accounted for under the fair value option. Credit risk for categories of assets carried at fair value is not accounted for as part of the allowance for credit losses but as part of the fair value adjustments recorded in earnings. For derivative positions, our credit risk is measured as the net cost in the event the counterparties with contracts in which we are in a gain position fail to perform under the terms of those contracts. We use the current fair value to represent credit exposure without giving consideration to future mark-to-market changes. The credit risk amounts take into consideration the effects of legally enforceable master netting agreements and cash collateral. Our consumer and commercial credit extension and review procedures encompass funded and unfunded credit exposures. For more information on derivatives and credit extension commitments, see *Note 2 – Derivatives* and *Note 12 – Commitments and Contingencies* to the Consolidated Financial Statements.

We manage credit risk based on the risk profile of the borrower or counterparty, repayment sources, the nature of underlying collateral, and other support given current events, conditions and expectations. We classify our portfolios as either consumer or commercial and monitor credit risk in each as discussed below.

We refine our underwriting and credit risk management practices as well as credit standards to meet the changing economic environment. To mitigate losses and enhance customer support in our consumer businesses, we have in place collection programs and loan modification and customer assistance infrastructures. We utilize a number of actions to mitigate losses in the commercial businesses including increasing the frequency and intensity of portfolio monitoring, hedging activity and our practice of transferring management of deteriorating commercial exposures to independent special asset officers as credits enter criticized categories.

We have non-U.S. exposure largely in Europe and Asia Pacific. For more information on our exposures and related risks in non-U.S. countries, see Non-U.S. Portfolio on page 65 and Item 1A. Risk Factors of the Corporation's 2015 Annual Report on Form 10-K.

Utilized energy exposure represents approximately two percent of total loans and leases. For more information on our exposures and related risks in the energy industry, see Commercial Portfolio Credit Risk Management – Industry Concentrations on page 62 and Table 46.

For more information on our credit risk management activities, see Consumer Portfolio Credit Risk Management on page 45, Commercial Portfolio Credit Risk Management on page 56, Non-U.S. Portfolio on page 65, Provision for Credit Losses on page 67 and Allowance for Credit Losses on page 67, *Note 1 – Summary of Significant Accounting Principles*, *Note 4 – Outstanding Loans and Leases* and *Note 5 – Allowance for Credit Losses* to the Consolidated Financial Statements.

Consumer Portfolio Credit Risk Management

Credit risk management for the consumer portfolio begins with initial underwriting and continues throughout a borrower's credit cycle. Statistical techniques in conjunction with experiential judgment are used in all aspects of portfolio management including underwriting, product pricing, risk appetite, setting credit limits, and establishing operating processes and metrics to quantify and balance risks and returns. Statistical models are built using detailed behavioral information from external sources such as credit bureaus and/or internal historical experience. These models are a component of our consumer credit risk management process and are used in part to assist in making both new and ongoing credit decisions, as well as portfolio management strategies, including authorizations and line management, collection practices and strategies, and determination of the allowance for loan and lease losses and allocated capital for credit risk.

During 2015, we completed approximately 51,300 customer loan modifications with a total unpaid principal balance of $8.4 billion, including approximately 21,200 permanent modifications, under the U.S. government's Making Home Affordable Program. Of the loan modifications completed in 2015, in terms of both the volume of modifications and the unpaid principal balance associated with the underlying loans, more than half were in the Corporation's held-for-investment (HFI) portfolio. For modified loans on our balance sheet, these modification types are generally considered TDRs. For more information on TDRs and portfolio impacts, see Consumer Portfolio Credit Risk Management – Nonperforming Consumer Loans, Leases and Foreclosed Properties Activity on page 54 and *Note 4 – Outstanding Loans and Leases* to the Consolidated Financial Statements.

Consumer Credit Portfolio

Improvement in the U.S. unemployment rate and home prices continued during 2015 resulting in improved credit quality and lower credit losses across most major consumer portfolios compared to 2014. Nearly all consumer loan portfolios 30 and 90 days or more past due declined during 2015 as a result of improved delinquency trends.

Improved credit quality, continued loan balance run-off and sales across the consumer portfolio drove a $2.6 billion decrease in the consumer allowance for loan and lease losses in 2015 to $7.4 billion at December 31, 2015. For additional information, see Allowance for Credit Losses on page 67.

For more information on our accounting policies regarding delinquencies, nonperforming status, charge-offs and TDRs for the consumer portfolio, see *Note 1 – Summary of Significant Accounting Principles* to the Consolidated Financial Statements. For more information on representations and warranties related to our residential mortgage and home equity portfolios, see Off-Balance Sheet Arrangements and Contractual Obligations – Representations and Warranties on page 25 and *Note 7 – Representations and Warranties Obligations and Corporate Guarantees* to the Consolidated Financial Statements.

Table 22 presents our outstanding consumer loans and leases, and the PCI loan portfolio. In addition to being included in the "Outstandings" columns in Table 22, PCI loans are also shown separately in the "Purchased Credit-impaired Loan Portfolio" columns. The impact of the PCI loan portfolio on certain credit statistics is reported where appropriate. For more information on PCI loans, see Consumer Portfolio Credit Risk Management – Purchased Credit-impaired Loan Portfolio on page 52 and *Note 4 – Outstanding Loans and Leases* to the Consolidated Financial Statements.

Table 22 Consumer Loans and Leases

	December 31			
	Outstandings		Purchased Credit-impaired Loan Portfolio	
(Dollars in millions)	**2015**	2014	**2015**	2014
Residential mortgage [1]	**$ 187,911**	$ 216,197	**$ 12,066**	$ 15,152
Home equity	**75,948**	85,725	**4,619**	5,617
U.S. credit card	**89,602**	91,879	**n/a**	n/a
Non-U.S. credit card	**9,975**	10,465	**n/a**	n/a
Direct/Indirect consumer [2]	**88,795**	80,381	**n/a**	n/a
Other consumer [3]	**2,067**	1,846	**n/a**	n/a
Consumer loans excluding loans accounted for under the fair value option	**454,298**	486,493	**16,685**	20,769
Loans accounted for under the fair value option [4]	**1,871**	2,077	**n/a**	n/a
Total consumer loans and leases	**$ 456,169**	$ 488,570	**$ 16,685**	$ 20,769

[1] Outstandings include pay option loans of $2.3 billion and $3.2 billion at December 31, 2015 and 2014. We no longer originate pay option loans.

[2] Outstandings include auto and specialty lending loans of $42.6 billion and $37.7 billion, unsecured consumer lending loans of $886 million and $1.5 billion, U.S. securities-based lending loans of $39.8 billion and $35.8 billion, non-U.S. consumer loans of $3.9 billion and $4.0 billion, student loans of $564 million and $632 million and other consumer loans of $1.0 billion and $761 million at December 31, 2015 and 2014.

[3] Outstandings include consumer finance loans of $564 million and $676 million, consumer leases of $1.4 billion and $1.0 billion and consumer overdrafts of $146 million and $162 million at December 31, 2015 and 2014.

[4] Consumer loans accounted for under the fair value option include residential mortgage loans of $1.6 billion and $1.9 billion and home equity loans of $250 million and $196 million at December 31, 2015 and 2014. For more information on the fair value option, see *Note 21 – Fair Value Option* to the Consolidated Financial Statements.

n/a = not applicable

Table 23 presents consumer nonperforming loans and accruing consumer loans past due 90 days or more. Nonperforming loans do not include past due consumer credit card loans, other unsecured loans and in general, consumer non-real estate-secured loans (loans discharged in Chapter 7 bankruptcy are included) as these loans are typically charged off no later than the end of the month in which the loan becomes 180 days past due. Real estate-secured past due consumer loans that are insured by the FHA or individually insured under long-term standby agreements with FNMA and FHLMC (collectively, the fully-insured loan portfolio) are reported as accruing as opposed to nonperforming since the principal repayment is insured. Fully-insured loans included in accruing past due 90 days or more are primarily from our repurchases of delinquent FHA loans pursuant to our servicing agreements with GNMA. Additionally, nonperforming loans and accruing balances past due 90 days or more do not include the PCI loan portfolio or loans accounted for under the fair value option even though the customer may be contractually past due.

Table 23 Consumer Credit Quality

	December 31			
	Nonperforming		Accruing Past Due 90 Days or More	
(Dollars in millions)	**2015**	2014	**2015**	2014
Residential mortgage [1]	**$ 4,803**	$ 6,889	**$ 7,150**	$ 11,407
Home equity	**3,337**	3,901	**—**	—
U.S. credit card	**n/a**	n/a	**789**	866
Non-U.S. credit card	**n/a**	n/a	**76**	95
Direct/Indirect consumer	**24**	28	**39**	64
Other consumer	**1**	1	**3**	1
Total [2]	**$ 8,165**	$ 10,819	**$ 8,057**	$ 12,433
Consumer loans and leases as a percentage of outstanding consumer loans and leases [2]	**1.80%**	2.22%	**1.77%**	2.56%
Consumer loans and leases as a percentage of outstanding loans and leases, excluding PCI and fully-insured loan portfolios [2]	**2.04**	2.70	**0.23**	0.26

[1] Residential mortgage loans accruing past due 90 days or more are fully-insured loans. At December 31, 2015 and 2014, residential mortgage included $4.3 billion and $7.3 billion of loans on which interest has been curtailed by the FHA, and therefore are no longer accruing interest, although principal is still insured, and $2.9 billion and $4.1 billion of loans on which interest was still accruing.
[2] Balances exclude consumer loans accounted for under the fair value option. At December 31, 2015 and 2014, $293 million and $392 million of loans accounted for under the fair value option were past due 90 days or more and not accruing interest.
n/a = not applicable

Table 24 presents net charge-offs and related ratios for consumer loans and leases.

Table 24 Consumer Net Charge-offs and Related Ratios

	Net Charge-offs [1]		Net Charge-off Ratios [1, 2]	
(Dollars in millions)	**2015**	2014	**2015**	2014
Residential mortgage	**$ 473**	$ (114)	**0.24%**	(0.05)%
Home equity	**636**	907	**0.79**	1.01
U.S. credit card	**2,314**	2,638	**2.62**	2.96
Non-U.S. credit card	**188**	242	**1.86**	2.10
Direct/Indirect consumer	**112**	169	**0.13**	0.20
Other consumer	**193**	229	**9.96**	11.27
Total	**$ 3,916**	$ 4,071	**0.84**	0.80

[1] Net charge-offs exclude write-offs in the PCI loan portfolio. For more information on PCI write-offs, see Consumer Portfolio Credit Risk Management – Purchased Credit-impaired Loan Portfolio on page 52.
[2] Net charge-off ratios are calculated as net charge-offs divided by average outstanding loans and leases excluding loans accounted for under the fair value option.

Net charge-off ratios, excluding the PCI and fully-insured loan portfolios, were 0.35 percent and (0.08) percent for residential mortgage, 0.84 percent and 1.09 percent for home equity and 0.54 percent and 1.00 percent for the total consumer portfolio for 2015 and 2014, respectively. These are the only product classifications that include PCI and fully-insured loans.

Net charge-offs, as shown in Tables 24 and 25, exclude write-offs in the PCI loan portfolio of $634 million and $545 million in residential mortgage and $174 million and $265 million in home equity for 2015 and 2014. Net charge-off ratios including the PCI write-offs were 0.56 percent and 0.18 percent for residential mortgage and 1.00 percent and 1.31 percent for home equity in 2015 and 2014. For more information on PCI write-offs, see Consumer Portfolio Credit Risk Management – Purchased Credit-impaired Loan Portfolio on page 52.

Table 25 presents outstandings, nonperforming balances, net charge-offs, allowance for loan and lease losses and provision for loan and lease losses for the core portfolio and the non-core portfolio within the consumer real estate portfolio. We categorize consumer real estate loans as core and non-core on the basis of loan and customer characteristics such as origination date, product type, LTV, FICO score and delinquency status consistent with our current consumer and mortgage servicing strategy. Generally, loans that were originated after January 1, 2010, qualified under government-sponsored enterprise underwriting guidelines, or otherwise met our underwriting guidelines in place in 2015 are characterized as core loans. Loans held in legacy private-label securitizations, government-insured loans originated prior to 2010, loan products no longer originated, and loans originated prior to 2010 and classified as nonperforming or modified in a troubled debt restructuring prior to 2016 are generally characterized as non-core loans, and are principally run-off portfolios. Core loans as reported within Table 25 include loans held in the *Consumer Banking* and *GWIM* segments, as well as loans held for ALM activities in *All Other*. For more information on core and non-core loans, see *Note 1 – Summary of Significant Accounting Principles* and *Note 4 – Outstanding Loans and Leases* to the Consolidated Financial Statements.

Table 25 Consumer Real Estate Portfolio [1]

	December 31					
	Outstandings		Nonperforming		Net Charge-offs [2]	
(Dollars in millions)	**2015**	2014	**2015**	2014	**2015**	2014
Core portfolio						
Residential mortgage	**$ 141,795**	$ 156,643	**$ 1,825**	$ 2,329	**$ 101**	$ 28
Home equity	**54,917**	59,606	**974**	1,247	**163**	216
Total core portfolio	**196,712**	216,249	**2,799**	3,576	**264**	244
Non-core portfolio						
Residential mortgage	**46,116**	59,554	**2,978**	4,560	**372**	(142)
Home equity	**21,031**	26,119	**2,363**	2,654	**473**	691
Total non-core portfolio	**67,147**	85,673	**5,341**	7,214	**845**	549
Consumer real estate portfolio						
Residential mortgage	**187,911**	216,197	**4,803**	6,889	**473**	(114)
Home equity	**75,948**	85,725	**3,337**	3,901	**636**	907
Total consumer real estate portfolio	**$ 263,859**	$ 301,922	**$ 8,140**	$ 10,790	**$ 1,109**	$ 793

	December 31			
	Allowance for Loan and Lease Losses		Provision for Loan and Lease Losses	
	2015	2014	**2015**	2014
Core portfolio				
Residential mortgage	**$ 319**	$ 437	**$ (17)**	$ (147)
Home equity	**664**	859	**(33)**	(138)
Total core portfolio	**983**	1,296	**(50)**	(285)
Non-core portfolio				
Residential mortgage	**1,181**	2,463	**(277)**	(596)
Home equity	**1,750**	2,176	**257**	(95)
Total non-core portfolio	**2,931**	4,639	**(20)**	(691)
Consumer real estate portfolio				
Residential mortgage	**1,500**	2,900	**(294)**	(743)
Home equity	**2,414**	3,035	**224**	(233)
Total consumer real estate portfolio	**$ 3,914**	$ 5,935	**$ (70)**	$ (976)

[1] Outstandings and nonperforming loans exclude loans accounted for under the fair value option. Consumer loans accounted for under the fair value option include residential mortgage loans of $1.6 billion and $1.9 billion and home equity loans of $250 million and $196 million at December 31, 2015 and 2014. For more information on the fair value option, see *Note 21 – Fair Value Option* to the Consolidated Financial Statements.

[2] Net charge-offs exclude write-offs in the PCI loan portfolio. For more information on PCI write-offs, see Consumer Portfolio Credit Risk Management – Purchased Credit-impaired Loan Portfolio on page 52.

We believe that the presentation of information adjusted to exclude the impact of the PCI loan portfolio, the fully-insured loan portfolio and loans accounted for under the fair value option is more representative of the ongoing operations and credit quality of the business. As a result, in the following discussions of the residential mortgage and home equity portfolios, we provide information that excludes the impact of the PCI loan portfolio, the fully-insured loan portfolio and loans accounted for under the fair value option in certain credit quality statistics. We separately disclose information on the PCI loan portfolio on page 52.

Residential Mortgage

The residential mortgage portfolio makes up the largest percentage of our consumer loan portfolio at 41 percent of consumer loans and leases at December 31, 2015. Approximately 47 percent of the residential mortgage portfolio is in *All Other* and is comprised of originated loans, purchased loans used in our overall ALM activities, delinquent FHA loans repurchased pursuant to our servicing agreements with GNMA as well as loans repurchased related to our representations and warranties. Approximately 30 percent of the residential mortgage portfolio is in *GWIM* and represents residential mortgages originated for the home purchase and refinancing needs of our wealth management

clients and the remaining portion of the portfolio is primarily in *Consumer Banking*.

Outstanding balances in the residential mortgage portfolio, excluding loans accounted for under the fair value option, decreased $28.3 billion during 2015 due to loan sales of $24.2 billion and runoff outpacing the retention of new originations. Loan sales primarily included $16.4 billion of loans with standby insurance agreements, $3.1 billion of nonperforming and other delinquent loans and $4.5 billion of loans in consolidated agency residential mortgage securitization vehicles.

At December 31, 2015 and 2014, the residential mortgage portfolio included $37.1 billion and $65.0 billion of outstanding fully-insured loans. On this portion of the residential mortgage portfolio, we are protected against principal loss as a result of either FHA insurance or long-term standby agreements that provide for the transfer of credit risk to FNMA and FHLMC. At December 31, 2015 and 2014, $33.4 billion and $47.8 billion had FHA insurance with the remainder protected by long-term standby agreements. At December 31, 2015 and 2014, $11.2 billion and $15.9 billion of the FHA-insured loan population were repurchases of delinquent FHA loans pursuant to our servicing agreements with GNMA.

Table 26 presents certain residential mortgage key credit statistics on both a reported basis excluding loans accounted for under the fair value option, and excluding the PCI loan portfolio, our fully-insured loan portfolio and loans accounted for under the fair value option. Additionally, in the "Reported Basis" columns in the table below, accruing balances past due and nonperforming loans do not include the PCI loan portfolio, in accordance with our accounting policies, even though the customer may be contractually past due. As such, the following discussion presents the residential mortgage portfolio excluding the PCI loan portfolio, the fully-insured loan portfolio and loans accounted for under the fair value option. For more information on the PCI loan portfolio, see page 52.

Table 26 Residential Mortgage – Key Credit Statistics

	December 31			
	Reported Basis [1]		Excluding Purchased Credit-impaired and Fully-insured Loans	
(Dollars in millions)	**2015**	2014	**2015**	2014
Outstandings	**$ 187,911**	$ 216,197	**$ 138,768**	$ 136,075
Accruing past due 30 days or more	**11,423**	16,485	**1,568**	1,868
Accruing past due 90 days or more	**7,150**	11,407	**—**	—
Nonperforming loans	**4,803**	6,889	**4,803**	6,889
Percent of portfolio				
Refreshed LTV greater than 90 but less than or equal to 100	**7%**	9%	**5%**	6%
Refreshed LTV greater than 100	**8**	12	**4**	7
Refreshed FICO below 620	**13**	16	**6**	8
2006 and 2007 vintages [2]	**17**	19	**17**	22
Net charge-off ratio [3]	**0.24**	(0.05)	**0.35**	(0.08)

[1] Outstandings, accruing past due, nonperforming loans and percentages of portfolio exclude loans accounted for under the fair value option.
[2] These vintages of loans account for $1.6 billion, or 34 percent, and $2.8 billion, or 41 percent, of nonperforming residential mortgage loans at December 31, 2015 and 2014. Additionally, these vintages accounted for net charge-offs of $136 million to residential mortgage net charge-offs in 2015 and net recoveries of $233 million to residential mortgage net recoveries in 2014.
[3] Net charge-off ratios are calculated as net charge-offs divided by average outstanding loans excluding loans accounted for under the fair value option.

Nonperforming residential mortgage loans decreased $2.1 billion in 2015 including sales of $1.5 billion, partially offset by a $261 million net increase related to the DoJ Settlement for those loans that are no longer fully insured. Excluding these items, nonperforming residential mortgage loans decreased as outflows, including the transfers of certain qualifying borrowers discharged in a Chapter 7 bankruptcy to performing status, outpaced new inflows. Of the nonperforming residential mortgage loans at December 31, 2015, $1.6 billion, or 34 percent, were current on contractual payments. Nonperforming loans that are contractually current primarily consist of collateral-dependent TDRs, including those that have been discharged in Chapter 7 bankruptcy, as well as loans that have not yet demonstrated a sustained period of payment performance following a TDR. In addition, $2.0 billion, or 43 percent of nonperforming residential mortgage loans were 180 days or more past due and had been written down to the estimated fair value of the collateral, less costs to sell. Accruing loans that were 30 days or more past due decreased $300 million in 2015.

Net charge-offs increased $587 million to $473 million in 2015, or 0.35 percent of total average residential mortgage loans, compared to a net recovery of $114 million, or (0.08) percent, in 2014. This increase in net charge-offs was primarily driven by $402 million of charge-offs during 2015 related to the consumer relief portion of the DoJ Settlement. In addition, net charge-offs included recoveries of $127 million related to nonperforming loan sales during 2015 compared to $407 million in 2014. Excluding these items, net charge-offs declined driven by favorable portfolio trends and decreased write-downs on loans greater than 180 days past due, which were written down to the estimated fair value of the collateral, less costs to sell, due in part to improvement in home prices and the U.S. economy.

Residential mortgage loans with a greater than 90 percent but less than or equal to 100 percent refreshed LTV represented five percent and six percent of the residential mortgage portfolio at December 31, 2015 and 2014. Loans with a refreshed LTV greater than 100 percent represented four percent and seven percent of the residential mortgage loan portfolio at December 31, 2015 and 2014. Of the loans with a refreshed LTV greater than 100 percent, 98 percent and 96 percent were performing at December 31, 2015 and 2014. Loans with a refreshed LTV greater than 100 percent reflect loans where the outstanding carrying value of the loan is greater than the most recent valuation of the property securing the loan. The majority of these loans have a refreshed LTV greater than 100 percent primarily due to home price deterioration since 2006, partially offset by subsequent appreciation. Loans to borrowers with refreshed FICO scores below 620 represented six

percent and eight percent of the residential mortgage portfolio at December 31, 2015 and 2014.

Of the $138.8 billion in total residential mortgage loans outstanding at December 31, 2015, as shown in Table 27, 39 percent were originated as interest-only loans. The outstanding balance of interest-only residential mortgage loans that have entered the amortization period was $12.0 billion, or 22 percent at December 31, 2015. Residential mortgage loans that have entered the amortization period generally have experienced a higher rate of early stage delinquencies and nonperforming status compared to the residential mortgage portfolio as a whole. At December 31, 2015, $214 million, or two percent of outstanding interest-only residential mortgages that had entered the amortization period were accruing past due 30 days or more compared to $1.6 billion, or one percent for the entire residential mortgage portfolio. In addition, at December 31, 2015, $712 million, or six percent of outstanding interest-only residential mortgage loans that had entered the amortization period were nonperforming, of which $348 million were contractually current, compared to $4.8 billion, or three percent for the entire residential mortgage portfolio, of which $1.6 billion were contractually current. Loans that have yet to enter the amortization period in our interest-only residential mortgage portfolio are primarily well-collateralized loans to our wealth management clients and have an interest-only period of three to ten years. Approximately 75 percent of these loans that have yet to enter the amortization period will not be required to make a fully-amortizing payment until 2019 or later.

Table 27 presents outstandings, nonperforming loans and net charge-offs by certain state concentrations for the residential mortgage portfolio. The Los Angeles-Long Beach-Santa Ana Metropolitan Statistical Area (MSA) within California represented 14 percent and 13 percent of outstandings at December 31, 2015 and 2014. Loans within this MSA contributed net recoveries of $13 million and $81 million within the residential mortgage portfolio during 2015 and 2014. In the New York area, the New York-Northern New Jersey-Long Island MSA made up 11 percent of outstandings at both December 31, 2015 and 2014. Loans within this MSA contributed net charge-offs of $101 million and $27 million within the residential mortgage portfolio during 2015 and 2014.

Table 27 Residential Mortgage State Concentrations

	December 31					
	Outstandings [1]		Nonperforming [1]		Net Charge-offs [2]	
(Dollars in millions)	**2015**	2014	**2015**	2014	**2015**	2014
California	**$ 48,865**	$ 45,496	**$ 977**	$ 1,459	**$ (49)**	$ (280)
New York [3]	**12,696**	11,826	**399**	477	**57**	15
Florida [3]	**10,001**	10,116	**534**	858	**53**	(43)
Texas	**6,208**	6,635	**185**	269	**10**	1
Virginia	**4,097**	4,402	**164**	244	**20**	4
Other U.S./Non-U.S.	**56,901**	57,600	**2,544**	3,582	**382**	189
Residential mortgage loans [4]	**$ 138,768**	$ 136,075	**$ 4,803**	$ 6,889	**$ 473**	$ (114)
Fully-insured loan portfolio	**37,077**	64,970				
Purchased credit-impaired residential mortgage loan portfolio [5]	**12,066**	15,152				
Total residential mortgage loan portfolio	**$ 187,911**	$ 216,197				

(1) Outstandings and nonperforming loans exclude loans accounted for under the fair value option.
(2) Net charge-offs exclude $634 million of write-offs in the residential mortgage PCI loan portfolio in 2015 compared to $545 million in 2014. For additional information, see Consumer Portfolio Credit Risk Management – Purchased Credit-impaired Loan Portfolio on page 52.
(3) In these states, foreclosure requires a court order following a legal proceeding (judicial states).
(4) Amounts exclude the PCI residential mortgage and fully-insured loan portfolios.
(5) Forty-seven percent and 45 percent of PCI residential mortgage loans were in California at December 31, 2015 and 2014. There were no other significant single state concentrations.

The Community Reinvestment Act (CRA) encourages banks to meet the credit needs of their communities for housing and other purposes, particularly in neighborhoods with low or moderate incomes. Our CRA portfolio was $8.0 billion and $9.0 billion at December 31, 2015 and 2014, or six percent and seven percent of the residential mortgage portfolio. The CRA portfolio included $552 million and $986 million of nonperforming loans at December 31, 2015 and 2014, representing 11 percent and 14 percent of total nonperforming residential mortgage loans. In 2015, net charge-offs in the CRA portfolio were $85 million of the $473 million total net charge-offs for the residential mortgage portfolio. In 2014, net charge-offs in the CRA portfolio were $52 million compared to net recoveries of $114 million for the residential mortgage portfolio.

Home Equity

At December 31, 2015, the home equity portfolio made up 17 percent of the consumer portfolio and is comprised of home equity lines of credit (HELOCs), home equity loans and reverse mortgages.

At December 31, 2015, our HELOC portfolio had an outstanding balance of $66.1 billion, or 87 percent of the total home equity portfolio compared to $74.2 billion, or 87 percent, at December 31, 2014. HELOCs generally have an initial draw period of 10 years and the borrowers typically are only required to pay the interest due on the loans on a monthly basis. After the initial draw period ends, the loans generally convert to 15-year amortizing loans.

At December 31, 2015, our home equity loan portfolio had an outstanding balance of $7.9 billion, or 10 percent of the total home equity portfolio compared to $9.8 billion, or 11 percent, at December 31, 2014. Home equity loans are almost all fixed-rate loans with amortizing payment terms of 10 to 30 years and of the $7.9 billion at December 31, 2015, 54 percent have 25- to 30-year terms. At December 31, 2015, our reverse mortgage portfolio had an outstanding balance, excluding loans accounted for under the fair value option, of $2.0 billion, or three percent of the total home equity portfolio compared to $1.7 billion, or two percent, at December 31, 2014. We no longer originate reverse mortgages.

At December 31, 2015, approximately 65 percent of the home equity portfolio was included in *Consumer Banking*, 28 percent

was included in *All Other* and the remainder of the portfolio was primarily in *GWIM*. Outstanding balances in the home equity portfolio, excluding loans accounted for under the fair value option, decreased $9.8 billion in 2015 primarily due to paydowns and charge-offs outpacing new originations and draws on existing lines. Of the total home equity portfolio at December 31, 2015 and 2014, $20.3 billion and $20.6 billion, or 27 percent and 24 percent, were in first-lien positions (28 percent and 26 percent excluding the PCI home equity portfolio). At December 31, 2015, outstanding balances in the home equity portfolio that were in a second-lien or more junior-lien position and where we also held the first-lien loan totaled $12.9 billion, or 18 percent of our total home equity portfolio excluding the PCI loan portfolio.

Unused HELOCs totaled $50.3 billion and $53.7 billion at December 31, 2015 and 2014. The decrease was primarily due to customers choosing to close accounts, as well as accounts reaching the end of their draw period, which automatically eliminates open line exposure. Both of these more than offset customer paydowns of principal balances and the impact of new production. The HELOC utilization rate was 57 percent and 58 percent at December 31, 2015 and 2014.

Table 28 presents certain home equity portfolio key credit statistics on both a reported basis excluding loans accounted for under the fair value option, and excluding the PCI loan portfolio and loans accounted for under the fair value option. Additionally, in the "Reported Basis" columns in the table below, accruing balances past due 30 days or more and nonperforming loans do not include the PCI loan portfolio, in accordance with our accounting policies, even though the customer may be contractually past due. As such, the following discussion presents the home equity portfolio excluding the PCI loan portfolio and loans accounted for under the fair value option. For more information on the PCI loan portfolio, see page 52.

Table 28 Home Equity – Key Credit Statistics

	December 31			
	Reported Basis [1]		Excluding Purchased Credit-impaired Loans	
(Dollars in millions)	**2015**	2014	**2015**	2014
Outstandings	**$ 75,948**	$ 85,725	**$ 71,329**	$ 80,108
Accruing past due 30 days or more [2]	**613**	640	**613**	640
Nonperforming loans [2]	**3,337**	3,901	**3,337**	3,901
Percent of portfolio				
Refreshed CLTV greater than 90 but less than or equal to 100	**6%**	8%	**6%**	7%
Refreshed CLTV greater than 100	**12**	16	**11**	14
Refreshed FICO below 620	**7**	8	**7**	7
2006 and 2007 vintages [3]	**43**	46	**41**	43
Net charge-off ratio [4]	**0.79**	1.01	**0.84**	1.09

(1) Outstandings, accruing past due, nonperforming loans and percentages of the portfolio exclude loans accounted for under the fair value option.
(2) Accruing past due 30 days or more includes $89 million and $98 million and nonperforming loans include $396 million and $505 million of loans where we serviced the underlying first-lien at December 31, 2015 and 2014.
(3) These vintages of loans have higher refreshed combined LTV ratios and accounted for 45 percent and 47 percent of nonperforming home equity loans at December 31, 2015 and 2014, and 54 percent and 59 percent of net charge-offs in 2015 and 2014.
(4) Net charge-off ratios are calculated as net charge-offs divided by average outstanding loans excluding loans accounted for under the fair value option.

Nonperforming outstanding balances in the home equity portfolio decreased $564 million in 2015 as outflows, including sales of $154 million and the transfer of certain qualifying borrowers discharged in a Chapter 7 bankruptcy to performing status, outpaced new inflows. Of the nonperforming home equity portfolio at December 31, 2015, $1.4 billion, or 42 percent, were current on contractual payments. Nonperforming loans that are contractually current primarily consist of collateral-dependent TDRs, including those that have been discharged in Chapter 7 bankruptcy, junior-lien loans where the underlying first-lien is 90 days or more past due, as well as loans that have not yet demonstrated a sustained period of payment performance following a TDR. In addition, $1.3 billion, or 38 percent of nonperforming home equity loans, were 180 days or more past due and had been written down to the estimated fair value of the collateral, less costs to sell. Accruing loans that were 30 days or more past due decreased $27 million in 2015.

In some cases, the junior-lien home equity outstanding balance that we hold is performing, but the underlying first-lien is not. For outstanding balances in the home equity portfolio on which we service the first-lien loan, we are able to track whether the first-lien loan is in default. For loans where the first-lien is serviced by a third party, we utilize credit bureau data to estimate the delinquency status of the first-lien. Given that the credit bureau database we use does not include a property address for the mortgages, we are unable to identify with certainty whether a reported delinquent first-lien mortgage pertains to the same property for which we hold a junior-lien loan. For certain loans, we utilize a third-party vendor to combine credit bureau and public record data to better link a junior-lien loan with the underlying first-lien mortgage. At December 31, 2015, we estimate that $1.2 billion of current and $157 million of 30 to 89 days past due junior-lien loans were behind a delinquent first-lien loan. We service the first-lien loans on $193 million of these combined amounts, with the remaining $1.1 billion serviced by third parties. Of the $1.3 billion of current to 89 days past due junior-lien loans, based on available credit bureau data and our own internal servicing data, we estimate that $484 million had first-lien loans that were 90 days or more past due.

Net charge-offs decreased $271 million to $636 million, or 0.84 percent of the total average home equity portfolio in 2015, compared to $907 million, or 1.09 percent, in 2014. The decrease in net charge-offs was primarily driven by favorable portfolio trends due in part to improvement in home prices and the U.S. economy, and lower charge-offs related to the consumer relief portion of the DoJ Settlement, partially offset by lower recoveries.

Outstanding balances in the home equity portfolio with greater than 90 percent but less than or equal to 100 percent refreshed

combined loan-to-value (CLTV) comprised six percent and seven percent of the home equity portfolio at December 31, 2015 and 2014. Outstanding balances with refreshed CLTV greater than 100 percent comprised 11 percent and 14 percent of the home equity portfolio at December 31, 2015 and 2014. Outstanding balances in the home equity portfolio with a refreshed CLTV greater than 100 percent reflect loans where our loan and available line of credit combined with any outstanding senior liens against the property are equal to or greater than the most recent valuation of the property securing the loan. Depending on the value of the property, there may be collateral in excess of the first-lien that is available to reduce the severity of loss on the second-lien. Of those outstanding balances with a refreshed CLTV greater than 100 percent, 96 percent of the customers were current on their home equity loan and 92 percent of second-lien loans with a refreshed CLTV greater than 100 percent were current on both their second-lien and underlying first-lien loans at December 31, 2015. Outstanding balances in the home equity portfolio to borrowers with a refreshed FICO score below 620 represented seven percent of the home equity portfolio at both December 31, 2015 and 2014.

Of the $71.3 billion in total home equity portfolio outstandings at December 31, 2015, as shown in Table 29, 66 percent were interest-only loans, almost all of which were HELOCs. The outstanding balance of HELOCs that have entered the amortization period was $9.7 billion, or 15 percent of total HELOCs at December 31, 2015. The HELOCs that have entered the amortization period have experienced a higher percentage of early stage delinquencies and nonperforming status when compared to the HELOC portfolio as a whole. At December 31, 2015, $226 million, or two percent of outstanding HELOCs that had entered the amortization period were accruing past due 30 days or more compared to $561 million, or one percent for the entire HELOC portfolio. In addition, at December 31, 2015, $1.3 billion, or 14 percent of outstanding HELOCs that had entered the amortization period were nonperforming, of which $507 million were contractually current, compared to $3.1 billion, or five percent for the entire HELOC portfolio, of which $1.2 billion were contractually current. Loans in our HELOC portfolio generally have an initial draw period of 10 years and 44 percent of these loans will enter the amortization period in 2016 and 2017 and will be required to make fully-amortizing payments. We communicate to contractually current customers more than a year prior to the end of their draw period to inform them of the potential change to the payment structure before entering the amortization period, and provide payment options to customers prior to the end of the draw period.

Although we do not actively track how many of our home equity customers pay only the minimum amount due on their home equity loans and lines, we can infer some of this information through a review of our HELOC portfolio that we service and that is still in its revolving period (i.e., customers may draw on and repay their line of credit, but are generally only required to pay interest on a monthly basis). During 2015, approximately 39 percent of these customers with an outstanding balance did not pay any principal on their HELOCs.

Table 29 presents outstandings, nonperforming balances and net charge-offs by certain state concentrations for the home equity portfolio. In the New York area, the New York-Northern New Jersey-Long Island MSA made up 13 percent and 12 percent of the outstanding home equity portfolio at December 31, 2015 and 2014. Loans within this MSA contributed 13 percent and 14 percent of net charge-offs in 2015 and 2014 within the home equity portfolio. The Los Angeles-Long Beach-Santa Ana MSA within California made up 12 percent of the outstanding home equity portfolio at both December 31, 2015 and 2014. Loans within this MSA contributed two percent and four percent of net charge-offs in 2015 and 2014 within the home equity portfolio.

Table 29 Home Equity State Concentrations

	December 31					
	Outstandings [1]		Nonperforming [1]		Net Charge-offs [2]	
(Dollars in millions)	**2015**	2014	**2015**	2014	**2015**	2014
California	**$ 20,356**	$ 23,250	**$ 902**	$ 1,012	**$ 57**	$ 118
Florida [3]	**8,474**	9,633	**518**	574	**128**	170
New Jersey [3]	**5,570**	5,883	**230**	299	**51**	68
New York [3]	**5,249**	5,671	**316**	387	**61**	81
Massachusetts	**3,378**	3,655	**115**	148	**17**	30
Other U.S./Non-U.S.	**28,302**	32,016	**1,256**	1,481	**322**	440
Home equity loans [4]	**$ 71,329**	$ 80,108	**$ 3,337**	$ 3,901	**$ 636**	$ 907
Purchased credit-impaired home equity portfolio [5]	**4,619**	5,617				
Total home equity loan portfolio	**$ 75,948**	$ 85,725				

(1) Outstandings and nonperforming loans exclude loans accounted for under the fair value option.
(2) Net charge-offs exclude $174 million of write-offs in the home equity PCI loan portfolio in 2015 compared to $265 million in 2014. For more information on PCI write-offs, see Consumer Portfolio Credit Risk Management – Purchased Credit-impaired Loan Portfolio on page 52.
(3) In these states, foreclosure requires a court order following a legal proceeding (judicial states).
(4) Amount excludes the PCI home equity portfolio.
(5) Twenty-nine percent of PCI home equity loans were in California at both December 31, 2015 and 2014. There were no other significant single state concentrations.

Purchased Credit-impaired Loan Portfolio

Loans acquired with evidence of credit quality deterioration since origination and for which it is probable at purchase that we will be unable to collect all contractually required payments are accounted for under the accounting guidance for PCI loans, which addresses accounting for differences between contractual and expected cash flows to be collected from the purchaser's initial investment in loans if those differences are attributable, at least in part, to credit quality. For more information on PCI loans, see *Note 1 – Summary of Significant Accounting Principles* to the Consolidated Financial Statements.

Table 30 presents the unpaid principal balance, carrying value, related valuation allowance and the net carrying value as a percentage of the unpaid principal balance for the PCI loan portfolio.

Table 30 Purchased Credit-impaired Loan Portfolio

(Dollars in millions)	Unpaid Principal Balance	Gross Carrying Value	Related Valuation Allowance	Carrying Value Net of Valuation Allowance	Percent of Unpaid Principal Balance
	December 31, 2015				
Residential mortgage	$ 12,350	$ 12,066	$ 338	$ 11,728	94.96%
Home equity	4,650	4,619	466	4,153	89.31
Total purchased credit-impaired loan portfolio	$ 17,000	$ 16,685	$ 804	$ 15,881	93.42
	December 31, 2014				
Residential mortgage	$ 15,726	$ 15,152	$ 880	$ 14,272	90.75%
Home equity	5,605	5,617	772	4,845	86.44
Total purchased credit-impaired loan portfolio	$ 21,331	$ 20,769	$ 1,652	$ 19,117	89.62

The total PCI unpaid principal balance decreased $4.3 billion, or 20 percent, in 2015 primarily driven by sales, payoffs, paydowns and write-offs. During 2015, we sold PCI loans with a carrying value of $1.4 billion compared to sales of $1.9 billion in 2014.

Of the unpaid principal balance of $17.0 billion at December 31, 2015, $14.7 billion, or 86 percent, was current based on the contractual terms, $1.2 billion, or seven percent, was in early stage delinquency, and $800 million was 180 days or more past due, including $707 million of first-lien mortgages and $93 million of home equity loans.

During 2015, we recorded a provision benefit of $40 million for the PCI loan portfolio which included an expense of $92 million for residential mortgage and a benefit of $132 million for home equity. This compared to a total provision benefit of $31 million in 2014. The provision benefit in 2015 was primarily driven by lower default estimates.

The PCI valuation allowance declined $848 million during 2015 due to write-offs in the PCI loan portfolio of $634 million in residential mortgage and $174 million in home equity, combined with a provision benefit of $40 million.

Purchased Credit-impaired Residential Mortgage Loan Portfolio

The PCI residential mortgage loan portfolio represented 72 percent of the total PCI loan portfolio at December 31, 2015. Those loans to borrowers with a refreshed FICO score below 620 represented 31 percent of the PCI residential mortgage loan portfolio at December 31, 2015. Loans with a refreshed LTV greater than 90 percent, after consideration of purchase accounting adjustments and the related valuation allowance, represented 28 percent of the PCI residential mortgage loan portfolio and 33 percent based on the unpaid principal balance at December 31, 2015.

Pay option adjustable-rate mortgages, which are included in the PCI residential mortgage portfolio, have interest rates that adjust monthly and minimum required payments that adjust annually. During an initial five- or ten-year period, minimum required payments may increase by no more than 7.5 percent. If payments are insufficient to pay all of the monthly interest charges, unpaid interest is added to the loan balance (i.e., negative amortization) until the loan balance increases to a specified limit, at which time a new monthly payment amount adequate to repay the loan over its remaining contractual life is established.

At December 31, 2015, the unpaid principal balance of pay option loans was $2.4 billion, with a carrying value of $2.3 billion. The total unpaid principal balance of pay option loans with accumulated negative amortization was $503 million, including $28 million of negative amortization. We believe the majority of borrowers that are now making scheduled payments are able to do so primarily because the low rate environment has caused the fully indexed rates to be affordable to more borrowers. We continue to evaluate our exposure to payment resets on the acquired negative-amortizing loans and have taken into consideration several assumptions including prepayment and default rates. Of the loans in the pay option portfolio at December 31, 2015 that have not already experienced a payment reset, 54 percent are expected to reset in 2016 and 22 percent are expected to reset thereafter. In addition, four percent are expected to prepay and approximately 20 percent are expected to default prior to being reset, most of which were severely delinquent as of December 31, 2015. We no longer originate pay option loans.

Purchased Credit-impaired Home Equity Loan Portfolio

The PCI home equity portfolio represented 28 percent of the total PCI loan portfolio at December 31, 2015. Those loans with a refreshed FICO score below 620 represented 16 percent of the PCI home equity portfolio at December 31, 2015. Loans with a refreshed CLTV greater than 90 percent, after consideration of purchase accounting adjustments and the related valuation allowance, represented 57 percent of the PCI home equity portfolio and 60 percent based on the unpaid principal balance at December 31, 2015.

U.S. Credit Card

At December 31, 2015, 97 percent of the U.S. credit card portfolio was managed in *Consumer Banking* with the remainder managed in *GWIM*. Outstandings in the U.S. credit card portfolio decreased $2.3 billion in 2015 due to portfolio divestitures. Net charge-offs decreased $324 million to $2.3 billion in 2015 due to improvements in delinquencies and bankruptcies as a result of an improved economic environment and the impact of higher credit quality originations. U.S. credit card loans 30 days or more past due and still accruing interest decreased $126 million while loans 90 days or more past due and still accruing interest decreased $77 million in 2015 as a result of the factors mentioned above that contributed to lower net charge-offs.

Unused lines of credit for U.S. credit card totaled $312.5 billion and $305.9 billion at December 31, 2015 and 2014. The $6.6 billion increase was driven by account growth and line of credit increases.

Table 31 presents certain key credit statistics for the U.S. credit card portfolio.

Table 31 U.S. Credit Card – Key Credit Statistics

	December 31	
(Dollars in millions)	**2015**	2014
Outstandings	**$ 89,602**	$ 91,879
Accruing past due 30 days or more	**1,575**	1,701
Accruing past due 90 days or more	**789**	866
	2015	2014
Net charge-offs	**$ 2,314**	$ 2,638
Net charge-off ratios [1]	**2.62%**	2.96%

[1] Net charge-off ratios are calculated as net charge-offs divided by average outstanding loans.

Table 32 presents certain state concentrations for the U.S. credit card portfolio.

Table 32 U.S. Credit Card State Concentrations

	December 31					
	Outstandings		Accruing Past Due 90 Days or More		Net Charge-offs	
(Dollars in millions)	**2015**	2014	**2015**	2014	**2015**	2014
California	**$ 13,658**	$ 13,682	**$ 115**	$ 127	**$ 358**	$ 414
Florida	**7,420**	7,530	**81**	89	**244**	278
Texas	**6,620**	6,586	**58**	58	**157**	177
New York	**5,547**	5,655	**57**	59	**162**	174
Washington	**3,907**	3,907	**19**	22	**59**	71
Other U.S.	**52,450**	54,519	**459**	511	**1,334**	1,524
Total U.S. credit card portfolio	**$ 89,602**	$ 91,879	**$ 789**	$ 866	**$ 2,314**	$ 2,638

Non-U.S. Credit Card

Outstandings in the non-U.S. credit card portfolio, which are recorded in *All Other*, decreased $490 million in 2015 due to a weakening of the British Pound against the U.S. Dollar. Net charge-offs decreased $54 million to $188 million in 2015 due to improvement in delinquencies as a result of higher credit quality originations and an improved economic environment.

Unused lines of credit for non-U.S. credit card totaled $27.9 billion and $28.2 billion at December 31, 2015 and 2014. The $271 million decrease was driven by weakening of the British Pound against the U.S. Dollar, partially offset by account growth and lines of credit increases.

Table 33 presents certain key credit statistics for the non-U.S. credit card portfolio.

Table 33 Non-U.S. Credit Card – Key Credit Statistics

	December 31	
(Dollars in millions)	**2015**	2014
Outstandings	**$ 9,975**	$ 10,465
Accruing past due 30 days or more	**146**	183
Accruing past due 90 days or more	**76**	95
	2015	2014
Net charge-offs	**$ 188**	$ 242
Net charge-off ratios [1]	**1.86%**	2.10%

[1] Net charge-off ratios are calculated as net charge-offs divided by average outstanding loans.

Direct/Indirect Consumer

At December 31, 2015, approximately 50 percent of the direct/indirect portfolio was included in *GWIM* (principally securities-based lending loans), 49 percent was included in *Consumer Banking* (consumer auto and specialty lending – automotive, marine, aircraft, recreational vehicle loans and consumer personal loans) and the remainder was primarily student loans in *All Other*.

Outstandings in the direct/indirect portfolio increased $8.4 billion in 2015 as growth in the consumer auto portfolio and growth in securities-based lending were partially offset by lower outstandings in the unsecured consumer lending portfolio.

Net charge-offs decreased $57 million to $112 million in 2015, or 0.13 percent of total average direct/indirect loans, compared to $169 million, or 0.20 percent, in 2014. This decrease in net charge-offs was primarily driven by improvements in delinquencies and bankruptcies in the unsecured consumer lending portfolio as a result of an improved economic environment as well as reduced outstandings in this portfolio.

Direct/indirect loans that were past due 90 days or more and still accruing interest declined $25 million to $39 million in 2015 due to decreases in the unsecured consumer lending, and consumer auto and specialty lending portfolios.

Table 34 presents certain state concentrations for the direct/indirect consumer loan portfolio.

Table 34 Direct/Indirect State Concentrations

	December 31					
	Outstandings		Accruing Past Due 90 Days or More		Net Charge-offs	
(Dollars in millions)	2015	2014	2015	2014	2015	2014
California	$ 10,735	$ 9,770	$ 3	$ 5	$ 8	$ 18
Florida	8,835	7,930	3	5	20	27
Texas	8,514	7,741	4	5	17	19
New York	5,077	4,458	1	2	3	9
Illinois	2,906	2,550	1	2	3	5
Other U.S./Non-U.S.	52,728	47,932	27	45	61	91
Total direct/indirect loan portfolio	$ 88,795	$ 80,381	$ 39	$ 64	$ 112	$ 169

Other Consumer

At December 31, 2015, approximately 66 percent of the $2.1 billion other consumer portfolio was consumer auto leases included in *Consumer Banking*. The remainder is primarily associated with certain consumer finance businesses that we previously exited.

Nonperforming Consumer Loans, Leases and Foreclosed Properties Activity

Table 35 presents nonperforming consumer loans, leases and foreclosed properties activity during 2015 and 2014. Nonperforming LHFS are excluded from nonperforming loans as they are recorded at either fair value or the lower of cost or fair value. Nonperforming loans do not include past due consumer credit card loans, other unsecured loans and in general, consumer non-real estate-secured loans (loans discharged in Chapter 7 bankruptcy are included) as these loans are typically charged off no later than the end of the month in which the loan becomes 180 days past due. The charge-offs on these loans have no impact on nonperforming activity and, accordingly, are excluded from this table. The fully-insured loan portfolio is not reported as nonperforming as principal repayment is insured. Additionally, nonperforming loans do not include the PCI loan portfolio or loans accounted for under the fair value option. For more information on nonperforming loans, see *Note 1 – Summary of Significant Accounting Principles* to the Consolidated Financial Statements. During 2015, nonperforming consumer loans declined $2.7 billion to $8.2 billion and included the impact of sales of $1.7 billion, partially offset by a net increase of $186 million related to the impact of the consumer relief portion of the DoJ Settlement for those loans that are no longer fully insured. Excluding these, nonperforming loans declined as outflows, including the transfer of certain qualifying borrowers discharged in a Chapter 7 bankruptcy to performing status, outpaced new inflows.

The outstanding balance of a real estate-secured loan that is in excess of the estimated property value less costs to sell is charged off no later than the end of the month in which the loan becomes 180 days past due unless repayment of the loan is fully insured. At December 31, 2015, $3.8 billion, or 44 percent of nonperforming consumer real estate loans and foreclosed properties had been written down to their estimated property value less costs to sell, including $3.3 billion of nonperforming loans 180 days or more past due and $444 million of foreclosed properties. In addition, at December 31, 2015, $3.0 billion, or 35 percent of nonperforming consumer loans were modified and are now current after successful trial periods, or are current loans classified as nonperforming loans in accordance with applicable policies.

Foreclosed properties decreased $186 million in 2015 as liquidations outpaced additions. PCI loans are excluded from nonperforming loans as these loans were written down to fair value at the acquisition date; however, once the underlying real estate is acquired by the Corporation upon foreclosure of the delinquent PCI loan, it is included in foreclosed properties. PCI-related foreclosed properties increased $39 million in 2015. Not included in foreclosed properties at December 31, 2015 was $1.4 billion of real estate that was acquired upon foreclosure of certain delinquent government-guaranteed loans (principally FHA-insured loans). We exclude these amounts from our nonperforming loans and foreclosed properties activity as we expect we will be reimbursed once the property is conveyed to the guarantor for principal and, up to certain limits, costs incurred during the foreclosure process and interest incurred during the holding period.

Restructured Loans

Nonperforming loans also include certain loans that have been modified in TDRs where economic concessions have been granted to borrowers experiencing financial difficulties. These concessions typically result from the Corporation's loss mitigation activities and could include reductions in the interest rate, payment extensions, forgiveness of principal, forbearance or other actions. Certain TDRs are classified as nonperforming at the time of restructuring and may only be returned to performing status after considering the borrower's sustained repayment performance for a reasonable period, generally six months. Nonperforming TDRs, excluding those modified loans in the PCI loan portfolio, are included in Table 35.

Table 35 Nonperforming Consumer Loans, Leases and Foreclosed Properties Activity (1)

(Dollars in millions)	2015	2014
Nonperforming loans and leases, January 1	**$ 10,819**	$ 15,840
Additions to nonperforming loans and leases:		
New nonperforming loans and leases	**4,949**	7,077
Reductions to nonperforming loans and leases:		
Paydowns and payoffs	**(1,018)**	(1,625)
Sales	**(1,674)**	(4,129)
Returns to performing status [2]	**(2,710)**	(3,277)
Charge-offs	**(1,769)**	(2,187)
Transfers to foreclosed properties [3]	**(432)**	(672)
Transfers to loans held-for-sale	**—**	(208)
Total net reductions to nonperforming loans and leases	**(2,654)**	(5,021)
Total nonperforming loans and leases, December 31 [4, 5]	**8,165**	10,819
Foreclosed properties, January 1	**630**	533
Additions to foreclosed properties:		
New foreclosed properties [3]	**606**	1,011
Reductions to foreclosed properties:		
Sales	**(686)**	(829)
Write-downs	**(106)**	(85)
Total net additions (reductions) to foreclosed properties	**(186)**	97
Total foreclosed properties, December 31 [6]	**444**	630
Nonperforming consumer loans, leases and foreclosed properties, December 31	**$ 8,609**	$ 11,449
Nonperforming consumer loans and leases as a percentage of outstanding consumer loans and leases [7]	**1.80%**	2.22%
Nonperforming consumer loans, leases and foreclosed properties as a percentage of outstanding consumer loans, leases and foreclosed properties [7]	**1.89**	2.35

(1) Balances do not include nonperforming LHFS of $5 million and $7 million and nonaccruing TDRs removed from the PCI loan portfolio prior to January 1, 2010 of $38 million and $102 million at December 31, 2015 and 2014 as well as loans accruing past due 90 days or more as presented in Table 23 and *Note 4 – Outstanding Loans and Leases* to the Consolidated Financial Statements.

(2) Consumer loans may be returned to performing status when all principal and interest is current and full repayment of the remaining contractual principal and interest is expected, or when the loan otherwise becomes well-secured and is in the process of collection.

(3) New foreclosed properties represents transfers of nonperforming loans to foreclosed properties net of charge-offs taken during the first 90 days after transfer of a loan to foreclosed properties. New foreclosed properties also includes properties obtained upon foreclosure of delinquent PCI loans, properties repurchased due to representations and warranties exposure and properties acquired with newly consolidated subsidiaries.

(4) In 2015, $1.4 billion in interest income was estimated to be contractually current on $8.2 billion of consumer loans and leases classified as nonperforming, at December 31, 2015, as presented in the table above, plus $16.9 billion of TDRs classified as performing at December 31, 2015. Approximately $773 million of the estimated $1.4 billion in contractual interest was received and included in interest income for 2015.

(5) At December 31, 2015, 41 percent of nonperforming loans were 180 days or more past due.

(6) Foreclosed property balances do not include properties insured by certain government-guaranteed loans, principally FHA-insured loans, of $1.4 billion and $1.1 billion at December 31, 2015 and 2014.

(7) Outstanding consumer loans and leases exclude loans accounted for under the fair value option.

Our policy is to record any losses in the value of foreclosed properties as a reduction in the allowance for loan and lease losses during the first 90 days after transfer of a loan to foreclosed properties. Thereafter, further losses in value as well as gains and losses on sale are recorded in noninterest expense. New foreclosed properties included in Table 35 are net of $162 million and $191 million of charge-offs and write-offs of PCI loans in 2015 and 2014, recorded during the first 90 days after transfer.

We classify junior-lien home equity loans as nonperforming when the first-lien loan becomes 90 days past due even if the junior-lien loan is performing. At December 31, 2015 and 2014, $484 million and $800 million of such junior-lien home equity loans were included in nonperforming loans and leases. This decline was driven by overall portfolio improvement as well as $75 million of charge-offs related to the consumer relief portion of the DoJ Settlement.

Table 36 presents TDRs for the consumer real estate portfolio. Performing TDR balances are excluded from nonperforming loans and leases in Table 35.

Table 36 Consumer Real Estate Troubled Debt Restructurings

	December 31					
	2015			2014		
(Dollars in millions)	Total	Nonperforming	Performing	Total	Nonperforming	Performing
Residential mortgage [1, 2]	$ 18,372	$ 3,284	$ 15,088	$ 23,270	$ 4,529	$ 18,741
Home equity [3]	2,686	1,649	1,037	2,358	1,595	763
Total consumer real estate troubled debt restructurings	**$ 21,058**	**$ 4,933**	**$ 16,125**	$ 25,628	$ 6,124	$ 19,504

(1) Residential mortgage TDRs deemed collateral dependent totaled $4.9 billion and $5.8 billion, and included $2.7 billion and $3.6 billion of loans classified as nonperforming and $2.2 billion and $2.2 billion of loans classified as performing at December 31, 2015 and 2014.
(2) Residential mortgage performing TDRs included $8.7 billion and $11.9 billion of loans that were fully-insured at December 31, 2015 and 2014.
(3) Home equity TDRs deemed collateral dependent totaled $1.6 billion and $1.6 billion, and included $1.3 billion and $1.4 billion of loans classified as nonperforming and $290 million and $178 million of loans classified as performing at December 31, 2015 and 2014.

In addition to modifying consumer real estate loans, we work with customers who are experiencing financial difficulty by modifying credit card and other consumer loans. Credit card and other consumer loan modifications generally involve a reduction in the customer's interest rate on the account and placing the customer on a fixed payment plan not exceeding 60 months, all of which are considered TDRs (the renegotiated TDR portfolio). In addition, the accounts of non-U.S. credit card customers who do not qualify for a fixed payment plan may have their interest rates reduced, as required by certain local jurisdictions. These modifications, which are also TDRs, tend to experience higher payment default rates given that the borrowers may lack the ability to repay even with the interest rate reduction. In all cases, the customer's available line of credit is canceled.

Modifications of credit card and other consumer loans are primarily made through internal renegotiation programs utilizing direct customer contact, but may also utilize external renegotiation programs. The renegotiated TDR portfolio is excluded in large part from Table 35 as substantially all of the loans remain on accrual status until either charged off or paid in full. At December 31, 2015 and 2014, our renegotiated TDR portfolio was $779 million and $1.1 billion, of which $635 million and $907 million were current or less than 30 days past due under the modified terms. The decline in the renegotiated TDR portfolio was primarily driven by paydowns and charge-offs as well as lower program enrollments. For more information on the renegotiated TDR portfolio, see *Note 4 – Outstanding Loans and Leases* to the Consolidated Financial Statements.

Commercial Portfolio Credit Risk Management

Credit risk management for the commercial portfolio begins with an assessment of the credit risk profile of the borrower or counterparty based on an analysis of its financial position. As part of the overall credit risk assessment, our commercial credit exposures are assigned a risk rating and are subject to approval based on defined credit approval standards. Subsequent to loan origination, risk ratings are monitored on an ongoing basis, and if necessary, adjusted to reflect changes in the financial condition, cash flow, risk profile or outlook of a borrower or counterparty. In making credit decisions, we consider risk rating, collateral, country, industry and single name concentration limits while also balancing this with the total borrower or counterparty relationship. Our business and risk management personnel use a variety of tools to continuously monitor the ability of a borrower or counterparty to perform under its obligations. We use risk rating aggregations to measure and evaluate concentrations within portfolios. In addition, risk ratings are a factor in determining the level of allocated capital and the allowance for credit losses.

As part of our ongoing risk mitigation initiatives, we attempt to work with clients experiencing financial difficulty to modify their loans to terms that better align with their current ability to pay. In situations where an economic concession has been granted to a borrower experiencing financial difficulty, we identify these loans as TDRs. For more information on our accounting policies regarding delinquencies, nonperforming status and net charge-offs for the commercial portfolio, see *Note 1 – Summary of Significant Accounting Principles* to the Consolidated Financial Statements.

Management of Commercial Credit Risk Concentrations

Commercial credit risk is evaluated and managed with the goal that concentrations of credit exposure do not result in undesirable levels of risk. We review, measure and manage concentrations of credit exposure by industry, product, geography, customer relationship and loan size. We also review, measure and manage commercial real estate loans by geographic location and property type. In addition, within our non-U.S. portfolio, we evaluate exposures by region and by country. Tables 41, 46, 52 and 53 summarize our concentrations. We also utilize syndications of exposure to third parties, loan sales, hedging and other risk mitigation techniques to manage the size and risk profile of the commercial credit portfolio. For more information on our industry concentrations, including our utilized exposure to the energy sector which was two percent of total loans and leases at December 31, 2015, see Commercial Portfolio Credit Risk Management – Industry Concentrations on page 62 and Table 46.

We account for certain large corporate loans and loan commitments, including issued but unfunded letters of credit which are considered utilized for credit risk management purposes, that exceed our single name credit risk concentration guidelines under the fair value option. Lending commitments, both funded and unfunded, are actively managed and monitored, and as appropriate, credit risk for these lending relationships may be mitigated through the use of credit derivatives, with the Corporation's credit view and market perspectives determining the size and timing of the hedging activity. In addition, we purchase credit protection to cover the funded portion as well as the unfunded portion of certain other credit exposures. To lessen the cost of obtaining our desired credit protection levels, credit exposure may be added within an industry, borrower or counterparty group by selling protection. These credit derivatives do not meet the requirements for treatment as accounting hedges.

They are carried at fair value with changes in fair value recorded in other income (loss).

In addition, the Corporation is a member of various securities and derivative exchanges and clearinghouses, both in the U.S. and other countries. As a member, the Corporation may be required to pay a pro-rata share of the losses incurred by some of these organizations as a result of another member default and under other loss scenarios. For additional information, see *Note 12 – Commitments and Contingencies* to the Consolidated Financial Statements.

Commercial Credit Portfolio

During 2015, credit quality among large corporate borrowers remained stable except in the energy sector which experienced some deterioration due to the sustained drop in oil prices. Credit quality of commercial real estate borrowers continued to improve as property valuations increased and vacancy rates remained low.

Outstanding commercial loans and leases increased $53.3 billion, primarily in U.S. commercial, non-U.S. commercial and commercial real estate. Nonperforming commercial loans and leases increased $112 million during 2015. Nonperforming commercial loans and leases as a percentage of outstanding loans and leases, excluding loans accounted for under the fair value option, decreased during 2015 to 0.28 percent from 0.29 percent at December 31, 2014. Reservable criticized balances increased $4.7 billion to $15.9 billion during 2015 as a result of downgrades outpacing paydowns and upgrades. The increase in reservable criticized balances was primarily due to our energy exposure as the credit quality of certain borrowers was impacted by the sustained drop in oil prices. The allowance for loan and lease losses for the commercial portfolio increased $412 million to $4.8 billion at December 31, 2015 compared to December 31, 2014. For additional information, see Allowance for Credit Losses on page 67.

Table 37 presents our commercial loans and leases portfolio, and related credit quality information at December 31, 2015 and 2014.

Table 37 Commercial Loans and Leases

	December 31					
	Outstandings		Nonperforming		Accruing Past Due 90 Days or More	
(Dollars in millions)	**2015**	2014	**2015**	2014	**2015**	2014
U.S. commercial	**$ 252,771**	$ 220,293	**$ 867**	$ 701	**$ 113**	$ 110
Commercial real estate [1]	**57,199**	47,682	**93**	321	**3**	3
Commercial lease financing	**21,352**	19,579	**12**	3	**15**	40
Non-U.S. commercial	**91,549**	80,083	**158**	1	**1**	—
	422,871	367,637	**1,130**	1,026	**132**	153
U.S. small business commercial [2]	**12,876**	13,293	**82**	87	**61**	67
Commercial loans excluding loans accounted for under the fair value option	**435,747**	380,930	**1,212**	1,113	**193**	220
Loans accounted for under the fair value option [3]	**5,067**	6,604	**13**	—	**—**	—
Total commercial loans and leases	**$ 440,814**	$ 387,534	**$ 1,225**	$ 1,113	**$ 193**	$ 220

[1] Includes U.S. commercial real estate loans of $53.6 billion and $45.2 billion and non-U.S. commercial real estate loans of $3.5 billion and $2.5 billion at December 31, 2015 and 2014.
[2] Includes card-related products.
[3] Commercial loans accounted for under the fair value option include U.S. commercial loans of $2.3 billion and $1.9 billion and non-U.S. commercial loans of $2.8 billion and $4.7 billion at December 31, 2015 and 2014. For more information on the fair value option, see *Note 21 – Fair Value Option* to the Consolidated Financial Statements.

Table 38 presents net charge-offs and related ratios for our commercial loans and leases for 2015 and 2014. The increase in net charge-offs of $110 million in 2015 was primarily related to higher recoveries in commercial real estate in 2014 and higher energy sector related losses in 2015.

Table 38 Commercial Net Charge-offs and Related Ratios

	Net Charge-offs		Net Charge-off Ratios [1]	
(Dollars in millions)	**2015**	2014	**2015**	2014
U.S. commercial	**$ 139**	$ 88	**0.06%**	0.04%
Commercial real estate	**(5)**	(83)	**(0.01)**	(0.18)
Commercial lease financing	**9**	(9)	**0.04**	(0.04)
Non-U.S. commercial	**54**	34	**0.06**	0.04
	197	30	**0.05**	0.01
U.S. small business commercial	**225**	282	**1.71**	2.10
Total commercial	**$ 422**	$ 312	**0.10**	0.08

[1] Net charge-off ratios are calculated as net charge-offs divided by average outstanding loans and leases excluding loans accounted for under the fair value option.

Table 39 presents commercial credit exposure by type for utilized, unfunded and total binding committed credit exposure. Commercial utilized credit exposure includes SBLCs and financial guarantees, bankers' acceptances and commercial letters of credit for which we are legally bound to advance funds under prescribed conditions, during a specified time period. Although funds have not yet been advanced, these exposure types are considered utilized for credit risk management purposes.

Total commercial utilized credit exposure increased $52.9 billion in 2015 primarily driven by growth in loans and leases. The utilization rate for loans and leases, SBLCs and financial guarantees, commercial letters of credit and bankers acceptances, in the aggregate, was 56 percent and 57 percent at December 31, 2015 and 2014.

Table 39 Commercial Credit Exposure by Type

	December 31					
	Commercial Utilized [1]		Commercial Unfunded [2, 3]		Total Commercial Committed	
(Dollars in millions)	**2015**	2014	**2015**	2014	**2015**	2014
Loans and leases [4]	**$ 446,832**	$ 392,821	**$ 376,478**	$ 317,258	**$ 823,310**	$ 710,079
Derivative assets [5]	**49,990**	52,682	**—**	—	**49,990**	52,682
Standby letters of credit and financial guarantees	**33,236**	33,550	**690**	745	**33,926**	34,295
Debt securities and other investments	**21,709**	17,301	**4,173**	5,315	**25,882**	22,616
Loans held-for-sale	**5,456**	7,036	**1,203**	2,315	**6,659**	9,351
Commercial letters of credit	**1,725**	2,037	**390**	126	**2,115**	2,163
Bankers' acceptances	**298**	255	**—**	—	**298**	255
Foreclosed properties and other	**317**	960	**—**	—	**317**	960
Total	**$ 559,563**	$ 506,642	**$ 382,934**	$ 325,759	**$ 942,497**	$ 832,401

[1] Total commercial utilized exposure includes loans of $5.1 billion and $6.6 billion and issued letters of credit with a notional amount of $290 million and $535 million accounted for under the fair value option at December 31, 2015 and 2014.
[2] Total commercial unfunded exposure includes loan commitments accounted for under the fair value option with a notional amount of $10.6 billion and $9.4 billion at December 31, 2015 and 2014.
[3] Excludes unused business card lines which are not legally binding.
[4] Includes risk exposure associated with assets under operating lease arrangements of $6.0 billion and $5.3 billion at December 31, 2015 and 2014.
[5] Derivative assets are carried at fair value, reflect the effects of legally enforceable master netting agreements and have been reduced by cash collateral of $41.9 billion and $47.3 billion at December 31, 2015 and 2014. Not reflected in utilized and committed exposure is additional non-cash derivative collateral held of $23.3 billion and $23.8 billion which consists primarily of other marketable securities.

Table 40 presents commercial utilized reservable criticized exposure by loan type. Criticized exposure corresponds to the Special Mention, Substandard and Doubtful asset categories as defined by regulatory authorities. Total commercial utilized reservable criticized exposure increased $4.7 billion, or 42 percent, in 2015 driven by downgrades primarily related to our energy exposure outpacing paydowns and upgrades. Approximately 78 percent and 87 percent of commercial utilized reservable criticized exposure was secured at December 31, 2015 and 2014.

Table 40 Commercial Utilized Reservable Criticized Exposure

	December 31			
	2015		2014	
(Dollars in millions)	**Amount [1]**	**Percent [2]**	Amount [1]	Percent [2]
U.S. commercial	**$ 9,965**	**3.56%**	$ 7,597	3.07%
Commercial real estate	**513**	**0.87**	1,108	2.24
Commercial lease financing	**708**	**3.31**	697	3.56
Non-U.S. commercial	**3,944**	**4.04**	887	1.03
	15,130	**3.30**	10,289	2.55
U.S. small business commercial	**766**	**5.95**	944	7.10
Total commercial utilized reservable criticized exposure	**$ 15,896**	**3.38**	$ 11,233	2.70

[1] Total commercial utilized reservable criticized exposure includes loans and leases of $14.5 billion and $9.9 billion and commercial letters of credit of $1.4 billion and $1.3 billion at December 31, 2015 and 2014.
[2] Percentages are calculated as commercial utilized reservable criticized exposure divided by total commercial utilized reservable exposure for each exposure category.

U.S. Commercial

At December 31, 2015, 70 percent of the U.S. commercial loan portfolio, excluding small business, was managed in *Global Banking*, 17 percent in *Global Markets*, 10 percent in *GWIM* (generally business-purpose loans for high net worth clients) and the remainder primarily in *Consumer Banking*. U.S. commercial loans, excluding loans accounted for under the fair value option, increased $32.5 billion, or 15 percent, during 2015 due to growth across all of the commercial businesses. Nonperforming loans and leases increased $166 million, or 24 percent, in 2015, largely related to our energy exposure. Net charge-offs increased $51 million to $139 million during 2015.

Commercial Real Estate

Commercial real estate primarily includes commercial loans and leases secured by non-owner-occupied real estate and is dependent on the sale or lease of the real estate as the primary source of repayment. The portfolio remains diversified across property types and geographic regions. California represented the largest state concentration at 21 percent and 22 percent of the commercial real estate loans and leases portfolio at December 31, 2015 and 2014. The commercial real estate portfolio is predominantly managed in *Global Banking* and consists of loans made primarily to public and private developers, and commercial real estate firms. Outstanding loans increased $9.5 billion, or 20 percent, during 2015 due to new originations primarily in major metropolitan markets.

During 2015, we continued to see improvements in credit quality in both the residential and non-residential portfolios. We use a number of proactive risk mitigation initiatives to reduce adversely rated exposure in the commercial real estate portfolio including transfers of deteriorating exposures to management by independent special asset officers and the pursuit of loan restructurings or asset sales to achieve the best results for our customers and the Corporation.

Nonperforming commercial real estate loans and foreclosed properties decreased $280 million, or 72 percent, and reservable criticized balances decreased $595 million, or 54 percent, during 2015. The decrease in reservable criticized balances was primarily due to loan resolutions and strong commercial real estate fundamentals throughout the year. Net recoveries were $5 million in 2015 compared to net recoveries of $83 million in 2014.

Table 41 presents outstanding commercial real estate loans by geographic region, based on the geographic location of the collateral, and by property type.

Table 41 Outstanding Commercial Real Estate Loans

(Dollars in millions)	December 31 2015	2014
By Geographic Region		
California	**$ 12,063**	$ 10,352
Northeast	**10,292**	8,781
Southwest	**7,789**	6,570
Southeast	**6,066**	5,495
Midwest	**3,780**	2,867
Florida	**3,330**	2,520
Illinois	**2,536**	2,785
Midsouth	**2,435**	1,724
Northwest	**2,327**	2,151
Non-U.S.	**3,549**	2,494
Other [1]	**3,032**	1,943
Total outstanding commercial real estate loans	**$ 57,199**	$ 47,682
By Property Type		
Non-residential		
Office	**$ 15,246**	$ 13,306
Multi-family rental	**8,956**	8,382
Shopping centers/retail	**8,594**	7,969
Industrial/warehouse	**5,501**	4,550
Hotels/motels	**5,415**	3,578
Multi-use	**3,003**	1,943
Unsecured	**2,056**	1,194
Land and land development	**539**	490
Other	**5,791**	4,560
Total non-residential	**55,101**	45,972
Residential	**2,098**	1,710
Total outstanding commercial real estate loans	**$ 57,199**	$ 47,682

[1] Includes unsecured loans to real estate investment trusts and national home builders whose portfolios of properties span multiple geographic regions and properties in the states of Colorado, Utah, Hawaii, Wyoming and Montana.

Tables 42 and 43 present commercial real estate credit quality data by non-residential and residential property types. The residential portfolio presented in Tables 41, 42 and 43 includes condominiums and other residential real estate. Other property types in Tables 41, 42 and 43 primarily include special purpose, nursing/retirement homes, medical facilities and restaurants.

Table 42 Commercial Real Estate Credit Quality Data

	December 31			
	Nonperforming Loans and Foreclosed Properties [1]		Utilized Reservable Criticized Exposure [2]	
(Dollars in millions)	**2015**	2014	**2015**	2014
Non-residential				
Office	**$ 14**	$ 177	**$ 110**	$ 235
Multi-family rental	**18**	21	**69**	125
Shopping centers/retail	**12**	46	**183**	350
Industrial/warehouse	**6**	42	**16**	67
Hotels/motels	**18**	3	**16**	26
Multi-use	**15**	11	**42**	55
Unsecured	**1**	1	**4**	14
Land and land development	**2**	51	**3**	63
Other	**8**	14	**59**	145
Total non-residential	**94**	366	**502**	1,080
Residential	**14**	22	**11**	28
Total commercial real estate	**$ 108**	$ 388	**$ 513**	$ 1,108

[1] Includes commercial foreclosed properties of $15 million and $67 million at December 31, 2015 and 2014.
[2] Includes loans, SBLCs and bankers' acceptances and excludes loans accounted for under the fair value option.

Table 43 Commercial Real Estate Net Charge-offs and Related Ratios

	Net Charge-offs		Net Charge-off Ratios [1]	
(Dollars in millions)	**2015**	2014	**2015**	2014
Non-residential				
Office	**$ 3**	$ (4)	**0.02%**	(0.04)%
Multi-family rental	**1**	(22)	**0.01**	(0.25)
Shopping centers/retail	**1**	4	**0.01**	0.06
Industrial/warehouse	**(1)**	(1)	**(0.02)**	(0.03)
Hotels/motels	**5**	(3)	**0.12**	(0.07)
Multi-use	**(4)**	(9)	**(0.19)**	(0.49)
Unsecured	**(4)**	(22)	**(0.20)**	(1.37)
Land and land development	**(9)**	(2)	**(1.60)**	(0.31)
Other	**1**	(16)	**0.01**	(0.37)
Total non-residential	**(7)**	(75)	**(0.01)**	(0.16)
Residential	**2**	(8)	**0.08**	(0.47)
Total commercial real estate	**$ (5)**	$ (83)	**(0.01)**	(0.18)

[1] Net charge-off ratios are calculated as net charge-offs divided by average outstanding loans excluding loans accounted for under the fair value option.

At December 31, 2015, total committed non-residential exposure was $81.0 billion compared to $67.7 billion at December 31, 2014, of which $55.1 billion and $46.0 billion were funded loans. Non-residential nonperforming loans and foreclosed properties declined $272 million, or 74 percent, to $94 million during 2015 primarily due to a decrease in office property. The non-residential nonperforming loans and foreclosed properties represented 0.17 percent and 0.79 percent of total non-residential loans and foreclosed properties at December 31, 2015 and 2014. Non-residential utilized reservable criticized exposure decreased $578 million, or 54 percent, to $502 million at December 31, 2015 compared to $1.1 billion at December 31, 2014, which represented 0.89 percent and 2.27 percent of non-residential utilized reservable exposure. For the non-residential portfolio, net recoveries decreased $68 million to $7 million in 2015 compared to 2014.

At December 31, 2015, total committed residential exposure was $4.1 billion compared to $3.6 billion at December 31, 2014, of which $2.1 billion and $1.7 billion were funded secured loans. Residential nonperforming loans and foreclosed properties decreased $8 million, or 36 percent, and residential utilized reservable criticized exposure decreased $17 million, or 61 percent, during 2015. The nonperforming loans, leases and foreclosed properties and the utilized reservable criticized ratios for the residential portfolio were 0.66 percent and 0.52 percent at December 31, 2015 compared to 1.28 percent and 1.51 percent at December 31, 2014.

At December 31, 2015 and 2014, the commercial real estate loan portfolio included $7.6 billion and $6.7 billion of funded construction and land development loans that were originated to fund the construction and/or rehabilitation of commercial properties. Reservable criticized construction and land development loans totaled $108 million and $164 million, and nonperforming construction and land development loans and foreclosed properties totaled $44 million and $80 million at December 31, 2015 and 2014. During a property's construction

phase, interest income is typically paid from interest reserves that are established at the inception of the loan. As construction is completed and the property is put into service, these interest reserves are depleted and interest payments from operating cash flows begin. We do not recognize interest income on nonperforming loans regardless of the existence of an interest reserve.

Non-U.S. Commercial

At December 31, 2015, 74 percent of the non-U.S. commercial loan portfolio was managed in *Global Banking* and 26 percent in *Global Markets*. Outstanding loans, excluding loans accounted for under the fair value option, increased $11.5 billion in 2015 primarily due to growth in securitization finance on consumer loans and increased corporate demand. Net charge-offs increased $20 million to $54 million in 2015. For more information on the non-U.S. commercial portfolio, see Non-U.S. Portfolio on page 65.

U.S. Small Business Commercial

The U.S. small business commercial loan portfolio is comprised of small business card loans and small business loans managed in *Consumer Banking*. Credit card-related products were 45 percent and 43 percent of the U.S. small business commercial portfolio at December 31, 2015 and 2014. Net charge-offs decreased $57 million to $225 million in 2015 primarily driven by improvement in small business card loan delinquencies, a reduction in higher risk vintages and increased recoveries from the sale of previously charged-off loans. Of the U.S. small business commercial net charge-offs, 81 percent and 73 percent were credit card-related products in 2015 and 2014.

Nonperforming Commercial Loans, Leases and Foreclosed Properties Activity

Table 44 presents the nonperforming commercial loans, leases and foreclosed properties activity during 2015 and 2014. Nonperforming loans do not include loans accounted for under the fair value option. During 2015, nonperforming commercial loans and leases increased $99 million to $1.2 billion primarily due to energy sector related exposure. The decline in foreclosed properties of $52 million in 2015 was primarily due to the sale of properties. Approximately 88 percent of commercial nonperforming loans, leases and foreclosed properties were secured and approximately 69 percent were contractually current. Commercial nonperforming loans were carried at approximately 85 percent of their unpaid principal balance before consideration of the allowance for loan and lease losses as the carrying value of these loans has been reduced to the estimated property value less costs to sell.

Table 44 Nonperforming Commercial Loans, Leases and Foreclosed Properties Activity [1, 2]

(Dollars in millions)	2015	2014
Nonperforming loans and leases, January 1	**$ 1,113**	$ 1,309
Additions to nonperforming loans and leases:		
New nonperforming loans and leases	**1,367**	1,228
Advances	**36**	48
Reductions to nonperforming loans and leases:		
Paydowns	**(491)**	(717)
Sales	**(108)**	(149)
Returns to performing status [3]	**(130)**	(261)
Charge-offs	**(362)**	(332)
Transfers to foreclosed properties [4]	**(213)**	(13)
Total net additions (reductions) to nonperforming loans and leases	**99**	(196)
Total nonperforming loans and leases, December 31 [5]	**1,212**	1,113
Foreclosed properties, January 1	**67**	90
Additions to foreclosed properties:		
New foreclosed properties [4]	**207**	11
Reductions to foreclosed properties:		
Sales	**(256)**	(26)
Write-downs	**(3)**	(8)
Total net reductions to foreclosed properties	**(52)**	(23)
Total foreclosed properties, December 31	**15**	67
Nonperforming commercial loans, leases and foreclosed properties, December 31	**$ 1,227**	$ 1,180
Nonperforming commercial loans and leases as a percentage of outstanding commercial loans and leases [6]	**0.28%**	0.29%
Nonperforming commercial loans, leases and foreclosed properties as a percentage of outstanding commercial loans, leases and foreclosed properties [6]	**0.28**	0.31

(1) Balances do not include nonperforming LHFS of $220 million and $212 million at December 31, 2015 and 2014.
(2) Includes U.S. small business commercial activity. Small business card loans are excluded as they are not classified as nonperforming.
(3) Commercial loans and leases may be returned to performing status when all principal and interest is current and full repayment of the remaining contractual principal and interest is expected, or when the loan otherwise becomes well-secured and is in the process of collection. TDRs are generally classified as performing after a sustained period of demonstrated payment performance.
(4) New foreclosed properties represents transfers of nonperforming loans to foreclosed properties net of charge-offs recorded during the first 90 days after transfer of a loan to foreclosed properties.
(5) In 2015, $126 million in interest income was estimated to be contractually due on $1.2 billion of commercial loans and leases classified as nonperforming, at December 31, 2015, as presented in the table above, plus $1.2 billion of TDRs classified as performing at December 31, 2015. Approximately $74 million of the estimated $126 million in contractual interest was received and included in interest income for 2015.
(6) Outstanding commercial loans exclude loans accounted for under the fair value option.

Table 45 presents our commercial TDRs by product type and performing status. U.S. small business commercial TDRs are comprised of renegotiated small business card loans and small business loans. The renegotiated small business card loans are not classified as nonperforming as they are charged off no later than the end of the month in which the loan becomes 180 days past due. For more information on TDRs, see *Note 4 – Outstanding Loans and Leases* to the Consolidated Financial Statements.

Table 45 Commercial Troubled Debt Restructurings

	December 31					
	2015			2014		
(Dollars in millions)	Total	Nonperforming	Performing	Total	Nonperforming	Performing
U.S. commercial	$ 1,225	$ 394	$ 831	$ 1,096	$ 308	$ 788
Commercial real estate	118	27	91	456	234	222
Non-U.S. commercial	363	136	227	43	—	43
U.S. small business commercial	29	10	19	35	—	35
Total commercial troubled debt restructurings	$ 1,735	$ 567	$ 1,168	$ 1,630	$ 542	$ 1,088

Industry Concentrations

Table 46 presents commercial committed and utilized credit exposure by industry and the total net credit default protection purchased to cover the funded and unfunded portions of certain credit exposures. Our commercial credit exposure is diversified across a broad range of industries. Total commercial committed credit exposure increased $110.1 billion, or 13 percent, in 2015 to $942.5 billion. Increases in commercial committed exposure were concentrated in diversified financials, technology hardware and equipment, real estate, food, beverage and tobacco and retailing.

Industry limits are used internally to manage industry concentrations and are based on committed exposures and capital usage that are allocated on an industry-by-industry basis. A risk management framework is in place to set and approve industry limits as well as to provide ongoing monitoring.

Diversified financials, our largest industry concentration with committed exposure of $128.4 billion, increased $24.9 billion, or 24 percent, in 2015. The increase was primarily driven by growth in exposure to asset managers, acquisition financing and certain asset-backed lending products.

Real estate, our second largest industry concentration with committed exposure of $87.7 billion, increased $11.5 billion, or 15 percent, in 2015. The increase was primarily due to strong demand for quality core assets in major metropolitan markets. Real estate construction and land development exposure represented 14 percent and 13 percent of the total real estate industry committed exposure at December 31, 2015 and 2014. For more information on the commercial real estate and related portfolios, see Commercial Portfolio Credit Risk Management – Commercial Real Estate on page 59.

During 2015, committed exposure to the technology hardware and equipment industry increased $12.4 billion, or 100 percent, food, beverages and tobacco increased $8.7 billion, or 25 percent, and retailing industry increased $5.9 billion, or 10 percent, primarily driven by bridge financing for acquisitions and increased client activity.

The significant decline in oil prices since June 2014 has impacted and may continue to impact the financial performance of energy producers as well as energy equipment and service providers within the energy sector. At December 31, 2015, these two subsectors comprised 39 percent of our overall utilized energy exposure. While we experienced modest credit losses in our energy portfolio through December 31, 2015, the magnitude of the impact over time will depend upon the level and duration of future oil prices. Our energy-related exposure decreased $3.9 billion in 2015 to $43.8 billion driven by paydowns from large clients.

Our committed state and municipal exposure of $43.4 billion at December 31, 2015 consisted of $35.9 billion of commercial utilized exposure (including $20.0 billion of funded loans, $6.4 billion of SBLCs and $2.2 billion of derivative assets) and $7.5 billion of unfunded commercial exposure (primarily unfunded loan commitments and letters of credit) and is reported in the government and public education industry in Table 46. With the U.S. economy gradually strengthening, most state and local governments are experiencing improved fiscal circumstances and continue to honor debt obligations as agreed. While historical default rates have been low, as part of our overall and ongoing risk management processes, we continually monitor these exposures through a rigorous review process. Additionally, internal communications are regularly circulated such that exposure levels are maintained in compliance with established concentration guidelines.

Table 46 Commercial Credit Exposure by Industry [1]

	December 31			
	Commercial Utilized		Total Commercial Committed	
(Dollars in millions)	2015	2014	2015	2014
Diversified financials	$ 79,496	$ 63,306	$ 128,436	$ 103,528
Real estate [2]	61,759	53,834	87,650	76,153
Retailing	37,675	33,683	63,975	58,043
Capital goods	30,790	29,028	58,583	54,653
Healthcare equipment and services	35,134	32,923	57,901	52,450
Banking	45,952	42,330	53,825	48,353
Government and public education	44,835	42,095	53,133	49,937
Materials	24,012	23,664	46,013	45,821
Energy	21,257	23,830	43,811	47,667
Food, beverage and tobacco	18,316	16,131	43,164	34,465
Consumer services	24,084	21,657	37,058	33,269
Commercial services and supplies	19,552	17,997	32,045	30,451
Utilities	11,396	9,399	27,849	25,235
Transportation	19,369	17,538	27,371	24,541
Technology hardware and equipment	6,337	5,489	24,734	12,350
Media	12,833	11,128	24,194	21,502
Individuals and trusts	17,992	16,749	23,176	21,195
Software and services	6,617	5,927	18,362	14,071
Pharmaceuticals and biotechnology	6,302	5,707	16,472	13,493
Automobiles and components	4,804	4,114	11,329	9,683
Consumer durables and apparel	6,053	6,111	11,165	10,613
Insurance, including monolines	5,095	5,204	10,728	11,252
Telecommunication services	4,717	3,814	10,645	9,295
Food and staples retailing	4,351	3,848	9,439	7,418
Religious and social organizations	4,526	4,881	5,929	6,548
Other	6,309	6,255	15,510	10,415
Total commercial credit exposure by industry	$ 559,563	$ 506,642	$ 942,497	$ 832,401
Net credit default protection purchased on total commitments [3]			$ (6,677)	$ (7,302)

[1] Includes U.S. small business commercial exposure.
[2] Industries are viewed from a variety of perspectives to best isolate the perceived risks. For purposes of this table, the real estate industry is defined based on the borrowers' or counterparties' primary business activity using operating cash flows and primary source of repayment as key factors.
[3] Represents net notional credit protection purchased. For additional information, see Commercial Portfolio Credit Risk Management – Risk Mitigation on page 63.

Risk Mitigation

We purchase credit protection to cover the funded portion as well as the unfunded portion of certain credit exposures. To lower the cost of obtaining our desired credit protection levels, we may add credit exposure within an industry, borrower or counterparty group by selling protection.

At December 31, 2015 and 2014, net notional credit default protection purchased in our credit derivatives portfolio to hedge our funded and unfunded exposures for which we elected the fair value option, as well as certain other credit exposures, was $6.7 billion and $7.3 billion. We recorded net gains of $150 million in 2015 compared to net losses of $50 million in 2014 on these positions. The gains and losses on these instruments were offset by gains and losses on the related exposures. The Value-at-Risk (VaR) results for these exposures are included in the fair value option portfolio information in Table 56. For additional information, see Trading Risk Management on page 72.

Tables 47 and 48 present the maturity profiles and the credit exposure debt ratings of the net credit default protection portfolio at December 31, 2015 and 2014.

Table 47 Net Credit Default Protection by Maturity

	December 31	
	2015	2014
Less than or equal to one year	39%	43%
Greater than one year and less than or equal to five years	59	55
Greater than five years	2	2
Total net credit default protection	100%	100%

Table 48 Net Credit Default Protection by Credit Exposure Debt Rating

(Dollars in millions)	December 31 2015 Net Notional [1]	2015 Percent of Total	2014 Net Notional [1]	2014 Percent of Total
Ratings [2, 3]				
AA	$ —	—%	$ (30)	0.4%
A	(752)	11.3	(660)	9.0
BBB	(3,030)	45.4	(4,401)	60.3
BB	(2,090)	31.3	(1,527)	20.9
B	(634)	9.5	(610)	8.4
CCC and below	(139)	2.1	(42)	0.6
NR [4]	(32)	0.4	(32)	0.4
Total net credit default protection	$ (6,677)	100.0%	$ (7,302)	100.0%

[1] Represents net credit default protection (purchased) sold.
[2] Ratings are refreshed on a quarterly basis.
[3] Ratings of BBB- or higher are considered to meet the definition of investment grade.
[4] NR is comprised of index positions held and any names that have not been rated.

In addition to our net notional credit default protection purchased to cover the funded and unfunded portion of certain credit exposures, credit derivatives are used for market-making activities for clients and establishing positions intended to profit from directional or relative value changes. We execute the majority of our credit derivative trades in the OTC market with large, multinational financial institutions, including broker-dealers and, to a lesser degree, with a variety of other investors. Because these transactions are executed in the OTC market, we are subject to settlement risk. We are also subject to credit risk in the event that these counterparties fail to perform under the terms of these contracts. In most cases, credit derivative transactions are executed on a daily margin basis. Therefore, events such as a credit downgrade, depending on the ultimate rating level, or a breach of credit covenants would typically require an increase in the amount of collateral required by the counterparty, where applicable, and/or allow us to take additional protective measures such as early termination of all trades.

Table 49 presents the total contract/notional amount of credit derivatives outstanding and includes both purchased and written credit derivatives. The credit risk amounts are measured as net asset exposure by counterparty, taking into consideration all contracts with the counterparty. For more information on our written credit derivatives, see *Note 2 – Derivatives* to the Consolidated Financial Statements.

The credit risk amounts discussed above and presented in Table 49 take into consideration the effects of legally enforceable master netting agreements while amounts disclosed in *Note 2 – Derivatives* to the Consolidated Financial Statements are shown on a gross basis. Credit risk reflects the potential benefit from offsetting exposure to non-credit derivative products with the same counterparties that may be netted upon the occurrence of certain events, thereby reducing our overall exposure.

Table 49 Credit Derivatives

(Dollars in millions)	December 31 2015 Contract/ Notional	2015 Credit Risk	2014 Contract/ Notional	2014 Credit Risk
Purchased credit derivatives:				
Credit default swaps	$ 928,300	$ 3,677	$ 1,094,796	$ 3,833
Total return swaps/other	26,427	1,596	44,333	510
Total purchased credit derivatives	$ 954,727	$ 5,273	$ 1,139,129	$ 4,343
Written credit derivatives:				
Credit default swaps	$ 924,143	n/a	$ 1,073,101	n/a
Total return swaps/other	39,658	n/a	61,031	n/a
Total written credit derivatives	$ 963,801	n/a	$ 1,134,132	n/a

n/a = not applicable

Counterparty Credit Risk Valuation Adjustments

We record counterparty credit risk valuation adjustments on certain derivative assets, including our credit default protection purchased, in order to properly reflect the credit risk of the counterparty, as presented in Table 50. We calculate CVA based on a modeled expected exposure that incorporates current market risk factors including changes in market spreads and non-credit related market factors that affect the value of a derivative. The exposure also takes into consideration credit mitigants such as legally enforceable master netting agreements and collateral. For additional information, see *Note 2 – Derivatives* to the Consolidated Financial Statements.

We enter into risk management activities to offset market driven exposures. We often hedge the counterparty spread risk in CVA with credit default swaps (CDS). We hedge other market risks in CVA primarily with currency and interest rate swaps. In certain instances, the net-of-hedge amounts in the table below move in the same direction as the gross amount or may move in the opposite direction. This is a consequence of the complex interaction of the risks being hedged resulting in limitations in the ability to perfectly hedge all of the market exposures at all times.

Table 50 Credit Valuation Gains and Losses

Gains (Losses) (Dollars in millions)	2015 Gross	2015 Hedge	2015 Net	2014 Gross	2014 Hedge	2014 Net
Credit valuation	$ 255	$ (28)	$ 227	$ (22)	$ 213	$ 191

Non-U.S. Portfolio

Our non-U.S. credit and trading portfolios are subject to country risk. We define country risk as the risk of loss from unfavorable economic and political conditions, currency fluctuations, social instability and changes in government policies. A risk management framework is in place to measure, monitor and manage non-U.S. risk and exposures. In addition to the direct risk of doing business in a country, we also are exposed to indirect country risks (e.g., related to the collateral received on secured financing transactions or related to client clearing activities). These indirect exposures are managed in the normal course of business through credit, market and operational risk governance, rather than through country risk governance.

Table 51 presents our total non-U.S. exposure by region at December 31, 2015 and 2014. Non-U.S. exposure is presented on an internal risk management basis and includes sovereign and non-sovereign credit exposure, securities and other investments issued by or domiciled in countries other than the U.S. The risk assignments by country can be adjusted for external guarantees and certain collateral types. Exposures that are subject to external guarantees are reported under the country of the guarantor. Exposures with tangible collateral are reflected in the country where the collateral is held. For securities received, other than cross-border resale agreements, outstandings are assigned to the domicile of the issuer of the securities.

Table 51 Total Non-U.S. Exposure by Region

	December 31			
	2015		2014	
(Dollars in millions)	Amount	Percent of Total	Amount	Percent of Total
Europe	$ 140,836	52%	$ 129,573	49%
Asia Pacific	75,446	28	78,792	30
Latin America	25,478	9	23,403	9
Middle East and Africa	11,516	4	10,801	4
Other [1]	18,035	7	22,701	8
Total	$ 271,311	100%	$ 265,270	100%

[1] Other includes Canada exposure of $16.6 billion and $20.4 billion at December 31, 2015 and 2014.

Our total non-U.S. exposure was $271.3 billion at December 31, 2015, an increase of $6.0 billion from December 31, 2014. The increase in non-U.S. exposure was driven by growth in Europe, Latin America, and Middle East and Africa exposures, partially offset by a reduction in Asia Pacific and Other. Our non-U.S. exposure remained concentrated in Europe which accounted for $140.8 billion, or 52 percent of total non-U.S. exposure. The European exposure was mostly in Western Europe and was distributed across a variety of industries.

Table 52 presents our 20 largest non-U.S. country exposures. These exposures accounted for 86 percent and 88 percent of our total non-U.S. exposure at December 31, 2015 and 2014. Net country exposure for these 20 countries increased $6.1 billion in 2015 primarily driven by increases in the United Kingdom, Belgium and Australia, partially offset by reductions in Canada, Japan, China, France and Hong Kong. On a product basis, the increase was driven by higher funded loans and loan equivalents in the United Kingdom, Germany, Australia and India and higher unfunded commitments in Belgium and the United Kingdom. These increases were partially offset by reductions in securities in the United Kingdom, Canada, India and France.

Funded loans and loan equivalents include loans, leases, and other extensions of credit and funds, including letters of credit and due from placements, which have not been reduced by collateral, hedges or credit default protection. Funded loans and loan equivalents are reported net of charge-offs but prior to any allowance for loan and lease losses. Unfunded commitments are the undrawn portion of legally binding commitments related to loans and loan equivalents.

Net counterparty exposure includes the fair value of derivatives, including the counterparty risk associated with CDS, and secured financing transactions. Derivatives exposures are presented net of collateral, which is predominantly cash, pledged under legally enforceable master netting agreements. Secured financing transaction exposures are presented net of eligible cash or securities pledged as collateral.

Securities and other investments are carried at fair value and long securities exposures are netted against short exposures with the same underlying issuer to, but not below, zero (i.e., negative issuer exposures are reported as zero). Other investments include our GPI portfolio and strategic investments.

Net country exposure represents country exposure less hedges and credit default protection purchased, net of credit default protection sold. We hedge certain of our country exposures with credit default protection primarily in the form of single-name, as well as indexed and tranched CDS. The exposures associated with these hedges represent the amount that would be realized upon the isolated default of an individual issuer in the relevant country assuming a zero recovery rate for that individual issuer, and are calculated based on the CDS notional amount adjusted for any fair value receivable or payable. Changes in the assumption of an isolated default can produce different results in a particular tranche.

Table 52 Top 20 Non-U.S. Countries Exposure

(Dollars in millions)	Funded Loans and Loan Equivalents	Unfunded Loan Commitments	Net Counterparty Exposure	Securities/ Other Investments	Country Exposure at December 31 2015	Hedges and Credit Default Protection	**Net Country Exposure at December 31 2015**	Increase (Decrease) from December 31 2014
United Kingdom	$ 30,268	$ 15,086	$ 8,923	$ 4,194	$ 58,471	$ (5,225)	**$ 53,246**	$ 7,699
Brazil	9,981	401	902	4,593	15,877	(227)	**15,650**	666
Canada	5,522	6,695	2,279	2,097	16,593	(1,861)	**14,732**	(3,808)
Japan	13,381	532	1,145	718	15,776	(1,412)	**14,364**	(2,370)
Germany	7,373	6,389	2,604	1,991	18,357	(4,953)	**13,404**	845
China	9,207	627	739	748	11,321	(847)	**10,474**	(1,818)
India	7,045	238	363	2,880	10,526	(172)	**10,354**	(232)
Australia	5,061	2,390	705	1,737	9,893	(348)	**9,545**	1,872
France	2,822	4,795	1,392	3,816	12,825	(4,139)	**8,686**	(1,752)
Netherlands	3,329	3,283	879	1,631	9,122	(1,488)	**7,634**	(501)
Hong Kong	5,850	273	788	701	7,612	(23)	**7,589**	(1,019)
South Korea	4,351	749	674	1,751	7,525	(667)	**6,858**	409
Switzerland	3,337	2,947	707	650	7,641	(1,378)	**6,263**	(268)
Belgium	648	4,749	149	185	5,731	(263)	**5,468**	4,260
Italy	2,933	1,062	1,544	1,563	7,102	(1,794)	**5,308**	(91)
Mexico	2,708	1,327	141	1,209	5,385	(331)	**5,054**	783
Singapore	2,297	167	481	1,843	4,788	(59)	**4,729**	725
Turkey	2,996	172	30	49	3,247	(107)	**3,140**	652
Spain	1,847	677	231	940	3,695	(632)	**3,063**	(553)
United Arab Emirates	2,008	56	1,027	37	3,128	(102)	**3,026**	619
Total top 20 non-U.S. countries exposure	$ 122,964	$ 52,615	$ 25,703	$ 33,333	$ 234,615	$ (26,028)	**$ 208,587**	$ 6,118

Weakening of commodity prices, signs of slowing growth in China and a recession in Brazil are driving risk aversion in emerging markets. Net exposure to China decreased to $10.5 billion at December 31, 2015, concentrated in large state-owned companies, subsidiaries of multinational corporations and commercial banks. Net exposure to Brazil was $15.7 billion, concentrated in sovereign securities, oil and gas companies and commercial banks.

Russian intervention in Ukraine initiated in 2014 significantly increased regional geopolitical tensions. The Russian economy continues to slow due to the negative impacts of weak oil prices, ongoing economic sanctions and high interest rates resulting from Russian central bank actions taken to counter ruble depreciation. Net exposure to Russia was reduced to $2.2 billion at December 31, 2015, concentrated in oil and gas companies and commercial banks. Our exposure to Ukraine at December 31, 2015 was minimal. In response to Russian actions, U.S. and European governments have imposed sanctions on a limited number of Russian individuals and business entities. Geopolitical and economic conditions remain fluid with potential for further escalation of tensions, increased severity of sanctions against Russian interests, sustained low oil prices and rating agency downgrades.

Certain European countries, including Italy, Spain, Ireland and Portugal, have experienced varying degrees of financial stress in recent years. While market conditions have improved in Europe, policymakers continue to address fundamental challenges of competitiveness, growth, deflation and high unemployment. A return of political stress or financial instability in these countries could disrupt financial markets and have a detrimental impact on global economic conditions and sovereign and non-sovereign debt in these countries. Net exposure at December 31, 2015 to Italy and Spain was $5.3 billion and $3.1 billion as presented in Table 52. Net exposure at December 31, 2015 to Ireland and Portugal was $1.0 billion and $54 million. We expect to continue to support client activities in the region and our exposures may vary over time as we monitor the situation and manage our risk profile.

Table 53 presents countries where total cross-border exposure exceeded one percent of our total assets. At December 31, 2015, the United Kingdom and France were the only countries where total cross-border exposure exceeded one percent of our total assets. At December 31, 2015, Canada and Germany had total cross-border exposure of $18.3 billion and $16.5 billion representing 0.85 percent and 0.77 percent of our total assets. No other countries had total cross-border exposure that exceeded 0.75 percent of our total assets at December 31, 2015.

Cross-border exposures in Table 53 are calculated using Federal Financial Institutions Examination Council (FFIEC) guidelines and not our internal risk management view; therefore, exposures are not comparable between Tables 52 and 53. Exposure includes cross-border claims by our non-U.S. offices including loans, acceptances, time deposits placed, trading account assets, securities, derivative assets, other interest-earning investments and other monetary assets. Amounts also include unfunded commitments, letters of credit and financial guarantees, and the notional amount of cash loaned under secured financing transactions. Sector definitions are consistent with FFIEC reporting requirements for preparing the Country Exposure Report.

Table 53 Total Cross-border Exposure Exceeding One Percent of Total Assets

(Dollars in millions)	December 31	Public Sector	Banks	Private Sector	Cross-border Exposure	Exposure as a Percent of Total Assets
United Kingdom	**2015**	**$ 3,264**	**$ 5,104**	**$ 38,576**	**$ 46,944**	**2.19%**
	2014	11	2,056	34,595	36,662	1.74
France	**2015**	**3,343**	**1,766**	**17,099**	**22,208**	**1.04**
	2014	4,479	2,631	14,368	21,478	1.02

Provision for Credit Losses

The provision for credit losses increased $886 million to $3.2 billion in 2015 compared to 2014. The provision for credit losses was $1.2 billion lower than net charge-offs for 2015, resulting in a reduction in the allowance for credit losses. This compared to a reduction of $2.1 billion in the allowance for credit losses in 2014. As we look at 2016, reserve releases are expected to decrease from 2015 levels. All else equal, this would result in increased provision expense, assuming sustained stability in underlying asset quality.

The provision for credit losses for the consumer portfolio increased $726 million to $2.2 billion in 2015 compared to 2014. The provision for credit losses in 2014 included $400 million of additional costs associated with the consumer relief portion of the DoJ Settlement. Excluding these additional costs, the consumer provision for credit losses increased due to a slower pace of portfolio improvement than in 2014, and also due to a lower level of recoveries on nonperforming loan sales and other recoveries in 2015. Included in the provision is a benefit of $40 million related to the PCI loan portfolio for 2015 compared to a benefit of $31 million in 2014.

The provision for credit losses for the commercial portfolio, including unfunded lending commitments, increased $160 million to $953 million in 2015 compared to 2014 driven by energy sector exposure and higher unfunded balances.

Allowance for Credit Losses

Allowance for Loan and Lease Losses

The allowance for loan and lease losses is comprised of two components. The first component covers nonperforming commercial loans and TDRs. The second component covers loans and leases on which there are incurred losses that are not yet individually identifiable, as well as incurred losses that may not be represented in the loss forecast models. We evaluate the adequacy of the allowance for loan and lease losses based on the total of these two components, each of which is described in more detail below. The allowance for loan and lease losses excludes LHFS and loans accounted for under the fair value option as the fair value reflects a credit risk component.

The first component of the allowance for loan and lease losses covers both nonperforming commercial loans and all TDRs within the consumer and commercial portfolios. These loans are subject to impairment measurement based on the present value of projected future cash flows discounted at the loan's original effective interest rate, or in certain circumstances, impairment may also be based upon the collateral value or the loan's observable market price if available. Impairment measurement for the renegotiated consumer credit card, small business credit card and unsecured consumer TDR portfolios is based on the present value of projected cash flows discounted using the average portfolio contractual interest rate, excluding promotionally priced loans, in effect prior to restructuring. For purposes of computing this specific loss component of the allowance, larger impaired loans are evaluated individually and smaller impaired loans are evaluated as a pool using historical experience for the respective product types and risk ratings of the loans.

The second component of the allowance for loan and lease losses covers the remaining consumer and commercial loans and leases that have incurred losses that are not yet individually identifiable. The allowance for consumer and certain homogeneous commercial loan and lease products is based on aggregated portfolio evaluations, generally by product type. Loss forecast models are utilized that consider a variety of factors including, but not limited to, historical loss experience, estimated defaults or foreclosures based on portfolio trends, delinquencies, economic trends and credit scores. Our consumer real estate loss forecast model estimates the portion of loans that will default based on individual loan attributes, the most significant of which are refreshed LTV or CLTV, and borrower credit score as well as vintage and geography, all of which are further broken down into current delinquency status. Additionally, we incorporate the delinquency status of underlying first-lien loans on our junior-lien home equity portfolio in our allowance process. Incorporating refreshed LTV and CLTV into our probability of default allows us to factor the impact of changes in home prices into our allowance for loan and lease losses. These loss forecast models are updated on a quarterly basis to incorporate information reflecting the current economic environment. As of December 31, 2015, the loss forecast process resulted in reductions in the allowance for all major consumer portfolios compared to December 31, 2014.

The allowance for commercial loan and lease losses is established by product type after analyzing historical loss experience, internal risk rating, current economic conditions, industry performance trends, geographic and obligor concentrations within each portfolio and any other pertinent information. The statistical models for commercial loans are generally updated annually and utilize our historical database of actual defaults and other data, including external default data. The loan risk ratings and composition of the commercial portfolios used to calculate the allowance are updated quarterly to incorporate the most recent data reflecting the current economic environment. For risk-rated commercial loans, we estimate the probability of default and the LGD based on our historical experience of defaults and credit losses. Factors considered when assessing the internal risk rating include the value of the underlying collateral, if applicable, the industry in which the obligor operates, the obligor's liquidity and other financial indicators, and other quantitative and qualitative factors relevant to the obligor's credit risk. As of December 31, 2015, the allowance increased for the

U.S. commercial, non-U.S. commercial and commercial lease financing portfolios compared to December 31, 2014.

Also included within the second component of the allowance for loan and lease losses are reserves to cover losses that are incurred but, in our assessment, may not be adequately represented in the historical loss data used in the loss forecast models. For example, factors that we consider include, among others, changes in lending policies and procedures, changes in economic and business conditions, changes in the nature and size of the portfolio, changes in portfolio concentrations, changes in the volume and severity of past due loans and nonaccrual loans, the effect of external factors such as competition, and legal and regulatory requirements. We also consider factors that are applicable to unique portfolio segments. For example, we consider the risk of uncertainty in our loss forecasting models related to junior-lien home equity loans that are current, but have first-lien loans that we do not service that are 30 days or more past due. In addition, we consider the increased risk of default associated with our interest-only loans that have yet to enter the amortization period. Further, we consider the inherent uncertainty in mathematical models that are built upon historical data.

During 2015, the factors that impacted the allowance for loan and lease losses included overall improvements in the credit quality of the portfolios driven by continuing improvements in the U.S. economy and labor markets, continuing proactive credit risk management initiatives and the impact of recent higher credit quality originations. Additionally, the resolution of uncertainties through current recognition of net charge-offs has impacted the amount of reserve needed in certain portfolios. Evidencing the improvements in the U.S. economy and labor markets are modest growth in consumer spending, improvements in unemployment levels, increases in home prices and a decrease in the absolute level and our share of national consumer bankruptcy filings. In addition to these improvements, in the consumer portfolio, returns to performing status, charge-offs, sales, paydowns and transfers to foreclosed properties continued to outpace new nonaccrual loans. Also impacting the allowance for loan and lease losses in the commercial portfolio were growth in loan balances and higher reservable criticized levels, particularly in the energy sector due primarily to lower oil prices.

We monitor differences between estimated and actual incurred loan and lease losses. This monitoring process includes periodic assessments by senior management of loan and lease portfolios and the models used to estimate incurred losses in those portfolios.

Additions to, or reductions of, the allowance for loan and lease losses generally are recorded through charges or credits to the provision for credit losses. Credit exposures deemed to be uncollectible are charged against the allowance for loan and lease losses. Recoveries of previously charged off amounts are credited to the allowance for loan and lease losses.

The allowance for loan and lease losses for the consumer portfolio, as presented in Table 55, was $7.4 billion at December 31, 2015, a decrease of $2.6 billion from December 31, 2014. The decrease was primarily in the residential mortgage, home equity and credit card portfolios. Reductions in the residential mortgage and home equity portfolios were due to improved home prices and lower delinquencies, a decrease in consumer loan balances, as well as the utilization of reserves recorded as a part of the DoJ Settlement. Further, the residential mortgage and home equity allowance declined due to write-offs in our PCI loan portfolio.

The decrease in the allowance related to the U.S. credit card and unsecured consumer lending portfolios in *Consumer Banking* was primarily due to improvement in delinquencies and more generally in unemployment levels. For example, in the U.S. credit card portfolio, accruing loans 30 days or more past due decreased to $1.6 billion at December 31, 2015 from $1.7 billion (to 1.76 percent from 1.85 percent of outstanding U.S. credit card loans) at December 31, 2014, and accruing loans 90 days or more past due decreased to $789 million at December 31, 2015 from $866 million (to 0.88 percent from 0.94 percent of outstanding U.S. credit card loans) at December 31, 2014. See Tables 23, 24, 31 and 33 for additional details on key credit statistics for the credit card and other unsecured consumer lending portfolios.

The allowance for loan and lease losses for the commercial portfolio, as presented in Table 55, was $4.8 billion at December 31, 2015, an increase of $412 million from December 31, 2014 with the increase attributable to loan growth and higher reservable criticized levels. Commercial utilized reservable criticized exposure increased to $15.9 billion at December 31, 2015 from $11.2 billion (to 3.38 percent from 2.70 percent of total commercial utilized reservable exposure) at December 31, 2014, largely due to downgrades in the energy portfolio. Nonperforming commercial loans increased $99 million from December 31, 2014 to $1.2 billion (to 0.28 percent from 0.29 percent of outstanding commercial loans) at December 31, 2015 largely in the energy sector. Commercial loans and leases outstanding increased to $440.8 billion at December 31, 2015 from $387.5 billion at December 31, 2014. See Tables 37, 38 and 40 for additional details on key commercial credit statistics.

The allowance for loan and lease losses as a percentage of total loans and leases outstanding was 1.37 percent at December 31, 2015 compared to 1.66 percent at December 31, 2014. The decrease in the ratio was primarily due to improved credit quality driven by improved economic conditions, write-offs in the PCI loan portfolio and utilization of reserves related to the DoJ Settlement. The December 31, 2015 and 2014 ratios above include the PCI loan portfolio. Excluding the PCI loan portfolio, the allowance for loan and lease losses as a percentage of total loans and leases outstanding was 1.31 percent and 1.51 percent at December 31, 2015 and 2014.

Table 54 presents a rollforward of the allowance for credit losses, which includes the allowance for loan and lease losses and the reserve for unfunded lending commitments, for 2015 and 2014.

Table 54 Allowance for Credit Losses

(Dollars in millions)	2015	2014
Allowance for loan and lease losses, January 1	**$ 14,419**	$ 17,428
Loans and leases charged off		
Residential mortgage	**(866)**	(855)
Home equity	**(975)**	(1,364)
U.S. credit card	**(2,738)**	(3,068)
Non-U.S. credit card	**(275)**	(357)
Direct/Indirect consumer	**(383)**	(456)
Other consumer	**(224)**	(268)
Total consumer charge-offs	**(5,461)**	(6,368)
U.S. commercial [1]	**(536)**	(584)
Commercial real estate	**(30)**	(29)
Commercial lease financing	**(19)**	(10)
Non-U.S. commercial	**(59)**	(35)
Total commercial charge-offs	**(644)**	(658)
Total loans and leases charged off	**(6,105)**	(7,026)
Recoveries of loans and leases previously charged off		
Residential mortgage	**393**	969
Home equity	**339**	457
U.S. credit card	**424**	430
Non-U.S. credit card	**87**	115
Direct/Indirect consumer	**271**	287
Other consumer	**31**	39
Total consumer recoveries	**1,545**	2,297
U.S. commercial [2]	**172**	214
Commercial real estate	**35**	112
Commercial lease financing	**10**	19
Non-U.S. commercial	**5**	1
Total commercial recoveries	**222**	346
Total recoveries of loans and leases previously charged off	**1,767**	2,643
Net charge-offs	**(4,338)**	(4,383)
Write-offs of PCI loans	**(808)**	(810)
Provision for loan and lease losses	**3,043**	2,231
Other [3]	**(82)**	(47)
Allowance for loan and lease losses, December 31	**12,234**	14,419
Reserve for unfunded lending commitments, January 1	**528**	484
Provision for unfunded lending commitments	**118**	44
Reserve for unfunded lending commitments, December 31	**646**	528
Allowance for credit losses, December 31	**$ 12,880**	$ 14,947

[1] Includes U.S. small business commercial charge-offs of $282 million and $345 million in 2015 and 2014.
[2] Includes U.S. small business commercial recoveries of $57 million and $63 million in 2015 and 2014.
[3] Primarily represents the net impact of portfolio sales, consolidations and deconsolidations, and foreign currency translation adjustments.

Table 54 Allowance for Credit Losses (continued)

(Dollars in millions)	2015	2014
Loan and allowance ratios:		
Loans and leases outstanding at December 31 [4]	**$ 890,045**	$ 867,422
Allowance for loan and lease losses as a percentage of total loans and leases outstanding at December 31 [4]	**1.37%**	1.66%
Consumer allowance for loan and lease losses as a percentage of total consumer loans and leases outstanding at December 31 [5]	**1.63**	2.05
Commercial allowance for loan and lease losses as a percentage of total commercial loans and leases outstanding at December 31 [6]	**1.11**	1.16
Average loans and leases outstanding [4]	**$ 869,904**	$ 888,804
Net charge-offs as a percentage of average loans and leases outstanding [4, 7]	**0.50%**	0.49%
Net charge-offs and PCI write-offs as a percentage of average loans and leases outstanding [4]	**0.59**	0.58
Allowance for loan and lease losses as a percentage of total nonperforming loans and leases at December 31 [4, 8]	**130**	121
Ratio of the allowance for loan and lease losses at December 31 to net charge-offs [7]	**2.82**	3.29
Ratio of the allowance for loan and lease losses at December 31 to net charge-offs and PCI write-offs	**2.38**	2.78
Amounts included in allowance for loan and lease losses for loans and leases that are excluded from nonperforming loans and leases at December 31 [9]	**$ 4,518**	$ 5,944
Allowance for loan and lease losses as a percentage of total nonperforming loans and leases, excluding the allowance for loan and lease losses for loans and leases that are excluded from nonperforming loans and leases at December 31 [4, 9]	**82%**	71%
Loan and allowance ratios excluding PCI loans and the related valuation allowance: [10]		
Allowance for loan and lease losses as a percentage of total loans and leases outstanding at December 31 [4]	**1.31%**	1.51%
Consumer allowance for loan and lease losses as a percentage of total consumer loans and leases outstanding at December 31 [5]	**1.50**	1.79
Net charge-offs as a percentage of average loans and leases outstanding [4]	**0.51**	0.50
Allowance for loan and lease losses as a percentage of total nonperforming loans and leases at December 31 [4, 8]	**122**	107
Ratio of the allowance for loan and lease losses at December 31 to net charge-offs	**2.64**	2.91

[4] Outstanding loan and lease balances and ratios do not include loans accounted for under the fair value option of $6.9 billion and $8.7 billion at December 31, 2015 and 2014. Average loans accounted for under the fair value option were $7.7 billion and $9.9 billion in 2015 and 2014.
[5] Excludes consumer loans accounted for under the fair value option of $1.9 billion and $2.1 billion at December 31, 2015 and 2014.
[6] Excludes commercial loans accounted for under the fair value option of $5.1 billion and $6.6 billion at December 31, 2015 and 2014.
[7] Net charge-offs exclude $808 million and $810 million of write-offs in the PCI loan portfolio in 2015 and 2014. For more information on PCI write-offs, see Consumer Portfolio Credit Risk Management – Purchased Credit-impaired Loan Portfolio on page 52.
[8] For more information on our definition of nonperforming loans, see pages 54 and 61.
[9] Primarily includes amounts allocated to 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*.
[10] For more information on the PCI loan portfolio and the valuation allowance for PCI loans, see *Note 4 – Outstanding Loans and Leases* and *Note 5 – Allowance for Credit Losses* to the Consolidated Financial Statements.

For reporting purposes, we allocate the allowance for credit losses across products. However, the allowance is generally available to absorb any credit losses without restriction. Table 55 presents our allocation by product type.

Table 55 Allocation of the Allowance for Credit Losses by Product Type

	December 31, 2015			December 31, 2014		
(Dollars in millions)	Amount	Percent of Total	Percent of Loans and Leases Outstanding [1]	Amount	Percent of Total	Percent of Loans and Leases Outstanding [1]
Allowance for loan and lease losses						
Residential mortgage	**$ 1,500**	**12.26%**	**0.80%**	$ 2,900	20.11%	1.34%
Home equity	**2,414**	**19.73**	**3.18**	3,035	21.05	3.54
U.S. credit card	**2,927**	**23.93**	**3.27**	3,320	23.03	3.61
Non-U.S. credit card	**274**	**2.24**	**2.75**	369	2.56	3.53
Direct/Indirect consumer	**223**	**1.82**	**0.25**	299	2.07	0.37
Other consumer	**47**	**0.38**	**2.27**	59	0.41	3.15
Total consumer	**7,385**	**60.36**	**1.63**	9,982	69.23	2.05
U.S. commercial [2]	**2,964**	**24.23**	**1.12**	2,619	18.16	1.12
Commercial real estate	**967**	**7.90**	**1.69**	1,016	7.05	2.13
Commercial lease financing	**164**	**1.34**	**0.77**	153	1.06	0.78
Non-U.S. commercial	**754**	**6.17**	**0.82**	649	4.50	0.81
Total commercial [3]	**4,849**	**39.64**	**1.11**	4,437	30.77	1.16
Allowance for loan and lease losses [4]	**12,234**	**100.00%**	**1.37**	14,419	100.00%	1.66
Reserve for unfunded lending commitments	**646**			528		
Allowance for credit losses	**$ 12,880**			$ 14,947		

[1] Ratios are calculated as allowance for loan and lease losses as a percentage of loans and leases outstanding excluding loans accounted for under the fair value option. Consumer loans accounted for under the fair value option included residential mortgage loans of $1.6 billion and $1.9 billion and home equity loans of $250 million and $196 million at December 31, 2015 and 2014. Commercial loans accounted for under the fair value option included U.S. commercial loans of $2.3 billion and $1.9 billion and non-U.S. commercial loans of $2.8 billion and $4.7 billion at December 31, 2015 and 2014.
[2] Includes allowance for loan and lease losses for U.S. small business commercial loans of $507 million and $536 million at December 31, 2015 and 2014.
[3] Includes allowance for loan and lease losses for impaired commercial loans of $217 million and $159 million at December 31, 2015 and 2014.
[4] Includes $804 million and $1.7 billion of valuation allowance presented with the allowance for loan and lease losses related to PCI loans at December 31, 2015 and 2014.

Reserve for Unfunded Lending Commitments

In addition to the allowance for loan and lease losses, we also estimate probable losses related to unfunded lending commitments such as letters of credit, financial guarantees, unfunded bankers' acceptances and binding loan commitments, excluding commitments accounted for under the fair value option. Unfunded lending commitments are subject to the same assessment as funded loans, including estimates of probability of default and LGD. Due to the nature of unfunded commitments, the estimate of probable losses must also consider utilization. To estimate the portion of these undrawn commitments that is likely to be drawn by a borrower at the time of estimated default, analyses of the Corporation's historical experience are applied to the unfunded commitments to estimate the funded EAD. The expected loss for unfunded lending commitments is the product of the probability of default, the LGD and the EAD, adjusted for any qualitative factors including economic uncertainty and inherent imprecision in models.

The reserve for unfunded lending commitments was $646 million at December 31, 2015, an increase of $118 million from December 31, 2014 with the increase attributable primarily to higher unfunded commitments.

Market Risk Management

Market risk is the risk that changes in market conditions may adversely impact the value of assets or liabilities, or otherwise negatively impact earnings. This risk is inherent in the financial instruments associated with our operations, primarily within our *Global Markets* segment. We are also exposed to these risks in other areas of the Corporation (e.g., our ALM activities). In the event of market stress, these risks could have a material impact on the results of the Corporation. For additional information, see Interest Rate Risk Management for Non-trading Activities on page 76.

Our traditional banking loan and deposit products are non-trading positions and are generally reported at amortized cost for assets or the amount owed for liabilities (historical cost). However, these positions are still subject to changes in economic value based on varying market conditions, with one of the primary risks being changes in the levels of interest rates. The risk of adverse changes in the economic value of our non-trading positions arising from changes in interest rates is managed through our ALM activities. We have elected to account for certain assets and liabilities under the fair value option.

Our trading positions are reported at fair value with changes reflected in income. Trading positions are subject to various changes in market-based risk factors. The majority of this risk is generated by our activities in the interest rate, foreign exchange, credit, equity and commodities markets. In addition, the values of assets and liabilities could change due to market liquidity, correlations across markets and expectations of market volatility. We seek to manage these risk exposures by using a variety of techniques that encompass a broad range of financial instruments. The key risk management techniques are discussed in more detail in the Trading Risk Management section.

Global Risk Management is responsible for providing senior management with a clear and comprehensive understanding of the trading risks to which the Corporation is exposed. These responsibilities include ownership of market risk policy, developing and maintaining quantitative risk models, calculating aggregated risk measures, establishing and monitoring position limits consistent with risk appetite, conducting daily reviews and analysis of trading inventory, approving material risk exposures and fulfilling regulatory requirements. Market risks that impact businesses outside of *Global Markets* are monitored and governed by their respective governance functions.

Quantitative risk models, such as VaR, are an essential component in evaluating the market risks within a portfolio. A subcommittee of the Management Risk Committee (MRC) is responsible for providing management oversight and approval of model risk management and governance (Risk Management, or RM subcommittee). The RM subcommittee defines model risk standards, consistent with the Corporation's risk framework and risk appetite, prevailing regulatory guidance and industry best practice. Models must meet certain validation criteria, including effective challenge of the model development process and a sufficient demonstration of developmental evidence incorporating a comparison of alternative theories and approaches. The RM subcommittee ensures model standards are consistent with model risk requirements and monitors the effective challenge in the model validation process across the Corporation. In addition, the relevant stakeholders must agree on any required actions or restrictions to the models and maintain a stringent monitoring process to ensure continued compliance.

For more information on the fair value of certain financial assets and liabilities, see *Note 20 – Fair Value Measurements* to the Consolidated Financial Statements.

Interest Rate Risk

Interest rate risk represents exposures to instruments whose values vary with the level or volatility of interest rates. These instruments include, but are not limited to, loans, debt securities, certain trading-related assets and liabilities, deposits, borrowings and derivatives. Hedging instruments used to mitigate these risks include derivatives such as options, futures, forwards and swaps.

Foreign Exchange Risk

Foreign exchange risk represents exposures to changes in the values of current holdings and future cash flows denominated in currencies other than the U.S. Dollar. The types of instruments exposed to this risk include investments in non-U.S. subsidiaries, foreign currency-denominated loans and securities, future cash flows in foreign currencies arising from foreign exchange transactions, foreign currency-denominated debt and various foreign exchange derivatives whose values fluctuate with changes in the level or volatility of currency exchange rates or non-U.S. interest rates. Hedging instruments used to mitigate this risk include foreign exchange options, currency swaps, futures, forwards, and foreign currency-denominated debt and deposits.

Mortgage Risk

Mortgage risk represents exposures to changes in the values of mortgage-related instruments. The values of these instruments are sensitive to prepayment rates, mortgage rates, agency debt ratings, default, market liquidity, government participation and interest rate volatility. Our exposure to these instruments takes several forms. First, we trade and engage in market-making activities in a variety of mortgage securities including whole loans, pass-through certificates, commercial mortgages and collateralized mortgage obligations including collateralized debt obligations (CDO) using mortgages as underlying collateral. Second, we originate a variety of MBS which involves the

accumulation of mortgage-related loans in anticipation of eventual securitization. Third, we may hold positions in mortgage securities and residential mortgage loans as part of the ALM portfolio. Fourth, we create MSRs as part of our mortgage origination activities. For more information on MSRs, see *Note 1 – Summary of Significant Accounting Principles* and *Note 23 – Mortgage Servicing Rights* to the Consolidated Financial Statements. Hedging instruments used to mitigate this risk include derivatives such as options, swaps, futures and forwards as well as securities including MBS and U.S. Treasury securities. For additional information, see Mortgage Banking Risk Management on page 78.

Equity Market Risk

Equity market risk represents exposures to securities that represent an ownership interest in a corporation in the form of domestic and foreign common stock or other equity-linked instruments. Instruments that would lead to this exposure include, but are not limited to, the following: common stock, exchange-traded funds, American Depositary Receipts, convertible bonds, listed equity options (puts and calls), OTC equity options, equity total return swaps, equity index futures and other equity derivative products. Hedging instruments used to mitigate this risk include options, futures, swaps, convertible bonds and cash positions.

Commodity Risk

Commodity risk represents exposures to instruments traded in the petroleum, natural gas, power and metals markets. These instruments consist primarily of futures, forwards, swaps and options. Hedging instruments used to mitigate this risk include options, futures and swaps in the same or similar commodity product, as well as cash positions.

Issuer Credit Risk

Issuer credit risk represents exposures to changes in the creditworthiness of individual issuers or groups of issuers. Our portfolio is exposed to issuer credit risk where the value of an asset may be adversely impacted by changes in the levels of credit spreads, by credit migration or by defaults. Hedging instruments used to mitigate this risk include bonds, CDS and other credit fixed-income instruments.

Market Liquidity Risk

Market liquidity risk represents the risk that the level of expected market activity changes dramatically and, in certain cases, may even cease. This exposes us to the risk that we will not be able to transact business and execute trades in an orderly manner which may impact our results. This impact could be further exacerbated if expected hedging or pricing correlations are compromised by disproportionate demand or lack of demand for certain instruments. We utilize various risk mitigating techniques as discussed in more detail in Trading Risk Management.

Trading Risk Management

To evaluate risk in our trading activities, we focus on the actual and potential volatility of revenues generated by individual positions as well as portfolios of positions. Various techniques and procedures are utilized to enable the most complete understanding of these risks. Quantitative measures of market risk are evaluated on a daily basis from a single position to the portfolio of the Corporation. These measures include sensitivities of positions to various market risk factors, such as the potential impact on revenue from a one basis point change in interest rates, and statistical measures utilizing both actual and hypothetical market moves, such as VaR and stress testing. Periods of extreme market stress influence the reliability of these techniques to varying degrees. Qualitative evaluations of market risk utilize the suite of quantitative risk measures while understanding each of their respective limitations. Additionally, risk managers independently evaluate the risk of the portfolios under the current market environment and potential future environments.

VaR is a common statistic used to measure market risk as it allows the aggregation of market risk factors, including the effects of portfolio diversification. A VaR model simulates the value of a portfolio under a range of scenarios in order to generate a distribution of potential gains and losses. VaR represents the loss a portfolio is not expected to exceed more than a certain number of times per period, based on a specified holding period, confidence level and window of historical data. We use one VaR model consistently across the trading portfolios and it uses a historical simulation approach based on a three-year window of historical data. Our primary VaR statistic is equivalent to a 99 percent confidence level. This means that for a VaR with a one-day holding period, there should not be losses in excess of VaR, on average, 99 out of 100 trading days.

Within any VaR model, there are significant and numerous assumptions that will differ from company to company. The accuracy of a VaR model depends on the availability and quality of historical data for each of the risk factors in the portfolio. A VaR model may require additional modeling assumptions for new products that do not have the necessary historical market data or for less liquid positions for which accurate daily prices are not consistently available. For positions with insufficient historical data for the VaR calculation, the process for establishing an appropriate proxy is based on fundamental and statistical analysis of the new product or less liquid position. This analysis identifies reasonable alternatives that replicate both the expected volatility and correlation to other market risk factors that the missing data would be expected to experience.

VaR may not be indicative of realized revenue volatility as changes in market conditions or in the composition of the portfolio can have a material impact on the results. In particular, the historical data used for the VaR calculation might indicate higher or lower levels of portfolio diversification than will be experienced. In order for the VaR model to reflect current market conditions, we update the historical data underlying our VaR model on a weekly basis, or more frequently during periods of market stress, and regularly review the assumptions underlying the model. A relatively minor portion of risks related to our trading positions is not included in VaR. These risks are reviewed as part of our ICAAP.

Global Risk Management continually reviews, evaluates and enhances our VaR model so that it reflects the material risks in our trading portfolio. Changes to the VaR model are reviewed and approved prior to implementation and any material changes are reported to management through the appropriate management committees.

Trading limits on quantitative risk measures, including VaR, are independently set by Global Markets Risk Management and reviewed on a regular basis to ensure they remain relevant and within our overall risk appetite for market risks. Trading limits are reviewed in the context of market liquidity, volatility and strategic business priorities. Trading limits are set at both a granular level to ensure extensive coverage of risks as well as at aggregated

portfolios to account for correlations among risk factors. All trading limits are approved at least annually. Approved trading limits are stored and tracked in a centralized limits management system. Trading limit excesses are communicated to management for review. Certain quantitative market risk measures and corresponding limits have been identified as critical in the Corporation's Risk Appetite Statement. These risk appetite limits are reported on a daily basis and are approved at least annually by the ERC and the Board.

In periods of market stress, *Global Markets* senior leadership communicates daily to discuss losses, key risk positions and any limit excesses. As a result of this process, the businesses may selectively reduce risk.

Table 56 presents the total market-based trading portfolio VaR which is the combination of the covered positions trading portfolio and the impact from less liquid trading exposures. Covered positions are defined by regulatory standards as trading assets and liabilities, both on- and off-balance sheet, that meet a defined set of specifications. These specifications identify the most liquid trading positions which are intended to be held for a short-term horizon and where the Corporation is able to hedge the material risk elements in a two-way market. Positions in less liquid markets, or where there are restrictions on the ability to trade the positions, typically do not qualify as covered positions. Foreign exchange and commodity positions are always considered covered positions, except for structural foreign currency positions that we choose to exclude with prior regulatory approval. In addition, Table 56 presents our fair value option portfolio, which includes the funded and unfunded exposures for which we elect the fair value option, and their corresponding hedges. The fair value option portfolio combined with the total market-based trading portfolio VaR represents the Corporation's total market-based portfolio VaR. Additionally, market risk VaR for trading activities as presented in Table 56 differs from VaR used for regulatory capital calculations due to the holding period being used. The holding period for VaR used for regulatory capital calculations is 10 days, while for the market risk VaR presented below it is one day. Both measures utilize the same process and methodology.

The total market-based portfolio VaR results in Table 56 include market risk from all business segments to which the Corporation is exposed, excluding CVA and DVA. The majority of this portfolio is within the *Global Markets* segment.

Table 56 presents year-end, average, high and low daily trading VaR for 2015 and 2014 using a 99 percent confidence level.

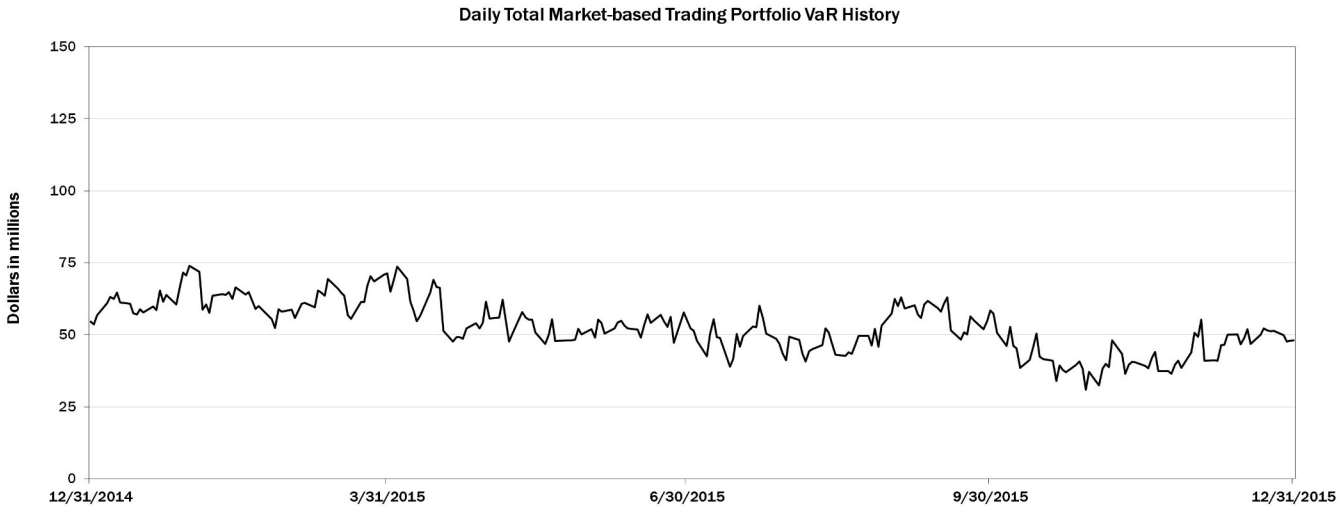
Table 56 Market Risk VaR for Trading Activities

	2015				2014			
(Dollars in millions)	Year End	Average	High [1]	Low [1]	Year End	Average	High [1]	Low [1]
Foreign exchange	$ 10	$ 10	$ 42	$ 5	$ 13	$ 16	$ 24	$ 8
Interest rate	17	25	42	14	24	34	60	19
Credit	32	35	46	27	43	52	82	32
Equity	18	16	33	9	16	17	32	11
Commodity	4	5	8	3	8	8	10	6
Portfolio diversification	(36)	(46)	—	—	(56)	(78)	—	—
Total covered positions trading portfolio	45	45	66	26	48	49	86	33
Impact from less liquid exposures	3	8	—	—	7	7	—	—
Total market-based trading portfolio	48	53	74	31	55	56	101	38
Fair value option loans	35	26	36	17	35	31	40	21
Fair value option hedges	17	14	22	8	21	14	23	8
Fair value option portfolio diversification	(35)	(26)	—	—	(37)	(24)	—	—
Total fair value option portfolio	17	14	19	10	19	21	28	15
Portfolio diversification	(4)	(6)	—	—	(7)	(12)	—	—
Total market-based portfolio	$ 61	$ 61	$ 85	$ 41	$ 67	$ 65	$ 120	$ 44

[1] The high and low for each portfolio may have occurred on different trading days than the high and low for the components. Therefore the impact from less liquid exposures and the amount of portfolio diversification, which is the difference between the total portfolio and the sum of the individual components, are not relevant.

The average total market-based trading portfolio VaR decreased during 2015 primarily due to reduced exposure to the credit and interest rate markets, partially offset by a reduction in portfolio diversification.

The graph below presents the daily total market-based trading portfolio VaR for 2015, corresponding to the data in Table 56.



Additional VaR statistics produced within the Corporation's single VaR model are provided in Table 57 at the same level of detail as in Table 56. Evaluating VaR with additional statistics allows for an increased understanding of the risks in the portfolio as the historical market data used in the VaR calculation does not necessarily follow a predefined statistical distribution. Table 57 presents average trading VaR statistics for 99 percent and 95 percent confidence levels for 2015 and 2014.

Table 57 Average Market Risk VaR for Trading Activities – 99 percent and 95 percent VaR Statistics

	2015		2014	
(Dollars in millions)	99 percent	95 percent	99 percent	95 percent
Foreign exchange	$ 10	$ 6	$ 16	$ 9
Interest rate	25	15	34	21
Credit	35	20	52	26
Equity	16	9	17	9
Commodity	5	3	8	4
Portfolio diversification	(46)	(31)	(78)	(43)
Total covered positions trading portfolio	45	22	49	26
Impact from less liquid exposures	8	3	7	3
Total market-based trading portfolio	53	25	56	29
Fair value option loans	26	15	31	15
Fair value option hedges	14	9	14	9
Fair value option portfolio diversification	(26)	(16)	(24)	(14)
Total fair value option portfolio	14	8	21	10
Portfolio diversification	(6)	(5)	(12)	(8)
Total market-based portfolio	$ 61	$ 28	$ 65	$ 31

Backtesting

The accuracy of the VaR methodology is evaluated by backtesting, which compares the daily VaR results, utilizing a one-day holding period, against a comparable subset of trading revenue. A backtesting excess occurs when a trading loss exceeds the VaR for the corresponding day. These excesses are evaluated to understand the positions and market moves that produced the trading loss and to ensure that the VaR methodology accurately represents those losses. As our primary VaR statistic used for backtesting is based on a 99 percent confidence level and a one-day holding period, we expect one trading loss in excess of VaR every 100 days, or between two to three trading losses in excess of VaR over the course of a year. The number of backtesting excesses observed can differ from the statistically expected number of excesses if the current level of market volatility is materially different than the level of market volatility that existed during the three years of historical data used in the VaR calculation.

We conduct daily backtesting on our portfolios, ranging from the total market-based portfolio to individual trading areas. Additionally, we conduct daily backtesting on the VaR results used for regulatory capital calculations as well as the VaR results for key legal entities, regions and risk factors. These results are reported to senior market risk management. Senior management regularly reviews and evaluates the results of these tests.

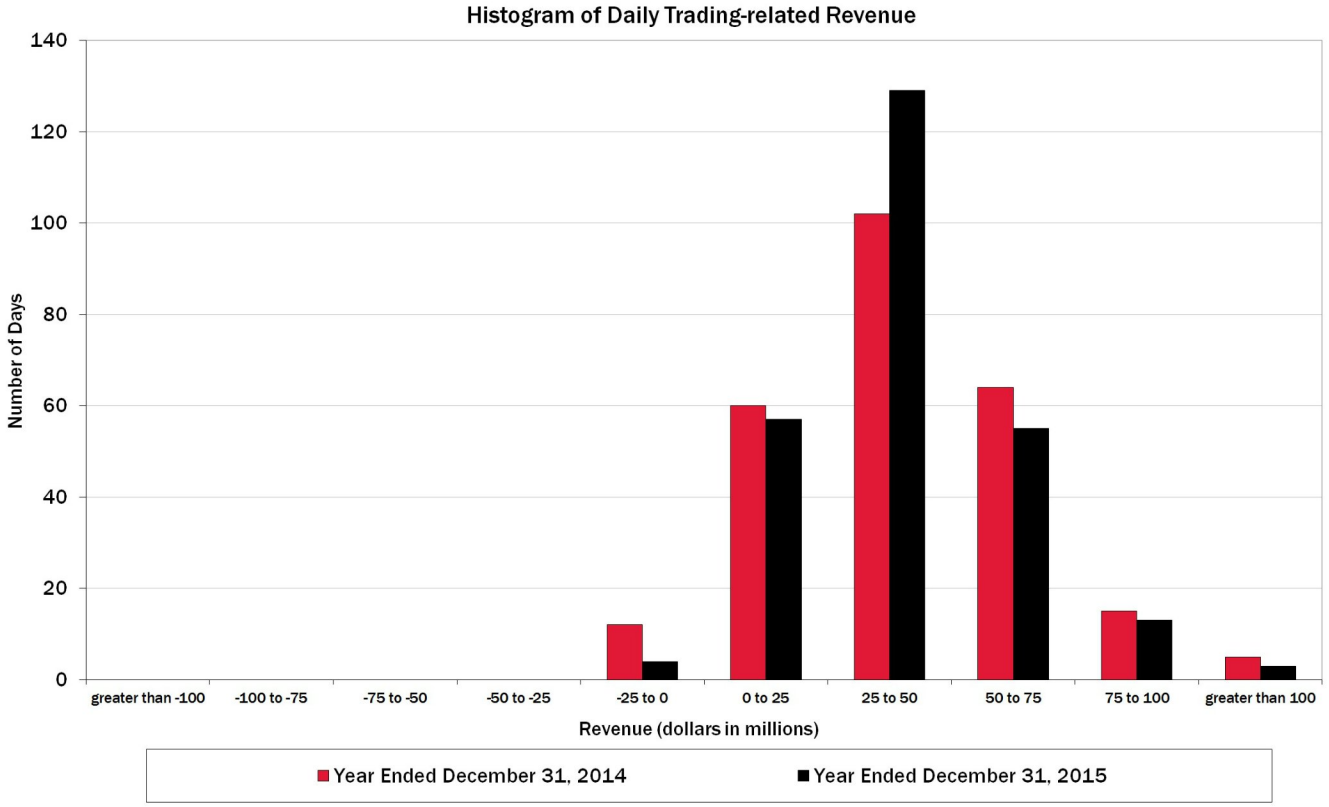
The trading revenue used for backtesting is defined by regulatory agencies in order to most closely align with the VaR component of the regulatory capital calculation. This revenue differs from total trading-related revenue in that it excludes revenue from trading activities that either do not generate market risk or the market risk cannot be included in VaR. Some examples of the types of revenue excluded for backtesting are fees, commissions, reserves, net interest income and intraday trading revenues.

During 2015, there were no days in which there was a backtesting excess for our total market-based portfolio VaR, utilizing a one-day holding period.

Total Trading-related Revenue

Total trading-related revenue, excluding brokerage fees, and CVA and DVA related revenue, represents the total amount earned from trading positions, including market-based net interest income, which are taken in a diverse range of financial instruments and markets. Trading account assets and liabilities are reported at fair value. For more information on fair value, see *Note 20 – Fair Value Measurements* to the Consolidated Financial Statements. Trading-related revenues can be volatile and are largely driven by general market conditions and customer demand. Also, trading-related revenues are dependent on the volume and type of transactions, the level of risk assumed, and the volatility of price and rate movements at any given time within the ever-changing market environment. Significant daily revenues by business are monitored and the primary drivers of these are reviewed.

The histogram below is a graphic depiction of trading volatility and illustrates the daily level of trading-related revenue for 2015 and 2014. During 2015, positive trading-related revenue was recorded for 98 percent of the trading days, of which 77 percent were daily trading gains of over $25 million and the largest loss was $22 million. This compares to 2014 where positive trading-related revenue was recorded for 95 percent of the trading days, of which 72 percent were daily trading gains of over $25 million and the largest loss was $17 million.



Trading Portfolio Stress Testing

Because the very nature of a VaR model suggests results can exceed our estimates and it is dependent on a limited historical window, we also stress test our portfolio using scenario analysis. This analysis estimates the change in the value of our trading portfolio that may result from abnormal market movements.

A set of scenarios, categorized as either historical or hypothetical, are computed daily for the overall trading portfolio and individual businesses. These scenarios include shocks to underlying market risk factors that may be well beyond the shocks found in the historical data used to calculate VaR. Historical scenarios simulate the impact of the market moves that occurred during a period of extended historical market stress. Generally, a multi-week period representing the most severe point during a crisis is selected for each historical scenario. Hypothetical scenarios provide simulations of the estimated portfolio impact from potential future market stress events. Scenarios are reviewed and updated in response to changing positions and new economic or political information. In addition, new or ad hoc scenarios are developed to address specific potential market events or particular vulnerabilities in the portfolio. The stress tests are reviewed on a regular basis and the results are presented to senior management.

Stress testing for the trading portfolio is integrated with enterprise-wide stress testing and incorporated into the limits framework. The macroeconomic scenarios used for enterprise-wide stress testing purposes differ from the typical trading portfolio scenarios in that they have a longer time horizon and the results are forecasted over multiple periods for use in consolidated capital and liquidity planning. For additional information, see Managing Risk – Corporation-wide Stress Testing on page 31.

Interest Rate Risk Management for Non-trading Activities

The following discussion presents net interest income excluding the impact of trading-related activities.

Interest rate risk represents the most significant market risk exposure to our non-trading balance sheet. Interest rate risk is measured as the potential change in net interest income caused by movements in market interest rates. Client-facing activities, primarily lending and deposit-taking, create interest rate sensitive positions on our balance sheet.

We prepare forward-looking forecasts of net interest income. The baseline forecast takes into consideration expected future business growth, ALM positioning and the direction of interest rate movements as implied by the market-based forward curve. We then measure and evaluate the impact that alternative interest rate scenarios have on the baseline forecast in order to assess interest rate sensitivity under varied conditions. The net interest income forecast is frequently updated for changing assumptions and differing outlooks based on economic trends, market conditions and business strategies. Thus, we continually monitor our balance sheet position in order to maintain an acceptable level of exposure to interest rate changes.

The interest rate scenarios that we analyze incorporate balance sheet assumptions such as loan and deposit growth and pricing, changes in funding mix, product repricing and maturity characteristics. Our overall goal is to manage interest rate risk so that movements in interest rates do not significantly adversely affect earnings and capital.

Table 58 presents the spot and 12-month forward rates used in our baseline forecasts at December 31, 2015 and 2014.

Table 58 Forward Rates

	December 31, 2015		
	Federal Funds	Three-month LIBOR	10-Year Swap
Spot rates	**0.50%**	**0.61%**	**2.19%**
12-month forward rates	**1.00**	**1.22**	**2.39**
	December 31, 2014		
Spot rates	0.25%	0.26%	2.28%
12-month forward rates	0.75	0.91	2.55

Table 59 shows the pretax dollar impact to forecasted net interest income over the next 12 months from December 31, 2015 and 2014, resulting from instantaneous parallel and non-parallel shocks to the market-based forward curve. Periodically we evaluate the scenarios presented to ensure that they are meaningful in the context of the current rate environment. For more information on net interest income excluding the impact of trading-related activities, see page 12.

During 2015, the asset sensitivity of our balance sheet increased due to higher deposit balances and lower long-end interest rates. We continue to be asset sensitive to a parallel move in interest rates with the majority of that benefit coming from the short end of the yield curve. Additionally, higher interest rates impact the fair value of debt securities and, accordingly, for debt securities classified as AFS, may adversely affect accumulated OCI and thus capital levels under the Basel 3 capital rules. Under instantaneous upward parallel shifts, the near-term adverse impact to Basel 3 capital is reduced over time by offsetting positive impacts to net interest income. For more information on the transition provisions of Basel 3, see Capital Management – Regulatory Capital on page 33.

Table 59 Estimated Net Interest Income Excluding Trading-related Net Interest Income [1]

(Dollars in millions) Curve Change	Short Rate (bps)	Long Rate (bps)	December 31 2015	December 31 2014
Parallel Shifts				
+100 bps instantaneous shift	+100	+100	**$ 3,606**	$ 3,358
-50 bps instantaneous shift	-50	-50	**(3,458)**	(2,722)
Flatteners				
Short-end instantaneous change	+100	—	**2,418**	1,951
Long-end instantaneous change	—	-50	**(1,767)**	(1,460)
Steepeners				
Short-end instantaneous change	-50	—	**(1,672)**	(1,251)
Long-end instantaneous change	—	+100	**1,217**	1,465

[1] Effective July 1, 2016, we changed our accounting method for the amortization of premiums and accretion of discounts related to certain debt securities. December 31, 2015 and 2014 amounts have been updated to reflect this change. For additional information, see *Note 1 – Summary of Significant Accounting Principles* to the Consolidated Financial Statements.

The sensitivity analysis in Table 59 assumes that we take no action in response to these rate shocks and does not assume any change in other macroeconomic variables normally correlated with changes in interest rates. As part of our ALM activities, we use securities, certain residential mortgages, and interest rate and foreign exchange derivatives in managing interest rate sensitivity.

The behavior of our deposit portfolio in the baseline forecast and in alternate interest rate scenarios is a key assumption in our projected estimates of net interest income. The sensitivity analysis in Table 59 assumes no change in deposit portfolio size or mix from the baseline forecast in alternate rate environments. In higher rate scenarios, any customer activity resulting in the replacement of low-cost or noninterest-bearing deposits with higher-yielding deposits or market-based funding would reduce the Corporation's benefit in those scenarios.

Interest Rate and Foreign Exchange Derivative Contracts

Interest rate and foreign exchange derivative contracts are utilized in our ALM activities and serve as an efficient tool to manage our interest rate and foreign exchange risk. We use derivatives to hedge the variability in cash flows or changes in fair value on our balance sheet due to interest rate and foreign exchange components. For more information on our hedging activities, see *Note 2 – Derivatives* to the Consolidated Financial Statements.

Our interest rate contracts are generally non-leveraged generic interest rate and foreign exchange basis swaps, options, futures and forwards. In addition, we use foreign exchange contracts, including cross-currency interest rate swaps, foreign currency futures contracts, foreign currency forward contracts and options to mitigate the foreign exchange risk associated with foreign currency-denominated assets and liabilities.

Changes to the composition of our derivatives portfolio during 2015 reflect actions taken for interest rate and foreign exchange rate risk management. The decisions to reposition our derivatives

portfolio are based on the current assessment of economic and financial conditions including the interest rate and foreign currency environments, balance sheet composition and trends, and the relative mix of our cash and derivative positions.

Table 60 presents derivatives utilized in our ALM activities including those designated as accounting and economic hedging instruments and shows the notional amount, fair value, weighted-average receive-fixed and pay-fixed rates, expected maturity and average estimated durations of our open ALM derivatives at December 31, 2015 and 2014. These amounts do not include derivative hedges on our MSRs.

Table 60 Asset and Liability Management Interest Rate and Foreign Exchange Contracts

(Dollars in millions, average estimated duration in years)	December 31, 2015								
		Expected Maturity							
	Fair Value	Total	2016	2017	2018	2019	2020	Thereafter	Average Estimated Duration
Receive-fixed interest rate swaps [1]	$ 6,291								4.98
Notional amount		$ 114,354	$ 15,339	$ 21,453	$ 21,850	$ 9,783	$ 7,015	$ 38,914	
Weighted-average fixed-rate		3.12%	3.12%	3.64%	3.20%	2.37%	2.13%	3.16%	
Pay-fixed interest rate swaps [1]	(81)								3.98
Notional amount		$ 12,131	$ 1,025	$ 1,527	$ 5,668	$ 600	$ 51	$ 3,260	
Weighted-average fixed-rate		1.70%	1.65%	1.84%	1.41%	1.59%	3.64%	2.15%	
Same-currency basis swaps [2]	(70)								
Notional amount		$ 75,224	$ 15,692	$ 20,833	$ 11,026	$ 6,786	$ 1,180	$ 19,707	
Foreign exchange basis swaps [1, 3, 4]	(3,968)								
Notional amount		144,446	25,762	27,441	19,319	12,226	10,572	49,126	
Option products [5]	57								
Notional amount [6]		752	737	—	—	—	—	15	
Foreign exchange contracts [1, 4, 7]	2,345								
Notional amount [6]		(25,405)	(36,504)	5,380	(2,228)	2,123	52	5,772	
Futures and forward rate contracts	(5)								
Notional amount [6]		200	200	—	—	—	—	—	
Net ALM contracts	$ 4,569								

(Dollars in millions, average estimated duration in years)	December 31, 2014								
		Expected Maturity							
	Fair Value	Total	2015	2016	2017	2018	2019	Thereafter	Average Estimated Duration
Receive-fixed interest rate swaps [1]	$ 7,626								4.34
Notional amount		$ 113,766	$ 11,785	$ 15,339	$ 21,453	$ 15,299	$ 10,233	$ 39,657	
Weighted-average fixed-rate		2.98%	3.56%	3.12%	3.64%	4.07%	0.49%	2.63%	
Pay-fixed interest rate swaps [1]	(829)								8.05
Notional amount		$ 14,668	$ 520	$ 1,025	$ 1,527	$ 2,908	$ 425	$ 8,263	
Weighted-average fixed-rate		2.27%	2.30%	1.65%	1.84%	1.62%	0.09%	2.77%	
Same-currency basis swaps [2]	(74)								
Notional amount		$ 94,413	$ 18,881	$ 15,691	$ 21,068	$ 11,026	$ 6,787	$ 20,960	
Foreign exchange basis swaps [1, 3, 4]	(2,352)								
Notional amount		161,196	27,629	26,118	27,026	14,255	12,359	53,809	
Option products [5]	11								
Notional amount [6]		980	964	—	—	—	—	16	
Foreign exchange contracts [1, 4, 7]	3,700								
Notional amount [6]		(22,572)	(29,931)	(2,036)	6,134	(2,335)	2,359	3,237	
Futures and forward rate contracts	(129)								
Notional amount [6]		(14,949)	(14,949)	—	—	—	—	—	
Net ALM contracts	$ 7,953								

[1] Does not include basis adjustments on either fixed-rate debt issued by the Corporation or AFS debt securities, which are hedged using derivatives designated as fair value hedging instruments, that substantially offset the fair values of these derivatives.

[2] At December 31, 2015 and 2014, the notional amount of same-currency basis swaps included $75.2 billion and $94.4 billion in both foreign currency and U.S. Dollar-denominated basis swaps in which both sides of the swap are in the same currency.

[3] Foreign exchange basis swaps consisted of cross-currency variable interest rate swaps used separately or in conjunction with receive-fixed interest rate swaps.

[4] Does not include foreign currency translation adjustments on certain non-U.S. debt issued by the Corporation that substantially offset the fair values of these derivatives.

[5] The notional amount of option products of $752 million at December 31, 2015 was comprised of $737 million in foreign exchange options and $15 million in purchased caps/floors. Option products of $980 million at December 31, 2014 were comprised of $974 million in foreign exchange options, $16 million in purchased caps/floors and $(10) million in swaptions.

[6] Reflects the net of long and short positions. Amounts shown as negative reflect a net short position.

[7] The notional amount of foreign exchange contracts of $(25.4) billion at December 31, 2015 was comprised of $21.3 billion in foreign currency-denominated and cross-currency receive-fixed swaps, $(40.3) billion in net foreign currency forward rate contracts, $(7.6) billion in foreign currency-denominated pay-fixed swaps and $1.2 billion in net foreign currency futures contracts. Foreign exchange contracts of $(22.6) billion at December 31, 2014 were comprised of $21.0 billion in foreign currency-denominated and cross-currency receive-fixed swaps, $(36.4) billion in net foreign currency forward rate contracts, $(8.3) billion in foreign currency-denominated pay-fixed swaps and $1.1 billion in foreign currency futures contracts.

We use interest rate derivative instruments to hedge the variability in the cash flows of our assets and liabilities and other forecasted transactions (collectively referred to as cash flow hedges). The net losses on both open and terminated cash flow hedge derivative instruments recorded in accumulated OCI were $1.7 billion and $2.7 billion, on a pretax basis, at December 31, 2015 and 2014. These net losses are expected to be reclassified into earnings in the same period as the hedged cash flows affect earnings and will decrease income or increase expense on the respective hedged cash flows. Assuming no change in open cash flow derivative hedge positions and no changes in prices or interest rates beyond what is implied in forward yield curves at December 31, 2015, the pretax net losses are expected to be reclassified into earnings as follows: $563 million, or 33 percent within the next year, 37 percent in years two through five, and 20 percent in years six through ten, with the remaining 10 percent thereafter. For more information on derivatives designated as cash flow hedges, see *Note 2 – Derivatives* to the Consolidated Financial Statements.

We hedge our net investment in non-U.S. operations determined to have functional currencies other than the U.S. Dollar using forward foreign exchange contracts that typically settle in less than 180 days, cross-currency basis swaps and foreign exchange options. We recorded net after-tax losses on derivatives in accumulated OCI associated with net investment hedges which were offset by gains on our net investments in consolidated non-U.S. entities at December 31, 2015.

Mortgage Banking Risk Management

We originate, fund and service mortgage loans, which subject us to credit, liquidity and interest rate risks, among others. We determine whether loans will be HFI or held-for-sale at the time of commitment and manage credit and liquidity risks by selling or securitizing a portion of the loans we originate.

Interest rate risk and market risk can be substantial in the mortgage business. Fluctuations in interest rates drive consumer demand for new mortgages and the level of refinancing activity, which in turn affects total origination and servicing income. Hedging the various sources of interest rate risk in mortgage banking is a complex process that requires complex modeling and ongoing monitoring. Typically, an increase in mortgage interest rates will lead to a decrease in mortgage originations and related fees. IRLCs and the related residential first mortgage LHFS are subject to interest rate risk between the date of the IRLC and the date the loans are sold to the secondary market, as an increase in mortgage interest rates will typically lead to a decrease in the value of these instruments.

MSRs are nonfinancial assets created when the underlying mortgage loan is sold to investors and we retain the right to service the loan. Typically, an increase in mortgage rates will lead to an increase in the value of the MSRs driven by lower prepayment expectations. This increase in value from increases in mortgage rates is opposite of, and therefore offsets, the risk described for IRLCs and LHFS. Because the interest rate risks of these two hedged items offset, we combine them into one overall hedged item with one combined economic hedge portfolio.

Interest rate and certain market risks of IRLCs and residential mortgage LHFS are economically hedged in combination with MSRs. To hedge these combined assets, we use certain derivatives such as interest rate options, interest rate swaps, forward sale commitments, eurodollar and U.S. Treasury futures, and mortgage TBAs, as well as other securities including agency MBS, principal-only and interest-only MBS and U.S. Treasury securities. During 2015 and 2014, we recorded gains in mortgage banking income of $360 million and $357 million related to the change in fair value of the derivative contracts and other securities used to hedge the market risks of the MSRs, IRLCs and LHFS, net of gains and losses due to changes in fair value of these hedged items. For more information on MSRs, see *Note 23 – Mortgage Servicing Rights* to the Consolidated Financial Statements and for more information on mortgage banking income, see *Consumer Banking* on page 14.

Compliance Risk Management

Compliance risk is the risk of legal or regulatory sanctions, material financial loss or damage to the reputation of the Corporation arising from the failure of the Corporation to comply with the requirements of applicable laws, rules, regulations and related self-regulatory organizations' standards and codes of conduct (collectively, applicable laws, rules and regulations). Global Compliance independently assesses compliance risk, and evaluates FLUs and control functions for adherence to applicable laws, rules and regulations, including identifying compliance issues and risks, performing monitoring and independent 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. For more information on FLUs and control functions, see Managing Risk on page 28.

The Corporation's approach to the management of compliance risk is described in the Global Compliance – Enterprise Policy, which outlines the requirements of the Corporation's global compliance program, and defines roles and responsibilities related to the implementation, execution and management of the compliance program by Global Compliance. The requirements work together to drive a comprehensive risk-based approach for the proactive identification, management and escalation of compliance risks throughout the Corporation.

The Global Compliance – Enterprise Policy sets the requirements for reporting compliance risk information to executive management as well as the Board or appropriate Board-level committees with an outline for conducting objective independent oversight of the Corporation's compliance risk management activities. The Board provides oversight of compliance risk through its Audit Committee and ERC.

Operational Risk Management

The Corporation defines operational risk as the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events. Operational risk may occur anywhere in the Corporation, including third-party business processes, and is not limited to operations functions. Effects may extend beyond financial losses and may result in reputational risk impacts. Operational risk includes legal risk. Successful operational risk management is particularly important to diversified financial services companies because of the nature, volume and complexity of the financial services business. Operational risk is a significant component in the calculation of total risk-weighted assets used in the Basel 3 capital calculation under the Advanced approaches. For more information on Basel 3 Advanced approaches, see Capital Management – Advanced Approaches on page 34.

We approach operational risk management from two perspectives within the structure of the Corporation: (1) at the enterprise level to provide independent, integrated management of operational risk across the organization, and (2) at the business and control function levels to address operational risk in revenue producing and non-revenue producing units. The Operational Risk Management Program addresses the overarching processes for identifying, measuring, monitoring and controlling operational risk, and reporting operational risk information to management and the Board. A sound internal governance structure enhances the effectiveness of the Corporation's Operational Risk Management Program and is accomplished at the enterprise level through formal oversight by the Board, the ERC, the CRO and a variety of management committees and risk oversight groups aligned to the Corporation's overall risk governance framework and practices. Of these, the MRC oversees the Corporation's policies and processes for sound operational risk management. The MRC also serves as an escalation point for critical operational risk matters within the Corporation. The MRC reports operational risk activities to the ERC. The independent operational risk management teams oversee the businesses and control functions to monitor adherence to the Operational Risk Management Program and advise and challenge operational risk exposures.

Within the Global Risk Management organization, the Enterprise Operational Risk team develops and guides the strategies, enterprise-wide policies, practices, controls and monitoring tools for assessing and managing operational risks across the organization. The Enterprise Operational Risk team reports results to businesses, control functions, senior management, management committees, the ERC and the Board.

The businesses and control functions are responsible for assessing, monitoring and managing all the risks within their units, including operational risks. In addition to enterprise risk management tools such as loss reporting, scenario analysis and RCSAs, operational risk executives, working in conjunction with senior business executives, have developed key tools to help identify, measure, monitor and control risk in each business and control function. Examples of these include personnel management practices; data management, data quality controls and related processes; fraud management units; cybersecurity controls, processes and systems; transaction processing, monitoring and analysis; business recovery planning; and new product introduction processes. The business and control functions are also responsible for consistently implementing and monitoring adherence to corporate practices.

Business and control function management uses the enterprise RCSA process to capture the identification and assessment of operational risk exposures and evaluate the status of risk and control issues including risk mitigation plans, as appropriate. The goals of this process are to assess changing market and business conditions, evaluate key risks impacting each business and control function, and assess the controls in place to mitigate the risks. Key operational risk indicators have been developed and are used to assist in identifying trends and issues on an enterprise, business and control function level. Independent review and challenge to the Corporation's overall operational risk management framework is performed by the Corporate Operational Risk Program Adherence Team and reported through the operational risk governance committees and management routines.

Where appropriate, insurance policies are purchased to mitigate the impact of operational losses. These insurance policies are explicitly incorporated in the structural features of operational risk evaluation. As insurance recoveries, especially given recent market events, are subject to legal and financial uncertainty, the inclusion of these insurance policies is subject to reductions in their expected mitigating benefits.

Reputational Risk Management

Reputational risk is the risk that negative perceptions of the Corporation's conduct or business practices will adversely affect its profitability or operations through an inability to establish new or maintain existing customer/client relationships. Reputational risk may result from many of the Corporation's activities, including those related to the management of our strategic, operational, compliance and credit risks.

The Corporation manages reputational risk through established policies and controls in its businesses and risk management processes to mitigate reputational risks in a timely manner and through proactive monitoring and identification of potential reputational risk events. The Corporation has processes and procedures in place to respond to events that give rise to reputational risk, including educating individuals and organizations that influence public opinion, external communication strategies to mitigate the risk, and informing key stakeholders of potential reputational risks.

The Corporation's organization and governance structure provides oversight of reputational risks, and key risk indicators are reported regularly and directly to management and the ERC, which provides primary oversight of reputational risk. In addition, each FLU has a committee, which includes representatives from Compliance, Legal and Risk, that is responsible for the oversight of reputational risk. Such committees' oversight includes providing approval for business activities that present elevated levels of reputational risks.

Complex Accounting Estimates

Our significant accounting principles, as described in *Note 1 – Summary of Significant Accounting Principles* to the Consolidated Financial Statements, are essential in understanding the MD&A. Many of our significant accounting principles require complex judgments to estimate the values of assets and liabilities. We have procedures and processes in place to facilitate making these judgments.

The more judgmental estimates are summarized in the following discussion. We have identified and described the development of the variables most important in the estimation processes that involve mathematical models to derive the estimates. In many cases, there are numerous alternative judgments that could be used in the process of determining the inputs to the models. Where alternatives exist, we have used the factors that we believe represent the most reasonable value in developing the inputs. Actual performance that differs from our estimates of the key variables could impact our results of operations. Separate from the possible future impact to our results of operations from input and model variables, the value of our lending portfolio and market-sensitive assets and liabilities may change subsequent to the balance sheet date, often significantly, due to the nature and magnitude of future credit and market conditions. Such credit and market conditions may change quickly and in unforeseen ways and the resulting volatility could have a significant, negative effect on future operating results. These fluctuations would not be indicative of deficiencies in our models or inputs.

Allowance for Credit Losses

The allowance for credit losses, which includes the allowance for loan and lease losses and the reserve for unfunded lending commitments, represents management's estimate of probable losses inherent in the Corporation's loan portfolio excluding those loans accounted for under the fair value option. Our process for determining the allowance for credit losses is discussed in *Note 1 – Summary of Significant Accounting Principles* to the Consolidated Financial Statements. We evaluate our allowance at the portfolio segment level and our portfolio segments are Consumer Real Estate, Credit Card and Other Consumer, and Commercial. Due to the variability in the drivers of the assumptions used in this process, estimates of the portfolio's inherent risks and overall collectability change with changes in the economy, individual industries, countries, and borrowers' ability and willingness to repay their obligations. The degree to which any particular assumption affects the allowance for credit losses depends on the severity of the change and its relationship to the other assumptions.

Key judgments used in determining the allowance for credit losses include risk ratings for pools of commercial loans and leases, market and collateral values and discount rates for individually evaluated loans, product type classifications for consumer and commercial loans and leases, loss rates used for consumer and commercial loans and leases, adjustments made to address current events and conditions (e.g., the recent sharp drop in oil prices), considerations regarding domestic and global economic uncertainty, and overall credit conditions.

Our estimate for the allowance for loan and lease losses is sensitive to the loss rates and expected cash flows from our Consumer Real Estate and Credit Card and Other Consumer portfolio segments, as well as our U.S. small business commercial card portfolio within the Commercial portfolio segment. For each one-percent increase in the loss rates on loans collectively evaluated for impairment in our Consumer Real Estate portfolio segment, excluding PCI loans, coupled with a one-percent decrease in the discounted cash flows on those loans individually evaluated for impairment within this portfolio segment, the allowance for loan and lease losses at December 31, 2015 would have increased by $71 million. PCI loans within our Consumer Real Estate portfolio segment are initially recorded at fair value. Applicable accounting guidance prohibits carry-over or creation of valuation allowances in the initial accounting. However, subsequent decreases in the expected cash flows from the date of acquisition result in a charge to the provision for credit losses and a corresponding increase to the allowance for loan and lease losses. We subject our PCI portfolio to stress scenarios to evaluate the potential impact given certain events. A one-percent decrease in the expected cash flows could result in a $151 million impairment of the portfolio. For each one-percent increase in the loss rates on loans collectively evaluated for impairment within our Credit Card and Other Consumer portfolio segment and U.S. small business commercial card portfolio, coupled with a one-percent decrease in the expected cash flows on those loans individually evaluated for impairment within the Credit Card and Other Consumer portfolio segment and the U.S. small business commercial card portfolio, the allowance for loan and lease losses at December 31, 2015 would have increased by $38 million.

Our allowance for loan and lease losses is sensitive to the risk ratings assigned to loans and leases within the Commercial portfolio segment (excluding the U.S. small business commercial card portfolio). Assuming a downgrade of one level in the internal risk ratings for commercial loans and leases, except loans and leases already risk-rated Doubtful as defined by regulatory authorities, the allowance for loan and lease losses would have increased by $3.2 billion at December 31, 2015.

The allowance for loan and lease losses as a percentage of total loans and leases at December 31, 2015 was 1.37 percent and these hypothetical increases in the allowance would raise the ratio to 1.75 percent.

These sensitivity analyses do not represent management's expectations of the deterioration in risk ratings or the increases in loss rates but are provided as hypothetical scenarios to assess the sensitivity of the allowance for loan and lease losses to changes in key inputs. We believe the risk ratings and loss severities currently in use are appropriate and that the probability of the alternative scenarios outlined above occurring within a short period of time is remote.

The process of determining the level of the allowance for credit losses requires a high degree of judgment. It is possible that others, given the same information, may at any point in time reach different reasonable conclusions.

For more information on the FASB's proposed standard on accounting for credit losses, see *Note 1 – Summary of Significant Accounting Principles* to the Consolidated Financial Statements.

Mortgage Servicing Rights

MSRs are nonfinancial assets that are created when a mortgage loan is sold and we retain the right to service the loan. We account for consumer MSRs, including residential mortgage and home equity MSRs, at fair value with changes in fair value primarily recorded in mortgage banking income in the Consolidated Statement of Income.

We determine the fair value of our consumer MSRs using a valuation model that calculates the present value of estimated future net servicing income. The model incorporates key economic assumptions including estimates of prepayment rates and resultant weighted-average lives of the MSRs, and the option-adjusted spread levels. These variables can, and generally do, change from quarter to quarter as market conditions and projected interest rates change. These assumptions are subjective in nature and changes in these assumptions could materially affect our operating results. For example, increasing the prepayment rate assumption used in the valuation of our consumer MSRs by 10 percent while keeping all other assumptions unchanged could have resulted in an estimated decrease of $163 million in both MSRs and mortgage banking income for 2015. This impact does not reflect any hedge strategies that may be undertaken to mitigate such risk.

We manage potential changes in the fair value of MSRs through a comprehensive risk management program. The intent is to mitigate the effects of changes in the fair value of MSRs through the use of risk management instruments. To reduce the sensitivity of earnings to interest rate and market value fluctuations, securities including MBS and U.S. Treasury securities, as well as certain derivatives such as options and interest rate swaps, may be used to hedge certain market risks of the MSRs, but are not designated as accounting hedges. These instruments are carried at fair value with changes in fair value primarily recognized in mortgage banking income. For additional information, see Mortgage Banking Risk Management on page 78.

For more information on MSRs, including the sensitivity of weighted-average lives and the fair value of MSRs to changes in modeled assumptions, see *Note 23 – Mortgage Servicing Rights* to the Consolidated Financial Statements.

Fair Value of Financial Instruments

We classify the fair values of financial instruments based on the fair value hierarchy established under applicable accounting guidance which requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. Applicable accounting guidance establishes three levels of inputs used to measure fair value. We carry trading account assets and liabilities, derivative assets and liabilities, AFS debt and equity securities, other debt securities, consumer MSRs and certain other assets at fair value. Also, we account for certain loans and loan commitments, LHFS, short-term borrowings, securities financing agreements, asset-backed secured financings, long-term deposits and long-term debt under the fair value option.

The fair values of assets and liabilities may include adjustments, such as market liquidity and credit quality, where appropriate. Valuations of products using models or other techniques are sensitive to assumptions used for the significant inputs. Where market data is available, the inputs used for valuation reflect that information as of our valuation date. Inputs to valuation models are considered unobservable if they are supported by little or no market activity. In periods of extreme volatility, lessened liquidity or in illiquid markets, there may be more variability in market pricing or a lack of market data to use in the valuation process. In keeping with the prudent application of estimates and management judgment in determining the fair value of assets and liabilities, we have in place various processes and controls that include: a model validation policy that requires review and approval of quantitative models used for deal pricing, financial statement fair value determination and risk quantification; a trading product valuation policy that requires verification of all traded product valuations; and a periodic review and substantiation of daily profit and loss reporting for all traded products. Primarily through validation controls, we utilize both broker and pricing service inputs which can and do include both market-observable and internally-modeled values and/or valuation inputs. Our reliance on this information is affected by our understanding of how the broker and/or pricing service develops its data with a higher degree of reliance applied to those that are more directly observable and lesser reliance applied to those developed through their own internal modeling. Similarly, broker quotes that are executable are given a higher level of reliance than indicative broker quotes, which are not executable. These processes and controls are performed independently of the business. For additional information, see *Note 20 – Fair Value Measurements* and *Note 21 – Fair Value Option* to the Consolidated Financial Statements.

In 2014, we implemented an FVA into valuation estimates primarily to include funding costs on uncollateralized derivatives and derivatives where we are not permitted to use the collateral received. This change resulted in a pretax net FVA charge of $497 million at the time of implementation. Significant judgment is required in modeling expected exposure profiles and in discounting for the funding risk premium inherent in these derivatives.

Level 3 Assets and Liabilities

Financial assets and liabilities where values are based on valuation techniques that require inputs that are both unobservable and are significant to the overall fair value measurement are classified as Level 3 under the fair value hierarchy established in applicable accounting guidance. The Level 3 financial assets and liabilities include certain loans, MBS, ABS, CDOs, CLOs and structured liabilities, highly structured, complex or long-dated derivative contracts and consumer MSRs. The fair value of these Level 3 financial assets and liabilities is determined using pricing models, discounted cash flow methodologies or similar techniques for which the determination of fair value requires significant management judgment or estimation.

Table 61 Recurring Level 3 Asset and Liability Summary

	December 31					
	2015			2014		
(Dollars in millions)	Level 3 Fair Value	As a % of Total Level 3 Assets	As a % of Total Assets	Level 3 Fair Value	As a % of Total Level 3 Assets	As a % of Total Assets
Trading account assets	$ 5,634	31.13%	0.26%	$ 6,259	28.12%	0.30%
Derivative assets	5,134	28.37	0.24	6,851	30.77	0.33
AFS debt securities	1,432	7.91	0.07	2,555	11.48	0.12
Loans and leases	1,620	8.95	0.08	1,983	8.91	0.09
Mortgage servicing rights	3,087	17.06	0.14	3,530	15.86	0.17
All other Level 3 assets at fair value	1,191	6.58	0.05	1,084	4.86	0.05
Total Level 3 assets at fair value [1]	$ 18,098	100.00%	0.84%	$ 22,262	100.00%	1.06%

	Level 3 Fair Value	As a % of Total Level 3 Liabilities	As a % of Total Liabilities	Level 3 Fair Value	As a % of Total Level 3 Liabilities	As a % of Total Liabilities
Derivative liabilities	$ 5,575	74.50%	0.30%	$ 7,771	76.34%	0.42%
Long-term debt	1,513	20.22	0.08	2,362	23.20	0.13
All other Level 3 liabilities at fair value	395	5.28	0.02	46	0.46	—
Total Level 3 liabilities at fair value [1]	$ 7,483	100.00%	0.40%	$ 10,179	100.00%	0.55%

[1] Level 3 total assets and liabilities are shown before the impact of cash collateral and counterparty netting related to derivative positions.

Level 3 financial instruments may be hedged with derivatives classified as Level 1 or 2; therefore, gains or losses associated with Level 3 financial instruments may be offset by gains or losses associated with financial instruments classified in other levels of the fair value hierarchy. The Level 3 gains and losses recorded in earnings did not have a significant impact on our liquidity or capital. We conduct a review of our fair value hierarchy classifications on a quarterly basis. Transfers into or out of Level 3 are made if the significant inputs used in the financial models measuring the fair values of the assets and liabilities became unobservable or observable, respectively, in the current marketplace. These transfers are considered to be effective as of the beginning of the quarter in which they occur. For more information on the significant transfers into and out of Level 3 during 2015 and 2014, see *Note 20 – Fair Value Measurements* to the Consolidated Financial Statements.

Accrued Income Taxes and Deferred Tax Assets

Accrued income taxes, reported as a component of either other assets or accrued expenses and other liabilities on the Consolidated Balance Sheet, represent the net amount of current income taxes we expect to pay to or receive from various taxing jurisdictions attributable to our operations to date. We currently file income tax returns in more than 100 jurisdictions and consider many factors, including statutory, judicial and regulatory guidance, in estimating the appropriate accrued income taxes for each jurisdiction.

Consistent with the applicable accounting guidance, we monitor relevant tax authorities and change our estimate of accrued income taxes due to changes in income tax laws and their interpretation by the courts and regulatory authorities. These revisions of our estimate of accrued income taxes, which also may result from our income tax planning and from the resolution of income tax controversies, may be material to our operating results for any given period.

Net deferred tax assets, reported as a component of other assets on the Consolidated Balance Sheet, represent the net decrease in taxes expected to be paid in the future because of net operating loss (NOL) and tax credit carryforwards and because of future reversals of temporary differences in the bases of assets and liabilities as measured by tax laws and their bases as reported in the financial statements. NOL and tax credit carryforwards result in reductions to future tax liabilities, and many of these attributes can expire if not utilized within certain periods. We consider the need for valuation allowances to reduce net deferred tax assets to the amounts that we estimate are more-likely-than-not to be realized.

While we have established valuation allowances for certain state and non-U.S. deferred tax assets, we have concluded that no valuation allowance was necessary with respect to nearly all U.S. federal and U.K. deferred tax assets, including NOL and tax credit carryforwards. The majority of U.K. net deferred tax assets, which consist primarily of NOLs, are expected to be realized by certain subsidiaries over an extended number of years. Management's conclusion is supported by financial results and forecasts, the reorganization of certain business activities and the indefinite period to carry forward NOLs. However, significant changes to our estimates, such as changes that would be caused by substantial and prolonged worsening of the condition of Europe's capital markets, or to applicable tax laws, such as laws affecting the realizability of NOLs or other deferred tax assets, could lead management to reassess its U.K. valuation allowance conclusions. See *Note 19 – Income Taxes* to the Consolidated Financial Statements for a table of significant tax attributes and additional information. For more information, see Item 1A. Risk Factors of the Corporation's 2015 Annual Report on Form 10-K.

Goodwill and Intangible Assets

Background

The nature of and accounting for goodwill and intangible assets are discussed in *Note 1 – Summary of Significant Accounting Principles* and *Note 8 – Goodwill and Intangible Assets* to the Consolidated Financial Statements. Goodwill is reviewed for potential impairment at the reporting unit level on an annual basis, which for the Corporation is as of June 30, and in interim periods if events or circumstances indicate a potential impairment. A reporting unit is an operating segment or one level below. As reporting units are determined after an acquisition or evolve with changes in business strategy, goodwill is assigned to reporting units and it no longer retains its association with a particular acquisition. All of the revenue streams and related activities of a reporting unit, whether acquired or organic, are available to support the value of the goodwill.

Effective January 1, 2015, the Corporation changed its basis of presentation related to its business segments. The realignment triggered a test for goodwill impairment, which was performed both immediately before and after the realignment. In performing the goodwill impairment test, the Corporation compared the fair value of the affected reporting units with their carrying value as measured by allocated equity. The fair value of the affected reporting units exceeded their carrying value and, accordingly, no goodwill impairment resulted from the realignment.

2015 Annual Impairment Test

Estimating the fair value of reporting units is a subjective process that involves the use of estimates and judgments, particularly related to cash flows, the appropriate discount rates and an applicable control premium. We determined the fair values of the reporting units using a combination of valuation techniques consistent with the market approach and the income approach and also utilized independent valuation specialists.

The market approach we used estimates the fair value of the individual reporting units by incorporating any combination of the tangible capital, book capital and earnings multiples from comparable publicly-traded companies in industries similar to the reporting unit. The relative weight assigned to these multiples varies among the reporting units based on qualitative and quantitative characteristics, primarily the size and relative profitability of the reporting unit as compared to the comparable publicly-traded companies. Since the fair values determined under the market approach are representative of a noncontrolling interest, we added a control premium to arrive at the reporting units' estimated fair values on a controlling basis.

For purposes of the income approach, we calculated discounted cash flows by taking the net present value of estimated future cash flows and an appropriate terminal value. Our discounted cash flow analysis employs a capital asset pricing model in estimating the discount rate (i.e., cost of equity financing) for each reporting unit. The inputs to this model include the risk-free rate of return, beta, which is a measure of the level of non-diversifiable risk associated with comparable companies for each

specific reporting unit, market equity risk premium and in certain cases an unsystematic (company-specific) risk factor. The unsystematic risk factor is the input that specifically addresses uncertainty related to our projections of earnings and growth, including the uncertainty related to loss expectations. We utilized discount rates that we believe adequately reflect the risk and uncertainty in the financial markets generally and specifically in our internally developed forecasts. We estimated expected rates of equity returns based on historical market returns and risk/return rates for industries similar to each reporting unit. We use our internal forecasts to estimate future cash flows and actual results may differ from forecasted results.

We completed our annual goodwill impairment test as of June 30, 2015 for all of our reporting units that had goodwill. In performing the first step of the annual goodwill impairment analysis, we compared the fair value of each reporting unit to its estimated carrying value as measured by allocated equity, which includes goodwill. We also evaluated the U.K. Card business within *All Other*, as the U.K. Card business comprises substantially all of the goodwill included in *All Other*. To determine fair value, we utilized a combination of the market approach and the income approach. Under the market approach, we compared earnings and equity multiples of the individual reporting units to multiples of public companies comparable to the individual reporting units. The control premium used in the June 30, 2015 annual goodwill impairment test was 30 percent, based upon observed comparable premiums paid for change in control transactions for financial institutions, for all reporting units. The discount rates used in the June 30, 2015 annual goodwill impairment test ranged from 10.2 percent to 13.7 percent depending on the relative risk of a reporting unit. Growth rates developed by management for individual revenue and expense items in each reporting unit ranged from negative 3.5 percent to positive 8.0 percent.

The Corporation's market capitalization remained below our recorded book value during 2015. As none of our reporting units are publicly-traded, individual reporting unit fair value determinations may not directly correlate to the Corporation's market capitalization. We considered the comparison of the aggregate fair value of the reporting units with assigned goodwill to the Corporation's market capitalization as of June 30, 2015. Although we believe it is reasonable to conclude that market capitalization could be an indicator of fair value over time, we do not believe that our current market capitalization would reflect the aggregate fair value of our individual reporting units with assigned goodwill, as reporting units with no assigned goodwill have not been valued and are excluded from the comparison and our market capitalization does not include consideration of individual reporting unit control premiums. Although the individual reporting units have considered the impact of recent regulatory changes in their forecasts and valuations, overall regulatory and market uncertainties persist that we believe further impact the Corporation's stock price.

Based on the results of step one of the annual goodwill impairment test, we determined that step two was not required for any of the reporting units as their fair value exceeded their carrying value indicating there was no impairment.

2014 Annual Impairment Test

We completed our annual goodwill impairment test as of June 30, 2014 for all of our reporting units that had goodwill. We also evaluated the U.K. Card business within *All Other,* as the U.K. Card business comprises the majority of the goodwill included in *All Other.*

Based on the results of step one of the annual goodwill impairment test, we determined that step two was not required for any of the reporting units as their fair value exceeded their carrying value indicating there was no impairment.

Representations and Warranties Liability

The methodology used to estimate the liability for obligations under representations and warranties related to transfers of residential mortgage loans is a function of the type of representations and warranties provided in the sales contract and considers a variety of factors. Depending upon the counterparty, these factors include actual defaults, estimated future defaults, historical loss experience, estimated home prices, other economic conditions, estimated probability that we will receive a repurchase request, number of payments made by the borrower prior to default and estimated probability that we will be required to repurchase a loan. It also considers other relevant facts and circumstances, such as bulk settlements and identity of the counterparty or type of counterparty, as appropriate. The estimate of the liability for obligations under representations and warranties is based upon currently available information, significant judgment, and a number of factors, including those set forth above, that are subject to change. Changes to any one of these factors could significantly impact the estimate of our liability.

The representations and warranties provision may vary significantly each period as the methodology used to estimate the expense continues to be refined based on the level and type of repurchase requests presented, defects identified, the latest experience gained on repurchase requests and other relevant facts and circumstances. The estimate of the liability for representations and warranties is sensitive to future defaults, loss severity and the net repurchase rate. An assumed simultaneous increase or decrease of 10 percent in estimated future defaults, loss severity and the net repurchase rate would result in an increase or decrease of approximately $300 million in the representations and warranties liability as of December 31, 2015. These sensitivities are hypothetical and are intended to provide an indication of the impact of a significant change in these key assumptions on the representations and warranties liability. In reality, changes in one assumption may result in changes in other assumptions, which may or may not counteract the sensitivity.

For more information on representations and warranties exposure and the corresponding estimated range of possible loss, see Off-Balance Sheet Arrangements and Contractual Obligations – Representations and Warranties on page 25, as well as *Note 7 – Representations and Warranties Obligations and Corporate Guarantees* and *Note 12 – Commitments and Contingencies* to the Consolidated Financial Statements.

Litigation Reserve

For a limited number of the matters disclosed in *Note 12 – Commitments and Contingencies* to the Consolidated Financial Statements for which a loss is probable or reasonably possible in future periods, whether in excess of a related accrued liability or where there is no accrued liability, we are able to estimate a range of possible loss. In determining whether it is possible to provide an estimate of loss or range of possible loss, the Corporation reviews and evaluates its material litigation and regulatory matters on an ongoing basis, in conjunction with any outside counsel handling the matter, in light of potentially relevant factual and legal developments. These may include information learned through the discovery process, rulings on dispositive motions, settlement discussions, and other rulings by courts, arbitrators or others. In cases in which the Corporation possesses sufficient information to develop an estimate of loss or range of possible loss, that estimate is aggregated and disclosed in *Note 12 – Commitments and Contingencies* to the Consolidated Financial Statements. For other disclosed matters for which a loss is probable or reasonably possible, such an estimate is not possible. Those matters for which an estimate is not possible are not included within this estimated range. Therefore, the estimated range of possible loss represents what we believe to be an estimate of possible loss only for certain matters meeting these criteria. It does not represent the Corporation's maximum loss exposure. Information is provided in *Note 12 – Commitments and Contingencies* to the Consolidated Financial Statements regarding the nature of all of these contingencies and, where specified, the amount of the claim associated with these loss contingencies.

Consolidation and Accounting for Variable Interest Entities

In accordance with applicable accounting guidance, an entity that has a controlling financial interest in a variable interest entity (VIE) is referred to as the primary beneficiary and consolidates the VIE. The Corporation is deemed to have a controlling financial interest and is the primary beneficiary of a VIE if it has both the power to direct the activities of the VIE that most significantly impact the VIE's economic performance and an obligation to absorb losses or the right to receive benefits that could potentially be significant to the VIE.

Determining whether an entity has a controlling financial interest in a VIE requires significant judgment. An entity must assess the purpose and design of the VIE, including explicit and implicit contractual arrangements, and the entity's involvement in both the design of the VIE and its ongoing activities. The entity must then determine which activities have the most significant impact on the economic performance of the VIE and whether the entity has the power to direct such activities. For VIEs that hold financial assets, the party that services the assets or makes investment management decisions may have the power to direct the most significant activities of a VIE. Alternatively, a third party that has the unilateral right to replace the servicer or investment manager or to liquidate the VIE may be deemed to be the party with power. If there are no significant ongoing activities, the party that was responsible for the design of the VIE may be deemed to have power. If the entity determines that it has the power to direct the most significant activities of the VIE, then the entity must determine if it has either an obligation to absorb losses or the right to receive benefits that could potentially be significant to the VIE. Such economic interests may include investments in debt or equity instruments issued by the VIE, liquidity commitments, and explicit and implicit guarantees.

On a quarterly basis, we reassess whether we have a controlling financial interest and are the primary beneficiary of a VIE. The quarterly reassessment process considers whether we have acquired or divested the power to direct the activities of the VIE through changes in governing documents or other circumstances. The reassessment also considers whether we have acquired or disposed of a financial interest that could be significant to the VIE, or whether an interest in the VIE has become significant or is no longer significant. The consolidation status of the VIEs with which we are involved may change as a result of such reassessments. Changes in consolidation status are applied prospectively, with assets and liabilities of a newly consolidated VIE initially recorded at fair value. A gain or loss may be recognized upon deconsolidation of a VIE depending on the carrying values of deconsolidated assets and liabilities compared to the fair value of retained interests and ongoing contractual arrangements.

2014 Compared to 2013

The following discussion and analysis provide a comparison of our results of operations for 2014 and 2013. This discussion should be read in conjunction with the Consolidated Financial Statements and related Notes. Tables 8 and 9 contain financial data to supplement this discussion.

Overview

Net Income

Net income was $5.5 billion in 2014 compared to $10.5 billion in 2013. Including preferred stock dividends, net income applicable to common shareholders was $4.5 billion, or $0.42 per diluted share in 2014 and $9.2 billion, or $0.83 per diluted share in 2013.

Net Interest Income

Net interest income on an FTE basis increased $52 million to $41.6 billion in 2014 compared to 2013. The net interest yield on an FTE basis increased one bp to 2.30 percent in 2014. These increases were primarily driven by reductions in funding yields, lower long-term debt balances and commercial loan growth. Partially offsetting these increases were lower loan yields and consumer loan balances, lower net interest income from the ALM portfolio and a decrease in trading-related net interest income.

Noninterest Income

Noninterest income was $45.1 billion in 2014, a decrease of $1.7 billion compared to 2013.

- Investment and brokerage services income increased $1.0 billion primarily driven by increased asset management fees driven by the impact of long-term AUM inflows and higher market levels.
- Equity investment income decreased $1.8 billion to $1.1 billion in 2014 primarily due to a lower level of gains compared to 2013 and the continued wind-down of GPI.
- Trading account profits decreased $747 million, which included a charge of $497 million in 2014 related to the implementation of an FVA in *Global Markets* and net DVA losses on derivatives of $150 million in 2014 compared to losses of $509 million in 2013.
- Mortgage banking income decreased $2.3 billion primarily driven by lower servicing income and core production revenue, partially offset by a lower representations and warranties provision.
- Other income (loss) improved $1.9 billion due to an increase of $1.1 billion in net DVA gains on structured liabilities as our spreads widened, and gains associated with the sales of residential mortgage loans, partially offset by an increase in U.K. consumer PPI costs. Results for 2013 also included a write-down of $450 million on a monoline receivable.

Provision for Credit Losses

The provision for credit losses was $2.3 billion in 2014, a decrease of $1.3 billion compared to 2013. The provision for credit losses was $2.1 billion lower than net charge-offs for 2014, resulting in a reduction in the allowance for credit losses. The decrease in the provision from 2013 was driven by portfolio improvement, including increased home prices in the consumer real estate portfolio and lower unemployment levels driving improvement in the credit card portfolios, as well as improved asset quality in the commercial portfolio. Partially offsetting this decline was $400 million of additional costs in 2014 associated with the consumer relief portion of the DoJ Settlement.

Net charge-offs totaled $4.4 billion, or 0.49 percent of average loans and leases in 2014 compared to $7.9 billion, or 0.87 percent in 2013. The decrease in net charge-offs was due to credit quality improvement across all major portfolios and the impact of increased recoveries primarily from nonperforming and delinquent loan sales.

Noninterest Expense

Noninterest expense was $75.7 billion in 2014, an increase of $6.4 billion compared to 2013. The increase was primarily driven by higher litigation expense. Litigation expense increased $10.3 billion primarily as a result of charges related to the settlements with the DoJ and the Federal Housing Finance Agency (FHFA). The increase in litigation expense was partially offset by a decrease of $3.2 billion in default-related staffing and other default-related servicing expenses.

Income Tax Expense

The income tax expense was $2.4 billion on pretax income of $8.0 billion in 2014 compared to income tax expense of $4.2 billion in 2013. The effective tax rate for 2014 was 30.7 percent and was driven by our recurring tax preference items, the resolution of several tax examinations and tax benefits from non-U.S. restructurings, partially offset by the non-deductible treatment of certain litigation charges.

The effective tax rate for 2013 was 28.5 percent and was driven by our recurring tax preference items and by certain tax benefits related to non-U.S. operations, partially offset by the $1.1 billion negative impact from the U.K. 2013 Finance Act, enacted in July 2013, which reduced the U.K. corporate income tax rate by three percent. The $1.1 billion charge resulted from remeasuring our U.K. net deferred tax assets, in the period of enactment, using the lower rates.

Business Segment Operations

Consumer Banking

Consumer Banking recorded net income of $6.3 billion in 2014 compared to $5.5 billion in 2013 with the increase primarily driven by lower noninterest expense and provision for credit losses, partially offset by lower noninterest income. Net interest income increased $242 million to $20.8 billion in 2014 due to the beneficial impact of an increase in investable assets as a result of higher deposit balances and the impact of the allocation of ALM activities, partially offset by the impact of lower average card loan balances and yields. Noninterest income decreased $782 million to $11.0 billion in 2014 primarily due to lower mortgage banking income and lower revenue from consumer protection products, partially offset by portfolio divestiture gains, and higher service charges and card income. The provision for credit losses decreased $487 million to $2.5 billion in 2014 primarily as a result of improvements in credit quality. Noninterest expense decreased $1.3 billion to $19.4 billion in 2014 primarily driven by lower personnel, operating, FDIC and litigation expenses.

Global Wealth & Investment Management

GWIM recorded net income of $2.9 billion in 2014 compared to $2.7 billion in 2013 as an increase in noninterest income and net interest income, as well as lower credit costs were partially offset by higher noninterest expense. Net interest income increased $97 million to $5.8 billion in 2014 driven by loan growth, partially offset by the impacts of the low rate environment. Noninterest income, primarily investment and brokerage services, increased $838 million to $12.6 billion in 2014 driven by increased asset management fees due to the impact of long-term AUM flows and higher market levels, partially offset by lower transactional revenue. Noninterest expense increased $617 million to $13.8 billion in 2014 primarily due to higher revenue-related incentive compensation and support expenses, partially offset by lower other expenses.

Global Banking

Global Banking recorded net income of $5.8 billion in 2014 compared to $5.0 billion in 2013 with the increase primarily driven by an increase in revenue and a reduction in the provision for credit losses, partially offset by higher noninterest expense. Revenue increased $1.0 billion to $18.3 billion in 2014 primarily from higher noninterest income. The provision for credit losses decreased $815 million to $325 million in 2014 driven by improved credit quality, and 2013 included increased reserves from loan growth. Noninterest expense increased $657 million to $8.8 billion in 2014 primarily from higher depreciation expense resulting from a reclassification of assets under operating leases to other assets in 2014, as well as additional client-facing personnel expense and higher litigation expense.

Global Markets

Global Markets recorded net income of $2.6 billion in 2014 compared to $1.0 billion in 2013. In 2014, we implemented an FVA into valuation estimates resulting in an initial charge of $497 million. Excluding net DVA/FVA and charges in 2013 related to the U.K. corporate income tax rate reduction, net income decreased $117 million to $2.7 billion in 2014 primarily driven by lower trading account profits and net interest income, partially offset by a decrease in noninterest expense, a $240 million gain in 2014 related to the IPO of an equity investment and higher investment and brokerage services income. Net DVA/FVA losses were $240 million in 2014 compared to losses of $1.2 billion in 2013. Noninterest expense decreased $233 million to $12.0 billion in 2014 due to lower litigation expense and revenue-related incentives, partially offset by higher technology costs and investments in infrastructure.

All Other

All Other recorded a net loss of $12.0 billion in 2014 compared to a loss of $3.7 billion in 2013 with the increase primarily driven by significantly higher litigation expense, which is included in noninterest expense, as a result of the settlements with the DoJ and FHFA, a decrease of $2.0 billion in equity investment income, a $961 million decrease in mortgage banking income due to lower servicing income, and a $363 million increase in U.K. PPI costs. Partially offsetting these decreases were gains related to the sales of residential mortgage loans. The net loss was also impacted by a lower tax benefit rate resulting from the non-deductible treatment of a portion of the DoJ Settlement.

Statistical Tables

Table of Contents

	Page
Table I – Average Balances and Interest Rates – FTE Basis	88
Table II – Analysis of Changes in Net Interest Income – FTE Basis	89
Table III – Preferred Stock Cash Dividend Summary	90
Table IV – Outstanding Loans and Leases	92
Table V – Allowance for Credit Losses	93
Table VI – Allocation of the Allowance for Credit Losses by Product Type	95
Table VII – Selected Loan Maturity Data	96
Table VIII – Non-exchange Traded Commodity Contracts	97
Table IX – Non-exchange Traded Commodity Contract Maturities	97
Table X – Selected Quarterly Financial Data	98
Table XI – Quarterly Average Balances and Interest Rates – FTE Basis	100
Table XII – Quarterly Supplemental Financial Data	102
Table XIII – Five-year Reconciliations to GAAP Financial Measures	103
Table XIV – Two-year Reconciliations to GAAP Financial Measures	104
Table XV – Quarterly Reconciliations to GAAP Financial Measures	105

Table I Average Balances and Interest Rates – FTE Basis

(Dollars in millions)	2015 Average Balance	2015 Interest Income/ Expense	2015 Yield/ Rate	2014 Average Balance	2014 Interest Income/ Expense	2014 Yield/ Rate	2013 Average Balance	2013 Interest Income/ Expense	2013 Yield/ Rate
Earning assets									
Interest-bearing deposits with the Federal Reserve, non-U.S. central banks and other banks [1]	$ 136,391	$ 369	0.27%	$ 113,999	$ 308	0.27%	$ 72,574	$ 182	0.25%
Time deposits placed and other short-term investments	9,556	146	1.53	11,032	170	1.54	16,066	187	1.16
Federal funds sold and securities borrowed or purchased under agreements to resell	211,471	988	0.47	222,483	1,039	0.47	224,331	1,229	0.55
Trading account assets	137,837	4,547	3.30	145,686	4,716	3.24	168,998	4,879	2.89
Debt securities	390,849	9,233	2.38	351,437	9,051	2.57	337,741	8,233	2.44
Loans and leases [2]:									
Residential mortgage	201,366	6,967	3.46	237,270	8,462	3.57	256,534	9,315	3.63
Home equity	81,070	2,984	3.68	89,705	3,340	3.72	100,264	3,835	3.82
U.S. credit card	88,244	8,085	9.16	88,962	8,313	9.34	90,369	8,792	9.73
Non-U.S. credit card	10,104	1,051	10.40	11,511	1,200	10.42	10,861	1,271	11.70
Direct/Indirect consumer [3]	84,585	2,040	2.41	82,409	2,099	2.55	82,907	2,370	2.86
Other consumer [4]	1,938	56	2.86	2,029	139	6.86	1,807	72	4.02
Total consumer	467,307	21,183	4.53	511,886	23,553	4.60	542,742	25,655	4.73
U.S. commercial	248,354	6,883	2.77	230,172	6,630	2.88	218,875	6,811	3.11
Commercial real estate [5]	52,136	1,521	2.92	47,525	1,432	3.01	42,345	1,391	3.29
Commercial lease financing	19,802	628	3.17	19,226	658	3.42	23,863	851	3.56
Non-U.S. commercial	89,188	2,008	2.25	89,894	2,196	2.44	90,816	2,083	2.29
Total commercial	409,480	11,040	2.70	386,817	10,916	2.82	375,899	11,136	2.96
Total loans and leases	876,787	32,223	3.68	898,703	34,469	3.84	918,641	36,791	4.00
Other earning assets	62,040	2,890	4.66	66,128	2,812	4.25	80,984	2,832	3.50
Total earning assets [6]	1,824,931	50,396	2.76	1,809,468	52,565	2.90	1,819,335	54,333	2.99
Cash and due from banks	28,921			27,079			35,501		
Other assets, less allowance for loan and lease losses	306,345			308,846			308,460		
Total assets	$ 2,160,197			$2,145,393			$2,163,296		
Interest-bearing liabilities									
U.S. interest-bearing deposits:									
Savings	$ 46,498	$ 7	0.01%	$ 46,270	$ 3	0.01%	$ 43,868	$ 22	0.05%
NOW and money market deposit accounts	543,133	273	0.05	518,893	316	0.06	506,082	413	0.08
Consumer CDs and IRAs	54,679	162	0.30	66,797	264	0.40	79,913	472	0.59
Negotiable CDs, public funds and other deposits	29,976	95	0.32	31,507	108	0.34	26,553	117	0.44
Total U.S. interest-bearing deposits	674,286	537	0.08	663,467	691	0.10	656,416	1,024	0.16
Non-U.S. interest-bearing deposits:									
Banks located in non-U.S. countries	4,473	31	0.70	8,744	61	0.69	12,431	69	0.56
Governments and official institutions	1,492	5	0.33	1,740	2	0.14	1,584	3	0.18
Time, savings and other	54,767	288	0.53	60,729	326	0.54	55,630	300	0.54
Total non-U.S. interest-bearing deposits	60,732	324	0.53	71,213	389	0.55	69,645	372	0.54
Total interest-bearing deposits	735,018	861	0.12	734,680	1,080	0.15	726,061	1,396	0.19
Federal funds purchased, securities loaned or sold under agreements to repurchase and short-term borrowings	246,295	2,387	0.97	257,678	2,579	1.00	301,415	2,923	0.97
Trading account liabilities	76,772	1,343	1.75	87,152	1,576	1.81	88,323	1,638	1.85
Long-term debt [7]	240,059	5,958	2.48	253,607	5,700	2.25	263,417	6,798	2.58
Total interest-bearing liabilities [6]	1,298,144	10,549	0.81	1,333,117	10,935	0.82	1,379,216	12,755	0.92
Noninterest-bearing sources:									
Noninterest-bearing deposits	420,842			389,527			363,674		
Other liabilities	189,230			184,432			186,587		
Shareholders' equity	251,981			238,317			233,819		
Total liabilities and shareholders' equity	$ 2,160,197			$2,145,393			$2,163,296		
Net interest spread			1.95%			2.08%			2.07%
Impact of noninterest-bearing sources			0.24			0.22			0.22
Net interest income/yield on earning assets		$ 39,847	2.19%		$ 41,630	2.30%		$ 41,578	2.29%

(1) Beginning in 2014, interest-bearing deposits placed with the Federal Reserve and certain non-U.S. central banks are included in earning assets. In prior periods, these balances were included with cash and due from banks in the cash and cash equivalents line, consistent with the Consolidated Balance Sheet presentation. Prior periods have been reclassified to conform to current period presentation.

(2) Nonperforming loans are included in the respective average loan balances. Income on these nonperforming loans is generally recognized on a cost recovery basis. PCI loans were recorded at fair value upon acquisition and accrete interest income over the estimated life of the loan.

(3) Includes non-U.S. consumer loans of $4.0 billion, $4.4 billion and $6.7 billion in 2015, 2014 and 2013, respectively.

(4) Includes consumer finance loans of $619 million, $1.1 billion and $1.3 billion; consumer leases of $1.2 billion, $819 million and $354 million; and consumer overdrafts of $156 million, $149 million and $153 million in 2015, 2014 and 2013, respectively.

(5) Includes U.S. commercial real estate loans of $49.0 billion, $46.0 billion and $40.7 billion, and non-U.S. commercial real estate loans of $3.1 billion, $1.6 billion and $1.6 billion in 2015, 2014 and 2013, respectively.

(6) Interest income includes the impact of interest rate risk management contracts, which decreased interest income on the underlying assets by $59 million, $58 million and $205 million in 2015, 2014 and 2013, respectively. Interest expense includes the impact of interest rate risk management contracts, which decreased interest expense on the underlying liabilities by $2.4 billion, $2.5 billion and $2.4 billion in 2015, 2014 and 2013, respectively. For additional information, see Interest Rate Risk Management for Non-trading Activities on page 76.

(7) The yield on long-term debt excluding the $612 million adjustment on certain trust preferred securities was 2.23 percent for 2015. For more information, see *Note 11 – Long-term Debt* to the Consolidated Financial Statements. The yield on long-term debt excluding the adjustment is a non-GAAP financial measure.

Table II Analysis of Changes in Net Interest Income – FTE Basis

(Dollars in millions)	From 2014 to 2015 Due to Change in [1] Volume	Rate	Net Change	From 2013 to 2014 Due to Change in [1] Volume	Rate	Net Change
Increase (decrease) in interest income						
Interest-bearing deposits with the Federal Reserve, non-U.S. central banks and other banks [2]	**$ 60**	**$ 1**	**$ 61**	$ 103	$ 23	$ 126
Time deposits placed and other short-term investments	**(23)**	**(1)**	**(24)**	(59)	42	(17)
Federal funds sold and securities borrowed or purchased under agreements to resell	**(45)**	**(6)**	**(51)**	(5)	(185)	(190)
Trading account assets	**(250)**	**81**	**(169)**	(669)	506	(163)
Debt securities	**994**	**(812)**	**182**	342	476	818
Loans and leases:						
Residential mortgage	**(1,273)**	**(222)**	**(1,495)**	(702)	(151)	(853)
Home equity	**(324)**	**(32)**	**(356)**	(408)	(87)	(495)
U.S. credit card	**(71)**	**(157)**	**(228)**	(136)	(343)	(479)
Non-U.S. credit card	**(147)**	**(2)**	**(149)**	76	(147)	(71)
Direct/Indirect consumer	**58**	**(117)**	**(59)**	(13)	(258)	(271)
Other consumer	**(6)**	**(77)**	**(83)**	10	57	67
Total consumer			**(2,370)**			(2,102)
U.S. commercial	**523**	**(270)**	**253**	347	(528)	(181)
Commercial real estate	**137**	**(48)**	**89**	173	(132)	41
Commercial lease financing	**19**	**(49)**	**(30)**	(167)	(26)	(193)
Non-U.S. commercial	**(20)**	**(168)**	**(188)**	(24)	137	113
Total commercial			**124**			(220)
Total loans and leases			**(2,246)**			(2,322)
Other earning assets	**(175)**	**253**	**78**	(518)	498	(20)
Total interest income			**$ (2,169)**			$ (1,768)
Increase (decrease) in interest expense						
U.S. interest-bearing deposits:						
Savings	**$ 2**	**$ 2**	**$ 4**	$ 1	$ (20)	$ (19)
NOW and money market deposit accounts	**10**	**(53)**	**(43)**	2	(99)	(97)
Consumer CDs and IRAs	**(45)**	**(57)**	**(102)**	(78)	(130)	(208)
Negotiable CDs, public funds and other deposits	**(6)**	**(7)**	**(13)**	22	(31)	(9)
Total U.S. interest-bearing deposits			**(154)**			(333)
Non-U.S. interest-bearing deposits:						
Banks located in non-U.S. countries	**(30)**	**—**	**(30)**	(20)	12	(8)
Governments and official institutions	**—**	**3**	**3**	—	(1)	(1)
Time, savings and other	**(30)**	**(8)**	**(38)**	28	(2)	26
Total non-U.S. interest-bearing deposits			**(65)**			17
Total interest-bearing deposits			**(219)**			(316)
Federal funds purchased, securities loaned or sold under agreements to repurchase and short-term borrowings	**(116)**	**(76)**	**(192)**	(424)	80	(344)
Trading account liabilities	**(186)**	**(47)**	**(233)**	(26)	(36)	(62)
Long-term debt	**(299)**	**557**	**258**	(255)	(843)	(1,098)
Total interest expense			**(386)**			(1,820)
Net decrease in net interest income			**$ (1,783)**			$ 52

[1] The changes for each category of interest income and expense are divided between the portion of change attributable to the variance in volume and the portion of change attributable to the variance in rate for that category. The unallocated change in rate or volume variance is allocated between the rate and volume variances.

[2] Beginning in 2014, interest-bearing deposits placed with the Federal Reserve and certain non-U.S. central banks are included in earning assets. In prior periods, these balances were included with cash and due from banks in the cash and cash equivalents line, consistent with the Consolidated Balance Sheet presentation. Prior periods have been reclassified to conform to current period presentation.

Table III Preferred Stock Cash Dividend Summary [1]

Preferred Stock	December 31, 2015 Outstanding Notional Amount (in millions)	Declaration Date	Record Date	Payment Date	Per Annum Dividend Rate	Dividend Per Share
Series B [2]	$ 1	January 21, 2016	April 11, 2016	April 25, 2016	7.00%	$ 1.75
		October 22, 2015	January 11, 2016	January 25, 2016	7.00	1.75
		July 23, 2015	October 9, 2015	October 23, 2015	7.00	1.75
		April 16, 2015	July 10, 2015	July 24, 2015	7.00	1.75
		February 10, 2015	April 10, 2015	April 24, 2015	7.00	1.75
Series D [3]	$ 654	January 11, 2016	February 29, 2016	March 14, 2016	6.204%	$ 0.38775
		October 9, 2015	November 30, 2015	December 14, 2015	6.204	0.38775
		July 9, 2015	August 31, 2015	September 14, 2015	6.204	0.38775
		April 13, 2015	May 29, 2015	June 15, 2015	6.204	0.38775
		January 9, 2015	February 27, 2015	March 16, 2015	6.204	0.38775
Series E [3]	$ 317	January 11, 2016	January 29, 2016	February 16, 2016	Floating	$ 0.25556
		October 9, 2015	October 30, 2015	November 16, 2015	Floating	0.25556
		July 9, 2015	July 31, 2015	August 17, 2015	Floating	0.25556
		April 13, 2015	April 30, 2015	May 15, 2015	Floating	0.24722
		January 9, 2015	January 30, 2015	February 17, 2015	Floating	0.25556
Series F	$ 141	January 11, 2016	February 29, 2016	March 15, 2016	Floating	$ 1,011.11111
		October 9, 2015	November 30, 2015	December 15, 2015	Floating	1,011.11111
		July 9, 2015	August 31, 2015	September 15, 2015	Floating	1,022.22222
		April 13, 2015	May 29, 2015	June 15, 2015	Floating	1,022.22222
		January 9, 2015	February 27, 2015	March 16, 2015	Floating	1,000.00
Series G	$ 493	January 11, 2016	February 29, 2016	March 15, 2016	Adjustable	$ 1,011.11111
		October 9, 2015	November 30, 2015	December 15, 2015	Adjustable	1,011.11111
		July 9, 2015	August 31, 2015	September 15, 2015	Adjustable	1,022.22222
		April 13, 2015	May 29, 2015	June 15, 2015	Adjustable	1,022.22222
		January 9, 2015	February 27, 2015	March 16, 2015	Adjustable	1,000.00
Series I [3]	$ 365	January 11, 2016	March 15, 2016	April 1, 2016	6.625%	$ 0.4140625
		October 9, 2015	December 15, 2015	January 4, 2016	6.625	0.4140625
		July 9, 2015	September 15, 2015	October 1, 2015	6.625	0.4140625
		April 13, 2015	June 15, 2015	July 1, 2015	6.625	0.4140625
		January 9, 2015	March 15, 2015	April 1, 2015	6.625	0.4140625
Series K [4, 5]	$ 1,544	January 11, 2016	January 15, 2016	February 1, 2016	Fixed-to-floating	$ 40.00
		July 9, 2015	July 15, 2015	July 30, 2015	Fixed-to-floating	40.00
		January 9, 2015	January 15, 2015	January 30, 2015	Fixed-to-floating	40.00
Series L	$ 3,080	December 18, 2015	January 1, 2016	February 1, 2016	7.25%	$ 18.125
		September 18, 2015	October 1, 2015	October 30, 2015	7.25	18.125
		June 19, 2015	July 1, 2015	July 30, 2015	7.25	18.125
		March 18, 2015	April 1, 2015	April 30, 2015	7.25	18.125
Series M [4, 5]	$ 1,310	October 9, 2015	October 31, 2015	November 16, 2015	Fixed-to-floating	$ 40.625
		April 13, 2015	April 30, 2015	May 15, 2015	Fixed-to-floating	40.625
Series T	$ 5,000	January 21, 2016	March 26, 2016	April 11, 2016	6.00%	$ 1,500.00
		October 22, 2015	December 26, 2015	January 11, 2016	6.00	1,500.00
		July 23, 2015	September 25, 2015	October 13, 2015	6.00	1,500.00
		April 16, 2015	June 25, 2015	July 10, 2015	6.00	1,500.00
		February 10, 2015	March 26, 2015	April 10, 2015	6.00	1,500.00
Series U [4, 5]	$ 1,000	October 9, 2015	November 15, 2015	December 1, 2015	Fixed-to-floating	$ 26.00
		April 13, 2015	May 15, 2015	June 1, 2015	Fixed-to-floating	26.00
Series V [4, 5]	$ 1,500	October 9, 2015	December 1, 2015	December 17, 2015	Fixed-to-floating	$ 25.625
		April 13, 2015	June 1, 2015	June 17, 2015	Fixed-to-floating	25.625
Series W [3]	$ 1,100	January 11, 2016	February 15, 2016	March 9, 2016	6.625%	$ 0.4140625
		October 9, 2015	November 15, 2015	December 9, 2015	6.625	0.4140625
		July 9, 2015	August 15, 2015	September 9, 2015	6.625	0.4140625
		April 13, 2015	May 15, 2015	June 9, 2015	6.625	0.4140625
		January 9, 2015	February 15, 2015	March 9, 2015	6.625	0.4140625
Series X [4, 5]	$ 2,000	January 11, 2016	February 15, 2016	March 7, 2016	Fixed-to-floating	$ 31.25
		July 9, 2015	August 15, 2015	September 8, 2015	Fixed-to-floating	31.25
		January 9, 2015	February 15, 2015	March 5, 2015	Fixed-to-floating	31.25
Series Y [3]	$ 1,100	December 18, 2015	January 1, 2016	January 27, 2016	6.50%	$ 0.40625
		September 18, 2015	October 1, 2015	October 27, 2015	6.50	0.40625
		June 19, 2015	July 1, 2015	July 27, 2015	6.50	0.40625
		March 18, 2015	April 1, 2015	April 27, 2015	6.50	0.40625
Series Z [4, 5]	$ 1,400	September 18, 2015	October 1, 2015	October 23, 2015	Fixed-to-floating	$ 32.50
		March 18, 2015	April 1, 2015	April 23, 2015	Fixed-to-floating	32.50
Series AA [4, 5]	$ 1,900	January 11, 2016	March 1, 2016	March 17, 2016	Fixed-to-floating	$ 30.50
		July 9, 2015	September 1, 2015	September 17, 2015	Fixed-to-floating	30.50

For footnotes see page 90.

Table III Preferred Stock Cash Dividend Summary [1] (continued)

Preferred Stock	December 31, 2015 Outstanding Notional Amount (in millions)	Declaration Date	Record Date	Payment Date	Per Annum Dividend Rate	Dividend Per Share
Series 1 [6]	$ 98	January 11, 2016	February 15, 2016	February 29, 2016	Floating	$ 0.18750
		October 9, 2015	November 15, 2015	November 30, 2015	Floating	0.18750
		July 9, 2015	August 15, 2015	August 28, 2015	Floating	0.18750
		April 13, 2015	May 15, 2015	May 28, 2015	Floating	0.18750
		January 9, 2015	February 15, 2015	February 27, 2015	Floating	0.18750
Series 2 [6]	$ 299	January 11, 2016	February 15, 2016	February 29, 2016	Floating	$ 0.19167
		October 9, 2015	November 15, 2015	November 30, 2015	Floating	0.19167
		July 9, 2015	August 15, 2015	August 28, 2015	Floating	0.19167
		April 13, 2015	May 15, 2015	May 28, 2015	Floating	0.18542
		January 9, 2015	February 15, 2015	February 27, 2015	Floating	0.19167
Series 3 [6]	$ 653	January 11, 2016	February 15, 2016	February 29, 2016	6.375%	$ 0.3984375
		October 9, 2015	November 15, 2015	November 30, 2015	6.375	0.3984375
		July 9, 2015	August 15, 2015	August 28, 2015	6.375	0.3984375
		April 13, 2015	May 15, 2015	May 28, 2015	6.375	0.3984375
		January 9, 2015	February 15, 2015	March 2, 2015	6.375	0.3984375
Series 4 [6]	$ 210	January 11, 2016	February 15, 2016	February 29, 2016	Floating	$ 0.25556
		October 9, 2015	November 15, 2015	November 30, 2015	Floating	0.25556
		July 9, 2015	August 15, 2015	August 28, 2015	Floating	0.25556
		April 13, 2015	May 15, 2015	May 28, 2015	Floating	0.24722
		January 9, 2015	February 15, 2015	February 27, 2015	Floating	0.25556
Series 5 [6]	$ 422	January 11, 2016	February 1, 2016	February 22, 2016	Floating	$ 0.25556
		October 9, 2015	November 1, 2015	November 23, 2015	Floating	0.25556
		July 9, 2015	August 1, 2015	August 21, 2015	Floating	0.25556
		April 13, 2015	May 1, 2015	May 21, 2015	Floating	0.24722
		January 9, 2015	February 1, 2015	February 23, 2015	Floating	0.25556

[1] Preferred stock cash dividend summary is as of February 24, 2016.
[2] Dividends are cumulative.
[3] Dividends per depositary share, each representing a 1/1,000th interest in a share of preferred stock.
[4] Initially pays dividends semi-annually.
[5] Dividends per depositary share, each representing a 1/25th interest in a share of preferred stock.
[6] Dividends per depositary share, each representing a 1/1,200th interest in a share of preferred stock.

Table IV Outstanding Loans and Leases

(Dollars in millions)	December 31 2015	2014	2013	2012	2011
Consumer					
Residential mortgage [1]	**$ 187,911**	$ 216,197	$ 248,066	$ 252,929	$ 273,228
Home equity	**75,948**	85,725	93,672	108,140	124,856
U.S. credit card	**89,602**	91,879	92,338	94,835	102,291
Non-U.S. credit card	**9,975**	10,465	11,541	11,697	14,418
Direct/Indirect consumer [2]	**88,795**	80,381	82,192	83,205	89,713
Other consumer [3]	**2,067**	1,846	1,977	1,628	2,688
Total consumer loans excluding loans accounted for under the fair value option	**454,298**	486,493	529,786	552,434	607,194
Consumer loans accounted for under the fair value option [4]	**1,871**	2,077	2,164	1,005	2,190
Total consumer	**456,169**	488,570	531,950	553,439	609,384
Commercial					
U.S. commercial [5]	**265,647**	233,586	225,851	209,719	193,199
Commercial real estate [6]	**57,199**	47,682	47,893	38,637	39,596
Commercial lease financing	**21,352**	19,579	25,199	23,843	21,989
Non-U.S. commercial	**91,549**	80,083	89,462	74,184	55,418
Total commercial loans excluding loans accounted for under the fair value option	**435,747**	380,930	388,405	346,383	310,202
Commercial loans accounted for under the fair value option [4]	**5,067**	6,604	7,878	7,997	6,614
Total commercial	**440,814**	387,534	396,283	354,380	316,816
Total loans and leases	**$ 896,983**	$ 876,104	$ 928,233	$ 907,819	$ 926,200

(1) Includes pay option loans of $2.3 billion, $3.2 billion, $4.4 billion, $6.7 billion and $9.9 billion, and non-U.S. residential mortgage loans of $2 million, $2 million, $0, $93 million and $85 million at December 31, 2015, 2014, 2013, 2012 and 2011, respectively. The Corporation no longer originates pay option loans.

(2) Includes auto and specialty lending loans of $42.6 billion, $37.7 billion, $38.5 billion, $35.9 billion and $43.0 billion, unsecured consumer lending loans of $886 million, $1.5 billion, $2.7 billion, $4.7 billion and $8.0 billion, U.S. securities-based lending loans of $39.8 billion, $35.8 billion, $31.2 billion, $28.3 billion and $23.6 billion, non-U.S. consumer loans of $3.9 billion, $4.0 billion, $4.7 billion, $8.3 billion and $7.6 billion, student loans of $564 million, $632 million, $4.1 billion, $4.8 billion and $6.0 billion, and other consumer loans of $1.0 billion, $761 million, $1.0 billion, $1.2 billion and $1.5 billion at December 31, 2015, 2014, 2013, 2012 and 2011, respectively.

(3) Includes consumer finance loans of $564 million, $676 million, $1.2 billion, $1.4 billion and $1.7 billion, consumer leases of $1.4 billion, $1.0 billion, $606 million, $34 million and $0, consumer overdrafts of $146 million, $162 million, $176 million, $177 million and $103 million, and other non-U.S. consumer loans of $4 million, $3 million, $5 million, $5 million and $929 million at December 31, 2015, 2014, 2013, 2012 and 2011, respectively.

(4) Consumer loans accounted for under the fair value option were residential mortgage loans of $1.6 billion, $1.9 billion, $2.0 billion, $1.0 billion and $2.2 billion, and home equity loans of $250 million, $196 million, $147 million, $0 and $0 at December 31, 2015, 2014, 2013, 2012 and 2011, respectively. Commercial loans accounted for under the fair value option were U.S. commercial loans of $2.3 billion, $1.9 billion, $1.5 billion, $2.3 billion and $2.2 billion, and non-U.S. commercial loans of $2.8 billion, $4.7 billion, $6.4 billion, $5.7 billion and $4.4 billion at December 31, 2015, 2014, 2013, 2012 and 2011, respectively.

(5) Includes U.S. small business commercial loans, including card-related products, of $12.9 billion, $13.3 billion, $13.3 billion, $12.6 billion and $13.3 billion at December 31, 2015, 2014, 2013, 2012 and 2011, respectively.

(6) Includes U.S. commercial real estate loans of $53.6 billion, $45.2 billion, $46.3 billion, $37.2 billion and $37.8 billion, and non-U.S. commercial real estate loans of $3.5 billion, $2.5 billion, $1.6 billion, $1.5 billion and $1.8 billion at December 31, 2015, 2014, 2013, 2012 and 2011, respectively.

Table V Allowance for Credit Losses

(Dollars in millions)	2015	2014	2013	2012	2011
Allowance for loan and lease losses, January 1	**$ 14,419**	$ 17,428	$ 24,179	$ 33,783	$ 41,885
Loans and leases charged off					
Residential mortgage	**(866)**	(855)	(1,508)	(3,276)	(4,294)
Home equity	**(975)**	(1,364)	(2,258)	(4,573)	(4,997)
U.S. credit card	**(2,738)**	(3,068)	(4,004)	(5,360)	(8,114)
Non-U.S. credit card	**(275)**	(357)	(508)	(835)	(1,691)
Direct/Indirect consumer	**(383)**	(456)	(710)	(1,258)	(2,190)
Other consumer	**(224)**	(268)	(273)	(274)	(252)
Total consumer charge-offs	**(5,461)**	(6,368)	(9,261)	(15,576)	(21,538)
U.S. commercial [1]	**(536)**	(584)	(774)	(1,309)	(1,690)
Commercial real estate	**(30)**	(29)	(251)	(719)	(1,298)
Commercial lease financing	**(19)**	(10)	(4)	(32)	(61)
Non-U.S. commercial	**(59)**	(35)	(79)	(36)	(155)
Total commercial charge-offs	**(644)**	(658)	(1,108)	(2,096)	(3,204)
Total loans and leases charged off	**(6,105)**	(7,026)	(10,369)	(17,672)	(24,742)
Recoveries of loans and leases previously charged off					
Residential mortgage	**393**	969	424	165	377
Home equity	**339**	457	455	331	517
U.S. credit card	**424**	430	628	728	838
Non-U.S. credit card	**87**	115	109	254	522
Direct/Indirect consumer	**271**	287	365	495	714
Other consumer	**31**	39	39	42	50
Total consumer recoveries	**1,545**	2,297	2,020	2,015	3,018
U.S. commercial [2]	**172**	214	287	368	500
Commercial real estate	**35**	112	102	335	351
Commercial lease financing	**10**	19	29	38	37
Non-U.S. commercial	**5**	1	34	8	3
Total commercial recoveries	**222**	346	452	749	891
Total recoveries of loans and leases previously charged off	**1,767**	2,643	2,472	2,764	3,909
Net charge-offs	**(4,338)**	(4,383)	(7,897)	(14,908)	(20,833)
Write-offs of PCI loans	**(808)**	(810)	(2,336)	(2,820)	—
Provision for loan and lease losses	**3,043**	2,231	3,574	8,310	13,629
Other [3]	**(82)**	(47)	(92)	(186)	(898)
Allowance for loan and lease losses, December 31	**12,234**	14,419	17,428	24,179	33,783
Reserve for unfunded lending commitments, January 1	**528**	484	513	714	1,188
Provision for unfunded lending commitments	**118**	44	(18)	(141)	(219)
Other [4]	**—**	—	(11)	(60)	(255)
Reserve for unfunded lending commitments, December 31	**646**	528	484	513	714
Allowance for credit losses, December 31	**$ 12,880**	$ 14,947	$ 17,912	$ 24,692	$ 34,497

[1] Includes U.S. small business commercial charge-offs of $282 million, $345 million, $457 million, $799 million and $1.1 billion in 2015, 2014, 2013, 2012 and 2011, respectively.
[2] Includes U.S. small business commercial recoveries of $57 million, $63 million, $98 million, $100 million and $106 million in 2015, 2014, 2013, 2012 and 2011, respectively.
[3] Primarily represents the net impact of portfolio sales, consolidations and deconsolidations, and foreign currency translation adjustments. In addition, the 2011 amount includes a $449 million reduction in the allowance for loan and lease losses related to Canadian consumer card loans that were transferred to LHFS.
[4] Primarily represents accretion of the Merrill Lynch purchase accounting adjustment and the impact of funding previously unfunded positions.

Table V Allowance for Credit Losses (continued)

(Dollars in millions)	2015	2014	2013	2012	2011
Loan and allowance ratios:					
Loans and leases outstanding at December 31 [5]	**$ 890,045**	$ 867,422	$ 918,191	$ 898,817	$ 917,396
Allowance for loan and lease losses as a percentage of total loans and leases outstanding at December 31 [5]	**1.37%**	1.66%	1.90%	2.69%	3.68%
Consumer allowance for loan and lease losses as a percentage of total consumer loans and leases outstanding at December 31 [6]	**1.63**	2.05	2.53	3.81	4.88
Commercial allowance for loan and lease losses as a percentage of total commercial loans and leases outstanding at December 31 [7]	**1.11**	1.16	1.03	0.90	1.33
Average loans and leases outstanding [5]	**$ 869,904**	$ 888,804	$ 909,127	$ 890,337	$ 929,661
Net charge-offs as a percentage of average loans and leases outstanding [5, 8]	**0.50%**	0.49%	0.87%	1.67%	2.24%
Net charge-offs and PCI write-offs as a percentage of average loans and leases outstanding [5, 9]	**0.59**	0.58	1.13	1.99	2.24
Allowance for loan and lease losses as a percentage of total nonperforming loans and leases at December 31 [5, 10]	**130**	121	102	107	135
Ratio of the allowance for loan and lease losses at December 31 to net charge-offs [8]	**2.82**	3.29	2.21	1.62	1.62
Ratio of the allowance for loan and lease losses at December 31 to net charge-offs and PCI write-offs [9]	**2.38**	2.78	1.70	1.36	1.62
Amounts included in allowance for loan and lease losses for loans and leases that are excluded from nonperforming loans and leases at December 31 [11]	**$ 4,518**	$ 5,944	$ 7,680	$ 12,021	$ 17,490
Allowance for loan and lease losses as a percentage of total nonperforming loans and leases, excluding the allowance for loan and lease losses for loans and leases that are excluded from nonperforming loans and leases at December 31 [5, 11]	**82%**	71%	57%	54%	65%
Loan and allowance ratios excluding PCI loans and the related valuation allowance: [12]					
Allowance for loan and lease losses as a percentage of total loans and leases outstanding at December 31 [5]	**1.31%**	1.51%	1.67%	2.14%	2.86%
Consumer allowance for loan and lease losses as a percentage of total consumer loans and leases outstanding at December 31 [6]	**1.50**	1.79	2.17	2.95	3.68
Net charge-offs as a percentage of average loans and leases outstanding [5]	**0.51**	0.50	0.90	1.73	2.32
Allowance for loan and lease losses as a percentage of total nonperforming loans and leases at December 31 [5, 10]	**122**	107	87	82	101
Ratio of the allowance for loan and lease losses at December 31 to net charge-offs	**2.64**	2.91	1.89	1.25	1.22

[5] Outstanding loan and lease balances and ratios do not include loans accounted for under the fair value option of $6.9 billion, $8.7 billion, $10.0 billion, $9.0 billion and $8.8 billion at December 31, 2015, 2014, 2013, 2012 and 2011, respectively. Average loans accounted for under the fair value option were $7.7 billion, $9.9 billion, $9.5 billion, $8.4 billion and $8.4 billion in 2015, 2014, 2013, 2012 and 2011, respectively.

[6] Excludes consumer loans accounted for under the fair value option of $1.9 billion, $2.1 billion, $2.2 billion, $1.0 billion and $2.2 billion at December 31, 2015, 2014, 2013, 2012 and 2011, respectively.

[7] Excludes commercial loans accounted for under the fair value option of $5.1 billion, $6.6 billion, $7.9 billion, $8.0 billion and $6.6 billion at December 31, 2015, 2014, 2013, 2012 and 2011, respectively.

[8] Net charge-offs exclude $808 million, $810 million, $2.3 billion and $2.8 billion of write-offs in the PCI loan portfolio in 2015, 2014, 2013 and 2012. For more information on PCI write-offs, see Consumer Portfolio Credit Risk Management – Purchased Credit-impaired Loan Portfolio on page 52.

[9] There were no write-offs of PCI loans in 2011.

[10] For more information on our definition of nonperforming loans, see pages 54 and 61.

[11] Primarily includes amounts allocated to U.S. credit card and unsecured lending portfolios in *Consumer Banking*, PCI loans and the non-U.S. credit portfolio in *All Other*.

[12] For more information on the PCI loan portfolio and the valuation allowance for PCI loans, see *Note 4 – Outstanding Loans and Leases* and *Note 5 – Allowance for Credit Losses* to the Consolidated Financial Statements.

Table VI Allocation of the Allowance for Credit Losses by Product Type

(Dollars in millions)	December 31									
	2015		2014		2013		2012		2011	
	Amount	Percent of Total	Amount	Percent of Total	Amount	Percent of Total	Amount	Percent of Total	Amount	Percent of Total
Allowance for loan and lease losses										
Residential mortgage	$ 1,500	12.26%	$ 2,900	20.11%	$ 4,084	23.43%	$ 7,088	29.31%	$ 7,985	23.64%
Home equity	2,414	19.73	3,035	21.05	4,434	25.44	7,845	32.45	13,094	38.76
U.S. credit card	2,927	23.93	3,320	23.03	3,930	22.55	4,718	19.51	6,322	18.71
Non-U.S. credit card	274	2.24	369	2.56	459	2.63	600	2.48	946	2.80
Direct/Indirect consumer	223	1.82	299	2.07	417	2.39	718	2.97	1,153	3.41
Other consumer	47	0.38	59	0.41	99	0.58	104	0.43	148	0.44
Total consumer	7,385	60.36	9,982	69.23	13,423	77.02	21,073	87.15	29,648	87.76
U.S. commercial [1]	2,964	24.23	2,619	18.16	2,394	13.74	1,885	7.80	2,441	7.23
Commercial real estate	967	7.90	1,016	7.05	917	5.26	846	3.50	1,349	3.99
Commercial lease financing	164	1.34	153	1.06	118	0.68	78	0.32	92	0.27
Non-U.S. commercial	754	6.17	649	4.50	576	3.30	297	1.23	253	0.75
Total commercial [2]	4,849	39.64	4,437	30.77	4,005	22.98	3,106	12.85	4,135	12.24
Allowance for loan and lease losses [3]	12,234	100.00%	14,419	100.00%	17,428	100.00%	24,179	100.00%	33,783	100.00%
Reserve for unfunded lending commitments	646		528		484		513		714	
Allowance for credit losses	$ 12,880		$ 14,947		$ 17,912		$ 24,692		$ 34,497	

[1] Includes allowance for loan and lease losses for U.S. small business commercial loans of $507 million, $536 million, $462 million, $642 million and $893 million at December 31, 2015, 2014, 2013, 2012 and 2011, respectively.

[2] Includes allowance for loan and lease losses for impaired commercial loans of $217 million, $159 million, $277 million, $475 million and $545 million at December 31, 2015, 2014, 2013, 2012 and 2011, respectively.

[3] Includes $804 million, $1.7 billion, $2.5 billion, $5.5 billion and $8.5 billion of valuation allowance presented with the allowance for loan and lease losses related to PCI loans at December 31, 2015, 2014, 2013, 2012 and 2011, respectively.

Table VII Selected Loan Maturity Data [1, 2]

(Dollars in millions)	December 31, 2015			
	Due in One Year or Less	Due After One Year Through Five Years	Due After Five Years	Total
U.S. commercial	$ 74,624	$ 149,456	$ 43,837	**$ 267,917**
U.S. commercial real estate	10,417	39,495	3,738	**53,650**
Non-U.S. and other [3]	64,078	27,646	6,171	**97,895**
Total selected loans	**$ 149,119**	**$ 216,597**	**$ 53,746**	**$ 419,462**
Percent of total	36%	51%	13%	100%
Sensitivity of selected loans to changes in interest rates for loans due after one year:				
Fixed interest rates		$ 16,216	$ 27,338	
Floating or adjustable interest rates		200,381	26,408	
Total		**$ 216,597**	**$ 53,746**	

[1] Loan maturities are based on the remaining maturities under contractual terms.
[2] Includes loans accounted for under the fair value option.
[3] Loan maturities include non-U.S. commercial and commercial real estate loans.

Table VIII Non-exchange Traded Commodity Contracts

(Dollars in millions)	2015 Asset Positions	2015 Liability Positions
Net fair value of contracts outstanding, January 1, 2015	$ 8,052	$ 8,593
Effect of legally enforceable master netting agreements	5,506	5,506
Gross fair value of contracts outstanding, January 1, 2015	13,558	14,099
Contracts realized or otherwise settled	(8,262)	(9,114)
Fair value of new contracts	4,624	4,250
Other changes in fair value	1,623	1,322
Gross fair value of contracts outstanding, December 31, 2015	11,543	10,557
Less: Legally enforceable master netting agreements	(3,244)	(3,244)
Net fair value of contracts outstanding, December 31, 2015	**$ 8,299**	**$ 7,313**

Table IX Non-exchange Traded Commodity Contract Maturities

(Dollars in millions)	2015 Asset Positions	2015 Liability Positions
Less than one year	$ 5,420	$ 5,853
Greater than or equal to one year and less than three years	2,619	2,121
Greater than or equal to three years and less than five years	723	671
Greater than or equal to five years	2,781	1,912
Gross fair value of contracts outstanding	11,543	10,557
Less: Legally enforceable master netting agreements	(3,244)	(3,244)
Net fair value of contracts outstanding	**$ 8,299**	**$ 7,313**

Table X Selected Quarterly Financial Data

(In millions, except per share information)	2015 Quarters [1]				2014 Quarters			
	Fourth	Third	Second	First	Fourth	Third	Second	First
Income statement								
Net interest income	**$ 9,686**	$ 9,900	$ 9,517	$ 9,855	$ 10,185	$ 10,141	$ 10,142	$ 10,311
Noninterest income	**9,896**	11,092	11,523	11,496	9,262	11,253	11,911	12,689
Total revenue, net of interest expense	**19,582**	20,992	21,040	21,351	19,447	21,394	22,053	23,000
Provision for credit losses	**810**	806	780	765	219	636	411	1,009
Noninterest expense	**14,010**	13,939	13,959	15,826	14,327	20,276	18,675	22,378
Income (loss) before income taxes	**4,762**	6,247	6,301	4,760	4,901	482	2,967	(387)
Income tax expense (benefit)	**1,478**	1,628	1,736	1,392	1,484	683	569	(293)
Net income (loss)	**3,284**	4,619	4,565	3,368	3,417	(201)	2,398	(94)
Net income (loss) applicable to common shareholders	**2,954**	4,178	4,235	2,986	3,105	(439)	2,142	(332)
Average common shares issued and outstanding	**10,399**	10,444	10,488	10,519	10,516	10,516	10,519	10,561
Average diluted common shares issued and outstanding [2]	**11,153**	11,197	11,238	11,267	11,274	10,516	11,265	10,561
Performance ratios								
Return on average assets	**0.60%**	0.84%	0.85%	0.64%	0.63%	n/m	0.44%	n/m
Four quarter trailing return on average assets [3]	**0.73**	0.74	0.52	0.42	0.26	0.26%	0.38	0.44%
Return on average common shareholders' equity	**4.99**	7.16	7.43	5.37	5.49	n/m	3.87	n/m
Return on average tangible common shareholders' equity [4]	**7.19**	10.40	10.85	7.91	8.11	n/m	5.77	n/m
Return on average tangible shareholders' equity [4]	**7.04**	10.08	10.24	7.87	7.94	n/m	5.91	n/m
Total ending equity to total ending assets	**11.95**	11.88	11.70	11.68	11.57	11.23	10.93	10.78
Total average equity to total average assets	**11.79**	11.70	11.67	11.50	11.38	11.14	10.86	11.05
Dividend payout	**17.57**	12.48	12.36	17.62	16.94	n/m	4.91	n/m
Per common share data								
Earnings (loss)	**$ 0.28**	$ 0.40	$ 0.40	$ 0.28	$ 0.30	$ (0.04)	$ 0.20	$ (0.03)
Diluted earnings (loss) [2]	**0.27**	0.38	0.38	0.27	0.28	(0.04)	0.20	(0.03)
Dividends paid	**0.05**	0.05	0.05	0.05	0.05	0.05	0.01	0.01
Book value	**22.53**	22.40	21.89	21.67	21.32	20.98	21.15	20.74
Tangible book value [4]	**15.62**	15.50	15.00	14.80	14.43	14.07	14.22	13.80
Market price per share of common stock								
Closing	**$ 16.83**	$ 15.58	$ 17.02	$ 15.39	$ 17.89	$ 17.05	$ 15.37	$ 17.20
High closing	**17.95**	18.45	17.67	17.90	18.13	17.18	17.34	17.92
Low closing	**15.38**	15.26	15.41	15.15	15.76	14.98	14.51	16.10
Market capitalization	**$ 174,700**	$ 162,457	$ 178,231	$ 161,909	$ 188,141	$ 179,296	$ 161,628	$ 181,117

[1] The results for 2015 were impacted by the early adoption of new accounting guidance on recognition and measurement of financial instruments. For additional information, see Executive Summary – Recent Events on page 4.

[2] The diluted earnings (loss) per common share excluded the effect of any equity instruments that are antidilutive to earnings per share. There were no potential common shares that were dilutive in the third and first quarters of 2014 because of the net loss applicable to common shareholders.

[3] Calculated as total net income (loss) for four consecutive quarters divided by annualized average assets for four consecutive quarters.

[4] Tangible equity ratios and tangible book value per share of common stock are non-GAAP financial measures. Other companies may define or calculate these measures differently. For more information on these ratios, see Supplemental Financial Data on page 11, and for corresponding reconciliations to GAAP financial measures, see Statistical Table XV.

[5] For more information on the impact of the PCI loan portfolio on asset quality, see Consumer Portfolio Credit Risk Management on page 45.

[6] Includes the allowance for loan and lease losses and the reserve for unfunded lending commitments.

[7] 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 54 and corresponding Table 35, and Commercial Portfolio Credit Risk Management – Nonperforming Commercial Loans, Leases and Foreclosed Properties Activity on page 61 and corresponding Table 44.

[8] 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*.

[9] Net charge-offs exclude $82 million, $148 million, $290 million and $288 million of write-offs in the PCI loan portfolio in the fourth, third, second and first quarters of 2015, respectively, and $13 million, $246 million, $160 million and $391 million in the fourth, third, second and first quarters of 2014, respectively. For more information on PCI write-offs, see Consumer Portfolio Credit Risk Management – Purchased Credit-impaired Loan Portfolio on page 52.

[10] Capital ratios reported under Advanced approaches in the fourth quarter of 2015. Prior to fourth quarter of 2015, we were required to report regulatory capital ratios under the Standardized approach only. For additional information, see Capital Management on page 32.

n/m = not meaningful

Table X Selected Quarterly Financial Data (continued)

(Dollars in millions)	2015 Quarters [1] Fourth	Third	Second	First	2014 Quarters Fourth	Third	Second	First
Average balance sheet								
Total loans and leases	**$ 886,156**	$ 877,429	$ 876,178	$ 867,169	$ 879,585	$ 894,094	$ 907,370	$ 914,195
Total assets	**2,180,507**	2,168,930	2,151,966	2,138,832	2,137,412	2,135,910	2,169,351	2,139,021
Total deposits	**1,186,051**	1,159,231	1,146,789	1,130,725	1,122,514	1,127,488	1,128,563	1,118,178
Long-term debt	**237,384**	240,520	242,230	240,127	249,221	251,772	259,825	253,678
Common shareholders' equity	**234,800**	231,524	228,774	225,477	224,350	222,208	222,052	223,013
Total shareholders' equity	**257,074**	253,798	251,048	245,863	243,325	237,874	235,633	236,365
Asset quality [5]								
Allowance for credit losses [6]	**$ 12,880**	$ 13,318	$ 13,656	$ 14,213	$ 14,947	$ 15,635	$ 16,314	$ 17,127
Nonperforming loans, leases and foreclosed properties [7]	**9,836**	10,336	11,565	12,101	12,629	14,232	15,300	17,732
Allowance for loan and lease losses as a percentage of total loans and leases outstanding [7]	**1.37%**	1.45%	1.50%	1.58%	1.66%	1.72%	1.76%	1.85%
Allowance for loan and lease losses as a percentage of total nonperforming loans and leases [7]	**130**	129	122	122	121	112	108	97
Allowance for loan and lease losses as a percentage of total nonperforming loans and leases, excluding the PCI loan portfolio [7]	**122**	120	111	110	107	100	95	85
Amounts included in allowance for loan and lease losses for loans and leases that are excluded from nonperforming loans and leases [8]	**$ 4,518**	$ 4,682	$ 5,050	$ 5,492	$ 5,944	$ 6,013	$ 6,488	$ 7,143
Allowance for loan and lease losses as a percentage of total nonperforming loans and leases, excluding the allowance for loan and lease losses for loans and leases that are excluded from nonperforming loans and leases [7, 8]	**82%**	81%	75%	73%	71%	67%	64%	55%
Net charge-offs [9]	**$ 1,144**	$ 932	$ 1,068	$ 1,194	$ 879	$ 1,043	$ 1,073	$ 1,388
Annualized net charge-offs as a percentage of average loans and leases outstanding [7, 9]	**0.52%**	0.43%	0.49%	0.56%	0.40%	0.47%	0.48%	0.62%
Annualized net charge-offs as a percentage of average loans and leases outstanding, excluding the PCI loan portfolio [7]	**0.53**	0.43	0.50	0.58	0.41	0.48	0.49	0.64
Annualized net charge-offs and PCI write-offs as a percentage of average loans and leases outstanding [7]	**0.55**	0.49	0.63	0.70	0.41	0.58	0.55	0.80
Nonperforming loans and leases as a percentage of total loans and leases outstanding [7]	**1.05**	1.12	1.23	1.30	1.38	1.54	1.64	1.90
Nonperforming loans, leases and foreclosed properties as a percentage of total loans, leases and foreclosed properties [7]	**1.10**	1.18	1.32	1.40	1.45	1.62	1.71	1.97
Ratio of the allowance for loan and lease losses at period end to annualized net charge-offs [9]	**2.70**	3.42	3.05	2.82	4.14	3.65	3.67	2.95
Ratio of the allowance for loan and lease losses at period end to annualized net charge-offs, excluding the PCI loan portfolio	**2.52**	3.18	2.79	2.55	3.66	3.27	3.25	2.58
Ratio of the allowance for loan and lease losses at period end to annualized net charge-offs and PCI write-offs	**2.52**	2.95	2.40	2.28	4.08	2.95	3.20	2.30
Capital ratios at period end [10]								
Risk-based capital:								
Common equity tier 1 capital	**10.2%**	11.6%	11.2%	11.1%	12.3%	12.0%	12.0%	11.8%
Tier 1 capital	**11.3**	12.9	12.5	12.3	13.4	12.8	12.5	11.9
Total capital	**13.2**	15.8	15.5	15.3	16.5	15.8	15.3	14.8
Tier 1 leverage	**8.6**	8.5	8.5	8.4	8.2	7.9	7.7	7.4
Tangible equity [4]	**8.9**	8.8	8.6	8.6	8.4	8.1	7.8	7.6
Tangible common equity [4]	**7.8**	7.8	7.6	7.5	7.5	7.2	7.1	7.0

For footnotes see page 98.

Table XI Quarterly Average Balances and Interest Rates – FTE Basis

(Dollars in millions)	Fourth Quarter 2015 Average Balance	Fourth Quarter 2015 Interest Income/ Expense	Fourth Quarter 2015 Yield/ Rate	Third Quarter 2015 Average Balance	Third Quarter 2015 Interest Income/ Expense	Third Quarter 2015 Yield/ Rate
Earning assets						
Interest-bearing deposits with the Federal Reserve, non-U.S. central banks and other banks	$ 148,102	$ 108	0.29%	$ 145,174	$ 96	0.26%
Time deposits placed and other short-term investments	10,120	41	1.61	11,503	38	1.32
Federal funds sold and securities borrowed or purchased under agreements to resell	207,585	214	0.41	210,127	275	0.52
Trading account assets	134,797	1,141	3.37	140,484	1,170	3.31
Debt securities	399,338	2,470	2.48	394,265	2,282	2.32
Loans and leases [1]:						
Residential mortgage	189,650	1,644	3.47	193,791	1,690	3.49
Home equity	77,109	715	3.69	79,715	730	3.64
U.S. credit card	88,623	2,045	9.15	88,201	2,033	9.15
Non-U.S. credit card	10,155	258	10.07	10,244	267	10.34
Direct/Indirect consumer [2]	87,858	530	2.40	85,975	515	2.38
Other consumer [3]	2,039	11	2.09	1,980	15	3.01
Total consumer	455,434	5,203	4.55	459,906	5,250	4.54
U.S. commercial	261,727	1,790	2.72	251,908	1,744	2.75
Commercial real estate [4]	56,126	408	2.89	53,605	384	2.84
Commercial lease financing	20,422	155	3.03	20,013	153	3.07
Non-U.S. commercial	92,447	530	2.27	91,997	514	2.22
Total commercial	430,722	2,883	2.66	417,523	2,795	2.66
Total loans and leases	886,156	8,086	3.63	877,429	8,045	3.65
Other earning assets	61,073	748	4.87	62,848	717	4.52
Total earning assets [5]	1,847,171	12,808	2.76	1,841,830	12,623	2.73
Cash and due from banks	29,503			27,730		
Other assets, less allowance for loan and lease losses	303,833			299,370		
Total assets	$ 2,180,507			$2,168,930		
Interest-bearing liabilities						
U.S. interest-bearing deposits:						
Savings	$ 46,094	$ 1	0.01%	$ 46,297	$ 2	0.02%
NOW and money market deposit accounts	558,441	68	0.05	545,741	67	0.05
Consumer CDs and IRAs	51,107	37	0.29	53,174	38	0.29
Negotiable CDs, public funds and other deposits	30,546	25	0.32	30,631	26	0.33
Total U.S. interest-bearing deposits	686,188	131	0.08	675,843	133	0.08
Non-U.S. interest-bearing deposits:						
Banks located in non-U.S. countries	3,997	7	0.69	4,196	7	0.71
Governments and official institutions	1,687	2	0.37	1,654	1	0.33
Time, savings and other	55,965	71	0.51	53,793	73	0.53
Total non-U.S. interest-bearing deposits	61,649	80	0.52	59,643	81	0.54
Total interest-bearing deposits	747,837	211	0.11	735,486	214	0.12
Federal funds purchased, securities loaned or sold under agreements to repurchase and short-term borrowings	231,650	519	0.89	257,323	597	0.92
Trading account liabilities	73,139	272	1.48	77,443	342	1.75
Long-term debt [6]	237,384	1,895	3.18	240,520	1,343	2.22
Total interest-bearing liabilities [5]	1,290,010	2,897	0.89	1,310,772	2,496	0.76
Noninterest-bearing sources:						
Noninterest-bearing deposits	438,214			423,745		
Other liabilities	195,209			180,615		
Shareholders' equity	257,074			253,798		
Total liabilities and shareholders' equity	$ 2,180,507			$2,168,930		
Net interest spread			1.87%			1.97%
Impact of noninterest-bearing sources			0.27			0.22
Net interest income/yield on earning assets		$ 9,911	2.14%		$ 10,127	2.19%

(1) Nonperforming loans are included in the respective average loan balances. Income on these nonperforming loans is generally recognized on a cost recovery basis. PCI loans were recorded at fair value upon acquisition and accrete interest income over the estimated life of the loan.

(2) Includes non-U.S. consumer loans of $4.0 billion for each of the quarters of 2015 and $4.2 billion in the fourth quarter of 2014.

(3) Includes consumer finance loans of $578 million, $605 million, $632 million and $661 million in the fourth, third, second and first quarters of 2015, respectively, and $907 million in the fourth quarter of 2014; consumer leases of $1.3 billion, $1.2 billion, $1.1 billion and $1.0 billion in the fourth, third, second and first quarters of 2015, respectively, and $965 million in the fourth quarter of 2014; and consumer overdrafts of $174 million, $177 million, $131 million and $141 million in the fourth, third, second and first quarters of 2015, respectively, and $156 million in the fourth quarter of 2014.

(4) Includes U.S. commercial real estate loans of $52.8 billion, $49.8 billion, $47.6 billion and $45.6 billion in the fourth, third, second and first quarters of 2015, respectively, and $45.1 billion in the fourth quarter of 2014; and non-U.S. commercial real estate loans of $3.3 billion, $3.8 billion, $2.8 billion and $2.7 billion in the fourth, third, second and first quarters of 2015, respectively, and $1.9 billion in the fourth quarter of 2014.

(5) Interest income includes the impact of interest rate risk management contracts, which decreased interest income on the underlying assets by $32 million, $8 million, $8 million and $11 million in the fourth, third, second and first quarters of 2015, respectively, and $10 million in the fourth quarter of 2014. Interest expense includes the impact of interest rate risk management contracts, which decreased interest expense on the underlying liabilities by $681 million, $590 million, $509 million and $582 million in the fourth, third, second and first quarters of 2015, respectively, and $659 million in the fourth quarter of 2014. For additional information, see Interest Rate Risk Management for Non-trading Activities on page 76.

(6) The yield on long-term debt excluding the $612 million adjustment on certain trust preferred securities was 2.15 percent for the fourth quarter of 2015. For more information, see *Note 11 – Long-term Debt* to the Consolidated Financial Statements. The yield on long-term debt excluding the adjustment is a non-GAAP financial measure.

Table XI Quarterly Average Balances and Interest Rates – FTE Basis (continued)

(Dollars in millions)	Second Quarter 2015 Average Balance	Second Quarter 2015 Interest Income/ Expense	Second Quarter 2015 Yield/ Rate	First Quarter 2015 Average Balance	First Quarter 2015 Interest Income/ Expense	First Quarter 2015 Yield/ Rate	Fourth Quarter 2014 Average Balance	Fourth Quarter 2014 Interest Income/ Expense	Fourth Quarter 2014 Yield/ Rate
Earning assets									
Interest-bearing deposits with the Federal Reserve, non-U.S. central banks and other banks	$ 125,762	$ 81	0.26%	$ 126,189	$ 84	0.27%	$ 109,042	$ 74	0.27%
Time deposits placed and other short-term investments	8,183	34	1.64	8,379	33	1.61	9,339	41	1.73
Federal funds sold and securities borrowed or purchased under agreements to resell	214,326	268	0.50	213,931	231	0.44	217,982	238	0.43
Trading account assets	137,137	1,114	3.25	138,946	1,122	3.26	144,147	1,141	3.15
Debt securities	386,337	2,138	2.23	383,240	2,343	2.48	370,806	2,278	2.47
Loans and leases [1]:									
Residential mortgage	207,356	1,782	3.44	215,030	1,851	3.45	223,132	1,946	3.49
Home equity	82,640	769	3.73	84,915	770	3.66	86,825	808	3.70
U.S. credit card	87,460	1,980	9.08	88,695	2,027	9.27	89,381	2,087	9.26
Non-U.S. credit card	10,012	264	10.56	10,002	262	10.64	10,950	280	10.14
Direct/Indirect consumer [2]	83,698	504	2.42	80,713	491	2.47	83,121	522	2.49
Other consumer [3]	1,885	15	3.14	1,847	15	3.29	2,031	85	16.75
Total consumer	473,051	5,314	4.50	481,202	5,416	4.54	495,440	5,728	4.60
U.S. commercial	244,540	1,704	2.80	234,907	1,645	2.84	231,215	1,648	2.83
Commercial real estate [4]	50,478	382	3.03	48,234	347	2.92	46,996	360	3.04
Commercial lease financing	19,486	149	3.05	19,271	171	3.55	19,090	154	3.23
Non-U.S. commercial	88,623	479	2.17	83,555	485	2.35	86,844	527	2.41
Total commercial	403,127	2,714	2.70	385,967	2,648	2.78	384,145	2,689	2.78
Total loans and leases	876,178	8,028	3.67	867,169	8,064	3.76	879,585	8,417	3.81
Other earning assets	62,723	719	4.60	61,514	706	4.65	65,864	741	4.46
Total earning assets [5]	1,810,646	12,382	2.74	1,799,368	12,583	2.82	1,796,765	12,930	2.86
Cash and due from banks	30,751			27,695			27,590		
Other assets, less allowance for loan and lease losses	310,569			311,769			313,057		
Total assets	$ 2,151,966			$ 2,138,832			$ 2,137,412		
Interest-bearing liabilities									
U.S. interest-bearing deposits:									
Savings	$ 47,381	$ 2	0.02%	$ 46,224	$ 2	0.02%	$ 45,621	$ 1	0.01%
NOW and money market deposit accounts	536,201	71	0.05	531,827	67	0.05	515,995	76	0.06
Consumer CDs and IRAs	55,832	42	0.30	58,704	45	0.31	61,880	52	0.33
Negotiable CDs, public funds and other deposits	29,904	22	0.30	28,796	22	0.31	30,950	22	0.29
Total U.S. interest-bearing deposits	669,318	137	0.08	665,551	136	0.08	654,446	151	0.09
Non-U.S. interest-bearing deposits:									
Banks located in non-U.S. countries	5,162	9	0.67	4,544	8	0.74	5,415	9	0.63
Governments and official institutions	1,239	1	0.38	1,382	1	0.21	1,647	1	0.18
Time, savings and other	55,030	69	0.51	54,276	75	0.55	57,029	76	0.53
Total non-U.S. interest-bearing deposits	61,431	79	0.52	60,202	84	0.56	64,091	86	0.53
Total interest-bearing deposits	730,749	216	0.12	725,753	220	0.12	718,537	237	0.13
Federal funds purchased, securities loaned or sold under agreements to repurchase and short-term borrowings	252,088	685	1.09	244,134	586	0.97	251,432	616	0.97
Trading account liabilities	77,772	335	1.73	78,787	394	2.03	78,174	351	1.78
Long-term debt [6]	242,230	1,407	2.33	240,127	1,313	2.20	249,221	1,315	2.10
Total interest-bearing liabilities [5]	1,302,839	2,643	0.81	1,288,801	2,513	0.79	1,297,364	2,519	0.77
Noninterest-bearing sources:									
Noninterest-bearing deposits	416,040			404,972			403,977		
Other liabilities	182,039			199,196			192,746		
Shareholders' equity	251,048			245,863			243,325		
Total liabilities and shareholders' equity	$ 2,151,966			$ 2,138,832			$ 2,137,412		
Net interest spread			1.93%			2.03%			2.09%
Impact of noninterest-bearing sources			0.23			0.23			0.22
Net interest income/yield on earning assets		$ 9,739	2.16%		$ 10,070	2.26%		$ 10,411	2.31%

For footnotes see page 100.

Table XII Quarterly Supplemental Financial Data

(Dollars in millions, except per share information)	2015 Quarters				2014 Quarters			
	Fourth	Third	Second	First	Fourth	Third	Second	First
Fully taxable-equivalent basis data [1]								
Net interest income	**$ 9,911**	$ 10,127	$ 9,739	$ 10,070	$ 10,411	$ 10,361	$ 10,351	$ 10,507
Total revenue, net of interest expense [2]	**19,807**	21,219	21,262	21,566	19,673	21,614	22,262	23,196
Net interest yield	**2.14%**	2.19%	2.16%	2.26%	2.31%	2.28%	2.26%	2.35%
Efficiency ratio [2]	**70.73**	65.70	65.65	73.39	72.83	93.81	83.89	96.47

[1] FTE basis is a non-GAAP financial measure. FTE basis is a performance measure used by management in operating the business that management believes provides investors with a more accurate picture of the interest margin for comparative purposes. For more information on these performance measures and ratios, see Supplemental Financial Data on page 11 and for corresponding reconciliations to GAAP financial measures, see Statistical Table XV.

[2] The results for 2015 were impacted by the early adoption of new accounting guidance on recognition and measurement of financial instruments. For additional information, see Executive Summary – Recent Events on page 4.

Table XIII Five-year Reconciliations to GAAP Financial Measures [1]

(Dollars in millions, shares in thousands)	2015	2014	2013	2012	2011
Reconciliation of net interest income to net interest income on a fully taxable-equivalent basis					
Net interest income	**$ 38,958**	$ 40,779	$ 40,719	$ 40,135	$ 44,953
Fully taxable-equivalent adjustment	**889**	851	859	901	972
Net interest income on a fully taxable-equivalent basis	**$ 39,847**	$ 41,630	$ 41,578	$ 41,036	$ 45,925
Reconciliation of total revenue, net of interest expense to total revenue, net of interest expense on a fully taxable-equivalent basis					
Total revenue, net of interest expense	**$ 82,965**	$ 85,894	$ 87,502	$ 82,798	$ 93,889
Fully taxable-equivalent adjustment	**889**	851	859	901	972
Total revenue, net of interest expense on a fully taxable-equivalent basis	**$ 83,854**	$ 86,745	$ 88,361	$ 83,699	$ 94,861
Reconciliation of total noninterest expense to total noninterest expense, excluding goodwill impairment charges					
Total noninterest expense	**$ 57,734**	$ 75,656	$ 69,213	$ 72,094	$ 80,274
Goodwill impairment charges	**—**	—	—	—	(3,184)
Total noninterest expense, excluding goodwill impairment charges	**$ 57,734**	$ 75,656	$ 69,213	$ 72,094	$ 77,090
Reconciliation of income tax expense (benefit) to income tax expense (benefit) on a fully taxable-equivalent basis					
Income tax expense (benefit)	**$ 6,234**	$ 2,443	$ 4,194	$ (1,320)	$ (1,511)
Fully taxable-equivalent adjustment	**889**	851	859	901	972
Income tax expense (benefit) on a fully taxable-equivalent basis	**$ 7,123**	$ 3,294	$ 5,053	$ (419)	$ (539)
Reconciliation of net income to net income, excluding goodwill impairment charges					
Net income	**$ 15,836**	$ 5,520	$ 10,539	$ 3,855	$ 1,716
Goodwill impairment charges	**—**	—	—	—	3,184
Net income, excluding goodwill impairment charges	**$ 15,836**	$ 5,520	$ 10,539	$ 3,855	$ 4,900
Reconciliation of net income applicable to common shareholders to net income applicable to common shareholders, excluding goodwill impairment charges					
Net income applicable to common shareholders	**$ 14,353**	$ 4,476	$ 9,190	$ 2,427	$ 355
Goodwill impairment charges	**—**	—	—	—	3,184
Net income applicable to common shareholders, excluding goodwill impairment charges	**$ 14,353**	$ 4,476	$ 9,190	$ 2,427	$ 3,539
Reconciliation of average common shareholders' equity to average tangible common shareholders' equity					
Common shareholders' equity	**$ 230,173**	$ 222,907	$ 218,340	$ 216,999	$ 211,844
Goodwill	**(69,772)**	(69,809)	(69,910)	(69,974)	(72,334)
Intangible assets (excluding MSRs)	**(4,201)**	(5,109)	(6,132)	(7,366)	(9,180)
Related deferred tax liabilities	**1,852**	2,090	2,328	2,593	2,898
Tangible common shareholders' equity	**$ 158,052**	$ 150,079	$ 144,626	$ 142,252	$ 133,228
Reconciliation of average shareholders' equity to average tangible shareholders' equity					
Shareholders' equity	**$ 251,981**	$ 238,317	$ 233,819	$ 235,681	$ 229,230
Goodwill	**(69,772)**	(69,809)	(69,910)	(69,974)	(72,334)
Intangible assets (excluding MSRs)	**(4,201)**	(5,109)	(6,132)	(7,366)	(9,180)
Related deferred tax liabilities	**1,852**	2,090	2,328	2,593	2,898
Tangible shareholders' equity	**$ 179,860**	$ 165,489	$ 160,105	$ 160,934	$ 150,614
Reconciliation of year-end common shareholders' equity to year-end tangible common shareholders' equity					
Common shareholders' equity	**$ 233,903**	$ 224,167	$ 219,124	$ 218,194	$ 211,703
Goodwill	**(69,761)**	(69,777)	(69,844)	(69,976)	(69,967)
Intangible assets (excluding MSRs)	**(3,768)**	(4,612)	(5,574)	(6,684)	(8,021)
Related deferred tax liabilities	**1,716**	1,960	2,166	2,428	2,702
Tangible common shareholders' equity	**$ 162,090**	$ 151,738	$ 145,872	$ 143,962	$ 136,417
Reconciliation of year-end shareholders' equity to year-end tangible shareholders' equity					
Shareholders' equity	**$ 256,176**	$ 243,476	$ 232,475	$ 236,962	$ 230,100
Goodwill	**(69,761)**	(69,777)	(69,844)	(69,976)	(69,967)
Intangible assets (excluding MSRs)	**(3,768)**	(4,612)	(5,574)	(6,684)	(8,021)
Related deferred tax liabilities	**1,716**	1,960	2,166	2,428	2,702
Tangible shareholders' equity	**$ 184,363**	$ 171,047	$ 159,223	$ 162,730	$ 154,814
Reconciliation of year-end assets to year-end tangible assets					
Assets	**$ 2,144,287**	$ 2,104,539	$ 2,102,064	$ 2,209,981	$ 2,129,045
Goodwill	**(69,761)**	(69,777)	(69,844)	(69,976)	(69,967)
Intangible assets (excluding MSRs)	**(3,768)**	(4,612)	(5,574)	(6,684)	(8,021)
Related deferred tax liabilities	**1,716**	1,960	2,166	2,428	2,702
Tangible assets	**$ 2,072,474**	$ 2,032,110	$ 2,028,812	$ 2,135,749	$ 2,053,759

[1] Presents reconciliations of non-GAAP financial measures to GAAP financial measures. We believe the use of these non-GAAP financial measures provides additional clarity in assessing the results of the Corporation. Other companies may define or calculate these measures differently. For more information on non-GAAP financial measures and ratios we use in assessing the results of the Corporation, see Supplemental Financial Data on page 11.

Table XIV Two-year Reconciliations to GAAP Financial Measures [1]

(Dollars in millions)	2015	2014
Consumer Banking		
Reported net income	$ 6,649	$ 6,251
Adjustment related to intangibles [2]	4	4
Adjusted net income	$ 6,653	$ 6,255
Average allocated equity [3]	$ 63,188	$ 64,285
Adjustment related to goodwill and a percentage of intangibles	(30,188)	(30,285)
Average allocated capital	$ 33,000	$ 34,000
Deposits		
Reported net income	$ 2,652	$ 2,311
Adjustment related to intangibles [2]	—	—
Adjusted net income	$ 2,652	$ 2,311
Average allocated equity [3]	$ 30,336	$ 29,367
Adjustment related to goodwill and a percentage of intangibles	(18,336)	(18,367)
Average allocated capital	$ 12,000	$ 11,000
Consumer Lending		
Reported net income	$ 3,997	$ 3,940
Adjustment related to intangibles [2]	4	4
Adjusted net income	$ 4,001	$ 3,944
Average allocated equity [3]	$ 32,852	$ 34,918
Adjustment related to goodwill and a percentage of intangibles	(11,852)	(11,918)
Average allocated capital	$ 21,000	$ 23,000
Global Wealth & Investment Management		
Reported net income	$ 2,567	$ 2,855
Adjustment related to intangibles [2]	11	13
Adjusted net income	$ 2,578	$ 2,868
Average allocated equity [3]	$ 22,215	$ 22,278
Adjustment related to goodwill and a percentage of intangibles	(10,215)	(10,278)
Average allocated capital	$ 12,000	$ 12,000
Global Banking		
Reported net income	$ 5,340	$ 5,782
Adjustment related to intangibles [2]	1	2
Adjusted net income	$ 5,341	$ 5,784
Average allocated equity [3]	$ 58,935	$ 57,429
Adjustment related to goodwill and a percentage of intangibles	(23,935)	(23,929)
Average allocated capital	$ 35,000	$ 33,500
Global Markets		
Reported net income	$ 2,423	$ 2,590
Adjustment related to intangibles [2]	10	9
Adjusted net income	$ 2,433	$ 2,599
Average allocated equity [3]	$ 40,372	$ 39,346
Adjustment related to goodwill and a percentage of intangibles	(5,372)	(5,346)
Average allocated capital	$ 35,000	$ 34,000

(1) Presents reconciliations of non-GAAP financial measures to GAAP financial measures. We believe the use of these non-GAAP financial measures provides additional clarity in assessing the results of the Corporation and our segments. Other companies may define or calculate these measures differently. For more information on non-GAAP financial measures and ratios we use in assessing the results of the Corporation, see Supplemental Financial Data on page 11.

(2) Represents cost of funds, earnings credits and certain expenses related to intangibles.

(3) Average allocated equity is comprised of average allocated capital plus capital for the portion of goodwill and intangibles specifically assigned to the business segment. For more information on allocated capital, see Business Segment Operations on page 13 and *Note 8 – Goodwill and Intangible Assets* to the Consolidated Financial Statements.

Table XV Quarterly Reconciliations to GAAP Financial Measures [1]

(Dollars in millions)	2015 Quarters				2014 Quarters			
	Fourth	Third	Second	First	Fourth	Third	Second	First
Reconciliation of net interest income to net interest income on a fully taxable-equivalent basis								
Net interest income	$ 9,686	$ 9,900	$ 9,517	$ 9,855	$ 10,185	$ 10,141	$ 10,142	$ 10,311
Fully taxable-equivalent adjustment	225	227	222	215	226	220	209	196
Net interest income on a fully taxable-equivalent basis	$ 9,911	$ 10,127	$ 9,739	$ 10,070	$ 10,411	$ 10,361	$ 10,351	$ 10,507
Reconciliation of total revenue, net of interest expense to total revenue, net of interest expense on a fully taxable-equivalent basis								
Total revenue, net of interest expense [2]	$ 19,582	$ 20,992	$ 21,040	$ 21,351	$ 19,447	$ 21,394	$ 22,053	$ 23,000
Fully taxable-equivalent adjustment	225	227	222	215	226	220	209	196
Total revenue, net of interest expense on a fully taxable-equivalent basis	$ 19,807	$ 21,219	$ 21,262	$ 21,566	$ 19,673	$ 21,614	$ 22,262	$ 23,196
Reconciliation of income tax expense (benefit) to income tax expense (benefit) on a fully taxable-equivalent basis								
Income tax expense (benefit) [2]	$ 1,478	$ 1,628	$ 1,736	$ 1,392	$ 1,484	$ 683	$ 569	$ (293)
Fully taxable-equivalent adjustment	225	227	222	215	226	220	209	196
Income tax expense (benefit) on a fully taxable-equivalent basis	$ 1,703	$ 1,855	$ 1,958	$ 1,607	$ 1,710	$ 903	$ 778	$ (97)
Reconciliation of average common shareholders' equity to average tangible common shareholders' equity								
Common shareholders' equity	$ 234,800	$ 231,524	$ 228,774	$ 225,477	$ 224,350	$ 222,208	$ 222,052	$ 223,013
Goodwill	(69,761)	(69,774)	(69,775)	(69,776)	(69,782)	(69,792)	(69,822)	(69,842)
Intangible assets (excluding MSRs)	(3,888)	(4,099)	(4,307)	(4,518)	(4,747)	(4,992)	(5,235)	(5,474)
Related deferred tax liabilities	1,753	1,811	1,885	1,959	2,019	2,077	2,100	2,165
Tangible common shareholders' equity	$ 162,904	$ 159,462	$ 156,577	$ 153,142	$ 151,840	$ 149,501	$ 149,095	$ 149,862
Reconciliation of average shareholders' equity to average tangible shareholders' equity								
Shareholders' equity	$ 257,074	$ 253,798	$ 251,048	$ 245,863	$ 243,325	$ 237,874	$ 235,633	$ 236,365
Goodwill	(69,761)	(69,774)	(69,775)	(69,776)	(69,782)	(69,792)	(69,822)	(69,842)
Intangible assets (excluding MSRs)	(3,888)	(4,099)	(4,307)	(4,518)	(4,747)	(4,992)	(5,235)	(5,474)
Related deferred tax liabilities	1,753	1,811	1,885	1,959	2,019	2,077	2,100	2,165
Tangible shareholders' equity	$ 185,178	$ 181,736	$ 178,851	$ 173,528	$ 170,815	$ 165,167	$ 162,676	$ 163,214
Reconciliation of period-end common shareholders' equity to period-end tangible common shareholders' equity								
Common shareholders' equity	$ 233,903	$ 233,588	$ 229,251	$ 228,011	$ 224,167	$ 220,588	$ 222,401	$ 218,352
Goodwill	(69,761)	(69,761)	(69,775)	(69,776)	(69,777)	(69,784)	(69,810)	(69,842)
Intangible assets (excluding MSRs)	(3,768)	(3,973)	(4,188)	(4,391)	(4,612)	(4,849)	(5,099)	(5,337)
Related deferred tax liabilities	1,716	1,762	1,813	1,900	1,960	2,019	2,078	2,100
Tangible common shareholders' equity	$ 162,090	$ 161,616	$ 157,101	$ 155,744	$ 151,738	$ 147,974	$ 149,570	$ 145,273
Reconciliation of period-end shareholders' equity to period-end tangible shareholders' equity								
Shareholders' equity	$ 256,176	$ 255,861	$ 251,524	$ 250,284	$ 243,476	$ 238,501	$ 237,246	$ 231,704
Goodwill	(69,761)	(69,761)	(69,775)	(69,776)	(69,777)	(69,784)	(69,810)	(69,842)
Intangible assets (excluding MSRs)	(3,768)	(3,973)	(4,188)	(4,391)	(4,612)	(4,849)	(5,099)	(5,337)
Related deferred tax liabilities	1,716	1,762	1,813	1,900	1,960	2,019	2,078	2,100
Tangible shareholders' equity	$ 184,363	$ 183,889	$ 179,374	$ 178,017	$ 171,047	$ 165,887	$ 164,415	$ 158,625
Reconciliation of period-end assets to period-end tangible assets								
Assets	$ 2,144,287	$2,152,962	$2,148,899	$2,143,644	$2,104,539	$2,123,392	$2,170,362	$2,149,623
Goodwill	(69,761)	(69,761)	(69,775)	(69,776)	(69,777)	(69,784)	(69,810)	(69,842)
Intangible assets (excluding MSRs)	(3,768)	(3,973)	(4,188)	(4,391)	(4,612)	(4,849)	(5,099)	(5,337)
Related deferred tax liabilities	1,716	1,762	1,813	1,900	1,960	2,019	2,078	2,100
Tangible assets	$ 2,072,474	$2,080,990	$2,076,749	$2,071,377	$2,032,110	$2,050,778	$2,097,531	$2,076,544

[1] Presents reconciliations of non-GAAP financial measures to GAAP financial measures. We believe the use of these non-GAAP financial measures provides additional clarity in assessing the results of the Corporation. Other companies may define or calculate these measures differently. For more information on non-GAAP financial measures and ratios we use in assessing the results of the Corporation, see Supplemental Financial Data on page 11.

[2] The results for 2015 were impacted by the early adoption of new accounting guidance on recognition and measurement of financial instruments. For additional information, see Executive Summary – Recent Events on page 4.

Glossary

Alt-A Mortgage – A type of U.S. mortgage that, for various reasons, is considered riskier than A-paper, or "prime," and less risky than "subprime," the riskiest category. Alt-A interest rates, which are determined by credit risk, therefore tend to be between those of prime and subprime consumer real estate loans. Typically, Alt-A mortgages are characterized by borrowers with less than full documentation, lower credit scores and higher LTVs.

Assets in Custody – Consist largely of custodial and non-discretionary trust assets excluding brokerage assets administered for clients. Trust assets encompass a broad range of asset types including real estate, private company ownership interest, personal property and investments.

Assets Under Management (AUM) – The total market value of assets under the investment advisory and/or discretion of *GWIM* which generate asset management fees based on a percentage of the assets' market values. AUM reflects assets that are generally managed for institutional, high net worth and retail clients, and are distributed through various investment products including mutual funds, other commingled vehicles and separate accounts. AUM is classified in two categories, Liquidity AUM and Long-term AUM. Liquidity AUM are assets under advisory and discretion of *GWIM* in which the investment strategy seeks current income, while maintaining liquidity and capital preservation. The duration of these strategies is primarily less than one year. Long-term AUM are assets under advisory and/or discretion of *GWIM* in which the duration of investment strategy is longer than one year.

Carrying Value (with respect to loans) – The amount at which a loan is recorded on the balance sheet. For loans recorded at amortized cost, carrying value is the unpaid principal balance net of unamortized deferred loan origination fees and costs, and unamortized purchase premium or discount. For loans that are or have been on nonaccrual status, the carrying value is also reduced by any net charge-offs that have been recorded and the amount of interest payments applied as a reduction of principal under the cost recovery method. For PCI loans, the carrying value equals fair value upon acquisition adjusted for subsequent cash collections and yield accreted to date. For credit card loans, the carrying value also includes interest that has been billed to the customer. For loans classified as held-for-sale, carrying value is the lower of carrying value as described in the sentences above, or fair value. For loans for which we have elected the fair value option, the carrying value is fair value.

Client Brokerage Assets – Include client assets which are held in brokerage accounts. This includes non-discretionary brokerage and fee-based assets which generate brokerage income and asset management fee revenue.

Committed Credit Exposure – Includes any funded portion of a facility plus the unfunded portion of a facility on which the lender is legally bound to advance funds during a specified period under prescribed conditions.

Credit Derivatives – Contractual agreements that provide protection against a credit event on one or more referenced obligations. The nature of a credit event is established by the protection purchaser and the protection seller at the inception of the transaction, and such events generally include bankruptcy or insolvency of the referenced credit entity, failure to meet payment obligations when due, as well as acceleration of indebtedness and payment repudiation or moratorium. The purchaser of the credit derivative pays a periodic fee in return for a payment by the protection seller upon the occurrence, if any, of such a credit event. A credit default swap is a type of a credit derivative.

Credit Valuation Adjustment (CVA) – A portfolio adjustment required to properly reflect the counterparty credit risk exposure as part of the fair value of derivative instruments.

Debit Valuation Adjustment (DVA) – A portfolio adjustment required to properly reflect the Corporation's own credit risk exposure as part of the fair value of derivative instruments and/or structured liabilities.

Funding Valuation Adjustment (FVA) – A portfolio adjustment required to include funding costs on uncollateralized derivatives and derivatives where the Corporation is not permitted to use the collateral it receives.

Interest Rate Lock Commitment (IRLC) – Commitment with a loan applicant in which the loan terms, including interest rate and price, are guaranteed for a designated period of time subject to credit approval.

Letter of Credit – A document issued on behalf of a customer to a third party promising to pay the third party upon presentation of specified documents. A letter of credit effectively substitutes the issuer's credit for that of the customer.

Loan-to-value (LTV) – A commonly used credit quality metric that is reported in terms of ending and average LTV. Ending LTV is calculated as the outstanding carrying value of the loan at the end of the period divided by the estimated value of the property securing the loan. An additional metric related to LTV is **combined loan-to-value (CLTV)** which is similar to the LTV metric, yet combines the outstanding balance on the residential mortgage loan and the outstanding carrying value on the home equity loan or available line of credit, both of which are secured by the same property, divided by the estimated value of the property. A LTV of 100 percent reflects a loan that is currently secured by a property valued at an amount exactly equal to the carrying value or available line of the loan. Estimated property values are generally determined through the use of automated valuation models (AVMs) or the CoreLogic Case-Shiller Index. An AVM is a tool that estimates the value of a property by reference to large volumes of market data including sales of comparable properties and price trends specific to the MSA in which the property being valued is located. CoreLogic Case-Shiller is a widely used index based on data from repeat sales of single family homes. CoreLogic Case-Shiller indexed-based values are reported on a three-month or one-quarter lag.

Margin Receivable – An extension of credit secured by eligible securities in certain brokerage accounts.

Matched Book – Repurchase and resale agreements and securities borrowed and loaned transactions entered into to accommodate customers and earn interest rate spreads.

Mortgage Servicing Right (MSR) – The right to service a mortgage loan when the underlying loan is sold or securitized. Servicing includes collections for principal, interest and escrow payments from borrowers and accounting for and remitting principal and interest payments to investors.

Net Interest Yield – Net interest income divided by average total interest-earning assets.

Nonperforming Loans and Leases – Include loans and leases that have been placed on nonaccrual status, including nonaccruing loans whose contractual terms have been restructured in a manner that grants a concession to a borrower experiencing financial difficulties (TDRs). Loans accounted for under the fair value option, PCI loans and LHFS are not reported as nonperforming loans and leases. Consumer credit card loans, business card loans, consumer loans secured by personal property (except for certain secured consumer loans, including those that have been modified in a TDR), and consumer loans secured by real estate that are insured by the FHA or through long-term credit protection agreements with FNMA and FHLMC (fully-insured loan portfolio) are not placed on nonaccrual status and are, therefore, not reported as nonperforming loans and leases.

Prompt Corrective Action (PCA) – A framework established by the U.S. banking regulators requiring banks to maintain certain levels of regulatory capital ratios, comprised of five categories of capitalization: "well capitalized," "adequately capitalized," "undercapitalized," "significantly undercapitalized," and "critically undercapitalized." Insured depository institutions that fail to meet these capital levels are subject to increasingly strict limits on their activities, including their ability to make capital distributions, pay management compensation, grow assets and take other actions.

Purchased Credit-impaired (PCI) Loan – A loan purchased as an individual loan, in a portfolio of loans or in a business combination with evidence of deterioration in credit quality since origination for which it is probable, upon acquisition, that the investor will be unable to collect all contractually required payments. These loans are recorded at fair value upon acquisition.

Subprime Loans – Although a standard industry definition for subprime loans (including subprime mortgage loans) does not exist, the Corporation defines subprime loans as specific product offerings for higher risk borrowers, including individuals with one or a combination of high credit risk factors, such as low FICO scores, high debt to income ratios and inferior payment history.

Troubled Debt Restructurings (TDRs) – Loans whose contractual terms have been restructured in a manner that grants a concession to a borrower experiencing financial difficulties. Certain consumer loans for which a binding offer to restructure has been extended are also classified as TDRs. Concessions could include a reduction in the interest rate to a rate that is below market on the loan, payment extensions, forgiveness of principal, forbearance, loans discharged in bankruptcy or other actions intended to maximize collection. Secured consumer loans that have been discharged in Chapter 7 bankruptcy and have not been reaffirmed by the borrower are classified as TDRs at the time of discharge from bankruptcy. TDRs are generally reported as nonperforming loans and leases while on nonaccrual status. Nonperforming TDRs may be returned to accrual status when, among other criteria, payment in full of all amounts due under the restructured terms is expected and the borrower has demonstrated a sustained period of repayment performance, generally six months. TDRs that are on accrual status are reported as performing TDRs through the end of the calendar year in which the restructuring occurred or the year in which they are returned to accrual status. In addition, if accruing TDRs bear less than a market rate of interest at the time of modification, they are reported as performing TDRs throughout their remaining lives unless and until they cease to perform in accordance with their modified contractual terms, at which time they would be placed on nonaccrual status and reported as nonperforming TDRs.

Value-at-Risk (VaR) – VaR is a model that simulates the value of a portfolio under a range of hypothetical scenarios in order to generate a distribution of potential gains and losses. VaR represents the loss the portfolio is expected to experience with a given confidence level based on historical data. A VaR model is an effective tool in estimating ranges of potential gains and losses on our trading portfolios.

Acronyms

ABS	Asset-backed securities
AFS	Available-for-sale
ALM	Asset and liability management
ARM	Adjustable-rate mortgage
AUM	Assets under management
BHC	Bank holding company
CCAR	Comprehensive Capital Analysis and Review
CDO	Collateralized debt obligation
CGA	Corporate General Auditor
CLO	Collateralized loan obligation
CRA	Community Reinvestment Act
CVA	Credit valuation adjustment
DVA	Debit valuation adjustment
EAD	Exposure at default
ERC	Enterprise Risk Committee
FDIC	Federal Deposit Insurance Corporation
FHA	Federal Housing Administration
FHFA	Federal Housing Finance Agency
FHLB	Federal Home Loan Bank
FHLMC	Freddie Mac
FICC	Fixed-income, currencies and commodities
FICO	Fair Isaac Corporation (credit score)
FLUs	Front line units
FNMA	Fannie Mae
FTE	Fully taxable-equivalent
FVA	Funding valuation adjustment
GAAP	Accounting principles generally accepted in the United States of America
GM&CA	Global Marketing and Corporate Affairs
GNMA	Government National Mortgage Association
GSE	Government-sponsored enterprise
HELOC	Home equity lines of credit
HFI	Held-for-investment
HQLA	High Quality Liquid Assets
HUD	U.S. Department of Housing and Urban Development
IRM	Independent risk management
LCR	Liquidity Coverage Ratio
LGD	Loss-given default
LHFS	Loans held-for-sale
LIBOR	London InterBank Offered Rate
LTV	Loan-to-value
MD&A	Management's Discussion and Analysis of Financial Condition and Results of Operations
MI	Mortgage insurance
MRC	Management Risk Committee
MSA	Metropolitan statistical area
MSR	Mortgage servicing right
NSFR	Net Stable Funding Ratio
OCC	Office of the Comptroller of the Currency
OCI	Other comprehensive income
OTC	Over-the-counter
OTTI	Other-than-temporary impairment
PCA	Prompt Corrective Action
PCI	Purchased credit-impaired
PPI	Payment protection insurance
RCSAs	Risk and Control Self Assessments
RMBS	Residential mortgage-backed securities
SBLCs	Standby letters of credit
SEC	Securities and Exchange Commission
SLR	Supplementary leverage ratio
TDR	Troubled debt restructurings
TLAC	Total Loss-Absorbing Capacity
VIE	Variable interest entity

Item 8. Financial Statements and Supplementary Data

Table of Contents

	Page
Consolidated Statement of Income	4
Consolidated Statement of Comprehensive Income	5
Consolidated Balance Sheet	6
Consolidated Statement of Changes in Shareholders' Equity	8
Consolidated Statement of Cash Flows	9
Note 1 – Summary of Significant Accounting Principles	10
Note 2 – Derivatives	21
Note 3 – Securities	31
Note 4 – Outstanding Loans and Leases	36
Note 5 – Allowance for Credit Losses	50
Note 6 – Securitizations and Other Variable Interest Entities	52
Note 7 – Representations and Warranties Obligations and Corporate Guarantees	58
Note 8 – Goodwill and Intangible Assets	62
Note 9 – Deposits	63
Note 10 – Federal Funds Sold or Purchased, Securities Financing Agreements and Short-term Borrowings	63
Note 11 – Long-term Debt	66
Note 12 – Commitments and Contingencies	69
Note 13 – Shareholders' Equity	77
Note 14 – Accumulated Other Comprehensive Income (Loss)	81
Note 15 – Earnings Per Common Share	83
Note 16 – Regulatory Requirements and Restrictions	84
Note 17 – Employee Benefit Plans	86
Note 18 – Stock-based Compensation Plans	93
Note 19 – Income Taxes	94
Note 20 – Fair Value Measurements	97
Note 21 – Fair Value Option	111
Note 22 – Fair Value of Financial Instruments	114
Note 23 – Mortgage Servicing Rights	115
Note 24 – Business Segment Information	116
Note 25 – Parent Company Information	120
Note 26 – Performance by Geographical Area	122

Report of Management on Internal Control Over Financial Reporting

The management of Bank of America Corporation is responsible for establishing and maintaining adequate internal control over financial reporting.

The Corporation's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with accounting principles generally accepted in the United States of America. The Corporation's internal control over financial reporting includes those policies and procedures that: (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the Corporation; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with accounting principles generally accepted in the United States of America, and that receipts and expenditures of the Corporation are being made only in accordance with authorizations of management and directors of the Corporation; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the Corporation's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Management assessed the effectiveness of the Corporation's internal control over financial reporting as of December 31, 2015 based on the framework set forth by the Committee of Sponsoring Organizations of the Treadway Commission in *Internal Control – Integrated Framework (2013)*. Based on that assessment, management concluded that, as of December 31, 2015, the Corporation's internal control over financial reporting is effective.

The Corporation's internal control over financial reporting as of December 31, 2015 has been audited by PricewaterhouseCoopers, LLP, an independent registered public accounting firm, as stated in their accompanying report which expresses an unqualified opinion on the effectiveness of the Corporation's internal control over financial reporting as of December 31, 2015.

Brian T. Moynihan
Chairman, Chief Executive Officer and President

Paul M. Donofrio
Chief Financial Officer

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareholders of Bank of America Corporation:

In our opinion, the accompanying consolidated balance sheets and the related consolidated statements of income, comprehensive income, changes in shareholders' equity and cash flows present fairly, in all material respects, the financial position of Bank of America Corporation and its subsidiaries at December 31, 2015 and 2014, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2015 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Corporation maintained, in all material respects, effective internal control over financial reporting as of December 31, 2015, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Corporation's management is responsible for these financial statements, for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Report of Management on Internal Control Over Financial Reporting. Our responsibility is to express opinions on these financial statements and on the Corporation's internal control over financial reporting based on our integrated audits. We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects. Our audits of the financial statements included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

As discussed in Note 1 to the consolidated financial statements, the Corporation changed the manner in which it accounts for the amortization of premiums and the accretion of discounts related to certain debt securities in 2016.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Charlotte, North Carolina
February 24, 2016, except with respect to our opinion on the consolidated financial statements insofar as it relates to the effects of changes in segments discussed in Note 1, as to which the date is August 1, 2016, and except with respect to our opinion on the consolidated financial statements insofar as it relates to the change in the manner in which the company accounts for the amortization of premiums and the accretion of discounts related to certain debt securities as discussed in Note 1, as to which the date is November 1, 2016

Consolidated Statement of Income

(Dollars in millions, except per share information)	2015	2014	2013
Interest income			
Loans and leases	**$ 31,918**	$ 34,145	$ 36,470
Debt securities	**9,178**	9,010	8,203
Federal funds sold and securities borrowed or purchased under agreements to resell	**988**	1,039	1,229
Trading account assets	**4,397**	4,561	4,706
Other interest income	**3,026**	2,959	2,866
Total interest income	**49,507**	51,714	53,474
Interest expense			
Deposits	**861**	1,080	1,396
Short-term borrowings	**2,387**	2,579	2,923
Trading account liabilities	**1,343**	1,576	1,638
Long-term debt	**5,958**	5,700	6,798
Total interest expense	**10,549**	10,935	12,755
Net interest income	**38,958**	40,779	40,719
Noninterest income			
Card income	**5,959**	5,944	5,826
Service charges	**7,381**	7,443	7,390
Investment and brokerage services	**13,337**	13,284	12,282
Investment banking income	**5,572**	6,065	6,126
Equity investment income	**261**	1,130	2,901
Trading account profits	**6,473**	6,309	7,056
Mortgage banking income	**2,364**	1,563	3,874
Gains on sales of debt securities	**1,138**	1,481	1,380
Other income (loss)	**1,522**	1,896	(52)
Total noninterest income	**44,007**	45,115	46,783
Total revenue, net of interest expense	**82,965**	85,894	87,502
Provision for credit losses	**3,161**	2,275	3,556
Noninterest expense			
Personnel	**32,868**	33,787	34,719
Occupancy	**4,093**	4,260	4,475
Equipment	**2,039**	2,125	2,146
Marketing	**1,811**	1,829	1,834
Professional fees	**2,264**	2,472	2,884
Amortization of intangibles	**834**	936	1,086
Data processing	**3,115**	3,144	3,170
Telecommunications	**823**	1,259	1,593
Other general operating	**9,887**	25,844	17,306
Total noninterest expense	**57,734**	75,656	69,213
Income before income taxes	**22,070**	7,963	14,733
Income tax expense	**6,234**	2,443	4,194
Net income	**$ 15,836**	$ 5,520	$ 10,539
Preferred stock dividends	**1,483**	1,044	1,349
Net income applicable to common shareholders	**$ 14,353**	$ 4,476	$ 9,190
Per common share information			
Earnings	**$ 1.37**	$ 0.43	$ 0.86
Diluted earnings	**1.31**	0.42	0.83
Dividends paid	**0.20**	0.12	0.04
Average common shares issued and outstanding (in thousands)	**10,462,282**	10,527,818	10,731,165
Average diluted common shares issued and outstanding (in thousands)	**11,213,992**	10,584,535	11,491,418

See accompanying Notes to Consolidated Financial Statements.

Consolidated Statement of Comprehensive Income

(Dollars in millions)	2015	2014	2013
Net income	**$ 15,836**	$ 5,520	$ 10,539
Other comprehensive income (loss), net-of-tax:			
Net change in available-for-sale debt and marketable equity securities	**(1,580)**	4,149	(7,490)
Net change in debit valuation adjustments	**615**	—	—
Net change in derivatives	**584**	616	592
Employee benefit plan adjustments	**394**	(943)	2,049
Net change in foreign currency translation adjustments	**(123)**	(157)	(135)
Other comprehensive income (loss)	**(110)**	3,665	(4,984)
Comprehensive income	**$ 15,726**	$ 9,185	$ 5,555

See accompanying Notes to Consolidated Financial Statements.

Consolidated Balance Sheet

(Dollars in millions)	December 31 2015	2014
Assets		
Cash and due from banks	**$ 31,265**	$ 33,118
Interest-bearing deposits with the Federal Reserve, non-U.S. central banks and other banks	**128,088**	105,471
Cash and cash equivalents	**159,353**	138,589
Time deposits placed and other short-term investments	**7,744**	7,510
Federal funds sold and securities borrowed or purchased under agreements to resell (includes **$55,143** and $62,182 measured at fair value)	**192,482**	191,823
Trading account assets (includes **$107,776** and $110,620 pledged as collateral)	**176,527**	191,785
Derivative assets	**49,990**	52,682
Debt securities:		
Carried at fair value (includes **$29,810** and $32,741 pledged as collateral)	**322,380**	320,695
Held-to-maturity, at cost (fair value – **$84,046** and $59,641; **$9,074** and $15,432 pledged as collateral)	**84,508**	59,757
Total debt securities	**406,888**	380,452
Loans and leases (includes **$6,938** and $8,681 measured at fair value and **$37,767** and $52,959 pledged as collateral)	**896,983**	876,104
Allowance for loan and lease losses	**(12,234)**	(14,419)
Loans and leases, net of allowance	**884,749**	861,685
Premises and equipment, net	**9,485**	10,049
Mortgage servicing rights (includes **$3,087** and $3,530 measured at fair value)	**3,087**	3,530
Goodwill	**69,761**	69,777
Intangible assets	**3,768**	4,612
Loans held-for-sale (includes **$4,818** and $6,801 measured at fair value)	**7,453**	12,836
Customer and other receivables	**58,312**	61,845
Other assets (includes **$14,320** and $13,873 measured at fair value)	**114,688**	117,364
Total assets	**$ 2,144,287**	$ 2,104,539

Assets of consolidated variable interest entities included in total assets above (isolated to settle the liabilities of the variable interest entities)		
Trading account assets	**$ 6,344**	$ 6,890
Loans and leases	**72,946**	95,187
Allowance for loan and lease losses	**(1,320)**	(1,968)
Loans and leases, net of allowance	**71,626**	93,219
Loans held-for-sale	**284**	1,822
All other assets	**1,530**	2,769
Total assets of consolidated variable interest entities	**$ 79,784**	$ 104,700

See accompanying Notes to Consolidated Financial Statements.

Consolidated Balance Sheet (continued)

(Dollars in millions)	December 31 2015	2014
Liabilities		
Deposits in U.S. offices:		
Noninterest-bearing	**$ 422,237**	$ 393,102
Interest-bearing (includes **$1,116** and $1,469 measured at fair value)	**703,761**	660,161
Deposits in non-U.S. offices:		
Noninterest-bearing	**9,916**	7,230
Interest-bearing	**61,345**	58,443
Total deposits	**1,197,259**	1,118,936
Federal funds purchased and securities loaned or sold under agreements to repurchase (includes **$24,574** and $35,357 measured at fair value)	**174,291**	201,277
Trading account liabilities	**66,963**	74,192
Derivative liabilities	**38,450**	46,909
Short-term borrowings (includes **$1,325** and $2,697 measured at fair value)	**28,098**	31,172
Accrued expenses and other liabilities (includes **$13,899** and $12,055 measured at fair value and **$646** and $528 of reserve for unfunded lending commitments)	**146,286**	145,438
Long-term debt (includes **$30,097** and $36,404 measured at fair value)	**236,764**	243,139
Total liabilities	**1,888,111**	1,861,063
Commitments and contingencies *(Note 6 – Securitizations and Other Variable Interest Entities, Note 7 – Representations and Warranties Obligations and Corporate Guarantees* and *Note 12 – Commitments and Contingencies)*		
Shareholders' equity		
Preferred stock, $0.01 par value; authorized – **100,000,000** shares; issued and outstanding – **3,767,790** and 3,647,790 shares	**22,273**	19,309
Common stock and additional paid-in capital, $0.01 par value; authorized – **12,800,000,000** shares; issued and outstanding – **10,380,265,063** and 10,516,542,476 shares	**151,042**	153,458
Retained earnings	**88,219**	74,731
Accumulated other comprehensive income (loss)	**(5,358)**	(4,022)
Total shareholders' equity	**256,176**	243,476
Total liabilities and shareholders' equity	**$ 2,144,287**	$ 2,104,539

Liabilities of consolidated variable interest entities included in total liabilities above		
Short-term borrowings	**$ 681**	$ 1,032
Long-term debt (includes **$11,304** and $11,943 of non-recourse debt)	**14,073**	13,307
All other liabilities (includes **$20** and $84 of non-recourse liabilities)	**21**	138
Total liabilities of consolidated variable interest entities	**$ 14,775**	$ 14,477

See accompanying Notes to Consolidated Financial Statements.

Consolidated Statement of Changes in Shareholders' Equity

(Dollars in millions, shares in thousands)	Preferred Stock	Common Stock and Additional Paid-in Capital		Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Total Shareholders' Equity
		Shares	Amount			
Balance, December 31, 2012	$ 18,768	10,778,264	$ 158,142	$ 62,755	$ (2,703)	$ 236,962
Net income				10,539		10,539
Net change in available-for-sale debt and marketable equity securities					(7,490)	(7,490)
Net change in derivatives					592	592
Employee benefit plan adjustments					2,049	2,049
Net change in foreign currency translation adjustments					(135)	(135)
Dividends declared:						
Common				(428)		(428)
Preferred				(1,249)		(1,249)
Issuance of preferred stock	1,008					1,008
Redemption of preferred stock	(6,461)			(100)		(6,561)
Common stock issued under employee plans and related tax effects		45,288	371			371
Common stock repurchased		(231,744)	(3,220)			(3,220)
Other	37					37
Balance, December 31, 2013	13,352	10,591,808	155,293	71,517	(7,687)	232,475
Net income				5,520		5,520
Net change in available-for-sale debt and marketable equity securities					4,149	4,149
Net change in derivatives					616	616
Employee benefit plan adjustments					(943)	(943)
Net change in foreign currency translation adjustments					(157)	(157)
Dividends declared:						
Common				(1,262)		(1,262)
Preferred				(1,044)		(1,044)
Issuance of preferred stock	5,957					5,957
Common stock issued under employee plans and related tax effects		25,866	(160)			(160)
Common stock repurchased		(101,132)	(1,675)			(1,675)
Balance, December 31, 2014	19,309	10,516,542	153,458	74,731	(4,022)	243,476
Cumulative adjustment for accounting change related to debit valuation adjustments				**1,226**	**(1,226)**	**—**
Net income				**15,836**		**15,836**
Net change in available-for-sale debt and marketable equity securities					**(1,580)**	**(1,580)**
Net change in debit valuation adjustments					**615**	**615**
Net change in derivatives					**584**	**584**
Employee benefit plan adjustments					**394**	**394**
Net change in foreign currency translation adjustments					**(123)**	**(123)**
Dividends declared:						
Common				**(2,091)**		**(2,091)**
Preferred				**(1,483)**		**(1,483)**
Issuance of preferred stock	**2,964**					**2,964**
Common stock issued under employee plans and related tax effects		**4,054**	**(42)**			**(42)**
Common stock repurchased		**(140,331)**	**(2,374)**			**(2,374)**
Balance, December 31, 2015	**$ 22,273**	**10,380,265**	**$ 151,042**	**$ 88,219**	**$ (5,358)**	**$ 256,176**

See accompanying Notes to Consolidated Financial Statements.

Consolidated Statement of Cash Flows

(Dollars in millions)	2015	2014	2013
Operating activities			
Net income	**$ 15,836**	$ 5,520	$ 10,539
Adjustments to reconcile net income to net cash provided by operating activities:			
Provision for credit losses	**3,161**	2,275	3,556
Gains on sales of debt securities	**(1,138)**	(1,481)	(1,380)
Realized debit valuation adjustments on structured liabilities	**556**	—	—
Depreciation and premises improvements amortization	**1,555**	1,586	1,597
Amortization of intangibles	**834**	936	1,086
Net amortization of premium/discount on debt securities	**2,613**	1,699	3,123
Deferred income taxes	**3,076**	1,147	2,715
Stock-based compensation	**28**	78	363
Loans held-for-sale:			
Originations and purchases	**(37,933)**	(39,358)	(65,688)
Proceeds from sales and paydowns of loans originally classified as held-for-sale	**36,204**	38,528	77,707
Net change in:			
Trading and derivative instruments	**2,550**	5,866	32,530
Other assets	**2,493**	5,894	35,154
Accrued expenses and other liabilities	**730**	9,702	(12,919)
Other operating activities, net	**(2,218)**	(1,597)	4,434
Net cash provided by operating activities	**28,347**	30,795	92,817
Investing activities			
Net change in:			
Time deposits placed and other short-term investments	**50**	4,030	7,154
Federal funds sold and securities borrowed or purchased under agreements to resell	**(659)**	(1,495)	29,596
Debt securities carried at fair value:			
Proceeds from sales	**145,079**	126,399	103,743
Proceeds from paydowns and maturities	**84,988**	79,704	85,554
Purchases	**(219,412)**	(247,902)	(160,744)
Held-to-maturity debt securities:			
Proceeds from paydowns and maturities	**12,872**	7,889	8,472
Purchases	**(36,575)**	(13,274)	(14,388)
Loans and leases:			
Proceeds from sales	**22,316**	28,765	12,331
Purchases	**(12,629)**	(10,609)	(16,734)
Other changes in loans and leases, net	**(51,895)**	19,160	(34,256)
Proceeds from sales of equity investments	**333**	1,577	4,818
Other investing activities, net	**(39)**	(2,504)	(488)
Net cash provided by (used in) investing activities	**(55,571)**	(8,260)	25,058
Financing activities			
Net change in:			
Deposits	**78,347**	(335)	14,010
Federal funds purchased and securities loaned or sold under agreements to repurchase	**(26,986)**	3,171	(95,153)
Short-term borrowings	**(3,074)**	(14,827)	16,009
Long-term debt:			
Proceeds from issuance	**43,670**	51,573	45,658
Retirement of long-term debt	**(40,365)**	(53,749)	(65,602)
Preferred stock:			
Proceeds from issuance	**2,964**	5,957	1,008
Redemption	**—**	—	(6,461)
Common stock repurchased	**(2,374)**	(1,675)	(3,220)
Cash dividends paid	**(3,574)**	(2,306)	(1,677)
Excess tax benefits on share-based payments	**16**	34	12
Other financing activities, net	**(39)**	(44)	(26)
Net cash provided by (used in) financing activities	**48,585**	(12,201)	(95,442)
Effect of exchange rate changes on cash and cash equivalents	**(597)**	(3,067)	(1,863)
Net increase in cash and cash equivalents	**20,764**	7,267	20,570
Cash and cash equivalents at January 1	**138,589**	131,322	110,752
Cash and cash equivalents at December 31	**$ 159,353**	$ 138,589	$ 131,322
Supplemental cash flow disclosures			
Interest paid	**$ 10,623**	$ 11,082	$ 12,912
Income taxes paid	**2,326**	2,558	1,559
Income taxes refunded	**(151)**	(144)	(244)

See accompanying Notes to Consolidated Financial Statements.

NOTE 1 Summary of Significant Accounting Principles

Bank of America Corporation (together with its consolidated subsidiaries, the Corporation), a bank holding company (BHC) and a financial holding company, provides a diverse range of financial services and products throughout the U.S. and in certain international markets. The term "the Corporation" as used herein may refer to Bank of America Corporation individually, Bank of America Corporation and its subsidiaries, or certain of Bank of America Corporation's subsidiaries or affiliates.

Principles of Consolidation and Basis of Presentation

The Consolidated Financial Statements include the accounts of the Corporation and its majority-owned subsidiaries, and those variable interest entities (VIEs) where the Corporation is the primary beneficiary. Intercompany accounts and transactions have been eliminated. Results of operations of acquired companies are included from the dates of acquisition and for VIEs, from the dates that the Corporation became the primary beneficiary. Assets held in an agency or fiduciary capacity are not included in the Consolidated Financial Statements. The Corporation accounts for investments in companies for which it owns a voting interest and for which it has the ability to exercise significant influence over operating and financing decisions using the equity method of accounting. These investments are included in other assets. Equity method investments are subject to impairment testing and the Corporation's proportionate share of income or loss is included in equity investment income.

The preparation of the Consolidated Financial Statements in conformity with accounting principles generally accepted in the United States of America (GAAP) requires management to make estimates and assumptions that affect reported amounts and disclosures. Realized results could differ from those estimates and assumptions.

Effective April 1, 2016, to align the segments with how the Corporation manages the businesses beginning in the three months ended June 30, 2016, the Corporation changed its basis of presentation, and following such change, reports its results of operations through the following four business segments: *Consumer Banking*, *Global Wealth & Investment Management (GWIM)*, *Global Banking* and *Global Markets*, with the remaining operations recorded in *All Other.* For more information on this segment realignment, see *Note 1 – Summary of Significant Accounting Principles* to the Consolidated Financial Statements of Exhibit 99.2 to the Corporation's Current Report on Form 8-K filed on August 1, 2016. Prior periods have been reclassified to conform to the current period presentation.

The Corporation classifies certain leases in other assets. Previously these leases were classified in loans and leases. The 2015 and 2014 periods have been reclassified to conform to current period presentation.

Change in Accounting Method

Effective July 1, 2016, the Corporation changed its accounting method under the Financial Accounting Standards Board (FASB) Accounting Standards Codification (ASC) 310-20, *Nonrefundable fees and other costs*, from the prepayment method (also referred to as the retrospective method) to the contractual method.

Under the prepayment method, the Corporation's amortization of premiums and accretion of discounts related to certain debt securities was based on estimated principal prepayment assumptions on individual debt securities each reporting period. Prepayment experience, which is largely driven by interest rates, is continually evaluated to determine the estimated lives of the securities. When a change is made to the estimated lives of the securities, the related premium or discount is adjusted with a corresponding charge or benefit to interest income as if the current estimated lives had been applied since the acquisition of the securities. Accordingly, the application of the prepayment method results in a cumulative catch-up adjustment in each period, recorded in interest income.

Under the contractual method, premiums and discounts on debt securities are amortized and accreted at a constant effective yield, and no assumption is made concerning prepayments. The cumulative catch-up adjustment that occurs under the prepayment method is therefore not required under the contractual method. Instead, as principal prepayments occur, the contractual method requires the acceleration of a portion of the unamortized premium or discount be recorded in interest income such that the effective yield of the debt security remains constant throughout the life of the debt security.

The Corporation believes that the contractual method is the preferable method of accounting because it is consistent with the accounting method used by peer institutions in terms of net interest income, an important element in the statement of income. Additionally, the contractual method better aligns with the Corporation's asset and liability (ALM) management strategy which acts to mitigate the risk that market conditions may adversely impact the value of the Corporation's assets and liabilities, and its financial results.

Adoption of the contractual method of accounting is a voluntary change required to be adopted retrospectively. Therefore all prior periods presented herein have been restated to conform to the current period presentation. The following Notes have been impacted by the change in accounting method: *Note 3 – Securities, Note 14 – Accumulated Other Comprehensive Income (Loss), Note 15 – Earnings Per Common Share*, *Note 16 – Regulatory Requirements and Restrictions* and *Note 24 – Business Segment Information*.

The following is the impact of the change in accounting method on the annual periods presented in the consolidated financial statements herein. The impact is expressed as an increase / (decrease) as compared to amounts originally reported. For 2015, 2014 and 2013: net interest income — $(141) million, $989 million and $(1.5) billion, gains on sales of debt securities — $47 million, $127 million and $109 million, and net income — $(52) million, or $0.00 per diluted share, $687 million, or $0.06 per diluted share, and $(892) million, or $(0.07) per diluted share, respectively. The change in accounting method decreased retained earnings $980 million at January 1, 2014.

New Accounting Pronouncements

In January 2016, the FASB issued new accounting guidance on recognition and measurement of financial instruments. The new guidance makes targeted changes to existing GAAP including, among other provisions, requiring certain equity investments to be measured at fair value with changes in fair value reported in earnings and requiring changes in instrument-specific credit risk (i.e., debit valuation adjustments (DVA)) for financial liabilities recorded at fair value under the fair value option to be reported in other comprehensive income (OCI). The accounting for DVA related to other financial liabilities, for example, derivatives, does not change. The new guidance is effective on January 1, 2018, with early adoption permitted for the provisions related to DVA.

The Corporation early adopted, retrospective to January 1, 2015, the provisions of this new accounting guidance related to DVA on financial liabilities accounted for under the fair value option. The impact of the adoption was to reclassify, as of January 1, 2015, unrealized DVA losses of $1.2 billion after tax ($2.0 billion pretax) from January 1, 2015 retained earnings to accumulated OCI. Further, pretax unrealized DVA gains of $301 million, $301 million and $420 million were reclassified from other income to accumulated OCI for the three months ended September 30, 2015, June 30, 2015 and March 31, 2015, respectively. This had the effect of reducing net income as previously reported for the aforementioned quarters by $187 million, $186 million and $260 million, or approximately $0.02 per share in each quarter. This change is reflected in the Consolidated Statement of Income and the *Global Markets* segment results. Financial statements for 2014 and 2013 were not subject to restatement under the provisions of this new accounting guidance. For additional information, see *Note 14 – Accumulated Other Comprehensive Income (Loss)* and *Note 21 – Fair Value Option*. The Corporation does not expect the provisions of this new accounting guidance other than those related to DVA, as described above, to have a material impact on its consolidated financial position or results of operations.

In February 2015, the FASB issued new accounting guidance that amends the criteria for determining whether limited partnerships and similar entities are VIEs, clarifies when a general partner or asset manager should consolidate an entity and eliminates the indefinite deferral of certain aspects of VIE accounting guidance for investments in certain investment funds. Money market funds registered under Rule 2a-7 of the Investment Company Act and similar funds are exempt from consolidation under the new guidance. The new accounting guidance is effective on January 1, 2016. The Corporation does not expect the new guidance to have a material impact on its consolidated financial position or results of operations.

In May 2014, the FASB issued new accounting guidance to clarify the principles for recognizing revenue from contracts with customers. The new accounting guidance, which does not apply to financial instruments, is effective on January 1, 2018. The Corporation does not expect the new guidance to have a material impact on its consolidated financial position or results of operations.

In December 2012, the FASB issued a proposed standard on accounting for credit losses. It would replace multiple existing impairment models, including an "incurred loss" model for loans, with an "expected loss" model. The FASB has indicated a tentative effective date of January 1, 2019, and final guidance is expected to be issued in the second quarter of 2016. The final standard may materially reduce retained earnings in the period of adoption.

Cash and Cash Equivalents

Cash and cash equivalents include cash on hand, cash items in the process of collection, cash segregated under federal and other brokerage regulations, and amounts due from correspondent banks, the Federal Reserve Bank and certain non-U.S. central banks.

Consolidated Statement of Cash Flows

In the Consolidated Statement of Cash Flows for the year ended December 31, 2014 as included herein, the Corporation made certain corrections related to non-cash activity which are not material to the Consolidated Financial Statements taken as a whole, do not impact the Consolidated Statement of Income or Consolidated Balance Sheet, and have no impact on the Corporation's cash and cash equivalents balance. Certain non-cash transactions involving the sale of loans and receipt of debt securities as proceeds were incorrectly classified between operating activities and investing activities. The corrections resulted in a $3.4 billion increase in net cash provided by operating activities, offset by a $3.4 billion increase in net cash used in investing activities when compared to the Consolidated Statement of Cash Flows in the Form 10-K for the year ended December 31, 2014.

The Consolidated Statement of Cash Flows included in the previously-filed Form 10-Qs for the quarterly periods ended March 31, 2015 and June 30, 2015 also incorrectly reported this type of non-cash activity by $4.8 billion and $9.3 billion, where an increase in net cash provided by operating activities was offset by an increase in net cash used in investing activities. The incorrectly reported amounts in these 2015 quarterly periods also were not material to the Consolidated Financial Statements taken as a whole, did not impact the Consolidated Statements of Income or Consolidated Balance Sheets and had no impact on cash and cash equivalents for those periods.

For information on certain non-cash transactions, which are not reflected in the Consolidated Statement of Cash Flows, see *Note 4 – Outstanding Loans and Leases* and *Note 6 – Securitizations and Other Variable Interest Entities.*

Securities Financing Agreements

The Corporation enters into securities borrowed or purchased under agreements to resell and securities loaned or sold under agreements to repurchase (securities financing agreements) to accommodate customers (also referred to as "matched-book transactions"), obtain securities to cover short positions, and to finance inventory positions. Securities financing agreements are treated as collateralized financing transactions except in instances where the transaction is required to be accounted for as individual sale and purchase transactions. Generally, these agreements are recorded at the amounts at which the securities were acquired or sold plus accrued interest, except for certain securities financing agreements that the Corporation accounts for under the fair value option. Changes in the fair value of securities financing agreements that are accounted for under the fair value option are recorded in trading account profits in the Consolidated Statement of Income.

The Corporation's policy is to obtain possession of collateral with a market value equal to or in excess of the principal amount loaned under resale agreements. To ensure that the market value of the underlying collateral remains sufficient, collateral is generally valued daily and the Corporation may require

counterparties to deposit additional collateral or may return collateral pledged when appropriate. Securities financing agreements give rise to negligible credit risk as a result of these collateral provisions and, accordingly, no allowance for loan losses is considered necessary.

In transactions where the Corporation acts as the lender in a securities lending agreement and receives securities that can be pledged or sold as collateral, it recognizes an asset on the Consolidated Balance Sheet at fair value, representing the securities received, and a liability, representing the obligation to return those securities.

Collateral

The Corporation accepts securities as collateral that it is permitted by contract or custom to sell or repledge. At December 31, 2015 and 2014, the fair value of this collateral was $458.9 billion and $508.7 billion, of which $383.5 billion and $419.3 billion was sold or repledged. The primary source of this collateral is securities borrowed or purchased under agreements to resell.

The Corporation also pledges company-owned securities and loans as collateral in transactions that include repurchase agreements, securities loaned, public and trust deposits, U.S. Treasury tax and loan notes, and short-term borrowings. This collateral, which in some cases can be sold or repledged by the counterparties to the transactions, is parenthetically disclosed on the Consolidated Balance Sheet.

In certain cases, the Corporation has transferred assets to consolidated VIEs where those restricted assets serve as collateral for the interests issued by the VIEs. These assets are included on the Consolidated Balance Sheet in Assets of Consolidated VIEs.

In addition, the Corporation obtains collateral in connection with its derivative contracts. Required collateral levels vary depending on the credit risk rating and the type of counterparty. Generally, the Corporation accepts collateral in the form of cash, U.S. Treasury securities and other marketable securities. Based on provisions contained in master netting agreements, the Corporation nets cash collateral received against derivative assets. The Corporation also pledges collateral on its own derivative positions which can be applied against derivative liabilities.

Trading Instruments

Financial instruments utilized in trading activities are carried at fair value. Fair value is generally based on quoted market prices or quoted market prices for similar assets and liabilities. If these market prices are not available, fair values are estimated based on dealer quotes, pricing models, discounted cash flow methodologies, or similar techniques where the determination of fair value may require significant management judgment or estimation. Realized gains and losses are recorded on a trade-date basis. Realized and unrealized gains and losses are recognized in trading account profits.

Derivatives and Hedging Activities

Derivatives are entered into on behalf of customers, for trading or to support risk management activities. Derivatives used in risk management activities include derivatives that are both designated in qualifying accounting hedge relationships and derivatives used to hedge market risks in relationships that are not designated in qualifying accounting hedge relationships (referred to as other risk management activities). Derivatives utilized by the Corporation include swaps, financial futures and forward settlement contracts, and option contracts.

All derivatives are recorded on the Consolidated Balance Sheet at fair value, taking into consideration the effects of legally enforceable master netting agreements that allow the Corporation to settle positive and negative positions and offset cash collateral held with the same counterparty on a net basis. For exchange-traded contracts, fair value is based on quoted market prices in active or inactive markets or is derived from observable market-based pricing parameters, similar to those applied to over-the-counter (OTC) derivatives. For non-exchange traded contracts, fair value is based on dealer quotes, pricing models, discounted cash flow methodologies or similar techniques for which the determination of fair value may require significant management judgment or estimation.

Valuations of derivative assets and liabilities reflect the value of the instrument including counterparty credit risk. These values also take into account the Corporation's own credit standing.

Trading Derivatives and Other Risk Management Activities

Derivatives held for trading purposes are included in derivative assets or derivative liabilities on the Consolidated Balance Sheet with changes in fair value included in trading account profits.

Derivatives used for other risk management activities are included in derivative assets or derivative liabilities. Derivatives used in other risk management activities have not been designated in a qualifying accounting hedge relationship because they did not qualify or the risk that is being mitigated pertains to an item that is reported at fair value through earnings so that the effect of measuring the derivative instrument and the asset or liability to which the risk exposure pertains will offset in the Consolidated Statement of Income to the extent effective. The changes in the fair value of derivatives that serve to mitigate certain risks associated with MSRs, interest rate lock commitments (IRLCs) and first mortgage loans held-for-sale (LHFS) that are originated by the Corporation are recorded in mortgage banking income. Changes in the fair value of derivatives that serve to mitigate interest rate risk and foreign currency risk are included in other income (loss). Credit derivatives are also used by the Corporation to mitigate the risk associated with various credit exposures. The changes in the fair value of these derivatives are included in other income (loss).

Derivatives Used For Hedge Accounting Purposes (Accounting Hedges)

For accounting hedges, the Corporation formally documents at inception all relationships between hedging instruments and hedged items, as well as the risk management objectives and strategies for undertaking various accounting hedges. Additionally, the Corporation primarily uses regression analysis at the inception of a hedge and for each reporting period thereafter to assess whether the derivative used in an accounting hedge transaction is expected to be and has been highly effective in offsetting changes in the fair value or cash flows of a hedged item or forecasted transaction. The Corporation discontinues hedge accounting when it is determined that a derivative is not expected to be or has ceased to be highly effective as a hedge, and then reflects changes in fair value of the derivative in earnings after termination of the hedge relationship.

The Corporation uses its accounting hedges as either fair value hedges, cash flow hedges or hedges of net investments in foreign operations. The Corporation manages interest rate and foreign currency exchange rate sensitivity predominantly through the use of derivatives.

Fair value hedges are used to protect against changes in the fair value of the Corporation's assets and liabilities that are attributable to interest rate or foreign exchange volatility. Changes in the fair value of derivatives designated as fair value hedges are recorded in earnings, together and in the same income statement line item with changes in the fair value of the related hedged item. If a derivative instrument in a fair value hedge is terminated or the hedge designation removed, the previous adjustments to the carrying value of the hedged asset or liability are subsequently accounted for in the same manner as other components of the carrying value of that asset or liability. For interest-earning assets and interest-bearing liabilities, such adjustments are amortized to earnings over the remaining life of the respective asset or liability.

Cash flow hedges are used primarily to minimize the variability in cash flows of assets or liabilities, or forecasted transactions caused by interest rate or foreign exchange fluctuations. Changes in the fair value of derivatives designated as cash flow hedges are recorded in accumulated OCI and are reclassified into the line item in the income statement in which the hedged item is recorded in the same period the hedged item affects earnings. Hedge ineffectiveness and gains and losses on the component of a derivative excluded in assessing hedge effectiveness are recorded in the same income statement line item. The Corporation records changes in the fair value of derivatives used as hedges of the net investment in foreign operations, to the extent effective, as a component of accumulated OCI. If a derivative instrument in a cash flow hedge is terminated or the hedge designation is removed, related amounts in accumulated OCI are reclassified into earnings in the same period or periods during which the hedged forecasted transaction affects earnings. If it becomes probable that a forecasted transaction will not occur, any related amounts in accumulated OCI are reclassified into earnings in that period.

Interest Rate Lock Commitments

The Corporation enters into IRLCs in connection with its mortgage banking activities to fund residential mortgage loans at specified times in the future. IRLCs that relate to the origination of mortgage loans that will be classified as held-for-sale are considered derivative instruments under applicable accounting guidance. As such, these IRLCs are recorded at fair value with changes in fair value recorded in mortgage banking income, typically resulting in recognition of a gain when the Corporation enters into IRLCs.

In estimating the fair value of an IRLC, the Corporation assigns a probability that the loan commitment will be exercised and the loan will be funded. The fair value of the commitments is derived from the fair value of related mortgage loans which is based on observable market data and includes the expected net future cash flows related to servicing of the loans. Changes in the fair value of IRLCs are recognized based on interest rate changes, changes in the probability that the commitment will be exercised and the passage of time. Changes from the expected future cash flows related to the customer relationship are excluded from the valuation of IRLCs.

Outstanding IRLCs expose the Corporation to the risk that the price of the loans underlying the commitments might decline from inception of the rate lock to funding of the loan. To manage this risk, the Corporation utilizes forward loan sales commitments and other derivative instruments, including interest rate swaps and options, to economically hedge the risk of potential changes in the value of the loans that would result from the commitments. The changes in the fair value of these derivatives are recorded in mortgage banking income.

Securities

Debt securities are recorded on the Consolidated Balance Sheet as of their trade date. Debt securities bought principally with the intent to buy and sell in the short term as part of the Corporation's trading activities are reported at fair value in trading account assets with unrealized gains and losses included in trading account profits. Debt securities purchased for longer term investment purposes, as part of ALM and other strategic activities are generally reported at fair value as available-for-sale (AFS) securities with net unrealized gains and losses net-of-tax included in accumulated OCI. Certain other debt securities purchased for ALM and other strategic purposes are reported at fair value with unrealized gains and losses reported in other income (loss). These are referred to as other debt securities carried at fair value. AFS securities and other debt securities carried at fair value are reported in debt securities on the Consolidated Balance Sheet. The Corporation may hedge these other debt securities with risk management derivatives with the unrealized gains and losses also reported in other income (loss). The debt securities are carried at fair value with unrealized gains and losses reported in other income (loss) to mitigate accounting asymmetry with the risk management derivatives and to achieve operational simplifications. Debt securities which management has the intent and ability to hold to maturity are reported at amortized cost. Certain debt securities purchased for use in other risk management activities, such as hedging certain market risks related to MSRs, are reported in other assets at fair value with unrealized gains and losses reported in the same line item as the item being hedged.

The Corporation regularly evaluates each AFS and held-to-maturity (HTM) debt security where the value has declined below amortized cost to assess whether the decline in fair value is other than temporary. In determining whether an impairment is other than temporary, the Corporation considers the severity and duration of the decline in fair value, the length of time expected for recovery, the financial condition of the issuer, and other qualitative factors, as well as whether the Corporation either plans to sell the security or it is more-likely-than-not that it will be required to sell the security before recovery of the amortized cost. If the impairment of the AFS or HTM debt security is credit-related, an other-than-temporary impairment (OTTI) loss is recorded in earnings. For AFS debt securities, the non-credit related impairment loss is recognized in accumulated OCI. If the Corporation intends to sell an AFS debt security or believes it will more-likely-than-not be required to sell a security, the Corporation records the full amount of the impairment loss as an OTTI loss.

Interest on debt securities, including amortization of premiums and accretion of discounts, is included in interest income. Premiums and discounts are amortized or accreted to interest income at a constant effective yield over the contractual lives of the securities. Realized gains and losses from the sales of debt securities are determined using the specific identification method.

Marketable equity securities are classified based on management's intention on the date of purchase and recorded on the Consolidated Balance Sheet as of the trade date. Marketable

equity securities that are bought and held principally for the purpose of resale in the near term are classified as trading and are carried at fair value with unrealized gains and losses included in trading account profits. Other marketable equity securities are accounted for as AFS and classified in other assets. All AFS marketable equity securities are carried at fair value with net unrealized gains and losses included in accumulated OCI, net-of-tax. If there is an other-than-temporary decline in the fair value of any individual AFS marketable equity security, the cost basis is reduced and the Corporation reclassifies the associated net unrealized loss out of accumulated OCI with a corresponding charge to equity investment income. Dividend income on AFS marketable equity securities is included in equity investment income. Realized gains and losses on the sale of all AFS marketable equity securities, which are recorded in equity investment income, are determined using the specific identification method.

Certain equity investments held by Global Principal Investments, the Corporation's diversified equity investor in private equity, real estate and other alternative investments, are subject to investment company accounting under applicable accounting guidance and, accordingly, are carried at fair value with changes in fair value reported in equity investment income. These investments are included in other assets. Initially, the transaction price of the investment is generally considered to be the best indicator of fair value. Thereafter, valuation of direct investments is based on an assessment of each individual investment using methodologies that include publicly-traded comparables derived by multiplying a key performance metric of the portfolio company by the relevant valuation multiple observed for comparable companies, acquisition comparables, entry level multiples and discounted cash flow analyses, and are subject to appropriate discounts for lack of liquidity or marketability. For fund investments, the Corporation generally records the fair value of its proportionate interest in the fund's capital as reported by the respective fund managers.

Loans and Leases

Loans, with the exception of loans accounted for under the fair value option, are measured at historical cost and reported at their outstanding principal balances net of any unearned income, charge-offs, unamortized deferred fees and costs on originated loans, and for purchased loans, net of any unamortized premiums or discounts. Loan origination fees and certain direct origination costs are deferred and recognized as adjustments to interest income over the lives of the related loans. Unearned income, discounts and premiums are amortized to interest income using a level yield methodology. The Corporation elects to account for certain consumer and commercial loans under the fair value option with changes in fair value reported in other income (loss).

Under applicable accounting guidance, for reporting purposes, the loan and lease portfolio is categorized by portfolio segment and, within each portfolio segment, by class of financing receivables. A portfolio segment is defined as the level at which an entity develops and documents a systematic methodology to determine the allowance for credit losses, and a class of financing receivables is defined as the level of disaggregation of portfolio segments based on the initial measurement attribute, risk characteristics and methods for assessing risk. The Corporation's three portfolio segments are Consumer Real Estate, Credit Card and Other Consumer, and Commercial. The classes within the Consumer Real Estate portfolio segment are residential mortgage and home equity. The classes within the Credit Card and Other Consumer portfolio segment are U.S. credit card, non-U.S. credit card, direct/indirect consumer and other consumer. The classes within the Commercial portfolio segment are U.S. commercial, commercial real estate, commercial lease financing, non-U.S. commercial and U.S. small business commercial.

Purchased Credit-impaired Loans

Purchased loans with evidence of credit quality deterioration as of the purchase date for which it is probable that the Corporation will not receive all contractually required payments receivable are accounted for as purchased credit-impaired (PCI) loans. Evidence of credit quality deterioration since origination may include past due status, refreshed credit scores and refreshed loan-to-value (LTV) ratios. At acquisition, PCI loans are recorded at fair value with no allowance for credit losses, and accounted for individually or aggregated in pools based on similar risk characteristics such as credit risk, collateral type and interest rate risk. The Corporation estimates the amount and timing of expected cash flows for each loan or pool of loans. The expected cash flows in excess of the amount paid for the loans is referred to as the accretable yield and is recorded as interest income over the remaining estimated life of the loan or pool of loans. The excess of the PCI loans' contractual principal and interest over the expected cash flows is referred to as the nonaccretable difference. Over the life of the PCI loans, the expected cash flows continue to be estimated using models that incorporate management's estimate of current assumptions such as default rates, loss severity and prepayment speeds. If, upon subsequent valuation, the Corporation determines it is probable that the present value of the expected cash flows has decreased, a charge to the provision for credit losses is recorded with a corresponding increase in the allowance for credit losses. If it is probable that there is a significant increase in the present value of expected cash flows, the allowance for credit losses is reduced or, if there is no remaining allowance for credit losses related to these PCI loans, the accretable yield is increased through a reclassification from nonaccretable difference, resulting in a prospective increase in interest income. Reclassifications to or from nonaccretable difference can also occur for changes in the PCI loans' estimated lives. If a loan within a PCI pool is sold, foreclosed, forgiven or the expectation of any future proceeds is remote, the loan is removed from the pool at its proportional carrying value. If the loan's recovery value is less than the loan's carrying value, the difference is first applied against the PCI pool's nonaccretable difference and then against the allowance for credit losses.

Leases

The Corporation provides equipment financing to its customers through a variety of lease arrangements. Direct financing leases are carried at the aggregate of lease payments receivable plus estimated residual value of the leased property less unearned income. Leveraged leases, which are a form of financing leases, are reported net of non-recourse debt. Unearned income on leveraged and direct financing leases is accreted to interest income over the lease terms using methods that approximate the interest method.

Allowance for Credit Losses

The allowance for credit losses, which includes the allowance for loan and lease losses and the reserve for unfunded lending commitments, represents management's estimate of probable losses inherent in the Corporation's lending activities. The allowance for loan and lease losses and the reserve for unfunded lending commitments exclude amounts for loans and unfunded lending commitments accounted for under the fair value option as the fair values of these instruments reflect a credit component. The allowance for loan and lease losses does not include amounts related to accrued interest receivable, other than billed interest and fees on credit card receivables, as accrued interest receivable is reversed when a loan is placed on nonaccrual status. The allowance for loan and lease losses represents the estimated probable credit losses on funded consumer and commercial loans and leases while the reserve for unfunded lending commitments, including standby letters of credit (SBLCs) and binding unfunded loan commitments, represents estimated probable credit losses on these unfunded credit instruments based on utilization assumptions. Lending-related credit exposures deemed to be uncollectible, excluding loans carried at fair value, are charged off against these accounts. Write-offs on PCI loans on which there is a valuation allowance are recorded against the valuation allowance. For additional information, see Purchased Credit-impaired Loans in this Note. Cash recovered on previously charged-off amounts is recorded as a recovery to these accounts. Management evaluates the adequacy of the allowance for credit losses based on the combined total of the allowance for loan and lease losses and the reserve for unfunded lending commitments.

The Corporation performs periodic and systematic detailed reviews of its lending portfolios to identify credit risks and to assess the overall collectability of those portfolios. The allowance on certain homogeneous consumer loan portfolios, which generally consist of consumer real estate within the Consumer Real Estate portfolio segment and credit card loans within the Credit Card and Other Consumer portfolio segment, is based on aggregated portfolio segment evaluations generally by product type. Loss forecast models are utilized for these portfolios which consider a variety of factors including, but not limited to, historical loss experience, estimated defaults or foreclosures based on portfolio trends, delinquencies, bankruptcies, economic conditions and credit scores.

The Corporation's Consumer Real Estate portfolio segment is comprised primarily of large groups of homogeneous consumer loans secured by residential real estate. The amount of losses incurred in the homogeneous loan pools is estimated based on the number of loans that will default and the loss in the event of default. Using modeling methodologies, the Corporation estimates the number of homogeneous loans that will default based on the individual loan attributes aggregated into pools of homogeneous loans with similar attributes. The attributes that are most significant to the probability of default and are used to estimate defaults include refreshed LTV or, in the case of a subordinated lien, refreshed combined LTV, borrower credit score, months since origination (referred to as vintage) and geography, all of which are further broken down by present collection status (whether the loan is current, delinquent, in default or in bankruptcy). This estimate is based on the Corporation's historical experience with the loan portfolio. The estimate is adjusted to reflect an assessment of environmental factors not yet reflected in the historical data underlying the loss estimates, such as changes in real estate values, local and national economies, underwriting standards and the regulatory environment. The probability of default on a loan is based on an analysis of the movement of loans with the measured attributes from either current or any of the delinquency categories to default over a 12-month period. On home equity loans where the Corporation holds only a second-lien position and foreclosure is not the best alternative, the loss severity is estimated at 100 percent.

The allowance on certain commercial loans (except business card and certain small business loans) is calculated using loss rates delineated by risk rating and product type. Factors considered when assessing loss rates include the value of the underlying collateral, if applicable, the industry of the obligor, and the obligor's liquidity and other financial indicators along with certain qualitative factors. These statistical models are updated regularly for changes in economic and business conditions. Included in the analysis of consumer and commercial loan portfolios are reserves which are maintained to cover uncertainties that affect the Corporation's estimate of probable losses including domestic and global economic uncertainty and large single-name defaults.

The remaining portfolios, including nonperforming commercial loans, as well as consumer and commercial loans modified in a troubled debt restructuring (TDR), are reviewed in accordance with applicable accounting guidance on impaired loans and TDRs. If necessary, a specific allowance is established for these loans if they are deemed to be impaired. A loan is considered impaired when, based on current information and events, it is probable that the Corporation will be unable to collect all amounts due, including principal and/or interest, in accordance with the contractual terms of the agreement, or the loan has been modified in a TDR. Once a loan has been identified as impaired, management measures impairment primarily based on the present value of payments expected to be received, discounted at the loans' original effective contractual interest rates, or discounted at the portfolio average contractual annual percentage rate, excluding promotionally priced loans, in effect prior to restructuring. Impaired loans and TDRs may also be measured based on observable market prices, or for loans that are solely dependent on the collateral for repayment, the estimated fair value of the collateral less costs to sell. If the recorded investment in impaired loans exceeds this amount, a specific allowance is established as a component of the allowance for loan and lease losses unless these are secured consumer loans that are solely dependent on the collateral for repayment, in which case the amount that exceeds the fair value of the collateral is charged off.

Generally, when determining the fair value of the collateral securing consumer real estate-secured loans that are solely dependent on the collateral for repayment, prior to performing a detailed property valuation including a walk-through of a property, the Corporation initially estimates the fair value of the collateral securing these consumer loans using an automated valuation model (AVM). An AVM is a tool that estimates the value of a property by reference to market data including sales of comparable properties and price trends specific to the Metropolitan Statistical Area in which the property being valued is located. In the event that an AVM value is not available, the Corporation utilizes publicized indices or if these methods provide less reliable valuations, the Corporation uses appraisals or broker price opinions to estimate the fair value of the collateral. While there is inherent imprecision in these valuations, the Corporation believes that they are representative of the portfolio in the aggregate.

In addition to the allowance for loan and lease losses, the Corporation also estimates probable losses related to unfunded

lending commitments, such as letters of credit and financial guarantees, and binding unfunded loan commitments. The reserve for unfunded lending commitments excludes commitments accounted for under the fair value option. Unfunded lending commitments are subject to individual reviews and are analyzed and segregated by risk according to the Corporation's internal risk rating scale. These risk classifications, in conjunction with an analysis of historical loss experience, utilization assumptions, current economic conditions, performance trends within the portfolio and any other pertinent information, result in the estimation of the reserve for unfunded lending commitments.

The allowance for credit losses related to the loan and lease portfolio is reported separately on the Consolidated Balance Sheet whereas the reserve for unfunded lending commitments is reported on the Consolidated Balance Sheet in accrued expenses and other liabilities. The provision for credit losses related to the loan and lease portfolio and unfunded lending commitments is reported in the Consolidated Statement of Income.

Nonperforming Loans and Leases, Charge-offs and Delinquencies

Nonperforming loans and leases generally include loans and leases that have been placed on nonaccrual status, including nonaccruing loans whose contractual terms have been restructured in a manner that grants a concession to a borrower experiencing financial difficulties. Loans accounted for under the fair value option, PCI loans and LHFS are not reported as nonperforming.

In accordance with the Corporation's policies, consumer real estate-secured loans, including residential mortgages and home equity loans, are generally placed on nonaccrual status and classified as nonperforming at 90 days past due unless repayment of the loan is insured by the Federal Housing Administration (FHA) or through individually insured long-term standby agreements with Fannie Mae (FNMA) or Freddie Mac (FHLMC) (the fully-insured portfolio). Residential mortgage loans in the fully-insured portfolio are not placed on nonaccrual status and, therefore, are not reported as nonperforming. Junior-lien home equity loans are placed on nonaccrual status and classified as nonperforming when the underlying first-lien mortgage loan becomes 90 days past due even if the junior-lien loan is current. Accrued interest receivable is reversed when a consumer loan is placed on nonaccrual status. Interest collections on nonaccruing consumer loans for which the ultimate collectability of principal is uncertain are generally applied as principal reductions; otherwise, such collections are credited to interest income when received. These loans may be restored to accrual status when all principal and interest is current and full repayment of the remaining contractual principal and interest is expected, or when the loan otherwise becomes well-secured and is in the process of collection. The outstanding balance of real estate-secured loans that is in excess of the estimated property value less costs to sell is charged off no later than the end of the month in which the loan becomes 180 days past due unless the loan is fully insured. The estimated property value less costs to sell is determined using the same process as described for impaired loans in Allowance for Credit Losses in this Note.

Consumer loans secured by personal property, credit card loans and other unsecured consumer loans are not placed on nonaccrual status prior to charge-off and, therefore, are not reported as nonperforming loans, except for certain secured consumer loans, including those that have been modified in a TDR. Personal property-secured loans are charged off to collateral value no later than the end of the month in which the account becomes 120 days past due or, for loans in bankruptcy, 60 days past due. Credit card and other unsecured consumer loans are charged off no later than the end of the month in which the account becomes 180 days past due or within 60 days after receipt of notification of death or bankruptcy.

Commercial loans and leases, excluding business card loans, that are past due 90 days or more as to principal or interest, or where reasonable doubt exists as to timely collection, including loans that are individually identified as being impaired, are generally placed on nonaccrual status and classified as nonperforming unless well-secured and in the process of collection.

Accrued interest receivable is reversed when commercial loans and leases are placed on nonaccrual status. Interest collections on nonaccruing commercial loans and leases for which the ultimate collectability of principal is uncertain are applied as principal reductions; otherwise, such collections are credited to income when received. Commercial loans and leases may be restored to accrual status when all principal and interest is current and full repayment of the remaining contractual principal and interest is expected, or when the loan otherwise becomes well-secured and is in the process of collection. Business card loans are charged off no later than the end of the month in which the account becomes 180 days past due or 60 days after receipt of notification of death or bankruptcy. These loans are not placed on nonaccrual status prior to charge-off and, therefore, are not reported as nonperforming loans. Other commercial loans and leases are generally charged off when all or a portion of the principal amount is determined to be uncollectible.

The entire balance of a consumer loan or commercial loan or lease is contractually delinquent if the minimum payment is not received by the specified due date on the customer's billing statement. Interest and fees continue to accrue on past due loans and leases until the date the loan is placed on nonaccrual status, if applicable.

PCI loans are recorded at fair value at the acquisition date. Although the PCI loans may be contractually delinquent, the Corporation does not classify these loans as nonperforming as the loans were written down to fair value at the acquisition date and the accretable yield is recognized in interest income over the remaining life of the loan. In addition, reported net charge-offs exclude write-offs on PCI loans as the fair value already considers the estimated credit losses.

Troubled Debt Restructurings

Consumer and commercial loans and leases whose contractual terms have been restructured in a manner that grants a concession to a borrower experiencing financial difficulties are classified as TDRs. Concessions could include a reduction in the interest rate to a rate that is below market on the loan, payment extensions, forgiveness of principal, forbearance or other actions designed to maximize collections. Loans classified as TDRs are considered impaired loans. Loans that are carried at fair value, LHFS and PCI loans are not classified as TDRs.

Consumer and commercial loans and leases whose contractual terms have been modified in a TDR and are current at the time of restructuring may remain on accrual status if there is demonstrated performance prior to the restructuring and payment in full under the restructured terms is expected. Otherwise, the

loans are placed on nonaccrual status and reported as nonperforming, except for fully-insured consumer real estate loans, until there is sustained repayment performance for a reasonable period, generally six months. If accruing TDRs cease to perform in accordance with their modified contractual terms, they are placed on nonaccrual status and reported as nonperforming TDRs. Generally, TDRs are reported as performing or nonperforming TDRs, depending on nonaccrual status, throughout their remaining lives. Accruing TDRs that bear a market rate of interest are reported as performing TDRs through the end of the calendar year in which the loans are returned to accrual status.

Secured consumer loans that have been discharged in Chapter 7 bankruptcy and have not been reaffirmed by the borrower are classified as TDRs at the time of discharge. Such loans are placed on nonaccrual status and written down to the estimated collateral value less costs to sell no later than at the time of discharge. If these loans are contractually current, interest collections are generally recorded in interest income on a cash basis. Consumer real estate-secured loans for which a binding offer to restructure has been extended are also classified as TDRs. Credit card and other unsecured consumer loans that have been renegotiated in a TDR are not placed on nonaccrual status. Credit card and other unsecured consumer loans that have been renegotiated and placed on a fixed payment plan after July 1, 2012 are generally charged off no later than the end of the month in which the account becomes 120 days past due.

A loan that had previously been modified in a TDR and is subsequently refinanced under current underwriting standards at a market rate with no concessionary terms is accounted for as a new loan and is no longer reported as a TDR.

Loans Held-for-sale

Loans that are intended to be sold in the foreseeable future, including residential mortgages, loan syndications, and to a lesser degree, commercial real estate, consumer finance and other loans, are reported as LHFS and are carried at the lower of aggregate cost or fair value. The Corporation accounts for certain LHFS, including residential mortgage LHFS, under the fair value option. Loan origination costs related to LHFS that the Corporation accounts for under the fair value option are recognized in noninterest expense when incurred. Loan origination costs for LHFS carried at the lower of cost or fair value are capitalized as part of the carrying value of the loans and recognized as a reduction of noninterest income upon the sale of such loans. LHFS that are on nonaccrual status and are reported as nonperforming, as defined in the policy herein, are reported separately from nonperforming loans and leases.

Premises and Equipment

Premises and equipment are carried at cost less accumulated depreciation and amortization. Depreciation and amortization are recognized using the straight-line method over the estimated useful lives of the assets. Estimated lives range up to 40 years for buildings, up to 12 years for furniture and equipment, and the shorter of lease term or estimated useful life for leasehold improvements.

Internally-developed Software

The Corporation capitalizes the costs associated with certain internally-developed software, and amortizes the costs over the expected useful life. Direct project costs of internally-developed software are capitalized when it is probable that the project will be completed and the software will be used for its intended function.

Mortgage Servicing Rights

The Corporation accounts for consumer MSRs, including residential mortgage and home equity MSRs, at fair value with changes in fair value recorded in mortgage banking income. To reduce the volatility of earnings related to interest rate and market value fluctuations, U.S. Treasury securities, mortgage-backed securities and derivatives such as options and interest rate swaps may be used to hedge certain market risks of the MSRs. Such derivatives are not designated as qualifying accounting hedges. These instruments are carried at fair value with changes in fair value recognized in mortgage banking income. The Corporation estimates the fair value of consumer MSRs using a valuation model that calculates the present value of estimated future net servicing income and, when available, quoted prices from independent parties.

Goodwill and Intangible Assets

Goodwill is the purchase premium after adjusting for the fair value of net assets acquired. Goodwill is not amortized but is reviewed for potential impairment on an annual basis, or when events or circumstances indicate a potential impairment, at the reporting unit level. A reporting unit, as defined under applicable accounting guidance, is a business segment or one level below a business segment. The goodwill impairment analysis is a two-step test. The first step of the goodwill impairment test involves comparing the fair value of each reporting unit with its carrying value, including goodwill, as measured by allocated equity. In certain circumstances, the first step may be performed using a qualitative assessment. If the fair value of the reporting unit exceeds its carrying value, goodwill of the reporting unit is considered not impaired; however, if the carrying value of the reporting unit exceeds its fair value, the second step must be performed to measure potential impairment.

The second step involves calculating an implied fair value of goodwill for each reporting unit for which the first step indicated possible impairment. The implied fair value of goodwill is determined in the same manner as the amount of goodwill recognized in a business combination, which is the excess of the fair value of the reporting unit, as determined in the first step, over the aggregate fair values of the assets, liabilities and identifiable intangibles as if the reporting unit was being acquired in a business combination. Measurement of the fair values of the assets and liabilities of a reporting unit is consistent with the requirements of the fair value measurements accounting guidance, as described in Fair Value in this Note. The adjustments to measure the assets, liabilities and intangibles at fair value are for the purpose of measuring the implied fair value of goodwill and such adjustments are not reflected on the Consolidated Balance Sheet. If the implied fair value of goodwill exceeds the goodwill assigned to the reporting unit, there is no impairment. If the goodwill assigned to a reporting unit exceeds the implied fair value of goodwill, an impairment charge is recorded for the excess. An impairment loss recognized cannot exceed the amount of goodwill assigned to a reporting unit. An impairment loss establishes a new basis in the goodwill and subsequent reversals of goodwill impairment losses are not permitted under applicable accounting guidance.

For intangible assets subject to amortization, an impairment loss is recognized if the carrying value of the intangible asset is not recoverable and exceeds fair value. The carrying value of the intangible asset is considered not recoverable if it exceeds the sum of the undiscounted cash flows expected to result from the use of the asset. Intangible assets deemed to have indefinite useful lives are not subject to amortization. An impairment loss is recognized if the carrying value of the intangible asset with an indefinite life exceeds its fair value.

Variable Interest Entities

A VIE is an entity that lacks equity investors or whose equity investors do not have a controlling financial interest in the entity through their equity investments. The entity that has a controlling financial interest in a VIE is referred to as the primary beneficiary and consolidates the VIE. The Corporation is deemed to have a controlling financial interest and is the primary beneficiary of a VIE if it has both the power to direct the activities of the VIE that most significantly impact the VIE's economic performance and an obligation to absorb losses or the right to receive benefits that could potentially be significant to the VIE. On a quarterly basis, the Corporation reassesses whether it has a controlling financial interest in and is the primary beneficiary of a VIE. The quarterly reassessment process considers whether the Corporation has acquired or divested the power to direct the activities of the VIE through changes in governing documents or other circumstances. The reassessment also considers whether the Corporation has acquired or disposed of a financial interest that could be significant to the VIE, or whether an interest in the VIE has become significant or is no longer significant. The consolidation status of the VIEs with which the Corporation is involved may change as a result of such reassessments. Changes in consolidation status are applied prospectively, with assets and liabilities of a newly consolidated VIE initially recorded at fair value. A gain or loss may be recognized upon deconsolidation of a VIE depending on the carrying values of deconsolidated assets and liabilities compared to the fair value of retained interests and ongoing contractual arrangements.

The Corporation primarily uses VIEs for its securitization activities, in which the Corporation transfers whole loans or debt securities into a trust or other vehicle such that the assets are legally isolated from the creditors of the Corporation. Assets held in a trust can only be used to settle obligations of the trust. The creditors of these trusts typically have no recourse to the Corporation except in accordance with the Corporation's obligations under standard representations and warranties.

When the Corporation is the servicer of whole loans held in a securitization trust, including non-agency residential mortgages, home equity loans, credit cards, automobile loans and student loans, the Corporation has the power to direct the most significant activities of the trust. The Corporation generally does not have the power to direct the most significant activities of a residential mortgage agency trust except in certain circumstances in which the Corporation holds substantially all of the issued securities and has the unilateral right to liquidate the trust. The power to direct the most significant activities of a commercial mortgage securitization trust is typically held by the special servicer or by the party holding specific subordinate securities which embody certain controlling rights. The Corporation consolidates a whole-loan securitization trust if it has the power to direct the most significant activities and also holds securities issued by the trust or has other contractual arrangements, other than standard representations and warranties, that could potentially be significant to the trust.

The Corporation may also transfer trading account securities and AFS securities into municipal bond or resecuritization trusts. The Corporation consolidates a municipal bond or resecuritization trust if it has control over the ongoing activities of the trust such as the remarketing of the trust's liabilities or, if there are no ongoing activities, sole discretion over the design of the trust, including the identification of securities to be transferred in and the structure of securities to be issued, and also retains securities or has liquidity or other commitments that could potentially be significant to the trust. The Corporation does not consolidate a municipal bond or resecuritization trust if one or a limited number of third-party investors share responsibility for the design of the trust or have control over the significant activities of the trust through liquidation or other substantive rights.

Other VIEs used by the Corporation include collateralized debt obligations (CDOs), investment vehicles created on behalf of customers and other investment vehicles. The Corporation does not routinely serve as collateral manager for CDOs and, therefore, does not typically have the power to direct the activities that most significantly impact the economic performance of a CDO. However, following an event of default, if the Corporation is a majority holder of senior securities issued by a CDO and acquires the power to manage the assets of the CDO, the Corporation consolidates the CDO.

The Corporation consolidates a customer or other investment vehicle if it has control over the initial design of the vehicle or manages the assets in the vehicle and also absorbs potentially significant gains or losses through an investment in the vehicle, derivative contracts or other arrangements. The Corporation does not consolidate an investment vehicle if a single investor controlled the initial design of the vehicle or manages the assets in the vehicles or if the Corporation does not have a variable interest that could potentially be significant to the vehicle.

Retained interests in securitized assets are initially recorded at fair value. In addition, the Corporation may invest in debt securities issued by unconsolidated VIEs. Fair values of these debt securities, which are classified as trading account assets, debt securities carried at fair value or held-to-maturity securities, are based primarily on quoted market prices in active or inactive markets. Generally, quoted market prices for retained residual interests are not available; therefore, the Corporation estimates fair values based on the present value of the associated expected future cash flows. This may require management to estimate credit losses, prepayment speeds, forward interest yield curves, discount rates and other factors that impact the value of retained interests. Retained residual interests in unconsolidated securitization trusts are classified in trading account assets or other assets with changes in fair value recorded in earnings. The Corporation may also enter into derivatives with unconsolidated VIEs, which are carried at fair value with changes in fair value recorded in earnings.

Fair Value

The Corporation measures the fair values of its assets and liabilities, where applicable, in accordance with accounting guidance that requires an entity to base fair value on exit price. A three-level hierarchy, provided in the applicable accounting guidance, for inputs is utilized in measuring fair value which maximizes the use of observable inputs and minimizes the use of unobservable inputs by requiring that observable inputs be used

to determine the exit price when available. Under applicable accounting guidance, the Corporation categorizes its financial instruments, based on the priority of inputs to the valuation technique, into this three-level hierarchy, as described below. Trading account assets and liabilities, derivative assets and liabilities, AFS debt and equity securities, other debt securities carried at fair value, consumer MSRs and certain other assets are carried at fair value in accordance with applicable accounting guidance. The Corporation has also elected to account for certain assets and liabilities under the fair value option, including certain commercial and consumer loans and loan commitments, LHFS, short-term borrowings, securities financing agreements, long-term deposits and long-term debt. The following describes the three-level hierarchy.

Level 1 Unadjusted quoted prices in active markets for identical assets or liabilities. Level 1 assets and liabilities include debt and equity securities and derivative contracts that are traded in an active exchange market, as well as certain U.S. Treasury securities that are highly liquid and are actively traded in OTC markets.

Level 2 Observable inputs other than Level 1 prices, such as quoted prices for similar assets or liabilities, quoted prices in markets that are not active, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities. Level 2 assets and liabilities include debt securities with quoted prices that are traded less frequently than exchange-traded instruments and derivative contracts where fair value is determined using a pricing model with inputs that are observable in the market or can be derived principally from or corroborated by observable market data. This category generally includes U.S. government and agency mortgage-backed and asset-backed securities (ABS), corporate debt securities, derivative contracts, certain loans and LHFS.

Level 3 Unobservable inputs that are supported by little or no market activity and that are significant to the overall fair value of the assets or liabilities. Level 3 assets and liabilities include financial instruments for which the determination of fair value requires significant management judgment or estimation. The fair value for such assets and liabilities is generally determined using pricing models, discounted cash flow methodologies or similar techniques that incorporate the assumptions a market participant would use in pricing the asset or liability. This category generally includes retained residual interests in securitizations, consumer MSRs, certain ABS, highly structured, complex or long-dated derivative contracts, certain loans and LHFS, IRLCs and certain CDOs where independent pricing information cannot be obtained for a significant portion of the underlying assets.

Income Taxes

There are two components of income tax expense: current and deferred. Current income tax expense reflects taxes to be paid or refunded for the current period. Deferred income tax expense results from changes in deferred tax assets and liabilities between periods. These gross deferred tax assets and liabilities represent decreases or increases in taxes expected to be paid in the future because of future reversals of temporary differences in the bases of assets and liabilities as measured by tax laws and their bases as reported in the financial statements. Deferred tax assets are also recognized for tax attributes such as net operating loss carryforwards and tax credit carryforwards. Valuation allowances are recorded to reduce deferred tax assets to the amounts management concludes are more-likely-than-not to be realized.

Income tax benefits are recognized and measured based upon a two-step model: first, a tax position must be more-likely-than-not to be sustained based solely on its technical merits in order to be recognized, and second, the benefit is measured as the largest dollar amount of that position that is more-likely-than-not to be sustained upon settlement. The difference between the benefit recognized and the tax benefit claimed on a tax return is referred to as an unrecognized tax benefit. The Corporation records income tax-related interest and penalties, if applicable, within income tax expense.

Accumulated Other Comprehensive Income

The Corporation records the following in accumulated OCI, net-of-tax: unrealized gains and losses on AFS debt and marketable equity securities, unrealized gains or losses on DVA on financial liabilities recorded at fair value under the fair value option, gains and losses on cash flow accounting hedges, certain employee benefit plan adjustments, and foreign currency translation adjustments and related hedges of net investments in foreign operations. Unrealized gains and losses on AFS debt and marketable equity securities are reclassified to earnings as the gains or losses are realized upon sale of the securities. Unrealized losses on AFS securities deemed to represent OTTI are reclassified to earnings at the time of the impairment charge. For AFS debt securities that the Corporation does not intend to sell or it is not more-likely-than-not that it will be required to sell, only the credit component of an unrealized loss is reclassified to earnings. Realized gains or losses on DVA are reclassified to earnings upon derecognition of the liability. Gains or losses on derivatives accounted for as cash flow hedges are reclassified to earnings when the hedged transaction affects earnings. Translation gains or losses on foreign currency translation adjustments are reclassified to earnings upon the substantial sale or liquidation of investments in foreign operations.

Revenue Recognition

The following summarizes the Corporation's revenue recognition policies as they relate to certain noninterest income line items in the Consolidated Statement of Income.

Card income includes fees such as interchange, cash advance, annual, late, over-limit and other miscellaneous fees, which are recorded as revenue when earned. Uncollected fees are included in the customer card receivables balances with an amount recorded in the allowance for loan and lease losses for estimated uncollectible card receivables. Uncollected fees are written off when a card receivable reaches 180 days past due.

Service charges include fees for insufficient funds, overdrafts and other banking services and are recorded as revenue when earned. Uncollected fees are included in outstanding loan balances with an amount recorded for estimated uncollectible service fees receivable. Uncollected fees are written off when a fee receivable reaches 60 days past due.

Investment and brokerage services revenue consists primarily of asset management fees and brokerage income that are

recognized over the period the services are provided or when commissions are earned. Asset management fees consist primarily of fees for investment management and trust services and are generally based on the dollar amount of the assets being managed. Brokerage income generally includes commissions and fees earned on the sale of various financial products.

Investment banking income consists primarily of advisory and underwriting fees that are recognized in income as the services are provided and no contingencies exist. Revenues are generally recognized net of any direct expenses. Non-reimbursed expenses are recorded as noninterest expense.

Earnings Per Common Share

Earnings per common share (EPS) is computed by dividing net income (loss) allocated to common shareholders by the weighted-average common shares outstanding, except that it does not include unvested common shares subject to repurchase or cancellation. Net income (loss) allocated to common shareholders represents net income (loss) applicable to common shareholders which is net income (loss) adjusted for preferred stock dividends including dividends declared, accretion of discounts on preferred stock including accelerated accretion when preferred stock is repaid early, and cumulative dividends related to the current dividend period that have not been declared as of period end, less income allocated to participating securities (see below for more information). Diluted EPS is computed by dividing income (loss) allocated to common shareholders plus dividends on dilutive convertible preferred stock and preferred stock that can be tendered to exercise warrants, by the weighted-average common shares outstanding plus amounts representing the dilutive effect of stock options outstanding, restricted stock, restricted stock units, outstanding warrants and the dilution resulting from the conversion of convertible preferred stock, if applicable.

Unvested share-based payment awards that contain nonforfeitable rights to dividends are participating securities that are included in computing EPS using the two-class method. The two-class method is an earnings allocation formula under which EPS is calculated for common stock and participating securities according to dividends declared and participating rights in undistributed earnings. Under this method, all earnings, distributed and undistributed, are allocated to participating securities and common shares based on their respective rights to receive dividends.

In an exchange of non-convertible preferred stock, income allocated to common shareholders is adjusted for the difference between the carrying value of the preferred stock and the fair value of the consideration exchanged. In an induced conversion of convertible preferred stock, income allocated to common shareholders is reduced by the excess of the fair value of the consideration exchanged over the fair value of the common stock that would have been issued under the original conversion terms.

Foreign Currency Translation

Assets, liabilities and operations of foreign branches and subsidiaries are recorded based on the functional currency of each entity. For certain of the foreign operations, the functional currency is the local currency, in which case the assets, liabilities and operations are translated, for consolidation purposes, from the local currency to the U.S. Dollar reporting currency at period-end rates for assets and liabilities and generally at average rates for results of operations. The resulting unrealized gains or losses, as well as gains and losses from certain hedges, are reported as a component of accumulated OCI, net-of-tax. When the foreign entity's functional currency is determined to be the U.S. Dollar, the resulting remeasurement gains or losses on foreign currency-denominated assets or liabilities are included in earnings.

Credit Card and Deposit Arrangements

Endorsing Organization Agreements

The Corporation contracts with other organizations to obtain their endorsement of the Corporation's loan and deposit products. This endorsement may provide to the Corporation exclusive rights to market to the organization's members or to customers on behalf of the Corporation. These organizations endorse the Corporation's loan and deposit products and provide the Corporation with their mailing lists and marketing activities. These agreements generally have terms that range five or more years. The Corporation typically pays royalties in exchange for the endorsement. Compensation costs related to the credit card agreements are recorded as contra-revenue in card income.

Cardholder Reward Agreements

The Corporation offers reward programs that allow its cardholders to earn points that can be redeemed for a broad range of rewards including cash, travel and gift cards. The Corporation establishes a rewards liability based upon the points earned that are expected to be redeemed and the average cost per point redeemed. The points to be redeemed are estimated based on past redemption behavior, card product type, account transaction activity and other historical card performance. The liability is reduced as the points are redeemed. The estimated cost of the rewards programs is recorded as contra-revenue in card income.

NOTE 2 Derivatives

Derivative Balances

Derivatives are entered into on behalf of customers, for trading, or to support risk management activities. Derivatives used in risk management activities include derivatives that may or may not be designated in qualifying hedge accounting relationships. Derivatives that are not designated in qualifying hedge accounting relationships are referred to as other risk management derivatives. For more information on the Corporation's derivatives and hedging activities, see *Note 1 – Summary of Significant Accounting Principles*. The following tables present derivative instruments included on the Consolidated Balance Sheet in derivative assets and liabilities at December 31, 2015 and 2014. Balances are presented on a gross basis, prior to the application of counterparty and cash collateral netting. Total derivative assets and liabilities are adjusted on an aggregate basis to take into consideration the effects of legally enforceable master netting agreements and have been reduced by the cash collateral received or paid.

		December 31, 2015					
		Gross Derivative Assets			Gross Derivative Liabilities		
(Dollars in billions)	Contract/ Notional [1, 2]	Trading and Other Risk Management Derivatives	Qualifying Accounting Hedges	Total	Trading and Other Risk Management Derivatives	Qualifying Accounting Hedges	Total
Interest rate contracts							
Swaps	$ 21,706.8	$ 439.6	$ 7.4	$ 447.0	$ 440.8	$ 1.2	$ 442.0
Futures and forwards	6,237.6	1.1	—	1.1	1.3	—	1.3
Written options	1,313.8	—	—	—	57.6	—	57.6
Purchased options	1,393.3	58.9	—	58.9	—	—	—
Foreign exchange contracts							
Swaps	2,149.9	49.2	0.9	50.1	52.2	2.8	55.0
Spot, futures and forwards	4,104.3	46.0	1.2	47.2	45.8	0.3	46.1
Written options	467.2	—	—	—	10.6	—	10.6
Purchased options	439.9	10.2	—	10.2	—	—	—
Equity contracts							
Swaps	201.2	3.3	—	3.3	3.8	—	3.8
Futures and forwards	72.8	2.1	—	2.1	1.2	—	1.2
Written options	347.6	—	—	—	21.1	—	21.1
Purchased options	320.3	23.8	—	23.8	—	—	—
Commodity contracts							
Swaps	47.0	4.7	—	4.7	7.1	—	7.1
Futures and forwards	45.6	3.8	—	3.8	0.7	—	0.7
Written options	36.6	—	—	—	4.4	—	4.4
Purchased options	37.4	4.2	—	4.2	—	—	—
Credit derivatives							
Purchased credit derivatives:							
Credit default swaps	928.3	14.4	—	14.4	14.8	—	14.8
Total return swaps/other	26.4	0.2	—	0.2	1.9	—	1.9
Written credit derivatives:							
Credit default swaps	924.1	15.3	—	15.3	13.1	—	13.1
Total return swaps/other	39.7	2.3	—	2.3	0.4	—	0.4
Gross derivative assets/liabilities		$ 679.1	$ 9.5	$ 688.6	$ 676.8	$ 4.3	$ 681.1
Less: Legally enforceable master netting agreements [2]				(596.7)			(596.7)
Less: Cash collateral received/paid				(41.9)			(45.9)
Total derivative assets/liabilities				$ 50.0			$ 38.5

[1] Represents the total contract/notional amount of derivative assets and liabilities outstanding.
[2] The notional amount for certain derivatives has been reduced to reflect the impact of legally closed positions, which had no impact on the net fair value.

(Dollars in billions)	Contract/ Notional [1, 2]	December 31, 2014 Gross Derivative Assets: Trading and Other Risk Management Derivatives	Gross Derivative Assets: Qualifying Accounting Hedges	Gross Derivative Assets: Total	Gross Derivative Liabilities: Trading and Other Risk Management Derivatives	Gross Derivative Liabilities: Qualifying Accounting Hedges	Gross Derivative Liabilities: Total
Interest rate contracts							
Swaps	$ 29,445.4	$ 658.5	$ 8.5	$ 667.0	$ 658.4	$ 0.5	$ 658.9
Futures and forwards	8,958.1	1.7	—	1.7	2.0	—	2.0
Written options	1,721.4	—	—	—	85.4	—	85.4
Purchased options	1,735.4	85.6	—	85.6	—	—	—
Foreign exchange contracts							
Swaps	2,159.1	51.5	0.8	52.3	54.6	1.9	56.5
Spot, futures and forwards	4,226.4	68.9	1.5	70.4	72.4	0.2	72.6
Written options	600.7	—	—	—	16.0	—	16.0
Purchased options	584.6	15.1	—	15.1	—	—	—
Equity contracts							
Swaps	193.7	3.2	—	3.2	4.0	—	4.0
Futures and forwards	67.2	2.1	—	2.1	1.8	—	1.8
Written options	336.1	—	—	—	26.0	—	26.0
Purchased options	312.2	27.9	—	27.9	—	—	—
Commodity contracts							
Swaps	74.3	5.8	—	5.8	8.5	—	8.5
Futures and forwards	79.4	4.5	—	4.5	1.8	—	1.8
Written options	66.3	—	—	—	7.2	—	7.2
Purchased options	69.3	6.6	—	6.6	—	—	—
Credit derivatives							
Purchased credit derivatives:							
Credit default swaps	1,094.8	13.3	—	13.3	23.4	—	23.4
Total return swaps/other	44.3	0.2	—	0.2	1.4	—	1.4
Written credit derivatives:							
Credit default swaps	1,073.1	24.5	—	24.5	11.9	—	11.9
Total return swaps/other	61.0	0.5	—	0.5	0.3	—	0.3
Gross derivative assets/liabilities		$ 969.9	$ 10.8	$ 980.7	$ 975.1	$ 2.6	$ 977.7
Less: Legally enforceable master netting agreements [2]				(880.7)			(880.7)
Less: Cash collateral received/paid				(47.3)			(50.1)
Total derivative assets/liabilities				$ 52.7			$ 46.9

[1] Represents the total contract/notional amount of derivative assets and liabilities outstanding.
[2] The notional amount for certain derivatives has been reduced to reflect the impact of legally closed positions, which had no impact on the net fair value.

Offsetting of Derivatives

The Corporation enters into International Swaps and Derivatives Association, Inc. (ISDA) master netting agreements or similar agreements with substantially all of the Corporation's derivative counterparties. Where legally enforceable, these master netting agreements give the Corporation, in the event of default by the counterparty, the right to liquidate securities held as collateral and to offset receivables and payables with the same counterparty. For purposes of the Consolidated Balance Sheet, the Corporation offsets derivative assets and liabilities and cash collateral held with the same counterparty where it has such a legally enforceable master netting agreement.

The Offsetting of Derivatives table presents derivative instruments included in derivative assets and liabilities on the Consolidated Balance Sheet at December 31, 2015 and 2014 by primary risk (e.g., interest rate risk) and the platform, where applicable, on which these derivatives are transacted. Exchange-traded derivatives include listed options transacted on an exchange. OTC derivatives include bilateral transactions between the Corporation and a particular counterparty. OTC-cleared derivatives include bilateral transactions between the Corporation and a counterparty where the transaction is cleared through a clearinghouse. Balances are presented on a gross basis, prior to the application of counterparty and cash collateral netting. Total gross derivative assets and liabilities are adjusted on an aggregate basis to take into consideration the effects of legally enforceable master netting agreements which includes reducing the balance for counterparty netting and cash collateral received or paid.

Other gross derivative assets and liabilities in the table represent derivatives entered into under master netting agreements where uncertainty exists as to the enforceability of these agreements under bankruptcy laws in some countries or industries and, accordingly, receivables and payables with counterparties in these countries or industries are reported on a gross basis.

Also included in the table is financial instruments collateral related to legally enforceable master netting agreements that represents securities collateral received or pledged and customer cash collateral held at third-party custodians. These amounts are not offset on the Consolidated Balance Sheet but are shown as a reduction to total derivative assets and liabilities in the table to derive net derivative assets and liabilities.

For more information on offsetting of securities financing agreements, see *Note 10 – Federal Funds Sold or Purchased, Securities Financing Agreements and Short-term Borrowings*.

Offsetting of Derivatives

(Dollars in billions)	December 31, 2015 Derivative Assets	December 31, 2015 Derivative Liabilities	December 31, 2014 Derivative Assets	December 31, 2014 Derivative Liabilities
Interest rate contracts				
Over-the-counter	**$ 309.3**	**$ 297.2**	$ 386.6	$ 373.2
Exchange-traded [1]	**—**	**—**	0.1	0.1
Over-the-counter cleared	**197.0**	**201.7**	365.7	368.7
Foreign exchange contracts				
Over-the-counter	**103.2**	**107.5**	133.0	139.9
Over-the-counter cleared	**0.1**	**0.1**	—	—
Equity contracts				
Over-the-counter	**16.6**	**14.0**	19.5	16.7
Exchange-traded [1]	**10.0**	**9.2**	8.6	7.8
Commodity contracts				
Over-the-counter	**7.3**	**8.9**	10.2	11.9
Exchange-traded [1]	**1.8**	**1.8**	3.3	3.4
Over-the-counter cleared	**0.1**	**0.1**	0.1	0.6
Credit derivatives				
Over-the-counter	**24.6**	**22.9**	30.8	30.2
Over-the-counter cleared	**6.5**	**6.4**	7.0	6.8
Total gross derivative assets/liabilities, before netting				
Over-the-counter	**461.0**	**450.5**	580.1	571.9
Exchange-traded [1]	**11.8**	**11.0**	12.0	11.3
Over-the-counter cleared	**203.7**	**208.3**	372.8	376.1
Less: Legally enforceable master netting agreements and cash collateral received/paid				
Over-the-counter	**(426.6)**	**(425.7)**	(545.7)	(545.5)
Exchange-traded [1]	**(8.7)**	**(8.7)**	(9.8)	(9.8)
Over-the-counter cleared	**(203.3)**	**(208.2)**	(372.5)	(375.5)
Derivative assets/liabilities, after netting	**37.9**	**27.2**	36.9	28.5
Other gross derivative assets/liabilities	**12.1**	**11.3**	15.8	18.4
Total derivative assets/liabilities	**50.0**	**38.5**	52.7	46.9
Less: Financial instruments collateral [2]	**(13.9)**	**(6.5)**	(13.3)	(8.9)
Total net derivative assets/liabilities	**$ 36.1**	**$ 32.0**	$ 39.4	$ 38.0

[1] The notional amount for certain derivatives has been reduced to reflect the impact of legally closed positions, which had no impact on the net fair value.
[2] These amounts are limited to the derivative asset/liability balance and, accordingly, do not include excess collateral received/pledged.

ALM and Risk Management Derivatives

The Corporation's ALM and risk management activities include the use of derivatives to mitigate risk to the Corporation including derivatives designated in qualifying hedge accounting relationships and derivatives used in other risk management activities. Interest rate, foreign exchange, equity, commodity and credit contracts are utilized in the Corporation's ALM and risk management activities.

The Corporation maintains an overall interest rate risk management strategy that incorporates the use of interest rate contracts, which are generally non-leveraged generic interest rate and basis swaps, options, futures and forwards, to minimize significant fluctuations in earnings caused by interest rate volatility. The Corporation's goal is to manage interest rate sensitivity and volatility so that movements in interest rates do not significantly adversely affect earnings or capital. As a result of interest rate fluctuations, hedged fixed-rate assets and liabilities appreciate or depreciate in fair value. Gains or losses on the derivative instruments that are linked to the hedged fixed-rate assets and liabilities are expected to substantially offset this unrealized appreciation or depreciation.

Market risk, including interest rate risk, can be substantial in the mortgage business. Market risk is the risk that values of mortgage assets or revenues will be adversely affected by changes in market conditions such as interest rate movements. To mitigate the interest rate risk in mortgage banking production income, the Corporation utilizes forward loan sale commitments and other derivative instruments, including purchased options, and certain debt securities. The Corporation also utilizes derivatives such as interest rate options, interest rate swaps, forward settlement contracts and eurodollar futures to hedge certain market risks of MSRs. For more information on MSRs, see *Note 23 – Mortgage Servicing Rights*.

The Corporation uses foreign exchange contracts to manage the foreign exchange risk associated with certain foreign currency-denominated assets and liabilities, as well as the Corporation's investments in non-U.S. subsidiaries. Foreign exchange contracts, which include spot and forward contracts, represent agreements to exchange the currency of one country for the currency of another country at an agreed-upon price on an agreed-upon settlement date. Exposure to loss on these contracts will increase or decrease over their respective lives as currency exchange and interest rates fluctuate.

The Corporation enters into derivative commodity contracts such as futures, swaps, options and forwards as well as non-derivative commodity contracts to provide price risk management services to customers or to manage price risk associated with its physical and financial commodity positions. The non-derivative commodity contracts and physical inventories of commodities expose the Corporation to earnings volatility. Fair value accounting hedges provide a method to mitigate a portion of this earnings volatility.

The Corporation purchases credit derivatives to manage credit risk related to certain funded and unfunded credit exposures. Credit derivatives include credit default swaps (CDS), total return swaps and swaptions. These derivatives are recorded on the Consolidated Balance Sheet at fair value with changes in fair value recorded in other income.

Derivatives Designated as Accounting Hedges

The Corporation uses various types of interest rate, commodity and foreign exchange derivative contracts to protect against changes in the fair value of its assets and liabilities due to fluctuations in interest rates, commodity prices and exchange rates (fair value hedges). The Corporation also uses these types of contracts and equity derivatives to protect against changes in the cash flows of its assets and liabilities, and other forecasted transactions (cash flow hedges). The Corporation hedges its net investment in consolidated non-U.S. operations determined to have functional currencies other than the U.S. Dollar using forward exchange contracts and cross-currency basis swaps, and by issuing foreign currency-denominated debt (net investment hedges).

Fair Value Hedges

The table below summarizes information related to fair value hedges for 2015, 2014 and 2013, including hedges of interest rate risk on long-term debt that were acquired as part of a business combination and redesignated at that time. At redesignation, the fair value of the derivatives was positive. As the derivatives mature, the fair value will approach zero. As a result, ineffectiveness will occur and the fair value changes in the derivatives and the long-term debt being hedged may be directionally the same in certain scenarios. Based on a regression analysis, the derivatives continue to be highly effective at offsetting changes in the fair value of the long-term debt attributable to interest rate risk.

Derivatives Designated as Fair Value Hedges

Gains (Losses)	2015		
(Dollars in millions)	Derivative	Hedged Item	Hedge Ineffectiveness
Interest rate risk on long-term debt [1]	$ (718)	$ (77)	$ (795)
Interest rate and foreign currency risk on long-term debt [1]	(1,898)	1,812	(86)
Interest rate risk on available-for-sale securities [2]	105	(127)	(22)
Price risk on commodity inventory [3]	15	(11)	4
Total	$ (2,496)	$ 1,597	$ (899)
	2014		
Interest rate risk on long-term debt [1]	$ 2,144	$ (2,935)	$ (791)
Interest rate and foreign currency risk on long-term debt [1]	(2,212)	2,120	(92)
Interest rate risk on available-for-sale securities [2]	(35)	3	(32)
Price risk on commodity inventory [3]	21	(15)	6
Total	$ (82)	$ (827)	$ (909)
	2013		
Interest rate risk on long-term debt [1]	$ (4,704)	$ 3,925	$ (779)
Interest rate and foreign currency risk on long-term debt [1]	(1,291)	1,085	(206)
Interest rate risk on available-for-sale securities [2]	839	(840)	(1)
Price risk on commodity inventory [3]	(13)	11	(2)
Total	$ (5,169)	$ 4,181	$ (988)

[1] Amounts are recorded in interest expense on long-term debt and in other income (loss).
[2] Amounts are recorded in interest income on debt securities.
[3] Amounts relating to commodity inventory are recorded in trading account profits.

Cash Flow and Net Investment Hedges

The table below summarizes certain information related to cash flow hedges and net investment hedges for 2015, 2014 and 2013. Of the $1.1 billion net loss (after-tax) on derivatives in accumulated OCI for 2015, $563 million ($352 million after-tax) is expected to be reclassified into earnings in the next 12 months. These net losses reclassified into earnings are expected to primarily reduce net interest income related to the respective hedged items. Amounts related to price risk on restricted stock awards reclassified from accumulated OCI are recorded in personnel expense. For terminated cash flow hedges, the time period over which substantially all of the forecasted transactions are hedged is approximately seven years, with a maximum length of time for certain forecasted transactions of 20 years.

Derivatives Designated as Cash Flow and Net Investment Hedges

(Dollars in millions, amounts pretax)	Gains (Losses) Recognized in Accumulated OCI on Derivatives	Gains (Losses) in Income Reclassified from Accumulated OCI	Hedge Ineffectiveness and Amounts Excluded from Effectiveness Testing [1]
2015			
Cash flow hedges			
Interest rate risk on variable-rate portfolios	**$ 95**	**$ (974)**	**$ (2)**
Price risk on restricted stock awards [2]	**(40)**	**91**	**—**
Total	**$ 55**	**$ (883)**	**$ (2)**
Net investment hedges			
Foreign exchange risk	**$ 3,010**	**$ 153**	**$ (298)**
2014			
Cash flow hedges			
Interest rate risk on variable-rate portfolios	$ 68	$ (1,119)	$ (4)
Price risk on restricted stock awards [2]	127	359	—
Total	$ 195	$ (760)	$ (4)
Net investment hedges			
Foreign exchange risk	$ 3,021	$ 21	$ (503)
2013			
Cash flow hedges			
Interest rate risk on variable-rate portfolios	$ (321)	$ (1,102)	$ —
Price risk on restricted stock awards [2]	477	329	—
Total	$ 156	$ (773)	$ —
Net investment hedges			
Foreign exchange risk	$ 1,024	$ (355)	$ (134)

[1] Amounts related to cash flow hedges represent hedge ineffectiveness and amounts related to net investment hedges represent amounts excluded from effectiveness testing.
[2] The hedge gain (loss) recognized in accumulated OCI is primarily related to the change in the Corporation's stock price for the period.

Other Risk Management Derivatives

Other risk management derivatives are used by the Corporation to reduce certain risk exposures. These derivatives are not qualifying accounting hedges because either they did not qualify for or were not designated as accounting hedges. The table below presents gains (losses) on these derivatives for 2015, 2014 and 2013. These gains (losses) are largely offset by the income or expense that is recorded on the hedged item.

Other Risk Management Derivatives

Gains (Losses)

(Dollars in millions)	**2015**	2014	2013
Interest rate risk on mortgage banking income [1]	**$ 254**	$ 1,017	$ (619)
Credit risk on loans [2]	**(22)**	16	(47)
Interest rate and foreign currency risk on ALM activities [3]	**(222)**	(3,683)	2,501
Price risk on restricted stock awards [4]	**(267)**	600	865
Other	**11**	(9)	(19)

(1) Net gains (losses) on these derivatives are recorded in mortgage banking income as they are used to mitigate the interest rate risk related to MSRs, IRLCs and mortgage loans held-for-sale, all of which are measured at fair value with changes in fair value recorded in mortgage banking income. The net gains on IRLCs related to the origination of mortgage loans that are held-for-sale, which are not included in the table but are considered derivative instruments, were $714 million, $776 million and $927 million for 2015, 2014 and 2013, respectively.
(2) Primarily related to derivatives that are economic hedges of credit risk on loans. Net gains (losses) on these derivatives are recorded in other income.
(3) Primarily related to hedges of debt securities carried at fair value and hedges of foreign currency-denominated debt. Gains (losses) on these derivatives and the related hedged items are recorded in other income.
(4) Gains (losses) on these derivatives are recorded in personnel expense.

Transfers of Financial Assets with Risk Retained through Derivatives

The Corporation enters into certain transactions involving the transfer of financial assets that are accounted for as sales where substantially all of the economic exposure to the transferred financial assets is retained by the Corporation through a derivative agreement with the initial transferee. These transactions are accounted for as sales because the Corporation does not retain control over the assets transferred.

Through December 31, 2015, the Corporation transferred $7.9 billion of primarily non-U.S. government-guaranteed mortgage-backed securities (MBS) to a third-party trust. The Corporation received gross cash proceeds of $7.9 billion at the transfer dates. At December 31, 2015, the fair value of these securities was $7.2 billion. The Corporation simultaneously entered into derivatives with those counterparties whereby the Corporation retained certain economic exposures to those securities (e.g., interest rate and/or credit risk). A derivative asset of $24 million and a liability of $29 million were recorded at December 31, 2015 and are included in credit derivatives in the derivative instruments table on page 21. The economic exposure retained by the Corporation is typically hedged with interest rate swaps and interest rate swaptions.

Sales and Trading Revenue

The Corporation enters into trading derivatives to facilitate client transactions and to manage risk exposures arising from trading account assets and liabilities. It is the Corporation's policy to include these derivative instruments in its trading activities which include derivatives and non-derivative cash instruments. The resulting risk from these derivatives is managed on a portfolio basis as part of the Corporation's *Global Markets* business segment. The related sales and trading revenue generated within *Global Markets* is recorded in various income statement line items including trading account profits and net interest income as well as other revenue categories.

Sales and trading revenue includes changes in the fair value and realized gains and losses on the sales of trading and other assets, net interest income, and fees primarily from commissions on equity securities. Revenue is generated by the difference in the client price for an instrument and the price at which the trading desk can execute the trade in the dealer market. For equity securities, commissions related to purchases and sales are recorded in the "Other" column in the Sales and Trading Revenue table. Changes in the fair value of these securities are included in trading account profits. For debt securities, revenue, with the exception of interest associated with the debt securities, is typically included in trading account profits. Unlike commissions for equity securities, the initial revenue related to broker-dealer services for debt securities is typically included in the pricing of the instrument rather than being charged through separate fee arrangements. Therefore, this revenue is recorded in trading account profits as part of the initial mark to fair value. For derivatives, the majority of revenue is included in trading account profits. In transactions where the Corporation acts as agent, which include exchange-traded futures and options, fees are recorded in other income.

The table below, which includes both derivatives and non-derivative cash instruments, identifies the amounts in the respective income statement line items attributable to the Corporation's sales and trading revenue in *Global Markets*, categorized by primary risk, for 2015, 2014 and 2013. The difference between total trading account profits in the table below and in the Consolidated Statement of Income represents trading activities in business segments other than *Global Markets*. This table includes DVA and funding valuation adjustment (FVA) gains (losses). *Global Markets* results in *Note 24 – Business Segment Information* are presented on a fully taxable-equivalent (FTE) basis. The table below is not presented on an FTE basis.

The results for 2015 were impacted by the early adoption of new accounting guidance on recognition and measurement of financial instruments. As such, amounts in the "Other" column for 2015 exclude unrealized DVA resulting from changes in the Corporation's own credit spreads on liabilities accounted for under the fair value option. Amounts for 2014 and 2013 include such amounts. For more information on the new accounting guidance, see *Note 1 – Summary of Significant Accounting Principles*.

Sales and Trading Revenue

(Dollars in millions)	Trading Account Profits	Net Interest Income	Other [1]	Total
	2015			
Interest rate risk	**$ 1,304**	**$ 1,308**	**$ (264)**	**$ 2,348**
Foreign exchange risk	**1,322**	**(10)**	**(117)**	**1,195**
Equity risk	**2,115**	**56**	**2,146**	**4,317**
Credit risk	**901**	**2,361**	**452**	**3,714**
Other risk	**467**	**(82)**	**64**	**449**
Total sales and trading revenue	**$ 6,109**	**$ 3,633**	**$ 2,281**	**$ 12,023**
	2014			
Interest rate risk	$ 991	$ 946	$ 466	$ 2,403
Foreign exchange risk	1,177	7	(128)	1,056
Equity risk	1,954	(79)	2,307	4,182
Credit risk	1,396	2,563	617	4,576
Other risk	509	(123)	108	494
Total sales and trading revenue	$ 6,027	$ 3,314	$ 3,370	$ 12,711
	2013			
Interest rate risk	$ 1,255	$ 1,025	$ (226)	$ 2,054
Foreign exchange risk	1,169	6	(100)	1,075
Equity risk	1,994	112	2,066	4,172
Credit risk	1,966	2,637	77	4,680
Other risk	386	(217)	70	239
Total sales and trading revenue	$ 6,770	$ 3,563	$ 1,887	$ 12,220

[1] Represents amounts in investment and brokerage services and other income that are recorded in *Global Markets* and included in the definition of sales and trading revenue. Includes investment and brokerage services revenue of $2.2 billion, $2.2 billion and $2.1 billion for 2015, 2014 and 2013, respectively.

Credit Derivatives

The Corporation enters into credit derivatives primarily to facilitate client transactions and to manage credit risk exposures. Credit derivatives derive value based on an underlying third-party referenced obligation or a portfolio of referenced obligations and generally require the Corporation, as the seller of credit protection, to make payments to a buyer upon the occurrence of a pre-defined credit event. Such credit events generally include bankruptcy of the referenced credit entity and failure to pay under the obligation, as well as acceleration of indebtedness and payment repudiation or moratorium. For credit derivatives based on a portfolio of referenced credits or credit indices, the Corporation may not be required to make payment until a specified amount of loss has occurred and/or may only be required to make payment up to a specified amount.

Credit derivative instruments where the Corporation is the seller of credit protection and their expiration at December 31, 2015 and 2014 are summarized in the table below. These instruments are classified as investment and non-investment grade based on the credit quality of the underlying referenced obligation. The Corporation considers ratings of BBB- or higher as investment grade. Non-investment grade includes non-rated credit derivative instruments. The Corporation discloses internal categorizations of investment grade and non-investment grade consistent with how risk is managed for these instruments.

Credit Derivative Instruments

(Dollars in millions)	Less than One Year	One to Three Years	Three to Five Years	Over Five Years	Total
	December 31, 2015				
	Carrying Value				
Credit default swaps:					
Investment grade	$ 84	$ 481	$ 2,203	$ 680	$ 3,448
Non-investment grade	672	3,035	2,386	3,583	9,676
Total	756	3,516	4,589	4,263	13,124
Total return swaps/other:					
Investment grade	5	—	—	—	5
Non-investment grade	171	236	8	2	417
Total	176	236	8	2	422
Total credit derivatives	$ 932	$ 3,752	$ 4,597	$ 4,265	$ 13,546
Credit-related notes:					
Investment grade	$ 267	$ 57	$ 444	$ 2,203	$ 2,971
Non-investment grade	61	118	117	1,264	1,560
Total credit-related notes	$ 328	$ 175	$ 561	$ 3,467	$ 4,531
	Maximum Payout/Notional				
Credit default swaps:					
Investment grade	$ 149,177	$ 280,658	$ 178,990	$ 26,352	$ 635,177
Non-investment grade	81,596	135,850	53,299	18,221	288,966
Total	230,773	416,508	232,289	44,573	924,143
Total return swaps/other:					
Investment grade	9,758	—	—	—	9,758
Non-investment grade	20,917	6,989	1,371	623	29,900
Total	30,675	6,989	1,371	623	39,658
Total credit derivatives	$ 261,448	$ 423,497	$ 233,660	$ 45,196	$ 963,801

	Less than One Year	One to Three Years	Three to Five Years	Over Five Years	Total
	December 31, 2014				
	Carrying Value				
Credit default swaps:					
Investment grade	$ 100	$ 714	$ 1,455	$ 939	$ 3,208
Non-investment grade	916	2,107	1,338	4,301	8,662
Total	1,016	2,821	2,793	5,240	11,870
Total return swaps/other:					
Investment grade	24	—	—	—	24
Non-investment grade	64	247	2	—	313
Total	88	247	2	—	337
Total credit derivatives	$ 1,104	$ 3,068	$ 2,795	$ 5,240	$ 12,207
Credit-related notes:					
Investment grade	$ 2	$ 365	$ 568	$ 2,634	$ 3,569
Non-investment grade	5	141	85	1,443	1,674
Total credit-related notes	$ 7	$ 506	$ 653	$ 4,077	$ 5,243
	Maximum Payout/Notional				
Credit default swaps:					
Investment grade	$ 132,974	$ 342,914	$ 242,728	$ 28,982	$ 747,598
Non-investment grade	54,326	170,580	80,011	20,586	325,503
Total	187,300	513,494	322,739	49,568	1,073,101
Total return swaps/other:					
Investment grade	22,645	—	—	—	22,645
Non-investment grade	23,839	10,792	3,268	487	38,386
Total	46,484	10,792	3,268	487	61,031
Total credit derivatives	$ 233,784	$ 524,286	$ 326,007	$ 50,055	$ 1,134,132

The notional amount represents the maximum amount payable by the Corporation for most credit derivatives. However, the Corporation does not monitor its exposure to credit derivatives based solely on the notional amount because this measure does not take into consideration the probability of occurrence. As such, the notional amount is not a reliable indicator of the Corporation's exposure to these contracts. Instead, a risk framework is used to define risk tolerances and establish limits to help ensure that certain credit risk-related losses occur within acceptable, predefined limits.

The Corporation manages its market risk exposure to credit derivatives by entering into a variety of offsetting derivative contracts and security positions. For example, in certain instances, the Corporation may purchase credit protection with identical underlying referenced names to offset its exposure. The carrying value and notional amount of written credit derivatives for which the Corporation held purchased credit derivatives with identical underlying referenced names and terms were $8.2 billion and $706.0 billion at December 31, 2015 and $5.7 billion and $880.6 billion at December 31, 2014.

Credit-related notes in the table on page 28 include investments in securities issued by CDO, collateralized loan obligation (CLO) and credit-linked note vehicles. These instruments are primarily classified as trading securities. The carrying value of these instruments equals the Corporation's maximum exposure to loss. The Corporation is not obligated to make any payments to the entities under the terms of the securities owned.

Credit-related Contingent Features and Collateral

The Corporation executes the majority of its derivative contracts in the OTC market with large, international financial institutions, including broker-dealers and, to a lesser degree, with a variety of non-financial companies. A significant majority of the derivative transactions are executed on a daily margin basis. Therefore, events such as a credit rating downgrade (depending on the ultimate rating level) or a breach of credit covenants would typically require an increase in the amount of collateral required of the counterparty, where applicable, and/or allow the Corporation to take additional protective measures such as early termination of all trades. Further, as previously discussed on page 21, the Corporation enters into legally enforceable master netting agreements which reduce risk by permitting the closeout and netting of transactions with the same counterparty upon the occurrence of certain events.

A majority of the Corporation's derivative contracts contain credit risk-related contingent features, primarily in the form of ISDA master netting agreements and credit support documentation that enhance the creditworthiness of these instruments compared to other obligations of the respective counterparty with whom the Corporation has transacted. These contingent features may be for the benefit of the Corporation as well as its counterparties with respect to changes in the Corporation's creditworthiness and the mark-to-market exposure under the derivative transactions. At December 31, 2015 and 2014, the Corporation held cash and securities collateral of $78.9 billion and $82.0 billion, and posted cash and securities collateral of $62.7 billion and $67.9 billion in the normal course of business under derivative agreements. This excludes cross-product margining agreements where clients are permitted to margin on a net basis for both derivative and secured financing arrangements.

In connection with certain OTC derivative contracts and other trading agreements, the Corporation can be required to provide additional collateral or to terminate transactions with certain counterparties in the event of a downgrade of the senior debt ratings of the Corporation or certain subsidiaries. The amount of additional collateral required depends on the contract and is usually a fixed incremental amount and/or the market value of the exposure.

At December 31, 2015, the amount of collateral, calculated based on the terms of the contracts, that the Corporation and certain subsidiaries could be required to post to counterparties but had not yet posted to counterparties was approximately $2.9 billion, including $1.6 billion for Bank of America, N.A. (BANA).

Some counterparties are currently able to unilaterally terminate certain contracts, or the Corporation or certain subsidiaries may be required to take other action such as find a suitable replacement or obtain a guarantee. At December 31, 2015, the current liability recorded for these derivative contracts was $69 million.

The table below presents the amount of additional collateral that would have been contractually required by derivative contracts and other trading agreements at December 31, 2015 if the rating agencies had downgraded their long-term senior debt ratings for the Corporation or certain subsidiaries by one incremental notch and by an additional second incremental notch.

Additional Collateral Required to be Posted Upon Downgrade

	December 31, 2015	
(Dollars in millions)	One incremental notch	Second incremental notch
Bank of America Corporation	$ 1,011	$ 1,948
Bank of America, N.A. and subsidiaries [1]	762	1,474

[1] Included in Bank of America Corporation collateral requirements in this table.

The table below presents the derivative liabilities that would be subject to unilateral termination by counterparties and the amounts of collateral that would have been contractually required at December 31, 2015 if the long-term senior debt ratings for the Corporation or certain subsidiaries had been lower by one incremental notch and by an additional second incremental notch.

Derivative Liabilities Subject to Unilateral Termination Upon Downgrade

	December 31, 2015	
(Dollars in millions)	One incremental notch	Second incremental notch
Derivative liabilities	$ 879	$ 2,792
Collateral posted	501	2,269

Valuation Adjustments on Derivatives

The Corporation records credit risk valuation adjustments on derivatives in order to properly reflect the credit quality of the counterparties and its own credit quality. The Corporation calculates valuation adjustments on derivatives based on a modeled expected exposure that incorporates current market risk factors. The exposure also takes into consideration credit mitigants such as enforceable master netting agreements and collateral. CDS spread data is used to estimate the default probabilities and severities that are applied to the exposures. Where no observable credit default data is available for counterparties, the Corporation uses proxies and other market data to estimate default probabilities and severity.

Valuation adjustments on derivatives are affected by changes in market spreads, non-credit related market factors such as interest rate and currency changes that affect the expected exposure, and other factors like changes in collateral arrangements and partial payments. Credit spreads and non-credit factors can move independently. For example, for an interest rate swap, changes in interest rates may increase the expected exposure, which would increase the counterparty credit valuation adjustment (CVA). Independently, counterparty credit spreads may tighten, which would result in an offsetting decrease to CVA.

The Corporation early adopted, retrospective to January 1, 2015, the provision of new accounting guidance issued in January 2016 that requires the Corporation to record unrealized DVA resulting from changes in the Corporation's own credit spreads on liabilities accounted for under the fair value option in accumulated OCI. This new accounting guidance had no impact on the accounting for DVA on derivatives. For additional information, see New Accounting Pronouncements in *Note 1 – Summary of Significant Accounting Principles*.

In 2014, the Corporation implemented a funding valuation adjustment (FVA) into valuation estimates primarily to include funding costs on uncollateralized derivatives and derivatives where the Corporation is not permitted to use the collateral it receives. The change in estimate resulted in a net pretax FVA charge of $497 million, at the time of implementation, including a charge of $632 million related to funding costs, partially offset by a funding benefit of $135 million, both related to derivative asset exposures. The net FVA charge was recorded as a reduction to sales and trading revenue in *Global Markets*. The Corporation calculates this valuation adjustment based on modeled expected exposure profiles discounted for the funding risk premium inherent in these derivatives. FVA related to derivative assets and liabilities is the effect of funding costs on the fair value of these derivatives.

The Corporation enters into risk management activities to offset market driven exposures. The Corporation often hedges the counterparty spread risk in CVA with CDS. The Corporation hedges other market risks in both CVA and DVA primarily with currency and interest rate swaps. In certain instances, the net-of-hedge amounts in the table below move in the same direction as the gross amount or may move in the opposite direction. This is a consequence of the complex interaction of the risks being hedged resulting in limitations in the ability to perfectly hedge all of the market exposures at all times.

The table below presents CVA, DVA and FVA gains (losses) on derivatives, which are recorded in trading account profits, on a gross and net of hedge basis for 2015, 2014 and 2013. CVA gains reduce the cumulative CVA thereby increasing the derivative assets balance. DVA gains increase the cumulative DVA thereby decreasing the derivative liabilities balance. CVA and DVA losses have the opposite impact. FVA gains related to derivative assets reduce the cumulative FVA thereby increasing the derivative assets balance. FVA gains related to derivative liabilities increase the cumulative FVA thereby decreasing the derivative liabilities balance.

Valuation Adjustments on Derivatives

Gains (Losses)

(Dollars in millions)	**2015**		2014		2013	
	Gross	**Net**	Gross	Net	Gross	Net
Derivative assets (CVA) [1]	**$ 255**	**$ 227**	$ (22)	$ 191	$ 738	$ (96)
Derivative assets (FVA) [2]	**(34)**	**(34)**	(632)	(632)	n/a	n/a
Derivative liabilities (DVA) [3]	**(18)**	**(153)**	(28)	(150)	(39)	(75)
Derivative liabilities (FVA) [2]	**50**	**50**	135	135	n/a	n/a

[1] At December 31, 2015, 2014 and 2013, the cumulative CVA reduced the derivative assets balance by $1.4 billion, $1.6 billion and $1.6 billion, respectively.
[2] FVA was adopted in 2014 and the cumulative FVA reduced the net derivatives balance by $481 million and $497 million at December 31, 2015 and 2014.
[3] At December 31, 2015, 2014 and 2013, the cumulative DVA reduced the derivative liabilities balance by $750 million, $769 million and $803 million, respectively.
n/a = not applicable

NOTE 3 Securities

The table below presents the amortized cost, gross unrealized gains and losses, and fair value of AFS debt securities, other debt securities carried at fair value, HTM debt securities and AFS marketable equity securities at December 31, 2015 and 2014. For information on the Corporation's change in accounting method for amortization of premiums and accretion of discounts on certain debt securities, see *Note 1 – Summary of Significant Accounting Principles.*

Debt Securities and Available-for-Sale Marketable Equity Securities

(Dollars in millions)	December 31, 2015 Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Available-for-sale debt securities				
Mortgage-backed securities:				
Agency	$ 229,356	$ 1,061	$ (1,470)	$ 228,947
Agency-collateralized mortgage obligations	10,892	148	(55)	10,985
Commercial	7,200	30	(65)	7,165
Non-agency residential [1]	3,031	219	(71)	3,179
Total mortgage-backed securities	250,479	1,458	(1,661)	250,276
U.S. Treasury and agency securities	25,075	211	(9)	25,277
Non-U.S. securities	5,743	27	(3)	5,767
Corporate/Agency bonds	243	3	(3)	243
Other taxable securities, substantially all asset-backed securities	10,232	51	(81)	10,202
Total taxable securities	291,772	1,750	(1,757)	291,765
Tax-exempt securities	13,978	63	(33)	14,008
Total available-for-sale debt securities	305,750	1,813	(1,790)	305,773
Other debt securities carried at fair value	16,678	103	(174)	16,607
Total debt securities carried at fair value	322,428	1,916	(1,964)	322,380
Held-to-maturity debt securities, substantially all U.S. agency mortgage-backed securities	84,508	330	(792)	84,046
Total debt securities [2]	$ 406,936	$ 2,246	$ (2,756)	$ 406,426
Available-for-sale marketable equity securities [3]	$ 326	$ 99	$ —	$ 425

	December 31, 2014			
Available-for-sale debt securities				
Mortgage-backed securities:				
Agency	$ 163,118	$ 2,432	$ (511)	$ 165,039
Agency-collateralized mortgage obligations	14,170	181	(103)	14,248
Commercial	3,932	68	—	4,000
Non-agency residential [1]	4,244	286	(76)	4,454
Total mortgage-backed securities	185,464	2,967	(690)	187,741
U.S. Treasury and agency securities	69,268	359	(32)	69,595
Non-U.S. securities	6,208	37	(15)	6,230
Corporate/Agency bonds	361	9	(2)	368
Other taxable securities, substantially all asset-backed securities	10,773	39	(21)	10,791
Total taxable securities	272,074	3,411	(760)	274,725
Tax-exempt securities	9,556	12	(19)	9,549
Total available-for-sale debt securities	281,630	3,423	(779)	284,274
Other debt securities carried at fair value	36,543	257	(379)	36,421
Total debt securities carried at fair value	318,173	3,680	(1,158)	320,695
Held-to-maturity debt securities, substantially all U.S. agency mortgage-backed securities	59,757	538	(654)	59,641
Total debt securities [2]	$ 377,930	$ 4,218	$ (1,812)	$ 380,336
Available-for-sale marketable equity securities [3]	$ 336	$ 27	$ —	$ 363

[1] At December 31, 2015 and 2014, the underlying collateral type included approximately 71 percent and 76 percent prime, 15 percent and 14 percent Alt-A, and 14 percent and 10 percent subprime.
[2] The Corporation had debt securities from FNMA and FHLMC that each exceeded 10 percent of shareholders' equity, with an amortized cost of $145.8 billion and $53.3 billion, and a fair value of $145.5 billion and $53.2 billion at December 31, 2015. Debt securities from FNMA and FHLMC that exceeded 10 percent of shareholders' equity had an amortized cost of $130.3 billion and $28.3 billion, and a fair value of $131.4 billion and $28.6 billion at December 31, 2014.
[3] Classified in other assets on the Consolidated Balance Sheet.

At December 31, 2015, the accumulated net unrealized gain on AFS debt securities included in accumulated OCI was $16 million, net of the related income tax expense of $7 million. At December 31, 2015 and 2014, the Corporation had nonperforming AFS debt securities of $188 million and $161 million.

The table below presents the components of other debt securities carried at fair value where the changes in fair value are reported in other income. In 2015, the Corporation recorded unrealized mark-to-market net gains of $62 million and realized net losses of $324 million, compared to unrealized mark-to-market net gains of $1.2 billion and realized net gains of $272 million in 2014. These amounts exclude hedge results.

Other Debt Securities Carried at Fair Value

(Dollars in millions)	December 31 2015	2014
Mortgage-backed securities:		
Agency	**$ —**	$ 15,704
Agency-collateralized mortgage obligations	**7**	—
Non-agency residential	**3,490**	3,745
Total mortgage-backed securities	**3,497**	19,449
U.S. Treasury and agency securities	**—**	1,541
Non-U.S. securities [1]	**12,843**	15,132
Other taxable securities, substantially all asset-backed securities	**267**	299
Total	**$ 16,607**	$ 36,421

[1] These securities are primarily used to satisfy certain international regulatory liquidity requirements.

The gross realized gains and losses on sales of AFS debt securities for 2015, 2014 and 2013 are presented in the table below.

Gains and Losses on Sales of AFS Debt Securities

(Dollars in millions)	2015	2014	2013
Gross gains	**$ 1,174**	$ 1,504	$ 1,429
Gross losses	**(36)**	(23)	(49)
Net gains on sales of AFS debt securities	**$ 1,138**	$ 1,481	$ 1,380
Income tax expense attributable to realized net gains on sales of AFS debt securities	**$ 432**	$ 563	$ 511

The table below presents the fair value and the associated gross unrealized losses on AFS debt securities and whether these securities have had gross unrealized losses for less than 12 months or for 12 months or longer at December 31, 2015 and 2014.

Temporarily Impaired and Other-than-temporarily Impaired AFS Debt Securities

(Dollars in millions)	December 31, 2015					
	Less than Twelve Months		Twelve Months or Longer		Total	
	Fair Value	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses
Temporarily impaired AFS debt securities						
Mortgage-backed securities:						
Agency	**$ 115,502**	**$ (1,082)**	**$ 13,083**	**$ (388)**	**$ 128,585**	**$ (1,470)**
Agency-collateralized mortgage obligations	**2,536**	**(19)**	**1,212**	**(36)**	**3,748**	**(55)**
Commercial	**4,587**	**(65)**	**—**	**—**	**4,587**	**(65)**
Non-agency residential	**553**	**(5)**	**723**	**(33)**	**1,276**	**(38)**
Total mortgage-backed securities	**123,178**	**(1,171)**	**15,018**	**(457)**	**138,196**	**(1,628)**
U.S. Treasury and agency securities	**1,172**	**(5)**	**190**	**(4)**	**1,362**	**(9)**
Non-U.S. securities	**—**	**—**	**134**	**(3)**	**134**	**(3)**
Corporate/Agency bonds	**107**	**(3)**	**—**	**—**	**107**	**(3)**
Other taxable securities, substantially all asset-backed securities	**4,829**	**(64)**	**869**	**(17)**	**5,698**	**(81)**
Total taxable securities	**129,286**	**(1,243)**	**16,211**	**(481)**	**145,497**	**(1,724)**
Tax-exempt securities	**4,400**	**(12)**	**1,877**	**(21)**	**6,277**	**(33)**
Total temporarily impaired AFS debt securities	**133,686**	**(1,255)**	**18,088**	**(502)**	**151,774**	**(1,757)**
Other-than-temporarily impaired AFS debt securities [1]						
Non-agency residential mortgage-backed securities	**481**	**(19)**	**98**	**(14)**	**579**	**(33)**
Total temporarily impaired and other-than-temporarily impaired AFS debt securities	**$ 134,167**	**$ (1,274)**	**$ 18,186**	**$ (516)**	**$ 152,353**	**$ (1,790)**

	December 31, 2014					
Temporarily impaired AFS debt securities						
Mortgage-backed securities:						
Agency	$ —	$ —	$ 35,930	$ (511)	$ 35,930	$ (511)
Agency-collateralized mortgage obligations	2,096	(21)	3,104	(82)	5,200	(103)
Non-agency residential	307	(3)	809	(40)	1,116	(43)
Total mortgage-backed securities	2,403	(24)	39,843	(633)	42,246	(657)
U.S. Treasury and agency securities	10,137	(22)	667	(10)	10,804	(32)
Non-U.S. securities	157	(13)	32	(2)	189	(15)
Corporate/Agency bonds	43	(1)	93	(1)	136	(2)
Other taxable securities, substantially all asset-backed securities	557	(2)	1,147	(19)	1,704	(21)
Total taxable securities	13,297	(62)	41,782	(665)	55,079	(727)
Tax-exempt securities	980	(1)	680	(18)	1,660	(19)
Total temporarily impaired AFS debt securities	14,277	(63)	42,462	(683)	56,739	(746)
Other-than-temporarily impaired AFS debt securities [1]						
Non-agency residential mortgage-backed securities	555	(33)	—	—	555	(33)
Total temporarily impaired and other-than-temporarily impaired AFS debt securities	$ 14,832	$ (96)	$ 42,462	$ (683)	$ 57,294	$ (779)

[1] Includes other-than-temporarily impaired AFS debt securities on which an OTTI loss, primarily related to changes in interest rates, remains in accumulated OCI.

The Corporation recorded OTTI losses on AFS debt securities in 2015, 2014 and 2013 as presented in the Net Credit-related Impairment Losses Recognized in Earnings table. Substantially all OTTI losses in 2015, 2014 and 2013 consisted of credit losses on non-agency residential mortgage-backed securities (RMBS) and were recorded in other income in the Consolidated Statement of Income. The credit losses on the RMBS in 2015 were driven by decreases in the estimated RMBS cash flows primarily due to a model change resulting in the refinement of expected cash flows.

A debt security is impaired when its fair value is less than its amortized cost. If the Corporation intends or will more-likely-than-not be required to sell a debt security prior to recovery, the entire impairment loss is recorded in the Consolidated Statement of Income. For AFS debt securities the Corporation does not intend or will not more-likely-than-not be required to sell, an analysis is performed to determine if any of the impairment is due to credit or whether it is due to other factors (e.g., interest rate). Credit losses are considered unrecoverable and are recorded in the Consolidated Statement of Income with the remaining unrealized losses recorded in OCI. In certain instances, the credit loss on a debt security may exceed the total impairment, in which case, the excess of the credit loss over the total impairment is recorded as an unrealized gain in OCI.

Net Credit-related Impairment Losses Recognized in Earnings

(Dollars in millions)	2015	2014	2013
Total OTTI losses	**$ (111)**	$ (30)	$ (21)
Less: non-credit portion of total OTTI losses recognized in OCI	**30**	14	1
Net credit-related impairment losses recognized in earnings	**$ (81)**	$ (16)	$ (20)

The table below presents a rollforward of the credit losses recognized in earnings in 2015, 2014 and 2013 on AFS debt securities that the Corporation does not have the intent to sell or will not more-likely-than-not be required to sell.

Rollforward of OTTI Credit Losses Recognized

(Dollars in millions)	2015	2014	2013
Balance, January 1	**$ 200**	$ 184	$ 243
Additions for credit losses recognized on AFS debt securities that had no previous impairment losses	**52**	14	6
Additions for credit losses recognized on AFS debt securities that had previously incurred impairment losses	**29**	2	14
Reductions for AFS debt securities matured, sold or intended to be sold	**(15)**	—	(79)
Balance, December 31	**$ 266**	$ 200	$ 184

The Corporation estimates the portion of a loss on a security that is attributable to credit using a discounted cash flow model and estimates the expected cash flows of the underlying collateral using internal credit, interest rate and prepayment risk models that incorporate management's best estimate of current key assumptions such as default rates, loss severity and prepayment rates. Assumptions used for the underlying loans that support the MBS can vary widely from loan to loan and are influenced by such factors as loan interest rate, geographic location of the borrower, borrower characteristics and collateral type. Based on these assumptions, the Corporation then determines how the underlying collateral cash flows will be distributed to each MBS issued from the applicable special purpose entity. Expected principal and interest cash flows on an impaired AFS debt security are discounted using the effective yield of each individual impaired AFS debt security.

Significant assumptions used in estimating the expected cash flows for measuring credit losses on non-agency RMBS were as follows at December 31, 2015.

Significant Assumptions

		Range [1]	
	Weighted-average	10th Percentile [2]	90th Percentile [2]
Prepayment speed	12.6%	3.8%	25.5%
Loss severity	32.6	12.9	34.8
Life default rate	26.0	0.8	86.1

(1) Represents the range of inputs/assumptions based upon the underlying collateral.
(2) The value of a variable below which the indicated percentile of observations will fall.

Constant prepayment speed and loss severity rates are projected considering collateral characteristics such as LTV, creditworthiness of borrowers as measured using Fair Isaac Corporation (FICO) scores, and geographic concentrations. The weighted-average severity by collateral type was 29.2 percent for prime, 31.4 percent for Alt-A and 42.9 percent for subprime at December 31, 2015. Additionally, default rates are projected by considering collateral characteristics including, but not limited to, LTV, FICO and geographic concentration. Weighted-average life default rates by collateral type were 16.1 percent for prime, 28.0 percent for Alt-A and 27.2 percent for subprime at December 31, 2015.

The remaining contractual maturity distribution and yields of the Corporation's debt securities carried at fair value and HTM debt securities at December 31, 2015 are summarized in the table below. Actual duration and yields may differ as prepayments on the loans underlying the mortgage or other asset-backed securities are passed through to the Corporation.

Maturities of Debt Securities Carried at Fair Value and Held-to-maturity Debt Securities

	December 31, 2015									
	Due in One Year or Less		Due after One Year through Five Years		Due after Five Years through Ten Years		Due after Ten Years		Total	
(Dollars in millions)	Amount	Yield [1]	Amount	Yield [1]	Amount	Yield [1]	Amount	Yield [1]	Amount	Yield [1]
Amortized cost of debt securities carried at fair value										
Mortgage-backed securities:										
Agency	$ 1	5.67%	$ 216	3.03%	$ 549	2.50%	$228,590	3.28%	$229,356	3.28%
Agency-collateralized mortgage obligations	—	—	—	—	—	—	10,898	3.15	10,898	3.15
Commercial	48	8.60	322	1.90	6,383	2.67	447	2.07	7,200	2.64
Non-agency residential	—	—	7	2.68	182	1.96	6,408	6.71	6,597	6.57
Total mortgage-backed securities	49	8.54	545	2.36	7,114	2.64	246,343	3.36	254,051	3.53
U.S. Treasury and agency securities	516	0.19	22,924	1.64	1,239	2.71	396	5.41	25,075	1.72
Non-U.S. securities	16,707	0.82	1,089	2.80	414	1.04	367	6.15	18,577	1.04
Corporate/Agency bonds	40	3.97	69	4.20	131	3.41	3	3.67	243	3.93
Other taxable securities, substantially all asset-backed securities	2,624	1.14	4,621	1.19	1,910	2.53	1,349	3.00	10,504	1.66
Total taxable securities	19,936	0.87	29,248	1.65	10,808	2.58	248,458	3.37	308,450	3.02
Tax-exempt securities	833	1.26	5,113	1.30	5,880	1.35	2,152	1.58	13,978	1.36
Total amortized cost of debt securities carried at fair value	**$ 20,769**	**0.88**	**$ 34,361**	**1.60**	**$ 16,688**	**2.14**	**$ 250,610**	**3.35**	**$ 322,428**	**2.95**
Amortized cost of HTM debt securities [2]	**$ —**	**—**	**$ 15**	**3.36**	**$ 87**	**2.31**	**$ 84,406**	**3.08**	**$ 84,508**	**3.08**
Debt securities carried at fair value										
Mortgage-backed securities:										
Agency	$ 1		$ 150		$ 555		$228,241		$228,947	
Agency-collateralized mortgage obligations	—		—		—		10,992		10,992	
Commercial	48		322		6,351		444		7,165	
Non-agency residential	—		7		181		6,481		6,669	
Total mortgage-backed securities	49		479		7,087		246,158		253,773	
U.S. Treasury and agency securities	516		23,073		1,256		432		25,277	
Non-U.S. securities	16,720		1,093		418		379		18,610	
Corporate/Agency bonds	41		70		128		4		243	
Other taxable securities, substantially all asset-backed securities	2,809		4,378		1,942		1,340		10,469	
Total taxable securities	20,135		29,093		10,831		248,313		308,372	
Tax-exempt securities	833		5,146		5,883		2,146		14,008	
Total debt securities carried at fair value	**$ 20,968**		**$ 34,239**		**$ 16,714**		**$ 250,459**		**$ 322,380**	
Fair value of HTM debt securities [2]	**$ —**		**$ 15**		**$ 87**		**$ 83,944**		**$ 84,046**	

[1] The average yield is computed based on a constant effective interest rate over the contractual life of each security. The average yield considers the contractual coupon and the amortization of premiums and accretion of discounts, excluding the effect of related hedging derivatives.
[2] Substantially all U.S. agency MBS.

Certain Corporate and Strategic Investments

The Corporation's 49 percent investment in a merchant services joint venture, which is recorded in other assets on the Consolidated Balance Sheet and in *All Other*, had a carrying value of $3.0 billion and $3.1 billion at December 31, 2015 and 2014. For additional information, see *Note 12 – Commitments and Contingencies*.

In 2013, the Corporation sold its remaining investment in China Construction Bank Corporation (CCB) and realized a pretax gain of $753 million in *All Other* reported in equity investment income in the Consolidated Statement of Income. The strategic assistance agreement between the Corporation and CCB, which includes cooperation in specific business areas, extends through 2016.

The Corporation holds investments in partnerships that construct, own and operate real estate projects that qualify for low income housing tax credits. The Corporation earns a return primarily through the receipt of tax credits allocated to the real estate projects.

Total low income housing tax credit investments were $7.1 billion and $6.6 billion at December 31, 2015 and 2014. These investments are reported in other assets on the Consolidated Balance Sheet. The Corporation had unfunded commitments to provide capital contributions of $2.4 billion and $2.2 billion to these partnerships at December 31, 2015 and 2014, which are expected to be paid over the next five years. These commitments are reported in accrued expenses and other liabilities on the Consolidated Balance Sheet. During 2015 and 2014, the Corporation recognized tax credits and other tax benefits from investments in affordable housing partnerships of $928 million and $920 million, partially offset by pretax losses recognized in other income of $629 million and $601 million.

NOTE 4 Outstanding Loans and Leases

The following tables present total outstanding loans and leases and an aging analysis for the Consumer Real Estate, Credit Card and Other Consumer, and Commercial portfolio segments, by class of financing receivables, at December 31, 2015 and 2014.

(Dollars in millions)	December 31, 2015							
	30-59 Days Past Due [1]	60-89 Days Past Due [1]	90 Days or More Past Due [2]	Total Past Due 30 Days or More	Total Current or Less Than 30 Days Past Due [3]	Purchased Credit-impaired [4]	Loans Accounted for Under the Fair Value Option	Total Outstandings
Consumer real estate								
Core portfolio								
Residential mortgage	$ 1,214	$ 368	$ 1,414	$ 2,996	$ 138,799			$ 141,795
Home equity	200	93	579	872	54,045			54,917
Non-core portfolio								
Residential mortgage [5]	2,045	1,167	8,439	11,651	22,399	$ 12,066		46,116
Home equity	335	174	1,170	1,679	14,733	4,619		21,031
Credit card and other consumer								
U.S. credit card	454	332	789	1,575	88,027			89,602
Non-U.S. credit card	39	31	76	146	9,829			9,975
Direct/Indirect consumer [6]	227	62	42	331	88,464			88,795
Other consumer [7]	18	3	4	25	2,042			2,067
Total consumer	4,532	2,230	12,513	19,275	418,338	16,685		454,298
Consumer loans accounted for under the fair value option [8]							$ 1,871	1,871
Total consumer loans and leases	4,532	2,230	12,513	19,275	418,338	16,685	1,871	456,169
Commercial								
U.S. commercial	444	148	332	924	251,847			252,771
Commercial real estate [9]	36	11	82	129	57,070			57,199
Commercial lease financing	150	29	20	199	21,153			21,352
Non-U.S. commercial	6	1	1	8	91,541			91,549
U.S. small business commercial	83	41	72	196	12,680			12,876
Total commercial	719	230	507	1,456	434,291			435,747
Commercial loans accounted for under the fair value option [8]							5,067	5,067
Total commercial loans and leases	719	230	507	1,456	434,291		5,067	440,814
Total loans and leases	$ 5,251	$ 2,460	$ 13,020	$ 20,731	$ 852,629	$ 16,685	$ 6,938	$ 896,983
Percentage of outstandings	0.59%	0.27%	1.45%	2.31%	95.06%	1.86%	0.77%	100.00%

(1) Consumer real estate loans 30-59 days past due includes fully-insured loans of $1.7 billion and nonperforming loans of $379 million. Consumer real estate loans 60-89 days past due includes fully-insured loans of $1.0 billion and nonperforming loans of $297 million.
(2) Consumer real estate includes fully-insured loans of $7.2 billion.
(3) Consumer real estate includes $3.0 billion and direct/indirect consumer includes $21 million of nonperforming loans.
(4) PCI loan amounts are shown gross of the valuation allowance.
(5) Total outstandings includes pay option loans of $2.3 billion. The Corporation no longer originates this product.
(6) Total outstandings includes auto and specialty lending loans of $42.6 billion, unsecured consumer lending loans of $886 million, U.S. securities-based lending loans of $39.8 billion, non-U.S. consumer loans of $3.9 billion, student loans of $564 million and other consumer loans of $1.0 billion.
(7) Total outstandings includes consumer finance loans of $564 million, consumer leases of $1.4 billion and consumer overdrafts of $146 million.
(8) Consumer loans accounted for under the fair value option were residential mortgage loans of $1.6 billion and home equity loans of $250 million. Commercial loans accounted for under the fair value option were U.S. commercial loans of $2.3 billion and non-U.S. commercial loans of $2.8 billion. For additional information, see *Note 20 – Fair Value Measurements* and *Note 21 – Fair Value Option*.
(9) Total outstandings includes U.S. commercial real estate loans of $53.6 billion and non-U.S. commercial real estate loans of $3.5 billion.

(Dollars in millions)	December 31, 2014							
	30-59 Days Past Due [1]	60-89 Days Past Due [1]	90 Days or More Past Due [2]	Total Past Due 30 Days or More	Total Current or Less Than 30 Days Past Due [3]	Purchased Credit-impaired [4]	Loans Accounted for Under the Fair Value Option	Total Outstandings
Consumer real estate								
Core portfolio								
Residential mortgage	$ 1,534	$ 488	$ 2,500	$ 4,522	$ 151,767	$ 354		$ 156,643
Home equity	191	73	730	994	58,599	13		59,606
Non-core portfolio								
Residential mortgage [5]	2,321	1,272	13,574	17,167	27,589	$ 14,798		59,554
Home equity	401	206	1,180	1,787	18,728	5,604		26,119
Credit card and other consumer								
U.S. credit card	494	341	866	1,701	90,178			91,879
Non-U.S. credit card	49	39	95	183	10,282			10,465
Direct/Indirect consumer [6]	245	71	65	381	80,000			80,381
Other consumer [7]	11	2	2	15	1,831			1,846
Total consumer	5,246	2,492	19,012	26,750	438,974	20,769		486,493
Consumer loans accounted for under the fair value option [8]							$ 2,077	2,077
Total consumer loans and leases	5,246	2,492	19,012	26,750	438,974	20,769	2,077	488,570
Commercial								
U.S. commercial	320	151	318	789	219,504			220,293
Commercial real estate [9]	138	16	288	442	47,240			47,682
Commercial lease financing	121	41	41	203	19,376			19,579
Non-U.S. commercial	5	4	—	9	80,074			80,083
U.S. small business commercial	88	45	94	227	13,066			13,293
Total commercial	672	257	741	1,670	379,260			380,930
Commercial loans accounted for under the fair value option [8]							6,604	6,604
Total commercial loans and leases	672	257	741	1,670	379,260		6,604	387,534
Total loans and leases	$ 5,918	$ 2,749	$ 19,753	$ 28,420	$ 818,234	$ 20,769	$ 8,681	$ 876,104
Percentage of outstandings	0.68%	0.31%	2.25%	3.24%	93.40%	2.37%	0.99%	100.00%

(1) Consumer real estate loans 30-59 days past due includes fully-insured loans of $2.1 billion and nonperforming loans of $392 million. Consumer real estate loans 60-89 days past due includes fully-insured loans of $1.1 billion and nonperforming loans of $332 million.
(2) Consumer real estate includes fully-insured loans of $11.4 billion.
(3) Consumer real estate includes $3.6 billion and direct/indirect consumer includes $27 million of nonperforming loans.
(4) PCI loan amounts are shown gross of the valuation allowance.
(5) Total outstandings includes pay option loans of $3.2 billion. The Corporation no longer originates this product.
(6) Total outstandings includes auto and specialty lending loans of $37.7 billion, unsecured consumer lending loans of $1.5 billion, U.S. securities-based lending loans of $35.8 billion, non-U.S. consumer loans of $4.0 billion, student loans of $632 million and other consumer loans of $761 million.
(7) Total outstandings includes consumer finance loans of $676 million, consumer leases of $1.0 billion and consumer overdrafts of $162 million.
(8) Consumer loans accounted for under the fair value option were residential mortgage loans of $1.9 billion and home equity loans of $196 million. Commercial loans accounted for under the fair value option were U.S. commercial loans of $1.9 billion and non-U.S. commercial loans of $4.7 billion. For additional information, see *Note 20 – Fair Value Measurements* and *Note 21 – Fair Value Option*.
(9) Total outstandings includes U.S. commercial real estate loans of $45.2 billion and non-U.S. commercial real estate loans of $2.5 billion.

The Corporation categorizes consumer real estate loans as core and non-core on the basis of loan and customer characteristics such as origination date, product type, LTV, FICO score and delinquency status consistent with its current consumer and mortgage servicing strategy. Generally, loans that were originated after January 1, 2010, qualified under government-sponsored enterprise underwriting guidelines, or otherwise met the Corporation's underwriting guidelines in place in 2015 are characterized as core loans. Loans held in legacy private-label securitizations, government-insured loans originated prior to 2010, loan products no longer originated, and loans originated prior to 2010 and classified as nonperforming or modified in a TDR prior to 2016 are generally characterized as non-core loans, and are principally run-off portfolios. Core loans as reported within this Note include loans held in the *Consumer Banking* and *GWIM* segments, as well as loans held for ALM activities in *All Other*.

The Corporation has entered into long-term credit protection agreements with FNMA and FHLMC on loans totaling $3.7 billion and $17.2 billion at December 31, 2015 and 2014, providing full credit protection on residential mortgage loans that become severely delinquent. All of these loans are individually insured and therefore the Corporation does not record an allowance for credit losses related to these loans.

Nonperforming Loans and Leases

The Corporation classifies junior-lien home equity loans as nonperforming when the first-lien loan becomes 90 days past due even if the junior-lien loan is performing. At December 31, 2015 and 2014, $484 million and $800 million of such junior-lien home equity loans were included in nonperforming loans.

The Corporation classifies consumer real estate loans that have been discharged in Chapter 7 bankruptcy and not reaffirmed by the borrower as TDRs, irrespective of payment history or delinquency status, even if the repayment terms for the loan have not been otherwise modified. The Corporation continues to have a lien on the underlying collateral. At December 31, 2015, nonperforming loans discharged in Chapter 7 bankruptcy with no change in repayment terms were $785 million of which $457 million were current on their contractual payments, while $285 million were 90 days or more past due. Of the contractually current nonperforming loans, more than 80 percent were discharged in

Chapter 7 bankruptcy more than 12 months ago, and more than 60 percent were discharged 24 months or more ago. As subsequent cash payments are received on these nonperforming loans that are contractually current, the interest component of the payments is generally recorded as interest income on a cash basis and the principal component is recorded as a reduction in the carrying value of the loan.

During 2015, the Corporation sold nonperforming and other delinquent consumer real estate loans with a carrying value of $3.2 billion, including $1.4 billion of PCI loans, compared to $6.7 billion, including $1.9 billion of PCI loans, in 2014. The Corporation recorded recoveries related to these sales of $133 million and $407 million during 2015 and 2014. Gains related to these sales of $173 million and $247 million were recorded in other income in the Consolidated Statement of Income during 2015 and 2014.

The table below presents the Corporation's nonperforming loans and leases including nonperforming TDRs, and loans accruing past due 90 days or more at December 31, 2015 and 2014. Nonperforming LHFS are excluded from nonperforming loans and leases as they are recorded at either fair value or the lower of cost or fair value. For more information on the criteria for classification as nonperforming, see *Note 1 – Summary of Significant Accounting Principles*.

Credit Quality

	December 31			
	Nonperforming Loans and Leases		Accruing Past Due 90 Days or More	
(Dollars in millions)	**2015**	2014	**2015**	2014
Consumer real estate				
Core portfolio				
Residential mortgage [1]	**$ 1,825**	$ 2,329	**$ 382**	$ 1,128
Home equity	**974**	1,247	**—**	—
Non-core portfolio				
Residential mortgage [1]	**2,978**	4,560	**6,768**	10,279
Home equity	**2,363**	2,654	**—**	—
Credit card and other consumer				
U.S. credit card	**n/a**	n/a	**789**	866
Non-U.S. credit card	**n/a**	n/a	**76**	95
Direct/Indirect consumer	**24**	28	**39**	64
Other consumer	**1**	1	**3**	1
Total consumer	**8,165**	10,819	**8,057**	12,433
Commercial				
U.S. commercial	**867**	701	**113**	110
Commercial real estate	**93**	321	**3**	3
Commercial lease financing	**12**	3	**15**	40
Non-U.S. commercial	**158**	1	**1**	—
U.S. small business commercial	**82**	87	**61**	67
Total commercial	**1,212**	1,113	**193**	220
Total loans and leases	**$ 9,377**	$ 11,932	**$ 8,250**	$ 12,653

[1] Residential mortgage loans in the core and non-core portfolios accruing past due 90 days or more are fully-insured loans. At December 31, 2015 and 2014, residential mortgage includes $4.3 billion and $7.3 billion of loans on which interest has been curtailed by the FHA, and therefore are no longer accruing interest, although principal is still insured, and $2.9 billion and $4.1 billion of loans on which interest is still accruing.

n/a = not applicable

Credit Quality Indicators

The Corporation monitors credit quality within its Consumer Real Estate, Credit Card and Other Consumer, and Commercial portfolio segments based on primary credit quality indicators. For more information on the portfolio segments, see *Note 1 – Summary of Significant Accounting Principles*. Within the Consumer Real Estate portfolio segment, the primary credit quality indicators are refreshed LTV and refreshed FICO score. Refreshed LTV measures the carrying value of the loan as a percentage of the value of the property securing the loan, refreshed quarterly. Home equity loans are evaluated using combined loan-to-value (CLTV) which measures the carrying value of the Corporation's loan and available line of credit combined with any outstanding senior liens against the property as a percentage of the value of the property securing the loan, refreshed quarterly. FICO score measures the creditworthiness of the borrower based on the financial obligations of the borrower and the borrower's credit history. At a minimum, FICO scores are refreshed quarterly, and in many cases, more frequently. FICO scores are also a primary credit quality indicator for the Credit Card and Other Consumer portfolio segment and the business card portfolio within U.S. small business commercial. Within the Commercial portfolio segment, loans are evaluated using the internal classifications of pass rated or reservable criticized as the primary credit quality indicators. The term reservable criticized refers to those commercial loans that are internally classified or listed by the Corporation as Special Mention, Substandard or Doubtful, which are asset quality categories defined by regulatory authorities. These assets have an elevated level of risk and may have a high probability of default or total loss. Pass rated refers to all loans not considered reservable criticized. In addition to these primary credit quality indicators, the Corporation uses other credit quality indicators for certain types of loans.

The following tables present certain credit quality indicators for the Corporation's Consumer Real Estate, Credit Card and Other Consumer, and Commercial portfolio segments, by class of financing receivables, at December 31, 2015 and 2014.

Consumer Real Estate – Credit Quality Indicators [1]

(Dollars in millions)	December 31, 2015					
	Core Portfolio Residential Mortgage [2]	Non-core Residential Mortgage [2]	Residential Mortgage PCI [3]	Core Portfolio Home Equity [2]	Non-core Home Equity [2]	Home Equity PCI
Refreshed LTV [4]						
Less than or equal to 90 percent	$ 110,023	$ 16,481	$ 8,655	$ 51,262	$ 8,347	$ 2,003
Greater than 90 percent but less than or equal to 100 percent	4,038	2,224	1,403	1,858	2,190	852
Greater than 100 percent	2,638	3,364	2,008	1,797	5,875	1,764
Fully-insured loans [5]	25,096	11,981	—	—	—	—
Total consumer real estate	$ 141,795	$ 34,050	$ 12,066	$ 54,917	$ 16,412	$ 4,619
Refreshed FICO score						
Less than 620	$ 3,129	$ 4,749	$ 3,798	$ 1,322	$ 3,490	$ 729
Greater than or equal to 620 and less than 680	5,472	3,762	2,586	3,295	3,862	825
Greater than or equal to 680 and less than 740	22,486	5,138	3,187	12,180	3,451	1,356
Greater than or equal to 740	85,612	8,420	2,495	38,120	5,609	1,709
Fully-insured loans [5]	25,096	11,981	—	—	—	—
Total consumer real estate	$ 141,795	$ 34,050	$ 12,066	$ 54,917	$ 16,412	$ 4,619

[1] Excludes $1.9 billion of loans accounted for under the fair value option.
[2] Excludes PCI loans.
[3] Includes $2.0 billion of pay option loans. The Corporation no longer originates this product.
[4] Refreshed LTV percentages for PCI loans are calculated using the carrying value net of the related valuation allowance.
[5] Credit quality indicators are not reported for fully-insured loans as principal repayment is insured.

Credit Card and Other Consumer – Credit Quality Indicators

(Dollars in millions)	December 31, 2015			
	U.S. Credit Card	Non-U.S. Credit Card	Direct/Indirect Consumer	Other Consumer [1]
Refreshed FICO score				
Less than 620	$ 4,196	$ —	$ 1,244	$ 217
Greater than or equal to 620 and less than 680	11,857	—	1,698	214
Greater than or equal to 680 and less than 740	34,270	—	10,955	337
Greater than or equal to 740	39,279	—	29,581	1,149
Other internal credit metrics [2, 3, 4]	—	9,975	45,317	150
Total credit card and other consumer	$ 89,602	$ 9,975	$ 88,795	$ 2,067

[1] Twenty-seven percent of the other consumer portfolio is associated with portfolios from certain consumer finance businesses that the Corporation previously exited.
[2] Other internal credit metrics may include delinquency status, geography or other factors.
[3] Direct/indirect consumer includes $43.7 billion of securities-based lending which is overcollateralized and therefore has minimal credit risk and $567 million of loans the Corporation no longer originates, primarily student loans.
[4] Non-U.S. credit card represents the U.K. credit card portfolio which is evaluated using internal credit metrics, including delinquency status. At December 31, 2015, 98 percent of this portfolio was current or less than 30 days past due, one percent was 30-89 days past due and one percent was 90 days or more past due.

Commercial – Credit Quality Indicators [1]

(Dollars in millions)	December 31, 2015				
	U.S. Commercial	Commercial Real Estate	Commercial Lease Financing	Non-U.S. Commercial	U.S. Small Business Commercial [2]
Risk ratings					
Pass rated	$ 243,922	$ 56,688	$ 20,644	$ 87,905	$ 571
Reservable criticized	8,849	511	708	3,644	96
Refreshed FICO score [3]					
Less than 620					184
Greater than or equal to 620 and less than 680					543
Greater than or equal to 680 and less than 740					1,627
Greater than or equal to 740					3,027
Other internal credit metrics [3, 4]					6,828
Total commercial	$ 252,771	$ 57,199	$ 21,352	$ 91,549	$ 12,876

[1] Excludes $5.1 billion of loans accounted for under the fair value option.
[2] U.S. small business commercial includes $670 million of criticized business card and small business loans which are evaluated using refreshed FICO scores or internal credit metrics, including delinquency status, rather than risk ratings. At December 31, 2015, 98 percent of the balances where internal credit metrics are used was current or less than 30 days past due.
[3] Refreshed FICO score and other internal credit metrics are applicable only to the U.S. small business commercial portfolio.
[4] Other internal credit metrics may include delinquency status, application scores, geography or other factors.

Consumer Real Estate – Credit Quality Indicators [1]

(Dollars in millions)	December 31, 2014					
	Core Portfolio Residential Mortgage [2]	Non-core Residential Mortgage [2]	Residential Mortgage PCI [3]	Core Portfolio Home Equity [2]	Non-core Home Equity [2]	Home Equity PCI
Refreshed LTV [4]						
Less than or equal to 90 percent	$ 99,001	$ 19,736	$ 9,972	$ 52,413	$ 10,405	$ 2,046
Greater than 90 percent but less than or equal to 100 percent	4,680	3,364	2,005	3,408	2,308	1,048
Greater than 100 percent	3,885	5,409	3,175	3,772	7,802	2,523
Fully-insured loans [5]	48,723	16,247	—	—	—	—
Total consumer real estate	$ 156,289	$ 44,756	$ 15,152	$ 59,593	$ 20,515	$ 5,617
Refreshed FICO score						
Less than 620	$ 3,779	$ 6,729	$ 6,109	$ 1,671	$ 4,055	$ 864
Greater than or equal to 620 and less than 680	6,040	4,269	3,014	4,099	4,163	995
Greater than or equal to 680 and less than 740	21,771	6,640	3,310	13,278	4,806	1,651
Greater than or equal to 740	75,976	10,871	2,719	40,545	7,491	2,107
Fully-insured loans [5]	48,723	16,247	—	—	—	—
Total consumer real estate	$ 156,289	$ 44,756	$ 15,152	$ 59,593	$ 20,515	$ 5,617

[1] Excludes $2.1 billion of loans accounted for under the fair value option.
[2] Excludes PCI loans.
[3] Includes $2.8 billion of pay option loans. The Corporation no longer originates this product.
[4] Refreshed LTV percentages for PCI loans are calculated using the carrying value net of the related valuation allowance.
[5] Credit quality indicators are not reported for fully-insured loans as principal repayment is insured.

Credit Card and Other Consumer – Credit Quality Indicators

(Dollars in millions)	December 31, 2014			
	U.S. Credit Card	Non-U.S. Credit Card	Direct/Indirect Consumer	Other Consumer [1]
Refreshed FICO score				
Less than 620	$ 4,467	$ —	$ 1,296	$ 266
Greater than or equal to 620 and less than 680	12,177	—	1,892	227
Greater than or equal to 680 and less than 740	34,986	—	10,749	307
Greater than or equal to 740	40,249	—	25,279	881
Other internal credit metrics [2, 3, 4]	—	10,465	41,165	165
Total credit card and other consumer	$ 91,879	$ 10,465	$ 80,381	$ 1,846

[1] Thirty-seven percent of the other consumer portfolio is associated with portfolios from certain consumer finance businesses that the Corporation previously exited.
[2] Other internal credit metrics may include delinquency status, geography or other factors.
[3] Direct/indirect consumer includes $39.7 billion of securities-based lending which is overcollateralized and therefore has minimal credit risk and $632 million of loans the Corporation no longer originates, primarily student loans.
[4] Non-U.S. credit card represents the U.K. credit card portfolio which is evaluated using internal credit metrics, including delinquency status. At December 31, 2014, 98 percent of this portfolio was current or less than 30 days past due, one percent was 30-89 days past due and one percent was 90 days or more past due.

Commercial – Credit Quality Indicators [1]

(Dollars in millions)	December 31, 2014				
	U.S. Commercial	Commercial Real Estate	Commercial Lease Financing	Non-U.S. Commercial	U.S. Small Business Commercial [2]
Risk ratings					
Pass rated	$ 213,839	$ 46,632	$ 18,882	$ 79,367	$ 751
Reservable criticized	6,454	1,050	697	716	182
Refreshed FICO score [3]					
Less than 620					184
Greater than or equal to 620 and less than 680					529
Greater than or equal to 680 and less than 740					1,591
Greater than or equal to 740					2,910
Other internal credit metrics [3, 4]					7,146
Total commercial	$ 220,293	$ 47,682	$ 19,579	$ 80,083	$ 13,293

[1] Excludes $6.6 billion of loans accounted for under the fair value option.
[2] U.S. small business commercial includes $762 million of criticized business card and small business loans which are evaluated using refreshed FICO scores or internal credit metrics, including delinquency status, rather than risk ratings. At December 31, 2014, 98 percent of the balances where internal credit metrics are used was current or less than 30 days past due.
[3] Refreshed FICO score and other internal credit metrics are applicable only to the U.S. small business commercial portfolio.
[4] Other internal credit metrics may include delinquency status, application scores, geography or other factors.

Impaired Loans and Troubled Debt Restructurings

A loan is considered impaired when, based on current information, it is probable that the Corporation will be unable to collect all amounts due from the borrower in accordance with the contractual terms of the loan. Impaired loans include nonperforming commercial loans and all consumer and commercial TDRs. Impaired loans exclude nonperforming consumer loans and nonperforming commercial leases unless they are classified as TDRs. Loans accounted for under the fair value option are also excluded. PCI loans are excluded and reported separately on page 49. For additional information, see *Note 1 – Summary of Significant Accounting Principles.*

Consumer Real Estate

Impaired consumer real estate loans within the Consumer Real Estate portfolio segment consist entirely of TDRs. Excluding PCI loans, most modifications of consumer real estate loans meet the definition of TDRs when a binding offer is extended to a borrower. Modifications of consumer real estate loans are done in accordance with the government's Making Home Affordable Program (modifications under government programs) or the Corporation's proprietary programs (modifications under proprietary programs). These modifications are considered to be TDRs if concessions have been granted to borrowers experiencing financial difficulties. Concessions may include reductions in interest rates, capitalization of past due amounts, principal and/or interest forbearance, payment extensions, principal and/or interest forgiveness, or combinations thereof.

Prior to permanently modifying a loan, the Corporation may enter into trial modifications with certain borrowers under both government and proprietary programs. Trial modifications generally represent a three- to four-month period during which the borrower makes monthly payments under the anticipated modified payment terms. Upon successful completion of the trial period, the Corporation and the borrower enter into a permanent modification. Binding trial modifications are classified as TDRs when the trial offer is made and continue to be classified as TDRs regardless of whether the borrower enters into a permanent modification.

Consumer real estate loans that have been discharged in Chapter 7 bankruptcy with no change in repayment terms and not reaffirmed by the borrower of $1.8 billion were included in TDRs at December 31, 2015, of which $785 million were classified as nonperforming and $765 million were loans fully-insured by the FHA. For more information on loans discharged in Chapter 7 bankruptcy, see Nonperforming Loans and Leases in this Note.

A consumer real estate loan, excluding PCI loans which are reported separately, is not classified as impaired unless it is a TDR. Once such a loan has been designated as a TDR, it is then individually assessed for impairment. Consumer real estate TDRs are measured primarily based on the net present value of the estimated cash flows discounted at the loan's original effective interest rate, as discussed in the following paragraph. If the carrying value of a TDR exceeds this amount, a specific allowance is recorded as a component of the allowance for loan and lease losses. Alternatively, consumer real estate TDRs that are considered to be dependent solely on the collateral for repayment (e.g., due to the lack of income verification) are measured based on the estimated fair value of the collateral and a charge-off is recorded if the carrying value exceeds the fair value of the collateral. Consumer real estate loans that reached 180 days past due prior to modification had been charged off to their net realizable value, less costs to sell, before they were modified as TDRs in accordance with established policy. Therefore, modifications of consumer real estate loans that are 180 or more days past due as TDRs do not have an impact on the allowance for loan and lease losses nor are additional charge-offs required at the time of modification. Subsequent declines in the fair value of the collateral after a loan has reached 180 days past due are recorded as charge-offs. Fully-insured loans are protected against principal loss, and therefore, the Corporation does not record an allowance for loan and lease losses on the outstanding principal balance, even after they have been modified in a TDR.

The net present value of the estimated cash flows used to measure impairment is based on model-driven estimates of projected payments, prepayments, defaults and loss-given-default (LGD). Using statistical modeling methodologies, the Corporation estimates the probability that a loan will default prior to maturity based on the attributes of each loan. The factors that are most relevant to the probability of default are the refreshed LTV, or in the case of a subordinated lien, refreshed CLTV, borrower credit score, months since origination (i.e., vintage) and geography. Each of these factors is further broken down by present collection status (whether the loan is current, delinquent, in default or in bankruptcy). Severity (or LGD) is estimated based on the refreshed LTV for first mortgages or CLTV for subordinated liens. The estimates are based on the Corporation's historical experience as adjusted to reflect an assessment of environmental factors that may not be reflected in the historical data, such as changes in real estate values, local and national economies, underwriting standards and the regulatory environment. The probability of default models also incorporate recent experience with modification programs including redefaults subsequent to modification, a loan's default history prior to modification and the change in borrower payments post-modification.

At December 31, 2015 and 2014, remaining commitments to lend additional funds to debtors whose terms have been modified in a consumer real estate TDR were immaterial. Consumer real estate foreclosed properties totaled $444 million and $630 million at December 31, 2015 and 2014. The carrying value of consumer real estate loans, including fully-insured and PCI loans, for which formal foreclosure proceedings were in process as of December 31, 2015 was $5.8 billion. During 2015 and 2014, the Corporation reclassified $2.1 billion and $1.9 billion of consumer real estate loans to foreclosed properties or, for properties acquired upon foreclosure of certain government-guaranteed loans (principally FHA-insured loans), to other assets. The reclassifications represent non-cash investing activities and, accordingly, are not reflected on the Consolidated Statement of Cash Flows.

The table below provides the unpaid principal balance, carrying value and related allowance at December 31, 2015 and 2014, and the average carrying value and interest income recognized for 2015, 2014 and 2013 for impaired loans in the Corporation's Consumer Real Estate portfolio segment. Certain impaired consumer real estate loans do not have a related allowance as the current valuation of these impaired loans exceeded the carrying value, which is net of previously recorded charge-offs.

Impaired Loans – Consumer Real Estate

(Dollars in millions)	December 31, 2015			December 31, 2014		
	Unpaid Principal Balance	**Carrying Value**	**Related Allowance**	Unpaid Principal Balance	Carrying Value	Related Allowance
With no recorded allowance						
Residential mortgage	**$ 14,888**	**$ 11,901**	**$ —**	$ 19,710	$ 15,605	$ —
Home equity	**3,545**	**1,775**	**—**	3,540	1,630	—
With an allowance recorded						
Residential mortgage	**$ 6,624**	**$ 6,471**	**$ 399**	$ 7,861	$ 7,665	$ 531
Home equity	**1,047**	**911**	**235**	852	728	196
Total						
Residential mortgage	**$ 21,512**	**$ 18,372**	**$ 399**	$ 27,571	$ 23,270	$ 531
Home equity	**4,592**	**2,686**	**235**	4,392	2,358	196

	2015		2014		2013	
	Average Carrying Value	**Interest Income Recognized (1)**	Average Carrying Value	Interest Income Recognized (1)	Average Carrying Value	Interest Income Recognized (1)
With no recorded allowance						
Residential mortgage	**$ 13,867**	**$ 403**	$ 15,065	$ 490	$ 16,625	$ 621
Home equity	**1,777**	**89**	1,486	87	1,245	76
With an allowance recorded						
Residential mortgage	**$ 7,290**	**$ 236**	$ 10,826	$ 411	$ 13,926	$ 616
Home equity	**785**	**24**	743	25	912	41
Total						
Residential mortgage	**$ 21,157**	**$ 639**	$ 25,891	$ 901	$ 30,551	$ 1,237
Home equity	**2,562**	**113**	2,229	112	2,157	117

(1) Interest income recognized includes interest accrued and collected on the outstanding balances of accruing impaired loans as well as interest cash collections on nonaccruing impaired loans for which the principal is considered collectible.

The table below presents the December 31, 2015, 2014 and 2013 unpaid principal balance, carrying value, and average pre- and post-modification interest rates on consumer real estate loans that were modified in TDRs during 2015, 2014 and 2013, and net charge-offs recorded during the period in which the modification occurred. The following Consumer Real Estate portfolio segment tables include loans that were initially classified as TDRs during the period and also loans that had previously been classified as TDRs and were modified again during the period.

Consumer Real Estate – TDRs Entered into During 2015, 2014 and 2013 (1)

(Dollars in millions)	December 31, 2015				2015
	Unpaid Principal Balance	**Carrying Value**	**Pre-Modification Interest Rate**	**Post-Modification Interest Rate (2)**	**Net Charge-offs (3)**
Residential mortgage	**$ 2,986**	**$ 2,655**	**4.98%**	**4.43%**	**$ 97**
Home equity	**1,019**	**775**	**3.54**	**3.17**	**84**
Total	**$ 4,005**	**$ 3,430**	**4.61**	**4.11**	**$ 181**
	December 31, 2014				2014
Residential mortgage	$ 5,940	$ 5,120	5.28%	4.93%	$ 72
Home equity	863	592	4.00	3.33	99
Total	$ 6,803	$ 5,712	5.12	4.73	$ 171
	December 31, 2013				2013
Residential mortgage	$ 11,233	$ 10,016	5.30%	4.27%	$ 235
Home equity	878	521	5.29	3.92	192
Total	$ 12,111	$ 10,537	5.30	4.24	$ 427

(1) During 2015, 2014 and 2013, the Corporation forgave principal of $396 million, $53 million and $467 million, respectively, related to residential mortgage loans in connection with TDRs.
(2) The post-modification interest rate reflects the interest rate applicable only to permanently completed modifications, which exclude loans that are in a trial modification period.
(3) Net charge-offs include amounts recorded on loans modified during the period that are no longer held by the Corporation at December 31, 2015, 2014 and 2013 due to sales and other dispositions.

The table below presents the December 31, 2015, 2014 and 2013 carrying value for consumer real estate loans that were modified in a TDR during 2015, 2014 and 2013, by type of modification.

Consumer Real Estate – Modification Programs

(Dollars in millions)	TDRs Entered into During 2015 Residential Mortgage	Home Equity	Total Carrying Value
Modifications under government programs			
Contractual interest rate reduction	**$ 408**	**$ 23**	**$ 431**
Principal and/or interest forbearance	**4**	**7**	**11**
Other modifications [1]	**46**	**—**	**46**
Total modifications under government programs	**458**	**30**	**488**
Modifications under proprietary programs			
Contractual interest rate reduction	**191**	**28**	**219**
Capitalization of past due amounts	**69**	**10**	**79**
Principal and/or interest forbearance	**124**	**44**	**168**
Other modifications [1]	**34**	**95**	**129**
Total modifications under proprietary programs	**418**	**177**	**595**
Trial modifications	**1,516**	**452**	**1,968**
Loans discharged in Chapter 7 bankruptcy [2]	**263**	**116**	**379**
Total modifications	**$ 2,655**	**$ 775**	**$ 3,430**

	TDRs Entered into During 2014		
Modifications under government programs			
Contractual interest rate reduction	$ 643	$ 56	$ 699
Principal and/or interest forbearance	16	18	34
Other modifications [1]	98	1	99
Total modifications under government programs	757	75	832
Modifications under proprietary programs			
Contractual interest rate reduction	244	22	266
Capitalization of past due amounts	71	2	73
Principal and/or interest forbearance	66	75	141
Other modifications [1]	40	47	87
Total modifications under proprietary programs	421	146	567
Trial modifications	3,421	182	3,603
Loans discharged in Chapter 7 bankruptcy [2]	521	189	710
Total modifications	$ 5,120	$ 592	$ 5,712

	TDRs Entered into During 2013		
Modifications under government programs			
Contractual interest rate reduction	$ 1,815	$ 48	$ 1,863
Principal and/or interest forbearance	35	24	59
Other modifications [1]	100	—	100
Total modifications under government programs	1,950	72	2,022
Modifications under proprietary programs			
Contractual interest rate reduction	2,799	40	2,839
Capitalization of past due amounts	132	2	134
Principal and/or interest forbearance	469	17	486
Other modifications [1]	105	25	130
Total modifications under proprietary programs	3,505	84	3,589
Trial modifications	3,410	87	3,497
Loans discharged in Chapter 7 bankruptcy [2]	1,151	278	1,429
Total modifications	$ 10,016	$ 521	$ 10,537

[1] Includes other modifications such as term or payment extensions and repayment plans.
[2] Includes loans discharged in Chapter 7 bankruptcy with no change in repayment terms that are classified as TDRs.

The table below presents the carrying value of consumer real estate loans that entered into payment default during 2015, 2014 and 2013 that were modified in a TDR during the 12 months preceding payment default. A payment default for consumer real estate TDRs is recognized when a borrower has missed three monthly payments (not necessarily consecutively) since modification. Payment defaults on a trial modification where the borrower has not yet met the terms of the agreement are included in the table below if the borrower is 90 days or more past due three months after the offer to modify is made.

Consumer Real Estate – TDRs Entering Payment Default That Were Modified During the Preceding 12 Months

(Dollars in millions)	Residential Mortgage	Home Equity	Total Carrying Value [1]
	2015		
Modifications under government programs	$ 452	$ 5	$ 457
Modifications under proprietary programs	263	24	287
Loans discharged in Chapter 7 bankruptcy [2]	238	47	285
Trial modifications [3]	2,997	181	3,178
Total modifications	$ 3,950	$ 257	$ 4,207
	2014		
Modifications under government programs	$ 696	$ 4	$ 700
Modifications under proprietary programs	714	12	726
Loans discharged in Chapter 7 bankruptcy [2]	481	70	551
Trial modifications	2,231	56	2,287
Total modifications	$ 4,122	$ 142	$ 4,264
	2013		
Modifications under government programs	$ 454	$ 2	$ 456
Modifications under proprietary programs	1,117	4	1,121
Loans discharged in Chapter 7 bankruptcy [2]	964	30	994
Trial modifications	4,376	14	4,390
Total modifications	$ 6,911	$ 50	$ 6,961

(1) Includes loans with a carrying value of $1.8 billion, $2.0 billion and $2.4 billion that entered into payment default during 2015, 2014 and 2013, respectively, but were no longer held by the Corporation as of December 31, 2015, 2014 and 2013 due to sales and other dispositions.
(2) Includes loans discharged in Chapter 7 bankruptcy with no change in repayment terms that are classified as TDRs.
(3) Includes $1.7 billion of trial modification offers made in connection with the 2014 settlement with the U.S. Department of Justice to which the customer has not responded for 2015.

Credit Card and Other Consumer

Impaired loans within the Credit Card and Other Consumer portfolio segment consist entirely of loans that have been modified in TDRs (the renegotiated credit card and other consumer TDR portfolio, collectively referred to as the renegotiated TDR portfolio). The Corporation seeks to assist customers that are experiencing financial difficulty by modifying loans while ensuring compliance with federal, local and international laws and guidelines. Credit card and other consumer loan modifications generally involve reducing the interest rate on the account and placing the customer on a fixed payment plan not exceeding 60 months, all of which are considered TDRs. In addition, the accounts of non-U.S. credit card customers who do not qualify for a fixed payment plan may have their interest rates reduced, as required by certain local jurisdictions. These modifications, which are also TDRs, tend to experience higher payment default rates given that the borrowers may lack the ability to repay even with the interest rate reduction. In substantially all cases, the customer's available line of credit is canceled. The Corporation makes loan modifications directly with borrowers for debt held only by the Corporation (internal programs). Additionally, the Corporation makes loan modifications for borrowers working with third-party renegotiation agencies that provide solutions to customers' entire unsecured debt structures (external programs). The Corporation classifies other secured consumer loans that have been discharged in Chapter 7 bankruptcy as TDRs which are written down to collateral value and placed on nonaccrual status no later than the time of discharge. For more information on the regulatory guidance on loans discharged in Chapter 7 bankruptcy, see Nonperforming Loans and Leases in this Note.

All credit card and substantially all other consumer loans that have been modified in TDRs remain on accrual status until the loan is either paid in full or charged off, which occurs no later than the end of the month in which the loan becomes 180 days past due or generally at 120 days past due for a loan that has been placed on a fixed payment plan.

The allowance for impaired credit card and substantially all other consumer loans is based on the present value of projected cash flows, which incorporates the Corporation's historical payment default and loss experience on modified loans, discounted using the portfolio's average contractual interest rate, excluding promotionally priced loans, in effect prior to restructuring. Credit card and other consumer loans are included in homogeneous pools which are collectively evaluated for impairment. For these portfolios, loss forecast models are utilized that consider a variety of factors including, but not limited to, historical loss experience, delinquency status, economic trends and credit scores.

The table below provides the unpaid principal balance, carrying value and related allowance at December 31, 2015 and 2014, and the average carrying value and interest income recognized for 2015, 2014 and 2013 on the Corporation's renegotiated TDR portfolio in the Credit Card and Other Consumer portfolio segment.

Impaired Loans – Credit Card and Other Consumer – Renegotiated TDRs

(Dollars in millions)	December 31, 2015 Unpaid Principal Balance	Carrying Value [1]	Related Allowance	December 31, 2014 Unpaid Principal Balance	Carrying Value [1]	Related Allowance
With no recorded allowance						
Direct/Indirect consumer	**$ 50**	**$ 21**	**$ —**	$ 59	$ 25	$ —
With an allowance recorded						
U.S. credit card	**$ 598**	**$ 611**	**$ 176**	$ 804	$ 856	$ 207
Non-U.S. credit card	**109**	**126**	**70**	132	168	108
Direct/Indirect consumer	**17**	**21**	4	76	92	24
Total						
U.S. credit card	**$ 598**	**$ 611**	**$ 176**	$ 804	$ 856	$ 207
Non-U.S. credit card	**109**	**126**	**70**	132	168	108
Direct/Indirect consumer	**67**	**42**	4	135	117	24

(Dollars in millions)	2015 Average Carrying Value	Interest Income Recognized [2]	2014 Average Carrying Value	Interest Income Recognized [2]	2013 Average Carrying Value	Interest Income Recognized [2]
With no recorded allowance						
Direct/Indirect consumer	**$ 22**	**$ —**	$ 27	$ —	$ 42	$ —
Other consumer	**—**	**—**	33	2	34	2
With an allowance recorded						
U.S. credit card	**$ 749**	**$ 43**	$ 1,148	$ 71	$ 2,144	$ 134
Non-U.S. credit card	**145**	**4**	210	6	266	7
Direct/Indirect consumer	**51**	**3**	180	9	456	24
Other consumer	**—**	**—**	23	1	28	2
Total						
U.S. credit card	**$ 749**	**$ 43**	$ 1,148	$ 71	$ 2,144	$ 134
Non-U.S. credit card	**145**	**4**	210	6	266	7
Direct/Indirect consumer	**73**	**3**	207	9	498	24
Other consumer	**—**	**—**	56	3	62	4

[1] Includes accrued interest and fees.

[2] Interest income recognized includes interest accrued and collected on the outstanding balances of accruing impaired loans as well as interest cash collections on nonaccruing impaired loans for which the principal is considered collectible.

The table below provides information on the Corporation's primary modification programs for the renegotiated TDR portfolio at December 31, 2015 and 2014.

Credit Card and Other Consumer – Renegotiated TDRs by Program Type

(Dollars in millions)	December 31 Internal Programs 2015	Internal Programs 2014	External Programs 2015	External Programs 2014	Other [1] 2015	Other [1] 2014	Total 2015	Total 2014	Percent of Balances Current or Less Than 30 Days Past Due 2015	Percent of Balances Current or Less Than 30 Days Past Due 2014
U.S. credit card	**$ 313**	$ 450	**$ 296**	$ 397	**$ 2**	$ 9	**$ 611**	$ 856	**88.74%**	84.99%
Non-U.S. credit card	**21**	41	**10**	16	**95**	111	**126**	168	**44.25**	47.56
Direct/Indirect consumer	**11**	50	**7**	34	**24**	33	**42**	117	**89.12**	85.21
Total renegotiated TDRs	**$ 345**	$ 541	**$ 313**	$ 447	**$ 121**	$ 153	**$ 779**	$ 1,141	**81.55**	79.51

[1] Other TDRs for non-U.S. credit card include modifications of accounts that are ineligible for a fixed payment plan.

The table below provides information on the Corporation's renegotiated TDR portfolio including the December 31, 2015, 2014 and 2013 unpaid principal balance, carrying value, and average pre- and post-modification interest rates of loans that were modified in TDRs during 2015, 2014 and 2013, and net charge-offs recorded during the period in which the modification occurred.

Credit Card and Other Consumer – Renegotiated TDRs Entered into During 2015, 2014 and 2013

(Dollars in millions)	December 31, 2015 Unpaid Principal Balance	Carrying Value [1]	Pre-Modification Interest Rate	Post-Modification Interest Rate	2015 Net Charge-offs
U.S. credit card	**$ 205**	**$ 218**	**17.07%**	**5.08%**	**$ 26**
Non-U.S. credit card	**74**	**86**	**24.05**	**0.53**	**63**
Direct/Indirect consumer	**19**	**12**	**5.95**	**5.19**	**9**
Total	**$ 298**	**$ 316**	**18.58**	**3.84**	**$ 98**
	December 31, 2014				2014
U.S. credit card	$ 276	$ 301	16.64%	5.15%	$ 37
Non-U.S. credit card	91	106	24.90	0.68	91
Direct/Indirect consumer	27	19	8.66	4.90	14
Total	$ 394	$ 426	18.32	4.03	$ 142
	December 31, 2013				2013
U.S. credit card	$ 299	$ 329	16.84%	5.84%	$ 30
Non-U.S. credit card	134	147	25.90	0.95	138
Direct/Indirect consumer	47	38	11.53	4.74	15
Other consumer	8	8	9.28	5.25	—
Total	$ 488	$ 522	18.89	4.37	$ 183

[1] Includes accrued interest and fees.

The table below provides information on the Corporation's primary modification programs for the renegotiated TDR portfolio for loans that were modified in TDRs during 2015, 2014 and 2013.

Credit Card and Other Consumer – Renegotiated TDRs Entered into During the Period by Program Type

(Dollars in millions)	2015 Internal Programs	External Programs	Other [1]	Total
U.S. credit card	**$ 134**	**$ 84**	**$ —**	**$ 218**
Non-U.S. credit card	**3**	**4**	**79**	**86**
Direct/Indirect consumer	**1**	**—**	**11**	**12**
Total renegotiated TDRs	**$ 138**	**$ 88**	**$ 90**	**$ 316**
	2014			
U.S. credit card	$ 196	$ 105	$ —	$ 301
Non-U.S. credit card	6	6	94	106
Direct/Indirect consumer	4	2	13	19
Total renegotiated TDRs	$ 206	$ 113	$ 107	$ 426
	2013			
U.S. credit card	$ 192	$ 137	$ —	$ 329
Non-U.S. credit card	16	9	122	147
Direct/Indirect consumer	15	8	15	38
Other consumer	8	—	—	8
Total renegotiated TDRs	$ 231	$ 154	$ 137	$ 522

[1] Other TDRs for non-U.S. credit card include modifications of accounts that are ineligible for a fixed payment plan.

Credit card and other consumer loans are deemed to be in payment default during the quarter in which a borrower misses the second of two consecutive payments. Payment defaults are one of the factors considered when projecting future cash flows in the calculation of the allowance for loan and lease losses for impaired credit card and other consumer loans. Based on historical experience, the Corporation estimates that 14 percent of new U.S. credit card TDRs, 88 percent of new non-U.S. credit card TDRs and 12 percent of new direct/indirect consumer TDRs may be in payment default within 12 months after modification. Loans that entered into payment default during 2015, 2014 and 2013 that had been modified in a TDR during the preceding 12 months were $43 million, $56 million and $61 million for U.S. credit card, $152 million, $200 million and $236 million for non-U.S. credit card, and $3 million, $5 million and $12 million for direct/indirect consumer.

Commercial Loans

Impaired commercial loans, which include nonperforming loans and TDRs (both performing and nonperforming), are primarily measured based on the present value of payments expected to be received, discounted at the loan's original effective interest rate. Commercial impaired loans may also be measured based on observable market prices or, for loans that are solely dependent on the collateral for repayment, the estimated fair value of collateral, less costs to sell. If the carrying value of a loan exceeds this amount, a specific allowance is recorded as a component of the allowance for loan and lease losses.

Modifications of loans to commercial borrowers that are experiencing financial difficulty are designed to reduce the Corporation's loss exposure while providing the borrower with an opportunity to work through financial difficulties, often to avoid foreclosure or bankruptcy. Each modification is unique and reflects the individual circumstances of the borrower. Modifications that result in a TDR may include extensions of maturity at a concessionary (below market) rate of interest, payment forbearances or other actions designed to benefit the customer while mitigating the Corporation's risk exposure. Reductions in interest rates are rare. Instead, the interest rates are typically increased, although the increased rate may not represent a market rate of interest. Infrequently, concessions may also include principal forgiveness in connection with foreclosure, short sale or other settlement agreements leading to termination or sale of the loan.

At the time of restructuring, the loans are remeasured to reflect the impact, if any, on projected cash flows resulting from the modified terms. If there was no forgiveness of principal and the interest rate was not decreased, the modification may have little or no impact on the allowance established for the loan. If a portion of the loan is deemed to be uncollectible, a charge-off may be recorded at the time of restructuring. Alternatively, a charge-off may have already been recorded in a previous period such that no charge-off is required at the time of modification. For more information on modifications for the U.S. small business commercial portfolio, see Credit Card and Other Consumer in this Note.

At December 31, 2015 and 2014, remaining commitments to lend additional funds to debtors whose terms have been modified in a commercial loan TDR were immaterial. Commercial foreclosed properties totaled $15 million and $67 million at December 31, 2015 and 2014.

The table below provides the unpaid principal balance, carrying value and related allowance at December 31, 2015 and 2014, and the average carrying value and interest income recognized for 2015, 2014 and 2013 for impaired loans in the Corporation's Commercial loan portfolio segment. Certain impaired commercial loans do not have a related allowance as the valuation of these impaired loans exceeded the carrying value, which is net of previously recorded charge-offs.

Impaired Loans – Commercial

(Dollars in millions)	December 31, 2015 Unpaid Principal Balance	December 31, 2015 Carrying Value	December 31, 2015 Related Allowance	December 31, 2014 Unpaid Principal Balance	December 31, 2014 Carrying Value	December 31, 2014 Related Allowance
With no recorded allowance						
U.S. commercial	**$ 566**	**$ 541**	**$ —**	$ 668	$ 650	$ —
Commercial real estate	**82**	**77**	**—**	60	48	—
Non-U.S. commercial	**4**	**4**	**—**	—	—	—
With an allowance recorded						
U.S. commercial	**$ 1,350**	**$ 1,157**	**$ 115**	$ 1,139	$ 839	$ 75
Commercial real estate	**328**	**107**	**11**	678	495	48
Non-U.S. commercial	**531**	**381**	**56**	47	44	1
U.S. small business commercial [1]	**105**	**101**	**35**	133	122	35
Total						
U.S. commercial	**$ 1,916**	**$ 1,698**	**$ 115**	$ 1,807	$ 1,489	$ 75
Commercial real estate	**410**	**184**	**11**	738	543	48
Non-U.S. commercial	**535**	**385**	**56**	47	44	1
U.S. small business commercial [1]	**105**	**101**	**35**	133	122	35

	2015 Average Carrying Value	2015 Interest Income Recognized [2]	2014 Average Carrying Value	2014 Interest Income Recognized [2]	2013 Average Carrying Value	2013 Interest Income Recognized [2]
With no recorded allowance						
U.S. commercial	**$ 688**	**$ 14**	$ 546	$ 12	$ 442	$ 6
Commercial real estate	**75**	**1**	166	3	269	3
Non-U.S. commercial	**29**	**1**	15	—	28	—
With an allowance recorded						
U.S. commercial	**$ 953**	**$ 48**	$ 1,198	$ 51	$ 1,553	$ 47
Commercial real estate	**216**	**7**	632	16	1,148	28
Non-U.S. commercial	**125**	**7**	52	3	109	5
U.S. small business commercial [1]	**109**	**1**	151	3	236	6
Total						
U.S. commercial	**$ 1,641**	**$ 62**	$ 1,744	$ 63	$ 1,995	$ 53
Commercial real estate	**291**	**8**	798	19	1,417	31
Non-U.S. commercial	**154**	**8**	67	3	137	5
U.S. small business commercial [1]	**109**	**1**	151	3	236	6

[1] Includes U.S. small business commercial renegotiated TDR loans and related allowance.

[2] Interest income recognized includes interest accrued and collected on the outstanding balances of accruing impaired loans as well as interest cash collections on nonaccruing impaired loans for which the principal is considered collectible.

The table below presents the December 31, 2015, 2014 and 2013 unpaid principal balance and carrying value of commercial loans that were modified as TDRs during 2015, 2014 and 2013, and net charge-offs that were recorded during the period in which the modification occurred. The table below includes loans that were initially classified as TDRs during the period and also loans that had previously been classified as TDRs and were modified again during the period.

Commercial – TDRs Entered into During 2015, 2014 and 2013

	December 31, 2015		2015
(Dollars in millions)	Unpaid Principal Balance	Carrying Value	Net Charge-offs
U.S. commercial	$ 853	$ 779	$ 28
Commercial real estate	42	42	—
Non-U.S. commercial	329	326	—
U.S. small business commercial [1]	14	11	3
Total	$ 1,238	$ 1,158	$ 31

	December 31, 2014		2014
U.S. commercial	$ 818	$ 785	$ 49
Commercial real estate	346	346	8
Non-U.S. commercial	44	43	—
U.S. small business commercial [1]	3	3	—
Total	$ 1,211	$ 1,177	$ 57

	December 31, 2013		2013
U.S. commercial	$ 926	$ 910	$ 33
Commercial real estate	483	425	3
Non-U.S. commercial	61	44	7
U.S. small business commercial [1]	8	9	1
Total	$ 1,478	$ 1,388	$ 44

[1] U.S. small business commercial TDRs are comprised of renegotiated small business card loans.

A commercial TDR is generally deemed to be in payment default when the loan is 90 days or more past due, including delinquencies that were not resolved as part of the modification. U.S. small business commercial TDRs are deemed to be in payment default during the quarter in which a borrower misses the second of two consecutive payments. Payment defaults are one of the factors considered when projecting future cash flows, along with observable market prices or fair value of collateral when measuring the allowance for loan and lease losses. TDRs that were in payment default had a carrying value of $105 million, $103 million and $55 million for U.S. commercial and $25 million, $211 million and $128 million for commercial real estate at December 31, 2015, 2014 and 2013, respectively.

Purchased Credit-impaired Loans

PCI loans are acquired loans with evidence of credit quality deterioration since origination for which it is probable at purchase date that the Corporation will be unable to collect all contractually required payments.

The following table shows activity for the accretable yield on PCI loans, which include the Countrywide Financial Corporation (Countrywide) portfolio and loans repurchased in connection with the 2013 settlement with FNMA. The amount of accretable yield is affected by changes in credit outlooks, including metrics such as default rates and loss severities, prepayment speeds, which can change the amount and period of time over which interest payments are expected to be received, and the interest rates on variable rate loans. The reclassifications from nonaccretable difference during 2015 and 2014 were primarily due to lower expected loss rates and a decrease in the forecasted prepayment speeds. Changes in the prepayment assumption affect the expected remaining life of the portfolio which results in a change to the amount of future interest cash flows.

Rollforward of Accretable Yield

(Dollars in millions)	
Accretable yield, January 1, 2014	$ 6,694
Accretion	(1,061)
Disposals/transfers	(506)
Reclassifications from nonaccretable difference	481
Accretable yield, December 31, 2014	5,608
Accretion	**(861)**
Disposals/transfers	**(465)**
Reclassifications from nonaccretable difference	**287**
Accretable yield, December 31, 2015	**$ 4,569**

During 2015, the Corporation sold PCI loans with a carrying value of $1.4 billion, which excludes the related allowance of $234 million. For more information on PCI loans, see *Note 1 – Summary of Significant Accounting Principles*, and for the carrying value and valuation allowance for PCI loans, see *Note 5 – Allowance for Credit Losses*.

Loans Held-for-sale

The Corporation had LHFS of $7.5 billion and $12.8 billion at December 31, 2015 and 2014. Cash and non-cash proceeds from sales and paydowns of loans originally classified as LHFS were $41.2 billion, $40.1 billion and $81.0 billion for 2015, 2014 and 2013, respectively. Cash used for originations and purchases of LHFS totaled $37.9 billion, $39.4 billion and $65.7 billion for 2015, 2014 and 2013, respectively.

NOTE 5 Allowance for Credit Losses

The table below summarizes the changes in the allowance for credit losses by portfolio segment for 2015, 2014 and 2013.

(Dollars in millions)	Consumer Real Estate	Credit Card and Other Consumer	Commercial	Total Allowance
	2015			
Allowance for loan and lease losses, January 1	**$ 5,935**	**$ 4,047**	**$ 4,437**	**$ 14,419**
Loans and leases charged off	**(1,841)**	**(3,620)**	**(644)**	**(6,105)**
Recoveries of loans and leases previously charged off	**732**	**813**	**222**	**1,767**
Net charge-offs	**(1,109)**	**(2,807)**	**(422)**	**(4,338)**
Write-offs of PCI loans	**(808)**	**—**	**—**	**(808)**
Provision for loan and lease losses	**(70)**	**2,278**	**835**	**3,043**
Other [1]	**(34)**	**(47)**	**(1)**	**(82)**
Allowance for loan and lease losses, December 31	**3,914**	**3,471**	**4,849**	**12,234**
Reserve for unfunded lending commitments, January 1	**—**	**—**	**528**	**528**
Provision for unfunded lending commitments	**—**	**—**	**118**	**118**
Reserve for unfunded lending commitments, December 31	**—**	**—**	**646**	**646**
Allowance for credit losses, December 31	**$ 3,914**	**$ 3,471**	**$ 5,495**	**$ 12,880**
	2014			
Allowance for loan and lease losses, January 1	$ 8,518	$ 4,905	$ 4,005	$ 17,428
Loans and leases charged off	(2,219)	(4,149)	(658)	(7,026)
Recoveries of loans and leases previously charged off	1,426	871	346	2,643
Net charge-offs	(793)	(3,278)	(312)	(4,383)
Write-offs of PCI loans	(810)	—	—	(810)
Provision for loan and lease losses	(976)	2,458	749	2,231
Other [1]	(4)	(38)	(5)	(47)
Allowance for loan and lease losses, December 31	5,935	4,047	4,437	14,419
Reserve for unfunded lending commitments, January 1	—	—	484	484
Provision for unfunded lending commitments	—	—	44	44
Reserve for unfunded lending commitments, December 31	—	—	528	528
Allowance for credit losses, December 31	$ 5,935	$ 4,047	$ 4,965	$ 14,947
	2013			
Allowance for loan and lease losses, January 1	$ 14,933	$ 6,140	$ 3,106	$ 24,179
Loans and leases charged off	(3,766)	(5,495)	(1,108)	(10,369)
Recoveries of loans and leases previously charged off	879	1,141	452	2,472
Net charge-offs	(2,887)	(4,354)	(656)	(7,897)
Write-offs of PCI loans	(2,336)	—	—	(2,336)
Provision for loan and lease losses	(1,124)	3,139	1,559	3,574
Other [1]	(68)	(20)	(4)	(92)
Allowance for loan and lease losses, December 31	8,518	4,905	4,005	17,428
Reserve for unfunded lending commitments, January 1	—	—	513	513
Provision for unfunded lending commitments	—	—	(18)	(18)
Other	—	—	(11)	(11)
Reserve for unfunded lending commitments, December 31	—	—	484	484
Allowance for credit losses, December 31	$ 8,518	$ 4,905	$ 4,489	$ 17,912

[1] Primarily represents the net impact of portfolio sales, consolidations and deconsolidations, and foreign currency translation adjustments.

In 2015, 2014 and 2013, for the PCI loan portfolio, the Corporation recorded a provision benefit of $40 million, $31 million and $707 million, respectively. Write-offs in the PCI loan portfolio totaled $808 million, $810 million and $2.3 billion during 2015, 2014 and 2013, respectively. Write-offs included $234 million, $317 million and $414 million associated with the sale of PCI loans during 2015, 2014 and 2013, respectively. Write-offs in 2013 also included certain PCI loans that were ineligible for the National Mortgage Settlement, but had characteristics similar to the eligible loans, and the expectation of future cash proceeds was considered remote. The valuation allowance associated with the PCI loan portfolio was $804 million, $1.7 billion and $2.5 billion at December 31, 2015, 2014 and 2013, respectively.

The table below presents the allowance and the carrying value of outstanding loans and leases by portfolio segment at December 31, 2015 and 2014.

Allowance and Carrying Value by Portfolio Segment

(Dollars in millions)	Consumer Real Estate	Credit Card and Other Consumer	Commercial	Total
	December 31, 2015			
Impaired loans and troubled debt restructurings [1]				
Allowance for loan and lease losses [2]	**$ 634**	**$ 250**	**$ 217**	**$ 1,101**
Carrying value [3]	**21,058**	**779**	**2,368**	**24,205**
Allowance as a percentage of carrying value	**3.01%**	**32.09%**	**9.16%**	**4.55%**
Loans collectively evaluated for impairment				
Allowance for loan and lease losses	**$ 2,476**	**$ 3,221**	**$ 4,632**	**$ 10,329**
Carrying value [3, 4]	**226,116**	**189,660**	**433,379**	**849,155**
Allowance as a percentage of carrying value [4]	**1.10%**	**1.70%**	**1.07%**	**1.22%**
Purchased credit-impaired loans				
Valuation allowance	**$ 804**	**n/a**	**n/a**	**$ 804**
Carrying value gross of valuation allowance	**16,685**	**n/a**	**n/a**	**16,685**
Valuation allowance as a percentage of carrying value	**4.82%**	**n/a**	**n/a**	**4.82%**
Total				
Allowance for loan and lease losses	**$ 3,914**	**$ 3,471**	**$ 4,849**	**$ 12,234**
Carrying value [3, 4]	**263,859**	**190,439**	**435,747**	**890,045**
Allowance as a percentage of carrying value [4]	**1.48%**	**1.82%**	**1.11%**	**1.37%**
	December 31, 2014			
Impaired loans and troubled debt restructurings [1]				
Allowance for loan and lease losses [2]	$ 727	$ 339	$ 159	$ 1,225
Carrying value [3]	25,628	1,141	2,198	28,967
Allowance as a percentage of carrying value	2.84%	29.71%	7.23%	4.23%
Loans collectively evaluated for impairment				
Allowance for loan and lease losses	$ 3,556	$ 3,708	$ 4,278	$ 11,542
Carrying value [3, 4]	255,525	183,430	378,732	817,687
Allowance as a percentage of carrying value [4]	1.39%	2.02%	1.13%	1.41%
Purchased credit-impaired loans				
Valuation allowance	$ 1,652	n/a	n/a	$ 1,652
Carrying value gross of valuation allowance	20,769	n/a	n/a	20,769
Valuation allowance as a percentage of carrying value	7.95%	n/a	n/a	7.95%
Total				
Allowance for loan and lease losses	$ 5,935	$ 4,047	$ 4,437	$ 14,419
Carrying value [3, 4]	301,922	184,571	380,930	867,423
Allowance as a percentage of carrying value [4]	1.97%	2.19%	1.16%	1.66%

[1] Impaired loans include nonperforming commercial loans and all TDRs, including both commercial and consumer TDRs. Impaired loans exclude nonperforming consumer loans unless they are TDRs, and all consumer and commercial loans accounted for under the fair value option.
[2] Allowance for loan and lease losses includes $35 million related to impaired U.S. small business commercial at both December 31, 2015 and 2014.
[3] Amounts are presented gross of the allowance for loan and lease losses.
[4] Outstanding loan and lease balances and ratios do not include loans accounted for under the fair value option of $6.9 billion and $8.7 billion at December 31, 2015 and 2014.
n/a = not applicable

NOTE 6 Securitizations and Other Variable Interest Entities

The Corporation utilizes variable interest entities (VIEs) in the ordinary course of business to support its own and its customers' financing and investing needs. The Corporation routinely securitizes loans and debt securities using VIEs as a source of funding for the Corporation and as a means of transferring the economic risk of the loans or debt securities to third parties. The assets are transferred into a trust or other securitization vehicle such that the assets are legally isolated from the creditors of the Corporation and are not available to satisfy its obligations. These assets can only be used to settle obligations of the trust or other securitization vehicle. The Corporation also administers, structures or invests in other VIEs including CDOs, investment vehicles and other entities. For more information on the Corporation's utilization of VIEs, see *Note 1 – Summary of Significant Accounting Principles*.

The tables in this Note present the assets and liabilities of consolidated and unconsolidated VIEs at December 31, 2015 and 2014, in situations where the Corporation has continuing involvement with transferred assets or if the Corporation otherwise has a variable interest in the VIE. The tables also present the Corporation's maximum loss exposure at December 31, 2015 and 2014 resulting from its involvement with consolidated VIEs and unconsolidated VIEs in which the Corporation holds a variable interest. The Corporation's maximum loss exposure is based on the unlikely event that all of the assets in the VIEs become worthless and incorporates not only potential losses associated with assets recorded on the Consolidated Balance Sheet but also potential losses associated with off-balance sheet commitments such as unfunded liquidity commitments and other contractual arrangements. The Corporation's maximum loss exposure does not include losses previously recognized through write-downs of assets.

The Corporation invests in ABS issued by third-party VIEs with which it has no other form of involvement and enters into certain commercial lending arrangements that may also incorporate the use of VIEs to hold collateral. These securities and loans are included in *Note 3 – Securities* or *Note 4 – Outstanding Loans and Leases*. In addition, the Corporation uses VIEs such as trust preferred securities trusts in connection with its funding activities. For additional information, see *Note 11 – Long-term Debt*. The Corporation uses VIEs, such as cash funds managed within *GWIM*, to provide investment opportunities for clients. These VIEs, which are not consolidated by the Corporation, are not included in the tables in this Note.

Except as described below, the Corporation did not provide financial support to consolidated or unconsolidated VIEs during 2015 or 2014 that it was not previously contractually required to provide, nor does it intend to do so.

First-lien Mortgage Securitizations

First-lien Mortgages

As part of its mortgage banking activities, the Corporation securitizes a portion of the first-lien residential mortgage loans it originates or purchases from third parties, generally in the form of RMBS guaranteed by government-sponsored enterprises, FNMA and FHLMC (collectively the GSEs), or Government National Mortgage Association (GNMA) primarily in the case of FHA-insured and U.S. Department of Veterans Affairs (VA)-guaranteed mortgage loans. Securitization usually occurs in conjunction with or shortly after origination or purchase and the Corporation may also securitize loans held in its residential mortgage portfolio. In addition, the Corporation may, from time to time, securitize commercial mortgages it originates or purchases from other entities. The Corporation typically services the loans it securitizes. Further, the Corporation may retain beneficial interests in the securitization trusts including senior and subordinate securities and equity tranches issued by the trusts. Except as described below and in *Note 7 – Representations and Warranties Obligations and Corporate Guarantees*, the Corporation does not provide guarantees or recourse to the securitization trusts other than standard representations and warranties.

The table below summarizes select information related to first-lien mortgage securitizations for 2015 and 2014.

First-lien Mortgage Securitizations

	Residential Mortgage					
	Agency		Non-agency - Subprime		Commercial Mortgage	
(Dollars in millions)	**2015**	2014	**2015**	2014	**2015**	2014
Cash proceeds from new securitizations [1]	**$ 27,164**	$ 36,905	**$ —**	$ 809	**$ 7,945**	$ 5,710
Gain on securitizations [2]	**894**	371	**—**	49	**49**	68

[1] The Corporation transfers residential mortgage loans to securitizations sponsored by the GSEs or GNMA in the normal course of business and receives RMBS in exchange which may then be sold into the market to third-party investors for cash proceeds.

[2] A majority of the first-lien residential and commercial mortgage loans securitized are initially classified as LHFS and accounted for under the fair value option. Gains recognized on these LHFS prior to securitization, which totaled $750 million and $715 million, net of hedges, during 2015 and 2014, are not included in the table above.

In addition to cash proceeds as reported in the table above, the Corporation received securities with an initial fair value of $22.3 billion and $5.4 billion in connection with first-lien mortgage securitizations in 2015 and 2014. The receipt of these securities represents non-cash operating and investing activities and, accordingly, is not reflected on the Consolidated Statement of Cash Flows. All of these securities were initially classified as Level 2 assets within the fair value hierarchy. During 2015 and 2014, there were no changes to the initial classification.

The Corporation recognizes consumer MSRs from the sale or securitization of first-lien mortgage loans. Servicing fee and ancillary fee income on consumer mortgage loans serviced, including securitizations where the Corporation has continuing involvement, were $1.4 billion and $1.8 billion in 2015 and 2014. Servicing advances on consumer mortgage loans, including securitizations where the Corporation has continuing involvement, were $7.8 billion and $10.4 billion at December 31, 2015 and 2014. The Corporation may have the option to repurchase delinquent loans out of securitization trusts, which reduces the amount of servicing advances it is required to make. During 2015 and 2014, $3.7 billion and $5.2 billion of loans were repurchased from first-lien securitization trusts primarily as a result of loan delinquencies or to perform modifications. The majority of these loans repurchased were FHA-insured mortgages collateralizing

GNMA securities. For more information on MSRs, see *Note 23 – Mortgage Servicing Rights*.

During 2015, the Corporation deconsolidated agency residential mortgage securitization vehicles with total assets of $4.5 billion following the sale of retained interests to third parties, after which the Corporation no longer had the unilateral ability to liquidate the vehicles. Gains on sale of $287 million were recorded in other income in the Consolidated Statement of Income.

The table below summarizes select information related to first-lien mortgage securitization trusts in which the Corporation held a variable interest at December 31, 2015 and 2014.

First-lien Mortgage VIEs

	Residential Mortgage									
			Non-agency							
	Agency		Prime		Subprime		Alt-A		Commercial Mortgage	
	December 31				December 31				December 31	
(Dollars in millions)	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014
Unconsolidated VIEs										
Maximum loss exposure [1]	**$ 28,192**	$ 14,921	**$ 1,027**	$ 1,288	**$ 2,905**	$ 3,167	**$ 622**	$ 710	**$ 326**	$ 352
On-balance sheet assets										
Senior securities held [2]:										
Trading account assets	**$ 1,297**	$ 584	**$ 42**	$ 3	**$ 94**	$ 14	**$ 99**	$ 81	**$ 59**	$ 54
Debt securities carried at fair value	**24,369**	13,473	**613**	816	**2,479**	2,811	**340**	383	**—**	76
Held-to-maturity securities	**2,511**	840	**—**	—	**—**	—	**—**	—	**37**	42
Subordinate securities held [2]:										
Trading account assets	**—**	—	**1**	—	**37**	—	**2**	1	**22**	58
Debt securities carried at fair value	**—**	—	**12**	12	**3**	5	**28**	—	**54**	58
Held-to-maturity securities	**—**	—	**—**	—	**—**	—	**—**	—	**13**	15
Residual interests held	**—**	—	**—**	10	**—**	—	**—**	—	**48**	22
All other assets [3]	**15**	24	**40**	56	**—**	1	**153**	245	**—**	—
Total retained positions	**$ 28,192**	$ 14,921	**$ 708**	$ 897	**$ 2,613**	$ 2,831	**$ 622**	$ 710	**$ 233**	$ 325
Principal balance outstanding [4]	**$ 313,613**	$ 397,055	**$ 16,087**	$ 20,167	**$ 27,854**	$ 32,592	**$ 40,848**	$ 50,054	**$ 34,243**	$ 20,593
Consolidated VIEs										
Maximum loss exposure [1]	**$ 26,878**	$ 38,345	**$ 65**	$ 77	**$ 232**	$ 206	**$ —**	$ —	**$ —**	$ —
On-balance sheet assets										
Trading account assets	**$ 1,101**	$ 1,538	**$ —**	$ —	**$ 188**	$ 30	**$ —**	$ —	**$ —**	$ —
Loans and leases	**25,328**	36,187	**111**	130	**675**	768	**—**	—	**—**	—
Allowance for loan and lease losses	**—**	(2)	**—**	—	**—**	—	**—**	—	**—**	—
All other assets	**449**	623	**—**	6	**54**	15	**—**	—	**—**	—
Total assets	**$ 26,878**	$ 38,346	**$ 111**	$ 136	**$ 917**	$ 813	**$ —**	$ —	**$ —**	$ —
On-balance sheet liabilities										
Long-term debt	**$ —**	$ 1	**$ 46**	$ 56	**$ 840**	$ 770	**$ —**	$ —	**$ —**	$ —
All other liabilities	**1**	—	**—**	3	**—**	13	**—**	—	**—**	—
Total liabilities	**$ 1**	$ 1	**$ 46**	$ 59	**$ 840**	$ 783	**$ —**	$ —	**$ —**	$ —

[1] Maximum loss exposure includes obligations under loss-sharing reinsurance and other arrangements for non-agency residential mortgage and commercial mortgage securitizations, but excludes the liability for representations and warranties obligations and corporate guarantees and also excludes servicing advances and other servicing rights and obligations. For additional information, see *Note 7 – Representations and Warranties Obligations and Corporate Guarantees* and *Note 23 – Mortgage Servicing Rights*.

[2] As a holder of these securities, the Corporation receives scheduled principal and interest payments. During 2015 and 2014, there were no OTTI losses recorded on those securities classified as AFS debt securities.

[3] Not included in the table above are all other assets of $222 million and $635 million, representing the unpaid principal balance of mortgage loans eligible for repurchase from unconsolidated residential mortgage securitization vehicles, principally guaranteed by GNMA, and all other liabilities of $222 million and $635 million, representing the principal amount that would be payable to the securitization vehicles if the Corporation was to exercise the repurchase option, at December 31, 2015 and 2014.

[4] Principal balance outstanding includes loans the Corporation transferred with which it has continuing involvement, which may include servicing the loans.

Other Asset-backed Securitizations

The table below summarizes select information related to home equity loan, credit card and other asset-backed VIEs in which the Corporation held a variable interest at December 31, 2015 and 2014.

Home Equity Loan, Credit Card and Other Asset-backed VIEs

	Home Equity Loan [1]		Credit Card [2, 3]		Resecuritization Trusts		Municipal Bond Trusts		Automobile and Other Securitization Trusts	
	December 31									
(Dollars in millions)	**2015**	2014	**2015**	2014	**2015**	2014	**2015**	2014	**2015**	2014
Unconsolidated VIEs										
Maximum loss exposure	**$ 3,988**	$ 4,801	**$ —**	$ —	**$ 13,046**	$ 8,574	**$ 1,572**	$ 2,100	**$ 63**	$ 77
On-balance sheet assets										
Senior securities held [4, 5]:										
Trading account assets	**$ —**	$ 12	**$ —**	$ —	**$ 1,248**	$ 767	**$ 2**	$ 25	**$ —**	$ 6
Debt securities carried at fair value	**—**	—	**—**	—	**4,341**	6,945	**—**	—	**53**	61
Held-to-maturity securities	**—**	—	**—**	—	**7,370**	745	**—**	—	**—**	—
Subordinate securities held [4, 5]:										
Trading account assets	**—**	2	**—**	—	**17**	44	**—**	—	**—**	—
Debt securities carried at fair value	**57**	39	**—**	—	**70**	73	**—**	—	**—**	—
All other assets	**—**	—	**—**	—	**—**	—	**—**	—	**10**	10
Total retained positions	**$ 57**	$ 53	**$ —**	$ —	**$ 13,046**	$ 8,574	**$ 2**	$ 25	**$ 63**	$ 77
Total assets of VIEs [6]	**$ 5,883**	$ 6,362	**$ —**	$ —	**$ 35,362**	$ 28,065	**$ 2,518**	$ 3,314	**$ 314**	$ 1,276
Consolidated VIEs										
Maximum loss exposure	**$ 231**	$ 991	**$ 32,678**	$ 43,139	**$ 354**	$ 654	**$ 1,973**	$ 2,440	**$ —**	$ 92
On-balance sheet assets										
Trading account assets	**$ —**	$ —	**$ —**	$ —	**$ 771**	$ 1,295	**$ 1,984**	$ 2,452	**$ —**	$ —
Loans and leases	**321**	1,014	**43,194**	53,068	**—**	—	**—**	—	**—**	—
Allowance for loan and lease losses	**(18)**	(56)	**(1,293)**	(1,904)	**—**	—	**—**	—	**—**	—
Loans held-for-sale	**—**	—	**—**	—	**—**	—	**—**	—	**—**	555
All other assets	**20**	33	**342**	392	**—**	—	**1**	—	**—**	54
Total assets	**$ 323**	$ 991	**$ 42,243**	$ 51,556	**$ 771**	$ 1,295	**$ 1,985**	$ 2,452	**$ —**	$ 609
On-balance sheet liabilities										
Short-term borrowings	**$ —**	$ —	**$ —**	$ —	**$ —**	$ —	**$ 681**	$ 1,032	**$ —**	$ —
Long-term debt	**183**	1,076	**9,550**	8,401	**417**	641	**12**	12	**—**	516
All other liabilities	**—**	—	**15**	16	**—**	—	**—**	—	**—**	1
Total liabilities	**$ 183**	$ 1,076	**$ 9,565**	$ 8,417	**$ 417**	$ 641	**$ 693**	$ 1,044	**$ —**	$ 517

[1] For unconsolidated home equity loan VIEs, the maximum loss exposure includes outstanding trust certificates issued by trusts in rapid amortization, net of recorded reserves. For both consolidated and unconsolidated home equity loan VIEs, the maximum loss exposure excludes the liability for representations and warranties obligations and corporate guarantees. For additional information, see *Note 7 – Representations and Warranties Obligations and Corporate Guarantees*.

[2] At December 31, 2015 and 2014, loans and leases in the consolidated credit card trust included $24.7 billion and $36.9 billion of seller's interest.

[3] At December 31, 2015 and 2014, all other assets in the consolidated credit card trust included restricted cash, certain short-term investments, and unbilled accrued interest and fees.

[4] As a holder of these securities, the Corporation receives scheduled principal and interest payments. During 2015 and 2014, there were no OTTI losses recorded on those securities classified as AFS or HTM debt securities.

[5] The retained senior and subordinate securities were valued using quoted market prices or observable market inputs (Level 2 of the fair value hierarchy).

[6] Total assets include loans the Corporation transferred with which it has continuing involvement, which may include servicing the loan.

Home Equity Loans

The Corporation retains interests in home equity securitization trusts to which it transferred home equity loans. These retained interests include senior and subordinate securities and residual interests. In addition, the Corporation may be obligated to provide subordinate funding to the trusts during a rapid amortization event. The Corporation typically services the loans in the trusts. Except as described below and in *Note 7 – Representations and Warranties Obligations and Corporate Guarantees*, the Corporation does not provide guarantees or recourse to the securitization trusts other than standard representations and warranties. There were no securitizations of home equity loans during 2015 and 2014, and all of the home equity trusts that hold revolving home equity lines of credit (HELOCs) have entered the rapid amortization phase.

The maximum loss exposure in the table above includes the Corporation's obligation to provide subordinate funding to the consolidated and unconsolidated home equity loan securitizations that have entered a rapid amortization phase. During this period, cash payments from borrowers are accumulated to repay outstanding debt securities and the Corporation continues to make advances to borrowers when they draw on their lines of credit. At December 31, 2015 and 2014, home equity loan securitizations in rapid amortization for which the Corporation has a subordinate funding obligation, including both consolidated and unconsolidated trusts, had $4.0 billion and $5.8 billion of trust certificates outstanding. This amount is significantly greater than the amount the Corporation expects to fund. The charges that will ultimately be recorded as a result of the rapid amortization events depend on the undrawn available credit on the home equity lines, which totaled $7 million and $39 million at December 31, 2015 and 2014, as well as performance of the loans, the amount of subsequent draws and the timing of related cash flows.

During 2015, the Corporation deconsolidated several home equity line of credit trusts with total assets of $488 million and total liabilities of $611 million as its obligation to provide subordinated funding is no longer considered to be a potentially significant variable interest in the trusts following a decline in the amount of credit available to be drawn by borrowers. In connection with deconsolidation, the Corporation recorded a gain of $123 million in other income in the Consolidated Statement of Income. The derecognition of assets and liabilities represents non-cash investing and financing activities and, accordingly, is not reflected on the Consolidated Statement of Cash Flows.

Credit Card Securitizations

The Corporation securitizes originated and purchased credit card loans. The Corporation's continuing involvement with the securitization trust includes servicing the receivables, retaining an undivided interest (seller's interest) in the receivables, and holding certain retained interests including senior and subordinate securities, subordinate interests in accrued interest and fees on the securitized receivables, and cash reserve accounts. The seller's interest in the trust, which is pari passu to the investors' interest, is classified in loans and leases.

During 2015, $2.3 billion of new senior debt securities were issued to third-party investors from the credit card securitization trust compared to $4.1 billion issued during 2014.

The Corporation held subordinate securities issued by the credit card securitization trust with a notional principal amount of $7.5 billion and $7.4 billion at December 31, 2015 and 2014. These securities serve as a form of credit enhancement to the senior debt securities and have a stated interest rate of zero percent. There were $371 million of these subordinate securities issued during 2015 and $662 million issued during 2014.

Resecuritization Trusts

The Corporation transfers existing securities, typically MBS, into resecuritization vehicles at the request of customers seeking securities with specific characteristics. The Corporation may also resecuritize securities within its investment portfolio for purposes of improving liquidity and capital, and managing credit or interest rate risk. Generally, there are no significant ongoing activities performed in a resecuritization trust and no single investor has the unilateral ability to liquidate the trust.

The Corporation resecuritized $30.7 billion and $14.4 billion of securities in 2015 and 2014. Resecuritizations in 2014 included $1.5 billion of AFS debt securities, and gains on sale of $85 million were recorded. There were no resecuritizations of AFS debt securities during 2015. Other securities transferred into resecuritization vehicles during 2015 and 2014 were measured at fair value with changes in fair value recorded in trading account profits or other income prior to the resecuritization and no gain or loss on sale was recorded. Resecuritization proceeds included securities with an initial fair value of $9.8 billion and $4.6 billion, including $6.9 billion and $747 million which were subsequently classified as HTM during 2015 and 2014. All of these securities were classified as Level 2 within the fair value hierarchy.

Municipal Bond Trusts

The Corporation administers municipal bond trusts that hold highly-rated, long-term, fixed-rate municipal bonds. The trusts obtain financing by issuing floating-rate trust certificates that reprice on a weekly or other short-term basis to third-party investors. The Corporation may transfer assets into the trusts and may also serve as remarketing agent and/or liquidity provider for the trusts. The floating-rate investors have the right to tender the certificates at specified dates. Should the Corporation be unable to remarket the tendered certificates, it may be obligated to purchase them at par under standby liquidity facilities. The Corporation also provides credit enhancement to investors in certain municipal bond trusts whereby the Corporation guarantees the payment of interest and principal on floating-rate certificates issued by these trusts in the event of default by the issuer of the underlying municipal bond.

The Corporation's liquidity commitments to unconsolidated municipal bond trusts, including those for which the Corporation was transferor, totaled $1.6 billion and $2.1 billion at December 31, 2015 and 2014. The weighted-average remaining life of bonds held in the trusts at December 31, 2015 was 7.4 years. There were no material write-downs or downgrades of assets or issuers during 2015 and 2014.

Automobile and Other Securitization Trusts

The Corporation transfers automobile and other loans into securitization trusts, typically to improve liquidity or manage credit risk. At December 31, 2015 and 2014, the Corporation serviced assets or otherwise had continuing involvement with automobile and other securitization trusts with outstanding balances of $314 million and $1.9 billion, including trusts collateralized by automobile loans of $125 million and $400 million, other loans of $189 million and $876 million, and student loans of $0 and $609 million.

During 2015, the Corporation deconsolidated a student loan trust with total assets of $515 million and total liabilities of $449 million following the transfer of servicing and sale of retained interests to third parties. No gain or loss was recorded as a result of the deconsolidation. The derecognition of assets and liabilities represents non-cash investing and financing activities and, accordingly, is not reflected on the Consolidated Statement of Cash Flows.

Other Variable Interest Entities

The table below summarizes select information related to other VIEs in which the Corporation held a variable interest at December 31, 2015 and 2014.

Other VIEs

	December 31					
	2015			2014		
(Dollars in millions)	Consolidated	Unconsolidated	Total	Consolidated	Unconsolidated	Total
Maximum loss exposure	**$ 6,295**	**$ 12,916**	**$ 19,211**	$ 7,981	$ 12,391	$ 20,372
On-balance sheet assets						
Trading account assets	**$ 2,300**	**$ 366**	**$ 2,666**	$ 1,575	$ 355	$ 1,930
Debt securities carried at fair value	**—**	**126**	**126**	—	483	483
Loans and leases	**3,317**	**3,389**	**6,706**	4,020	2,693	6,713
Allowance for loan and lease losses	**(9)**	**(23)**	**(32)**	(6)	—	(6)
Loans held-for-sale	**284**	**1,025**	**1,309**	1,267	814	2,081
All other assets	**664**	**6,925**	**7,589**	1,646	6,658	8,304
Total	**$ 6,556**	**$ 11,808**	**$ 18,364**	$ 8,502	$ 11,003	$ 19,505
On-balance sheet liabilities						
Long-term debt [1]	**$ 3,025**	**$ —**	**$ 3,025**	$ 1,834	$ —	$ 1,834
All other liabilities	**5**	**2,697**	**2,702**	105	2,643	2,748
Total	**$ 3,030**	**$ 2,697**	**$ 5,727**	$ 1,939	$ 2,643	$ 4,582
Total assets of VIEs	**$ 6,556**	**$ 49,190**	**$ 55,746**	$ 8,502	$ 50,366	$ 58,868

[1] Includes $2.8 billion and $1.4 billion of long-term debt at December 31, 2015 and 2014 issued by other consolidated VIEs, which has recourse to the general credit of the Corporation.

During 2015, the Corporation consolidated certain customer vehicles after redeeming long-term debt owed to the vehicles and acquiring a controlling financial interest in the vehicles. The Corporation also deconsolidated certain investment vehicles following the sale or disposition of variable interests. These actions resulted in a net decrease in long-term debt of $1.2 billion which represents a non-cash financing activity and, accordingly, is not reflected on the Consolidated Statement of Cash Flows. No gain or loss was recorded as a result of the consolidation or deconsolidation of these VIEs.

Customer Vehicles

Customer vehicles include credit-linked, equity-linked and commodity-linked note vehicles, repackaging vehicles, and asset acquisition vehicles, which are typically created on behalf of customers who wish to obtain market or credit exposure to a specific company, index, commodity or financial instrument. The Corporation may transfer assets to and invest in securities issued by these vehicles. The Corporation typically enters into credit, equity, interest rate, commodity or foreign currency derivatives to synthetically create or alter the investment profile of the issued securities.

The Corporation's maximum loss exposure to consolidated and unconsolidated customer vehicles totaled $3.9 billion and $4.7 billion at December 31, 2015 and 2014, including the notional amount of derivatives to which the Corporation is a counterparty, net of losses previously recorded, and the Corporation's investment, if any, in securities issued by the vehicles. The maximum loss exposure has not been reduced to reflect the benefit of offsetting swaps with the customers or collateral arrangements. The Corporation also had liquidity commitments, including written put options and collateral value guarantees, with certain unconsolidated vehicles of $691 million and $658 million at December 31, 2015 and 2014, that are included in the table above.

Collateralized Debt Obligation Vehicles

The Corporation receives fees for structuring CDO vehicles, which hold diversified pools of fixed-income securities, typically corporate debt or ABS, which the CDO vehicles fund by issuing multiple tranches of debt and equity securities. Synthetic CDOs enter into a portfolio of CDS to synthetically create exposure to fixed-income securities. CLOs, which are a subset of CDOs, hold pools of loans, typically corporate loans. CDOs are typically managed by third-party portfolio managers. The Corporation typically transfers assets to these CDOs, holds securities issued by the CDOs and may be a derivative counterparty to the CDOs, including a CDS counterparty for synthetic CDOs. The Corporation has also entered into total return swaps with certain CDOs whereby the Corporation absorbs the economic returns generated by specified assets held by the CDO.

The Corporation's maximum loss exposure to consolidated and unconsolidated CDOs totaled $543 million and $780 million at December 31, 2015 and 2014. This exposure is calculated on a gross basis and does not reflect any benefit from insurance purchased from third parties.

At December 31, 2015, the Corporation had $922 million of aggregate liquidity exposure, included in the Other VIEs table net of previously recorded losses, to unconsolidated CDOs which hold senior CDO debt securities or other debt securities on the Corporation's behalf. For additional information, see *Note 12 – Commitments and Contingencies*.

Investment Vehicles

The Corporation sponsors, invests in or provides financing, which may be in connection with the sale of assets, to a variety of investment vehicles that hold loans, real estate, debt securities or other financial instruments and are designed to provide the desired investment profile to investors or the Corporation. At December 31, 2015 and 2014, the Corporation's consolidated investment vehicles had total assets of $397 million and $1.1 billion. The Corporation also held investments in unconsolidated vehicles with total assets of $14.7 billion and $11.2 billion at December 31, 2015 and 2014. The Corporation's maximum loss exposure associated with both consolidated and unconsolidated investment vehicles totaled $5.1 billion at both December 31, 2015 and 2014 comprised primarily of on-balance sheet assets less non-recourse liabilities.

The Corporation transferred servicing advance receivables to independent third parties in connection with the sale of MSRs. Portions of the receivables were transferred into unconsolidated securitization trusts. The Corporation retained senior interests in such receivables with a maximum loss exposure and funding obligation of $150 million and $660 million, including a funded balance of $122 million and $431 million at December 31, 2015 and 2014, which were classified in other debt securities carried at fair value.

Leveraged Lease Trusts

The Corporation's net investment in consolidated leveraged lease trusts totaled $2.8 billion and $3.3 billion at December 31, 2015 and 2014. The trusts hold long-lived equipment such as rail cars, power generation and distribution equipment, and commercial aircraft. The Corporation structures the trusts and holds a significant residual interest. The net investment represents the Corporation's maximum loss exposure to the trusts in the unlikely event that the leveraged lease investments become worthless. Debt issued by the leveraged lease trusts is non-recourse to the Corporation.

Real Estate Vehicles

The Corporation held investments in unconsolidated real estate vehicles with total assets of $6.6 billion and $6.2 billion at December 31, 2015 and 2014, which primarily consisted of investments in unconsolidated limited partnerships that construct, own and operate affordable rental housing and commercial real estate projects. An unrelated third party is typically the general partner and has control over the significant activities of the partnership. The Corporation earns a return primarily through the receipt of tax credits allocated to the real estate projects. The Corporation's risk of loss is mitigated by policies requiring that the project qualify for the expected tax credits prior to making its investment. The Corporation may from time to time be asked to invest additional amounts to support a troubled project. Such additional investments have not been and are not expected to be significant.

NOTE 7 Representations and Warranties Obligations and Corporate Guarantees

Background

The Corporation securitizes first-lien residential mortgage loans generally in the form of RMBS guaranteed by the GSEs or by GNMA in the case of FHA-insured, VA-guaranteed and Rural Housing Service-guaranteed mortgage loans, and sells pools of first-lien residential mortgage loans in the form of whole loans. In addition, in prior years, legacy companies and certain subsidiaries sold pools of first-lien residential mortgage loans and home equity loans as private-label securitizations (in certain of these securitizations, monoline insurers or other financial guarantee providers insured all or some of the securities) or in the form of whole loans. In connection with these transactions, the Corporation or certain of its subsidiaries or legacy companies made various representations and warranties. These representations and warranties, as set forth in the agreements, related to, among other things, the ownership of the loan, the validity of the lien securing the loan, the absence of delinquent taxes or liens against the property securing the loan, the process used to select the loan for inclusion in a transaction, the loan's compliance with any applicable loan criteria, including underwriting standards, and the loan's compliance with applicable federal, state and local laws. 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 the GSEs, U.S. Department of Housing and Urban Development (HUD) with respect to FHA-insured loans, VA, whole-loan investors, securitization trusts, monoline insurers or other financial guarantors as applicable (collectively, repurchases). In all such cases, subsequent to repurchasing the loan, the Corporation would be exposed to any credit loss on the repurchased mortgage loans after accounting for any mortgage insurance (MI) or mortgage guarantee payments that it may receive.

The liability for representations and warranties exposures and the corresponding estimated range of possible loss are based upon currently available information, significant judgment, and a number of factors and assumptions, including those discussed in Liability for Representations and Warranties and Corporate Guarantees in this Note, that are subject to change. Changes to any one of these factors could significantly impact the liability for representations and warranties exposures and the corresponding estimated range of possible loss and could have a material adverse impact on the Corporation's results of operations for any particular period. Given that these factors vary by counterparty, the Corporation analyzes representations and warranties obligations based on the specific counterparty, or type of counterparty, with whom the sale was made.

Settlement Actions

The Corporation has vigorously contested any request for repurchase where it has concluded that a valid basis for repurchase does not exist and will continue to do so in the future. However, in an effort to resolve legacy mortgage-related issues, the Corporation has reached bulk settlements, including various settlements with the GSEs, and including settlement amounts which have been significant, with counterparties in lieu of a loan-by-loan review process. These bulk settlements generally did not cover all transactions with the relevant counterparties or all potential claims that may arise, including in some instances securities law, fraud and servicing claims, which may be addressed separately. The Corporation's liability in connection with the transactions and claims not covered by these settlements could be material to the Corporation's results of operations or liquidity for any particular reporting period. The Corporation may reach other settlements in the future if opportunities arise on terms it believes to be advantageous. However, there can be no assurance that the Corporation will reach future settlements or, if it does, that the terms of past settlements can be relied upon to predict the terms of future settlements. The following provides a summary of the settlement with The Bank of New York Mellon (BNY Mellon); the conditions of the settlement have now been fully satisfied.

Settlement with the Bank of New York Mellon, as Trustee

On April 22, 2015, the New York County Supreme Court entered final judgment approving the BNY Mellon Settlement. In October 2015, BNY Mellon obtained certain state tax opinions and an IRS private letter ruling confirming that the settlement will not impact the real estate mortgage investment conduit tax status of the trusts. The final conditions of the settlement have been satisfied and, accordingly, the Corporation made the settlement payment to BNY Mellon of $8.5 billion in February 2016. Pursuant to the settlement agreement, allocation and distribution of the $8.5 billion settlement payment is the responsibility of the RMBS trustee, BNY Mellon. On February 5, 2016, BNY Mellon filed an Article 77 proceeding in the New York County Supreme Court asking the court for instruction with respect to certain issues concerning the distribution of each trust's allocable share of the settlement payment and asking that the settlement payment be ordered to be held in escrow pending the outcome of this Article 77 proceeding. The Corporation is not a party to this proceeding.

Unresolved Repurchase Claims

Unresolved representations and warranties repurchase claims represent the notional amount of repurchase claims made by counterparties, typically the outstanding principal balance or the unpaid principal balance at the time of default. In the case of first-lien mortgages, the claim amount is often significantly greater than the expected loss amount due to the benefit of collateral and, in some cases, MI or mortgage guarantee payments. Claims received from a counterparty remain outstanding until the underlying loan is repurchased, the claim is rescinded by the counterparty, the Corporation determines that the applicable statute of limitations has expired, or representations and warranties claims with respect to the applicable trust are settled, and fully and finally released. When a claim is denied and the Corporation does not receive a response from the counterparty, the claim remains in the unresolved repurchase claims balance until resolution in one of the ways described above. Certain of the claims that have been received are duplicate claims which represent more than one claim outstanding related to a particular loan, typically as the result of bulk claims submitted without individual file reviews.

The table below presents unresolved repurchase claims at December 31, 2015 and 2014. The unresolved repurchase claims include only claims where the Corporation believes that the counterparty has the contractual right to submit claims. The unresolved repurchase claims predominantly relate to subprime and pay option first-lien loans and home equity loans. For additional information, see Private-label Securitizations and Whole-loan Sales Experience in this Note and *Note 12 – Commitments and Contingencies*.

Unresolved Repurchase Claims by Counterparty, net of duplicate claims

	December 31	
(Dollars in millions)	**2015**	2014 [1]
By counterparty		
Private-label securitization trustees, whole-loan investors, including third-party securitization sponsors and other [2, 3]	**$ 16,748**	$ 21,276
Monolines [4]	**1,599**	1,511
GSEs	**17**	59
Total unresolved repurchase claims by counterparty, net of duplicate claims	**$ 18,364**	$ 22,846

(1) The December 31, 2014 amounts have been updated to reflect additional claims submitted in the fourth quarter of 2014 from a single monoline, currently pursuing litigation, and addressed by the Corporation in 2015 pursuant to an existing litigation schedule. For more information on bond insurance litigation, see *Note 12 – Commitments and Contingencies*.

(2) Includes $11.9 billion and $13.8 billion of claims based on individual file reviews and $4.8 billion and $7.5 billion of claims submitted without individual file reviews at December 31, 2015 and 2014.

(3) The total notional amount of unresolved repurchase claims does not include repurchase claims related to the trusts covered by the BNY Mellon Settlement.

(4) At December 31, 2015, substantially all of the unresolved monoline claims are currently the subject of litigation with a single monoline insurer and predominately pertain to second-lien loans.

During 2015, the Corporation received $3.7 billion in new repurchase claims including $2.9 billion of claims submitted without individual loan file reviews. During 2015, $8.1 billion in claims were resolved, including $7.4 billion which are deemed resolved as a result of the New York Court of Appeals decision in *Ace Securities Corp. v. DB Structure Products, Inc.* (ACE). Of the remaining unresolved monoline claims, substantially all of the claims pertain to second-lien loans and are currently the subject of litigation with a single monoline insurer. There may be additional claims or file requests in the future.

In addition to the unresolved repurchase claims in the Unresolved Repurchase Claims by Counterparty, net of duplicate claims table, the Corporation has received notifications from sponsors of third-party securitizations with whom the Corporation engaged in whole-loan transactions indicating that the Corporation may have indemnity obligations with respect to loans for which the Corporation has not received a repurchase request. These outstanding notifications totaled $1.4 billion and $2.0 billion at December 31, 2015 and 2014.

The Corporation also from time to time receives correspondence purporting to raise representations and warranties breach issues from entities that do not have contractual standing or ability to bring such claims. The Corporation believes such communications to be procedurally and/or substantively invalid, and generally does not respond.

The presence of repurchase claims on a given trust, receipt of notices of indemnification obligations and receipt of other communications, as discussed above, are all factors that inform the Corporation's liability for representations and warranties and the corresponding estimated range of possible loss.

Government-sponsored Enterprises Experience

As a result of various bulk settlements with the GSEs, the Corporation has resolved substantially all outstanding and potential representations and warranties repurchase claims on whole loans sold by legacy Bank of America and Countrywide to FNMA and FHLMC through June 30, 2012 and December 31, 2009, respectively. As of December 31, 2015, the notional amount of unresolved repurchase claims submitted by the GSEs was $14 million for loans originated prior to 2009.

Private-label Securitizations and Whole-loan Sales Experience

Prior to 2009, legacy companies and certain subsidiaries sold pools of first-lien residential mortgage loans and home equity loans as private-label securitizations or in the form of whole loans. In connection with these transactions, the Corporation or certain of its subsidiaries or legacy companies made various representations and warranties. When the Corporation provided representations and warranties in connection with the sale of whole loans, the whole-loan investors may retain the right to make repurchase claims even when the loans were aggregated with other collateral into private-label securitizations sponsored by the whole-loan investors. In other third-party securitizations, the whole-loan investors' rights to enforce the representations and warranties were transferred to the securitization trustees. Private-label securitization investors generally do not have the contractual right to demand repurchase of loans directly or the right to access loan files directly.

In private-label securitizations, the applicable contracts provide that investors meet certain presentation thresholds to issue a binding direction to a trustee to assert repurchase claims. However, in certain circumstances, the Corporation believes that trustees have presented repurchase claims without requiring investors to meet contractual voting rights thresholds. New private-label claims are primarily related to repurchase requests received from trustees for private-label securitization transactions not included in the BNY Mellon Settlement.

On June 11, 2015, the New York Court of Appeals, New York's highest appellate court, issued its opinion in the ACE case, holding that, under New York law the six-year statute of limitations starts to run at the time the representations and warranties are made, not the date when the repurchase demand was denied. In addition, the Court of Appeals held that compliance with the contractual notice and cure period was a pre-condition to filing suit, and claims that did not comply with such contractual requirements prior to the expiration of the statute of limitations period were invalid. While no entity affiliated with the Corporation was a party to this litigation, the vast majority of the private-label RMBS trusts into which entities affiliated with the Corporation sold loans and made representations and warranties are governed by New York law, and the ACE decision should therefore apply to representations and warranties claims and litigation brought on those RMBS trusts. A significant number of representations and warranties claims and lawsuits brought against the Corporation have involved claims where the statute of limitations has expired under the ACE decision and are therefore time-barred. The Corporation treats time-barred claims as resolved and no longer outstanding; however, while post-ACE case law is in early stages, investors or trustees have sought to distinguish certain aspects of the ACE decision or to assert other claims against other RMBS counterparties seeking to avoid or circumvent the impact of the ACE decision. For example,

institutional investors have filed lawsuits against trustees based upon alleged contractual, statutory and tort theories of liability and alleging failure to pursue representations and warranties claims and servicer defaults. The potential impact on the Corporation, if any, of such alternative legal theories or assertions, judicial limitations on the ACE decision, or claims seeking to distinguish or avoid the ACE decision is unclear at this time. For more information on repurchase demands, see Unresolved Repurchase Claims in this Note.

The private-label securitization agreements generally require that counterparties have the ability to both assert a representations and warranties claim and to actually prove that a loan has an actionable defect under the applicable contracts. While the Corporation believes the agreements for private-label securitizations generally contain less rigorous representations and warranties and place higher burdens on claimants seeking repurchases than the express provisions of comparable agreements with the GSEs, the agreements generally include a representation that underwriting practices were prudent and customary. In the case of private-label securitization trustees and third-party sponsors, there is currently no established process in place for the parties to reach a conclusion on an individual loan if there is a disagreement on the resolution of the claim. Private-label securitization investors generally do not have the contractual right to demand repurchase of loans directly or the right to access loan files directly. For more information on repurchase demands, see Unresolved Repurchase Claims in this Note.

At December 31, 2015 and 2014, for loans originated between 2004 and 2008, the notional amount of unresolved repurchase claims, net of duplicated claims, submitted by private-label securitization trustees, whole-loan investors, including third-party securitization sponsors, and others was $16.7 billion and $21.2 billion. These repurchase claims at December 31, 2015 exclude claims in the amount of $7.4 billion where the statute of limitations has expired without litigation being commenced. At December 31, 2014, time-barred claims of $5.2 billion were included in unresolved repurchase claims. The notional amount of unresolved repurchase claims at both December 31, 2015 and 2014 includes $3.5 billion of claims related to loans in specific private-label securitization groups or tranches where the Corporation owns substantially all of the outstanding securities.

The overall decrease in the notional amount of outstanding unresolved repurchase claims in 2015 is primarily due to the impact of time-barred claims under the ACE decision, partially offset by new claims from private-label securitization trustees. 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, claims resolution and (2) the lack of an established process to resolve disputes related to these claims.

The Corporation reviews properly presented repurchase claims on a loan-by-loan basis. Claims that are time-barred are treated as resolved. If, after the Corporation's review of timely claims, it does not believe a claim is valid, it will deny the claim and generally indicate a reason for the denial. When the counterparty agrees with the Corporation's denial of the claim, the counterparty may rescind the claim. When there is disagreement as to the resolution of the claim, meaningful dialogue and negotiation between the parties are generally necessary to reach a resolution on an individual claim. When a claim has been denied and the Corporation does not hear from the counterparty for six months, the Corporation views these claims as inactive; however, they remain in the outstanding claims balance until resolution in one of the manners described above. In the case of private-label securitization trustees and third-party sponsors, there is currently no established process in place for the parties to reach a conclusion on an individual loan if there is a disagreement on the resolution of the claim. The Corporation has performed an initial review with respect to substantially all of these claims and, although the Corporation does not believe a valid basis for repurchase has been established by the claimant, it considers such claims activity in the computation of its liability for representations and warranties.

Monoline Insurers Experience

During 2015, the Corporation had limited loan-level representations and warranties repurchase claims experience with the monoline insurers due to settlements with several monoline insurers and ongoing litigation with a single monoline insurer. To the extent the Corporation received repurchase claims from the monolines that were properly presented, it generally reviewed them on a loan-by-loan basis. Where the Corporation agrees that there has been a breach of representations and warranties given by the Corporation or subsidiaries or legacy companies that meets contractual requirements for repurchase, settlement is generally reached as to that loan within 60 to 90 days. For more information related to the monolines, see *Note 12 – Commitments and Contingencies*.

Liability for Representations and Warranties and Corporate Guarantees

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. The liability for representations and warranties is established when those obligations are both probable and reasonably estimable.

The Corporation's representations and warranties liability and the corresponding estimated range of possible loss at December 31, 2015 considers, among other things, implied repurchase experience based on the BNY Mellon Settlement, adjusted to reflect differences between the trusts covered by the settlement and the remainder of the population of private-label securitizations where the statute of limitations for representations and warranties claims has not expired. Since the securitization trusts that were included in the BNY Mellon Settlement differ from those that were not included in the BNY Mellon Settlement, the Corporation adjusted the repurchase experience implied in the settlement in order to determine the representations and warranties liability and the corresponding estimated range of possible loss.

The table below presents a rollforward of the liability for representations and warranties and corporate guarantees.

Representations and Warranties and Corporate Guarantees

(Dollars in millions)	2015	2014
Liability for representations and warranties and corporate guarantees, January 1	**$ 12,081**	$ 13,282
Additions for new sales	**6**	8
Net reductions	**(722)**	(1,892)
Provision (benefit)	**(39)**	683
Liability for representations and warranties and corporate guarantees, December 31 [1]	**$ 11,326**	$ 12,081

[1] In February 2016, the Corporation made an $8.5 billion settlement payment to BNY Mellon as part of the BNY Mellon Settlement.

The representations and warranties liability represents the Corporation's estimate of probable incurred losses as of December 31, 2015. However, it is reasonably possible that future representations and warranties losses may occur in excess of the amounts recorded for these exposures.

Estimated Range of Possible Loss

The Corporation currently estimates that the range of possible loss for representations and warranties exposures could be up to $2 billion over existing accruals at December 31, 2015. The Corporation treats claims that are time-barred as resolved and does not consider such claims in the estimated range of possible loss. The estimated range of possible loss reflects principally exposures related to loans in private-label securitization trusts. It 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.

The liability for representations and warranties exposures and the corresponding estimated range of possible loss do not consider certain losses related to servicing (except as such losses are included as potential costs of the BNY Mellon Settlement), including foreclosure and related costs, fraud, indemnity, or claims (including for RMBS) related to securities law or monoline insurance litigation. Losses with respect to one or more of these matters could be material to the Corporation's results of operations or liquidity for any particular reporting period.

Future provisions and/or ranges of possible loss for representations and warranties may be significantly impacted if actual experiences are different from the Corporation's assumptions in predictive models, including, without limitation, the actual repurchase rates on loans in trusts not settled as part of the BNY Mellon settlement which may be different than the implied repurchase experience, estimated MI rescission rates, economic conditions, estimated home prices, consumer and counterparty behavior, the applicable statute of limitations, potential indemnity obligations to third parties to whom the Corporation has sold loans subject to representations and warranties and a variety of other judgmental factors. 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 could result in significant increases to future provisions and/or the estimated range of possible loss.

Cash Payments

During 2015 and 2014, excluding amounts paid in bulk settlements, the Corporation made loan repurchases and indemnification payments totaling $229 million and $496 million, respectively for first-lien and home equity loan repurchases and indemnification payments to reimburse investors or securitization trusts. The payments resulted in realized losses of $128 million and $334 million in 2015 and 2014 on unpaid principal amounts of $587 million and $857 million, respectively.

In February 2016, the Corporation made an $8.5 billion settlement payment to BNY Mellon as part of the BNY Mellon Settlement.

NOTE 8 Goodwill and Intangible Assets

Goodwill

The table below presents goodwill balances by business segment at December 31, 2015 and 2014. The reporting units utilized for goodwill impairment testing are the operating segments or one level below.

Goodwill

(Dollars in millions)	December 31 2015	2014
Consumer Banking	**$ 30,123**	$ 30,123
Global Wealth & Investment Management	**9,698**	9,698
Global Banking	**23,923**	23,923
Global Markets	**5,197**	5,197
All Other	**820**	836
Total goodwill	**$ 69,761**	$ 69,777

For purposes of goodwill impairment testing, the Corporation utilizes allocated equity as a proxy for the carrying value of its reporting units. Allocated equity in the reporting units is comprised of allocated capital plus capital for the portion of goodwill and intangibles specifically assigned to the reporting unit. The goodwill impairment test involves comparing the fair value of each reporting unit to its carrying value, including goodwill, as measured by allocated equity.

Annual Impairment Tests

The Corporation completed its annual goodwill impairment tests as of June 30, 2015 and 2014 for all applicable reporting units. Based on the results of the annual goodwill impairment test, the Corporation determined there was no impairment.

Effective January 1, 2015, the Corporation changed its basis of presentation related to its business segments. The realignment triggered a test for goodwill impairment, which was performed both immediately before and after the realignment. The fair value of the affected reporting units exceeded their carrying value and, accordingly, no goodwill impairment resulted from the realignment.

Intangible Assets

The table below presents the gross and net carrying values and accumulated amortization for intangible assets at December 31, 2015 and 2014.

Intangible Assets (1, 2)

	December 31					
	2015			2014		
(Dollars in millions)	Gross Carrying Value	Accumulated Amortization	Net Carrying Value	Gross Carrying Value	Accumulated Amortization	Net Carrying Value
Purchased credit card relationships	**$ 5,450**	**$ 4,755**	**$ 695**	$ 5,504	$ 4,527	$ 977
Core deposit intangibles	**1,779**	**1,505**	**274**	1,779	1,382	397
Customer relationships	**3,927**	**2,990**	**937**	4,025	2,648	1,377
Affinity relationships	**1,556**	**1,356**	**200**	1,565	1,283	282
Other intangibles (3)	**2,143**	**481**	**1,662**	2,045	466	1,579
Total intangible assets	**$ 14,855**	**$ 11,087**	**$ 3,768**	$ 14,918	$ 10,306	$ 4,612

(1) Excludes fully amortized intangible assets.
(2) At December 31, 2015 and 2014, none of the intangible assets were impaired.
(3) Includes intangible assets associated with trade names that have an indefinite life and, accordingly, are not amortized.

The tables below present intangible asset amortization expense for 2015, 2014 and 2013, and estimated future intangible asset amortization expense as of December 31, 2015.

Amortization Expense

(Dollars in millions)	2015	2014	2013
Purchased credit card and affinity relationships	**$ 356**	$ 415	$ 475
Core deposit intangibles	**122**	140	197
Customer relationships	**340**	355	371
Other intangibles	**16**	26	43
Total amortization expense	**$ 834**	$ 936	$ 1,086

Estimated Future Amortization Expense

(Dollars in millions)	2016	2017	2018	2019	2020
Purchased credit card and affinity relationships	$ 298	$ 237	$ 179	$ 121	$ 60
Core deposit intangibles	104	90	80	—	—
Customer relationships	325	310	302	—	—
Other intangibles	10	6	4	2	—
Total estimated future amortization expense	**$ 737**	**$ 643**	**$ 565**	**$ 123**	**$ 60**

NOTE 9 Deposits

The Corporation had U.S. certificates of deposit and other U.S. time deposits of $100 thousand or more totaling $28.3 billion and $32.4 billion at December 31, 2015 and 2014. Non-U.S. certificates of deposit and other non-U.S. time deposits of $100 thousand or more totaled $14.1 billion and $14.0 billion at December 31, 2015 and 2014. The Corporation also had aggregate time deposits of $14.2 billion in denominations that met or exceeded the Federal Deposit Insurance Corporation (FDIC) insurance limit at December 31, 2015. The table below presents the contractual maturities for time deposits of $100 thousand or more at December 31, 2015.

Time Deposits of $100 Thousand or More

(Dollars in millions)	Three Months or Less	Over Three Months to Twelve Months	Thereafter	Total
U.S. certificates of deposit and other time deposits	$ 12,836	$ 12,834	$ 2,677	**$ 28,347**
Non-U.S. certificates of deposit and other time deposits	12,352	1,517	277	**14,146**

The scheduled contractual maturities for total time deposits at December 31, 2015 are presented in the table below.

Contractual Maturities of Total Time Deposits

(Dollars in millions)	U.S.	Non-U.S.	Total
Due in 2016	$ 51,319	$ 14,248	**$ 65,567**
Due in 2017	4,166	103	**4,269**
Due in 2018	937	1	**938**
Due in 2019	874	5	**879**
Due in 2020	1,380	258	**1,638**
Thereafter	683	—	**683**
Total time deposits	$ 59,359	$ 14,615	**$ 73,974**

NOTE 10 Federal Funds Sold or Purchased, Securities Financing Agreements and Short-term Borrowings

The table below presents federal funds sold or purchased, securities financing agreements, which include securities borrowed or purchased under agreements to resell and securities loaned or sold under agreements to repurchase, and short-term borrowings. The Corporation elects to account for certain securities financing agreements and short-term borrowings under the fair value option. For more information on the election of the fair value option, see *Note 21 – Fair Value Option*.

	2015		2014	
(Dollars in millions)	Amount	Rate	Amount	Rate
Federal funds sold and securities borrowed or purchased under agreements to resell				
At December 31	**$ 192,482**	**0.44%**	$ 191,823	0.47%
Average during year	**211,471**	**0.47**	222,483	0.47
Maximum month-end balance during year	**226,502**	**n/a**	240,122	n/a
Federal funds purchased and securities loaned or sold under agreements to repurchase				
At December 31	**174,291**	**0.82**	201,277	0.98
Average during year	**213,497**	**0.89**	215,792	0.99
Maximum month-end balance during year	**235,232**	**n/a**	240,154	n/a
Short-term borrowings				
At December 31	**28,098**	**1.61**	31,172	1.47
Average during year	**32,798**	**1.49**	41,886	1.08
Maximum month-end balance during year	**40,110**	**n/a**	51,409	n/a

n/a = not applicable

Bank of America, N.A. maintains a global program to offer up to a maximum of $75 billion outstanding at any one time, of bank notes with fixed or floating rates and maturities of at least seven days from the date of issue. Short-term bank notes outstanding under this program totaled $16.8 billion and $14.6 billion at December 31, 2015 and 2014. These short-term bank notes, along with Federal Home Loan Bank (FHLB) advances, U.S. Treasury tax and loan notes, and term federal funds purchased, are included in short-term borrowings on the Consolidated Balance Sheet.

Offsetting of Securities Financing Agreements

Substantially all of the Corporation's securities financing activities are transacted under legally enforceable master repurchase agreements or legally enforceable master securities lending agreements that give the Corporation, in the event of default by the counterparty, the right to liquidate securities held and to offset receivables and payables with the same counterparty. The Corporation offsets securities financing transactions with the same counterparty on the Consolidated Balance Sheet where it has such a legally enforceable master netting agreement and the transactions have the same maturity date.

The Securities Financing Agreements table presents securities financing agreements included on the Consolidated Balance Sheet in federal funds sold and securities borrowed or purchased under agreements to resell, and in federal funds purchased and securities loaned or sold under agreements to repurchase at December 31, 2015 and 2014. Balances are presented on a gross basis, prior to the application of counterparty netting. Gross assets and liabilities are adjusted on an aggregate basis to take into consideration the effects of legally enforceable master netting agreements. For more information on the offsetting of derivatives, see *Note 2 – Derivatives*.

The "Other" amount in the table, which is included on the Consolidated Balance Sheet in accrued expenses and other liabilities, relates to transactions where the Corporation acts as the lender in a securities lending agreement and receives securities that can be pledged as collateral or sold. In these transactions, the Corporation recognizes an asset at fair value, representing the securities received, and a liability, representing the obligation to return those securities.

Gross assets and liabilities in the table include activity where uncertainty exists as to the enforceability of certain master netting agreements under bankruptcy laws in some countries or industries and, accordingly, these are reported on a gross basis.

The column titled "Financial Instruments" in the table includes securities collateral received or pledged under repurchase or securities lending agreements where there is a legally enforceable master netting agreement. These amounts are not offset on the Consolidated Balance Sheet, but are shown as a reduction to the net balance sheet amount in this table to derive a net asset or liability. Securities collateral received or pledged where the legal enforceability of the master netting agreements is not certain is not included.

Securities Financing Agreements

(Dollars in millions)	Gross Assets/ Liabilities	Amounts Offset	Net Balance Sheet Amount	Financial Instruments	Net Assets/ Liabilities
December 31, 2015					
Securities borrowed or purchased under agreements to resell [1]	**$ 347,281**	**$ (154,799)**	**$ 192,482**	**$ (144,332)**	**$ 48,150**
Securities loaned or sold under agreements to repurchase	**$ 329,078**	**$ (154,799)**	**$ 174,279**	**$ (135,737)**	**$ 38,542**
Other	**13,235**	**—**	**13,235**	**(13,235)**	**—**
Total	**$ 342,313**	**$ (154,799)**	**$ 187,514**	**$ (148,972)**	**$ 38,542**
December 31, 2014					
Securities borrowed or purchased under agreements to resell [1]	$ 316,567	$ (124,744)	$ 191,823	$ (145,573)	$ 46,250
Securities loaned or sold under agreements to repurchase	$ 326,007	$ (124,744)	$ 201,263	$ (164,306)	$ 36,957
Other	11,641	—	11,641	(11,641)	—
Total	$ 337,648	$ (124,744)	$ 212,904	$ (175,947)	$ 36,957

[1] Excludes repurchase activity of $9.3 billion and $5.6 billion reported in loans and leases on the Consolidated Balance Sheet at December 31, 2015 and 2014.

Repurchase Agreements and Securities Loaned Transactions Accounted for as Secured Borrowings

The tables below present securities sold under agreements to repurchase and securities loaned by remaining contractual term to maturity and class of collateral pledged. Included in "Other" are transactions where the Corporation acts as the lender in a securities lending agreement and receives securities that can be pledged as collateral or sold. Certain agreements contain a right to substitute collateral and/or terminate the agreement prior to maturity at the option of the Corporation or the counterparty. Such agreements are included in the table below based on the remaining contractual term to maturity. At December 31, 2015, the Corporation had no outstanding repurchase-to-maturity transactions.

Remaining Contractual Maturity

	December 31, 2015				
(Dollars in millions)	Overnight and Continuous	30 Days or Less	After 30 Days Through 90 Days	Greater than 90 Days [1]	Total
Securities sold under agreements to repurchase	$ 126,694	$ 86,879	$ 43,216	$ 27,514	**$ 284,303**
Securities loaned	39,772	363	2,352	2,288	**44,775**
Other	13,235	—	—	—	**13,235**
Total	**$ 179,701**	**$ 87,242**	**$ 45,568**	**$ 29,802**	**$ 342,313**

[1] No agreements have maturities greater than three years.

Class of Collateral Pledged

	December 31, 2015			
(Dollars in millions)	Securities Sold Under Agreements to Repurchase	Securities Loaned	Other	Total
U.S. government and agency securities	$ 142,572	$ —	$ 27	**$ 142,599**
Corporate securities, trading loans and other	11,767	265	278	**12,310**
Equity securities	32,323	13,350	12,929	**58,602**
Non-U.S. sovereign debt	87,849	31,160	1	**119,010**
Mortgage trading loans and ABS	9,792	—	—	**9,792**
Total	**$ 284,303**	**$ 44,775**	**$ 13,235**	**$ 342,313**

The Corporation is required to post collateral with a market value equal to or in excess of the principal amount borrowed under repurchase agreements. For securities loaned transactions, the Corporation receives collateral in the form of cash, letters of credit or other securities. To ensure that the market value of the underlying collateral remains sufficient, collateral is generally valued daily and the Corporation may be required to deposit additional collateral or may receive or return collateral pledged when appropriate. Repurchase agreements and securities loaned transactions are generally either overnight, continuous (i.e., no stated term) or short-term. The Corporation manages liquidity risks related to these agreements by sourcing funding from a diverse group of counterparties, providing a range of securities collateral and pursuing longer durations, when appropriate.

NOTE 11 Long-term Debt

Long-term debt consists of borrowings having an original maturity of one year or more. The table below presents the balance of long-term debt at December 31, 2015 and 2014, and the related contractual rates and maturity dates as of December 31, 2015.

	December 31	
(Dollars in millions)	**2015**	2014
Notes issued by Bank of America Corporation		
Senior notes:		
Fixed, with a weighted-average rate of 4.55%, ranging from 1.25% to 8.40%, due 2016 to 2045	**$ 109,861**	$ 113,037
Floating, with a weighted-average rate of 1.38%, ranging from 0.11% to 5.07%, due 2016 to 2044	**13,900**	14,590
Senior structured notes	**17,548**	22,168
Subordinated notes:		
Fixed, with a weighted-average rate of 5.19%, ranging from 2.40% to 8.57%, due 2016 to 2045	**27,216**	23,246
Floating, with a weighted-average rate of 0.94%, ranging from 0.43% to 2.68%, due 2016 to 2026	**5,029**	5,455
Junior subordinated notes (related to trust preferred securities):		
Fixed, with a weighted-average rate of 6.78%, ranging from 5.25% to 8.05%, due 2027 to 2067	**5,295**	6,722
Floating, with a weighted-average rate of 1.08%, ranging from 0.87% to 1.53%, due 2027 to 2056	**553**	553
Total notes issued by Bank of America Corporation	**179,402**	185,771
Notes issued by Bank of America, N.A.		
Senior notes:		
Fixed, with a weighted-average rate of 1.57%, ranging from 1.13% to 2.05%, due 2016 to 2018	**7,483**	2,740
Floating, with a weighted-average rate of 1.13%, ranging from 0.43% to 3.30%, due 2016 to 2041	**4,942**	3,028
Subordinated notes:		
Fixed, with a weighted-average rate of 5.68%, ranging from 5.30% to 6.10%, due 2016 to 2036	**4,815**	4,921
Floating, with a weighted-average rate of 0.80%, ranging from 0.79% to 0.81%, due 2016 to 2019	**1,401**	1,401
Advances from Federal Home Loan Banks:		
Fixed, with a weighted-average rate of 5.34%, ranging from 0.01% to 7.72%, due 2016 to 2034	**172**	183
Floating, with a weighted-average rate of 0.41%, ranging from 0.35% to 0.63%, due 2016	**6,000**	10,500
Securitizations and other BANA VIEs	**9,756**	9,882
Other	**2,985**	2,811
Total notes issued by Bank of America, N.A.	**37,554**	35,466
Other debt		
Senior notes:		
Fixed, with a rate of 5.50%, due 2017 to 2021	**30**	1
Floating	**—**	21
Structured liabilities	**14,974**	15,971
Junior subordinated notes (related to trust preferred securities):		
Fixed	**—**	340
Floating	**—**	66
Nonbank VIEs	**4,317**	3,425
Other	**487**	2,078
Total other debt	**19,808**	21,902
Total long-term debt	**$ 236,764**	$ 243,139

Bank of America Corporation and Bank of America, N.A. maintain various U.S. and non-U.S. debt programs to offer both senior and subordinated notes. The notes may be denominated in U.S. Dollars or foreign currencies. At December 31, 2015 and 2014, the amount of foreign currency-denominated debt translated into U.S. Dollars included in total long-term debt was $46.4 billion and $51.9 billion. Foreign currency contracts may be used to convert certain foreign currency-denominated debt into U.S. Dollars.

At December 31, 2015, long-term debt of consolidated VIEs in the table above included debt of credit card, home equity and all other VIEs of $9.6 billion, $183 million and $4.3 billion, respectively. Long-term debt of VIEs is collateralized by the assets of the VIEs. For additional information, see *Note 6 – Securitizations and Other Variable Interest Entities.*

The weighted-average effective interest rates for total long-term debt (excluding senior structured notes), total fixed-rate debt and total floating-rate debt were 3.80 percent, 4.61 percent and 0.96 percent, respectively, at December 31, 2015 and 3.81 percent, 4.83 percent and 0.80 percent, respectively, at December 31, 2014. The Corporation's ALM activities maintain an overall interest rate risk management strategy that incorporates the use of interest rate contracts to manage fluctuations in earnings that are caused by interest rate volatility. The Corporation's goal is to manage interest rate sensitivity so that movements in interest rates do not significantly adversely affect earnings and capital. The weighted-average rates are the contractual interest rates on the debt and do not reflect the impacts of derivative transactions.

Certain senior structured notes and structured liabilities are accounted for under the fair value option. For more information on these notes, see *Note 21 – Fair Value Option.*

The table below shows the carrying value for aggregate annual contractual maturities of long-term debt as of December 31, 2015. Included in the table are certain structured notes issued by the Corporation that contain provisions whereby the borrowings are redeemable at the option of the holder (put options) at specified dates prior to maturity. Other structured notes have coupon or repayment terms linked to the performance of debt or equity securities, indices, currencies or commodities, and the maturity may be accelerated based on the value of a referenced index or

security. In both cases, the Corporation or a subsidiary may be required to settle the obligation for cash or other securities prior to the contractual maturity date. These borrowings are reflected in the table as maturing at their contractual maturity date.

During 2015, the Corporation had total long-term debt maturities and redemptions in the aggregate of $40.4 billion consisting of $25.3 billion for Bank of America Corporation, $6.6 billion for Bank of America, N.A. and $8.5 billion of other debt. During 2014, the Corporation had total long-term debt maturities and redemptions in the aggregate of $53.7 billion consisting of $33.9 billion for Bank of America Corporation, $8.9 billion for Bank of America, N.A. and $10.9 billion of other debt.

Long-term Debt by Maturity

(Dollars in millions)	2016	2017	2018	2019	2020	Thereafter	Total
Bank of America Corporation							
Senior notes	$ 16,777	$ 18,303	$ 20,211	$ 16,820	$ 11,351	$ 40,299	**$ 123,761**
Senior structured notes	4,230	2,352	1,942	1,374	955	6,695	**17,548**
Subordinated notes	4,861	4,885	2,677	1,479	3	18,340	**32,245**
Junior subordinated notes	—	—	—	—	—	5,848	**5,848**
Total Bank of America Corporation	25,868	25,540	24,830	19,673	12,309	71,182	**179,402**
Bank of America, N.A.							
Senior notes	3,048	3,648	5,709	—	—	20	**12,425**
Subordinated notes	1,056	3,447	—	1	—	1,712	**6,216**
Advances from Federal Home Loan Banks	6,003	10	10	15	12	122	**6,172**
Securitizations and other Bank VIEs [1]	1,290	3,550	2,300	2,450	—	166	**9,756**
Other	53	2,713	76	85	30	28	**2,985**
Total Bank of America, N.A.	11,450	13,368	8,095	2,551	42	2,048	**37,554**
Other debt							
Senior notes	—	1	—	—	—	29	**30**
Structured liabilities	3,110	2,029	1,175	882	1,034	6,744	**14,974**
Nonbank VIEs [1]	2,506	240	42	22	—	1,507	**4,317**
Other	400	57	—	—	—	30	**487**
Total other debt	6,016	2,327	1,217	904	1,034	8,310	**19,808**
Total long-term debt	**$ 43,334**	**$ 41,235**	**$ 34,142**	**$ 23,128**	**$ 13,385**	**$ 81,540**	**$ 236,764**

[1] Represents the total long-term debt included in the liabilities of consolidated VIEs on the Consolidated Balance Sheet.

Trust Preferred and Hybrid Securities

Trust preferred securities (Trust Securities) are primarily issued by trust companies (the Trusts) that are not consolidated. These Trust Securities are mandatorily redeemable preferred security obligations of the Trusts. The sole assets of the Trusts generally are junior subordinated deferrable interest notes of the Corporation or its subsidiaries (the Notes). The Trusts generally are 100 percent-owned finance subsidiaries of the Corporation. Obligations associated with the Notes are included in the long-term debt table on page 66.

Certain of the Trust Securities were issued at a discount and may be redeemed prior to maturity at the option of the Corporation. The Trusts generally have invested the proceeds of such Trust Securities in the Notes. Each issue of the Notes has an interest rate equal to the corresponding Trust Securities distribution rate. The Corporation has the right to defer payment of interest on the Notes at any time or from time to time for a period not exceeding five years provided that no extension period may extend beyond the stated maturity of the relevant Notes. During any such extension period, distributions on the Trust Securities will also be deferred and the Corporation's ability to pay dividends on its common and preferred stock will be restricted.

The Trust Securities generally are subject to mandatory redemption upon repayment of the related Notes at their stated maturity dates or their earlier redemption at a redemption price equal to their liquidation amount plus accrued distributions to the date fixed for redemption and the premium, if any, paid by the Corporation upon concurrent repayment of the related Notes.

Periodic cash payments and payments upon liquidation or redemption with respect to Trust Securities are guaranteed by the Corporation or its subsidiaries to the extent of funds held by the Trusts (the Preferred Securities Guarantee). The Preferred Securities Guarantee, when taken together with the Corporation's other obligations including its obligations under the Notes, generally will constitute a full and unconditional guarantee, on a subordinated basis, by the Corporation of payments due on the Trust Securities.

On December 29, 2015, the Corporation provided notice of the redemption, which settled on January 29, 2016, of all trust preferred securities of Merrill Lynch Preferred Capital Trust III, Merrill Lynch Preferred Capital Trust IV and Merrill Lynch Preferred Capital Trust V with a total carrying value in the aggregate of $2.0 billion. In connection with the Corporation's acquisition of Merrill Lynch & Co., Inc. (Merrill Lynch) in 2009, the Corporation recorded a discount to par value as purchase accounting adjustments associated with these Trust Preferred Securities. The Corporation recorded a charge to net interest income of $612 million in 2015 related to the discount on the securities.

The Trust Securities Summary table details the outstanding Trust Securities and the related Notes previously issued which remained outstanding at December 31, 2015.

Trust Securities Summary

(Dollars in millions)

		December 31, 2015					
Issuer	Issuance Date	Aggregate Principal Amount of Trust Securities	Aggregate Principal Amount of the Notes	Stated Maturity of the Trust Securities	Per Annum Interest Rate of the Notes	Interest Payment Dates	Redemption Period
Bank of America							
Capital Trust VI	March 2005	$ 27	**$ 27**	March 2035	5.63%	Semi-Annual	Any time
Capital Trust VII [1]	August 2005	6	**7**	August 2035	5.25	Semi-Annual	Any time
Capital Trust VIII	August 2005	524	**540**	August 2035	6.00	Quarterly	On or after 8/25/10
Capital Trust XI	May 2006	658	**678**	May 2036	6.63	Semi-Annual	Any time
Capital Trust XV	May 2007	1	**1**	June 2056	3-mo. LIBOR + 80 bps	Quarterly	On or after 6/01/37
NationsBank							
Capital Trust III	February 1997	131	**136**	January 2027	3-mo. LIBOR + 55 bps	Quarterly	On or after 1/15/07
BankAmerica							
Capital III	January 1997	103	**106**	January 2027	3-mo. LIBOR + 57 bps	Quarterly	On or after 1/15/02
Fleet							
Capital Trust V	December 1998	79	**82**	December 2028	3-mo. LIBOR + 100 bps	Quarterly	On or after 12/18/03
BankBoston							
Capital Trust III	June 1997	53	**55**	June 2027	3-mo. LIBOR + 75 bps	Quarterly	On or after 6/15/07
Capital Trust IV	June 1998	102	**106**	June 2028	3-mo. LIBOR + 60 bps	Quarterly	On or after 6/08/03
MBNA							
Capital Trust B	January 1997	70	**73**	February 2027	3-mo. LIBOR + 80 bps	Quarterly	On or after 2/01/07
Countrywide							
Capital III	June 1997	200	**206**	June 2027	8.05	Semi-Annual	Only under special event
Capital IV	April 2003	500	**515**	April 2033	6.75	Quarterly	On or after 4/11/08
Capital V	November 2006	1,495	**1,496**	November 2036	7.00	Quarterly	On or after 11/01/11
Merrill Lynch [2]							
Capital Trust I	December 2006	1,050	**1,051**	December 2066	6.45	Quarterly	On or after 12/11
Capital Trust II	May 2007	950	**951**	June 2067	6.45	Quarterly	On or after 6/12
Capital Trust III	August 2007	750	**751**	September 2067	7.375	Quarterly	On or after 9/12
Total		$ 6,699	**$ 6,781**				

[1] Notes are denominated in British Pound. Presentation currency is U.S. Dollar.
[2] Call notices for Merrill Lynch Preferred Capital Trust III, IV and V were sent on December 29, 2015 and settled on January 29, 2016.

NOTE 12 Commitments and Contingencies

In the normal course of business, the Corporation enters into a number of off-balance sheet commitments. These commitments expose the Corporation to varying degrees of credit and market risk and are subject to the same credit and market risk limitation reviews as those instruments recorded on the Consolidated Balance Sheet.

Credit Extension Commitments

The Corporation enters into commitments to extend credit such as loan commitments, SBLCs and commercial letters of credit to meet the financing needs of its customers. The table below includes the notional amount of unfunded legally binding lending commitments net of amounts distributed (e.g., syndicated) to other financial institutions of $14.3 billion and $15.7 billion at December 31, 2015 and 2014. At December 31, 2015, the carrying value of these commitments, excluding commitments accounted for under the fair value option, was $664 million, including deferred revenue of $18 million and a reserve for unfunded lending commitments of $646 million. At December 31, 2014, the comparable amounts were $546 million, $18 million and $528 million, respectively. The carrying value of these commitments is classified in accrued expenses and other liabilities on the Consolidated Balance Sheet.

The table below also includes the notional amount of commitments of $10.9 billion and $9.9 billion at December 31, 2015 and 2014 that are accounted for under the fair value option. However, the table below excludes cumulative net fair value of $658 million and $405 million on these commitments, which is classified in accrued expenses and other liabilities. For more information regarding the Corporation's loan commitments accounted for under the fair value option, see *Note 21 – Fair Value Option.*

Credit Extension Commitments

(Dollars in millions)	Expire in One Year or Less	Expire After One Year Through Three Years	Expire After Three Years Through Five Years	Expire After Five Years	Total
	December 31, 2015				
Notional amount of credit extension commitments					
Loan commitments	**$ 84,884**	**$ 119,272**	**$ 158,920**	**$ 37,112**	**$ 400,188**
Home equity lines of credit	**7,074**	**18,438**	**5,126**	**19,697**	**50,335**
Standby letters of credit and financial guarantees [1]	**19,584**	**9,903**	**3,385**	**1,218**	**34,090**
Letters of credit	**1,650**	**165**	**258**	**54**	**2,127**
Legally binding commitments	**113,192**	**147,778**	**167,689**	**58,081**	**486,740**
Credit card lines [2]	**370,127**	**—**	**—**	**—**	**370,127**
Total credit extension commitments	**$ 483,319**	**$ 147,778**	**$ 167,689**	**$ 58,081**	**$ 856,867**
	December 31, 2014				
Notional amount of credit extension commitments					
Loan commitments	$ 79,897	$ 97,583	$ 146,743	$ 18,942	$ 343,165
Home equity lines of credit	6,292	19,679	12,319	15,417	53,707
Standby letters of credit and financial guarantees [1]	19,259	9,106	4,519	1,807	34,691
Letters of credit	1,883	157	35	88	2,163
Legally binding commitments	107,331	126,525	163,616	36,254	433,726
Credit card lines [2]	363,989	—	—	—	363,989
Total credit extension commitments	$ 471,320	$ 126,525	$ 163,616	$ 36,254	$ 797,715

[1] The notional amounts of SBLCs and financial guarantees classified as investment grade and non-investment grade based on the credit quality of the underlying reference name within the instrument were $25.5 billion and $8.4 billion at December 31, 2015, and $26.1 billion and $8.2 billion at December 31, 2014. Amounts in the table include consumer SBLCs of $164 million and $396 million at December 31, 2015 and 2014.

[2] Includes business card unused lines of credit.

Legally binding commitments to extend credit generally have specified rates and maturities. Certain of these commitments have adverse change clauses that help to protect the Corporation against deterioration in the borrower's ability to pay.

Other Commitments

At December 31, 2015 and 2014, the Corporation had commitments to purchase loans (e.g., residential mortgage and commercial real estate) of $729 million and $1.8 billion, which upon settlement will be included in loans or LHFS.

At December 31, 2015 and 2014, the Corporation had commitments to purchase commodities, primarily liquefied natural gas of $1.9 billion and $241 million, which upon settlement will be included in trading account assets.

At December 31, 2015 and 2014, the Corporation had commitments to enter into resale and forward-dated resale and securities borrowing agreements of $88.6 billion and $73.2 billion, and commitments to enter into forward-dated repurchase and securities lending agreements of $53.7 billion and $55.8 billion. These commitments expire within the next 12 months.

The Corporation is a party to operating leases for certain of its premises and equipment. Commitments under these leases are approximately $2.5 billion, $2.1 billion, $1.7 billion, $1.5 billion and $1.3 billion for 2016 through 2020, respectively, and $4.6 billion in the aggregate for all years thereafter.

Other Guarantees

Bank-owned Life Insurance Book Value Protection

The Corporation sells products that offer book value protection to insurance carriers who offer group life insurance policies to corporations, primarily banks. The book value protection is provided on portfolios of intermediate investment-grade fixed-income securities and is intended to cover any shortfall in the event that policyholders surrender their policies and market value is below book value. These guarantees are recorded as derivatives and carried at fair value in the trading portfolio. At December 31, 2015 and 2014, the notional amount of these guarantees totaled $13.8 billion and $13.6 billion. At both December 31, 2015 and 2014, the Corporation's maximum exposure related to these guarantees totaled $3.1 billion with estimated maturity dates between 2031 and 2039. The net fair value including the fee receivable associated with these guarantees was $12 million and $25 million at December 31, 2015 and 2014, and reflects the probability of surrender as well as the multiple structural protection features in the contracts.

Indemnifications

In the ordinary course of business, the Corporation enters into various agreements that contain indemnifications, such as tax indemnifications, whereupon payment may become due if certain external events occur, such as a change in tax law. The indemnification clauses are often standard contractual terms and were entered into in the normal course of business based on an assessment that the risk of loss would be remote. These agreements typically contain an early termination clause that permits the Corporation to exit the agreement upon these events. The maximum potential future payment under indemnification agreements is difficult to assess for several reasons, including the occurrence of an external event, the inability to predict future changes in tax and other laws, the difficulty in determining how such laws would apply to parties in contracts, the absence of exposure limits contained in standard contract language and the timing of the early termination clause. Historically, any payments made under these guarantees have been de minimis. The Corporation has assessed the probability of making such payments in the future as remote.

Merchant Services

In accordance with credit and debit card association rules, the Corporation sponsors merchant processing servicers that process credit and debit card transactions on behalf of various merchants. In connection with these services, a liability may arise in the event of a billing dispute between the merchant and a cardholder that is ultimately resolved in the cardholder's favor. If the merchant defaults on its obligation to reimburse the cardholder, the cardholder, through its issuing bank, generally has until six months after the date of the transaction to present a chargeback to the merchant processor, which is primarily liable for any losses on covered transactions. However, if the merchant processor fails to meet its obligation to reimburse the cardholder for disputed transactions, then the Corporation, as the sponsor, could be held liable for the disputed amount. In 2015 and 2014, the sponsored entities processed and settled $669.0 billion and $647.1 billion of transactions and recorded losses of $22 million and $16 million. A significant portion of this activity was processed by a joint venture in which the Corporation holds a 49 percent ownership. At December 31, 2015 and 2014, the sponsored merchant processing servicers held as collateral $181 million and $130 million of merchant escrow deposits which may be used to offset amounts due from the individual merchants.

The Corporation believes the maximum potential exposure for chargebacks would not exceed the total amount of merchant transactions processed through Visa and MasterCard for the last six months, which represents the claim period for the cardholder, plus any outstanding delayed-delivery transactions. As of December 31, 2015 and 2014, the maximum potential exposure for sponsored transactions totaled $277.1 billion and $269.3 billion. However, the Corporation believes that the maximum potential exposure is not representative of the actual potential loss exposure and does not expect to make material payments in connection with these guarantees.

Exchange and Clearing House Member Guarantees

The Corporation is a member of various securities and derivative exchanges and clearinghouses, both in the U.S. and other countries. As a member, the Corporation may be required to pay a pro-rata share of the losses incurred by some of these organizations as a result of another member default and under other loss scenarios. The Corporation's potential obligations may be limited to its membership interests in such exchanges and clearinghouses, to the amount (or multiple) of the Corporation's contribution to the guarantee fund or, in limited instances, to the full pro-rata share of the residual losses after applying the guarantee fund. The Corporation's maximum potential exposure under these membership agreements is difficult to estimate; however, the potential for the Corporation to be required to make these payments is remote.

Prime Brokerage and Securities Clearing Services

In connection with its prime brokerage and clearing businesses, the Corporation performs securities clearance and settlement services with other brokerage firms and clearinghouses on behalf of its clients. Under these arrangements, the Corporation stands ready to meet the obligations of its clients with respect to securities transactions. The Corporation's obligations in this respect are secured by the assets in the clients' accounts and the accounts of their customers as well as by any proceeds received from the transactions cleared and settled by the firm on behalf of clients or their customers. The Corporation's maximum potential exposure under these arrangements is difficult to estimate; however, the potential for the Corporation to incur material losses pursuant to these arrangements is remote.

Other Derivative Contracts

The Corporation funds selected assets, including securities issued by CDOs and CLOs, through derivative contracts, typically total return swaps, with third parties and VIEs that are not consolidated by the Corporation. The total notional amount of these derivative contracts was $371 million and $527 million with commercial banks and $922 million and $1.2 billion with VIEs at December 31, 2015 and 2014. The underlying securities are senior securities and substantially all of the Corporation's exposures are insured. Accordingly, the Corporation's exposure to loss consists principally of counterparty risk to the insurers. In certain circumstances, generally as a result of ratings downgrades, the Corporation may be required to purchase the underlying assets, which would not result in additional gain or loss to the Corporation as such exposure is already reflected in the fair value of the derivative contracts.

Other Guarantees

The Corporation has entered into additional guarantee agreements and commitments, including sold risk participation swaps, liquidity facilities, lease-end obligation agreements, partial credit guarantees on certain leases, real estate joint venture guarantees, divested business commitments and sold put options that require gross settlement. The maximum potential future payment under these agreements was approximately $6.0 billion and $6.2 billion at December 31, 2015 and 2014. The estimated maturity dates of these obligations extend up to 2040. The Corporation has made no material payments under these guarantees.

In the normal course of business, the Corporation periodically guarantees the obligations of its affiliates in a variety of transactions including ISDA-related transactions and non-ISDA related transactions such as commodities trading, repurchase agreements, prime brokerage agreements and other transactions.

Payment Protection Insurance Claims Matter

In the U.K., the Corporation previously sold payment protection insurance (PPI) through its international card services business to credit card customers and consumer loan customers. PPI covers a consumer's loan or debt repayment if certain events occur such as loss of job or illness. In response to an elevated level of customer complaints across the industry, heightened media coverage and pressure from consumer advocacy groups, the Prudential Regulation Authority and the Financial Conduct Authority (FCA) investigated and raised concerns about the way some companies have handled complaints related to the sale of these insurance policies. In November 2015, the FCA issued proposed guidance on the treatment of certain PPI claims.

The reserve was $360 million and $378 million at December 31, 2015 and 2014. The Corporation recorded expense of $319 million and $621 million in 2015 and 2014. It is possible that the Corporation will incur additional expense related to PPI claims; however, the amount of such additional expense cannot be reasonably estimated.

Litigation and Regulatory Matters

In the ordinary course of business, the Corporation and its subsidiaries are routinely defendants in or parties to many pending and threatened legal, regulatory and governmental actions and proceedings.

In view of the inherent difficulty of predicting the outcome of such matters, particularly where the claimants seek very large or indeterminate damages or where the matters present novel legal theories or involve a large number of parties, the Corporation generally cannot predict what the eventual outcome of the pending matters will be, what the timing of the ultimate resolution of these matters will be, or what the eventual loss, fines or penalties related to each pending matter may be.

In accordance with applicable accounting guidance, the Corporation establishes an accrued liability when those matters present loss contingencies that are both probable and estimable. In such cases, there may be an exposure to loss in excess of any amounts accrued. As a matter develops, the Corporation, in conjunction with any outside counsel handling the matter, evaluates on an ongoing basis whether such matter presents a loss contingency that is probable and estimable. Once the loss contingency is deemed to be both probable and estimable, the Corporation will establish an accrued liability and record a corresponding amount of litigation-related expense. The Corporation continues to monitor the matter for further developments that could affect the amount of the accrued liability that has been previously established. Excluding expenses of internal and external legal service providers, litigation-related expense of $1.2 billion was recognized for 2015 compared to $16.4 billion for 2014.

For a limited number of the matters disclosed in this Note, for which a loss, whether in excess of a related accrued liability or where there is no accrued liability, is reasonably possible in future periods, the Corporation is able to estimate a range of possible loss. In determining whether it is possible to estimate a range of possible loss, the Corporation reviews and evaluates its matters on an ongoing basis, in conjunction with any outside counsel handling the matter, in light of potentially relevant factual and legal developments. In cases in which the Corporation possesses sufficient appropriate information to estimate a range of possible loss, that estimate is aggregated and disclosed below. There may be other disclosed matters for which a loss is probable or reasonably possible but such an estimate of the range of possible loss may not be possible. For those matters where an estimate of the range of possible loss is possible, management currently estimates the aggregate range of possible loss is $0 to $2.4 billion in excess of the accrued liability (if any) related to those matters. This estimated range of possible loss is based upon currently available information and is subject to significant judgment and a variety of assumptions, and known and unknown uncertainties. The matters underlying the estimated range will change from time to time, and actual results may vary significantly from the current estimate. Therefore, this estimated range of possible loss represents what the Corporation believes to be an estimate of possible loss only for certain matters meeting these criteria. It does not represent the Corporation's maximum loss exposure.

Information is provided below regarding the nature of all of these contingencies and, where specified, the amount of the claim associated with these loss contingencies. Based on current knowledge, management does not believe that loss contingencies arising from pending matters, including the matters described herein, will have a material adverse effect on the consolidated financial position or liquidity of the Corporation. However, in light of the inherent uncertainties involved in these matters, some of which are beyond the Corporation's control, and the very large or indeterminate damages sought in some of these matters, an adverse outcome in one or more of these matters could be material to the Corporation's results of operations or liquidity for any particular reporting period.

Bond Insurance Litigation

Ambac Countrywide Litigation

The Corporation, Countrywide and other Countrywide entities are named as defendants in an action filed on September 29, 2010, and as amended on May 28, 2013, by Ambac Assurance Corporation and the Segregated Account of Ambac Assurance Corporation (together, Ambac), entitled *Ambac Assurance Corporation and The Segregated Account of Ambac Assurance Corporation v. Countrywide Home Loans, Inc., et al*. This action, currently pending in New York Supreme Court, relates to bond insurance policies provided by Ambac on certain securitized pools of second-lien (and in one pool, first-lien) HELOCs, first-lien subprime home equity loans and fixed-rate second-lien mortgage loans. Plaintiffs allege that they have paid claims as a result of defaults in the underlying loans and assert that the Countrywide defendants misrepresented the characteristics of the underlying loans and breached certain contractual representations and warranties regarding the underwriting and servicing of the loans. Plaintiffs also allege that the Corporation is liable based on successor liability theories. Damages claimed by Ambac are in excess of $2.2 billion and include the amount of payments for current and future claims it has paid or claims it will be obligated to pay under the policies, increasing over time as it pays claims under relevant policies, plus unspecified punitive damages.

On October 22, 2015, the New York Supreme Court granted in part and denied in part Countrywide's motion for summary judgment and Ambac's motion for partial summary judgment. Among other things, the court granted summary judgment dismissing Ambac's claim for rescissory damages and denied summary judgment regarding Ambac's claims for fraud and breach of the insurance agreements. The court also denied the Corporation's motion for summary judgment and granted in part Ambac's motion for partial summary judgment on Ambac's successor-liability claims with respect to a single element of its de facto merger claim. The court denied summary judgment on the other elements of Ambac's de facto merger claim and the other successor-liability claims. Ambac filed its notice of appeal on October 27, 2015. The Corporation filed its notice of appeal on November 16, 2015. Countrywide filed its notice of cross-appeal on November 18, 2015.

On December 30, 2014, Ambac filed a second complaint in the same New York Supreme Court against the same defendants, entitled *Ambac Assurance Corporation and The Segregated Account of Ambac Assurance Corporation v. Countrywide Home Loans, Inc., et al.*, claiming fraudulent inducement against Countrywide, and successor and vicarious liability against the Corporation relating to eight partially Ambac-insured RMBS transactions that closed between 2005 and 2007, all backed by negative amortization pay option adjustable-rate mortgage (ARM) loans that were originated in whole or in part by Countrywide. Seven of the eight securitizations were issued and underwritten by non-parties to the litigation. Ambac claims damages in excess of $600 million consisting of all alleged past and future claims against its policies, plus other unspecified compensatory and punitive damages.

Also on December 30, 2014, Ambac filed a third action in Wisconsin Circuit Court, Dane County, against Countrywide Home Loans, Inc., entitled *The Segregated Account of Ambac Assurance Corporation and Ambac Assurance Corporation v. Countrywide Home Loans, Inc.,* claiming that Ambac was fraudulently induced to insure portions of five securitizations issued and underwritten in 2005 by a non-party that included Countrywide-originated first-lien negative amortization pay option ARM loans. The complaint seeks damages in excess of $350 million for all alleged past and future Ambac insured claims payment obligations, plus other unspecified compensatory and punitive damages. Countrywide filed a motion to dismiss the complaint on February 20, 2015. On July 2, 2015, the court dismissed the complaint for lack of personal jurisdiction. Ambac appealed the dismissal to the Court of Appeals of Wisconsin, District IV, on July 21, 2015. The appeal remains under consideration.

On July 21, 2015, Ambac filed a fourth action in New York Supreme Court against Countrywide Home Loans, Inc., entitled *Ambac Assurance Corporation and The Segregated Account of Ambac Assurance Corporation v. Countrywide Home Loans, Inc*. asserting the same claims for fraudulent inducement that were asserted in the Wisconsin complaint. Ambac simultaneously moved to stay the action pending resolution of its appeal in the Wisconsin action. Countrywide opposed the motion to stay and on August 10, 2015, moved to dismiss the complaint. The court heard argument on the motions on November 18, 2015. Both motions remain under consideration.

Ambac First Franklin Litigation

On April 16, 2012, Ambac sued First Franklin Financial Corporation (First Franklin), BANA, Merrill Lynch, Pierce, Fenner & Smith, Inc. (MLPF&S), Merrill Lynch Mortgage Lending, Inc. (MLML), and Merrill Lynch Mortgage Investors, Inc. (MLMI) in New York Supreme Court. Ambac's claims relate to guaranty insurance Ambac provided on a First Franklin securitization (Franklin Mortgage Loan Trust, Series 2007-FFC). MLML sponsored and Ambac insured certain certificates in the securitization. The complaint alleges that defendants breached representations and warranties concerning, among other things, First Franklin's lending practices, the characteristics of the underlying mortgage loans, the underwriting guidelines followed in originating those loans, and the due diligence conducted with respect to those loans. The complaint asserts claims for fraudulent inducement, breach of contract, indemnification and attorneys' fees. Ambac also asserts breach of contract claims against BANA based upon its servicing of the loans in the securitization. The complaint alleges that Ambac has paid hundreds of millions of dollars in claims and has accrued and continues to accrue tens of millions of dollars in additional claims, and Ambac seeks as damages the total claims it has paid and its projected future claims payment obligations, as well as specific performance of defendants' contractual repurchase obligations.

On July 19, 2013, the court denied defendants' motion to dismiss Ambac's contract and fraud causes of action but dismissed Ambac's indemnification cause of action. In addition, the court denied defendants' motion to dismiss Ambac's claims for attorneys' fees and punitive damages. On September 17, 2015, the court denied Ambac's motion to strike defendants' affirmative defense of in pari delicto and granted Ambac's motion to strike defendants' affirmative defense of unclean hands.

European Commission - Credit Default Swaps Antitrust Investigation

On July 1, 2013, the European Commission (Commission) announced that it had addressed a Statement of Objections (SO) to the Corporation, BANA and Banc of America Securities LLC (together, the Bank of America Entities), a number of other financial institutions, Markit Group Limited, and the International Swaps and Derivatives Association (together, the Parties). The SO set forth the Commission's preliminary conclusion that the Parties infringed European Union competition law by participating in alleged collusion to prevent exchange trading of CDS and futures. According to the SO, the conduct of the Bank of America Entities took place between August 2007 and April 2009. On December 4, 2015, the Commission announced that it was closing its investigation against the Bank of America Entities and the other financial institutions involved in the investigation.

Interchange and Related Litigation

In 2005, a group of merchants filed a series of putative class actions and individual actions directed at interchange fees associated with Visa and MasterCard payment card transactions. These actions, which were consolidated in the U.S. District Court for the Eastern District of New York under the caption In Re Payment Card Interchange Fee and Merchant Discount Anti-Trust Litigation (Interchange), named Visa, MasterCard and several banks and BHCs, including the Corporation, as defendants. Plaintiffs allege that defendants conspired to fix the level of default interchange rates and that certain rules of Visa and MasterCard related to merchant acceptance of payment cards at the point of sale were unreasonable restraints of trade. Plaintiffs sought unspecified damages and injunctive relief. On October 19, 2012, defendants settled the matter.

The settlement provided for, among other things, (i) payments by defendants to the class and individual plaintiffs totaling approximately $6.6 billion, allocated proportionately to each defendant based upon various loss-sharing agreements; (ii) distribution to class merchants of an amount equal to 10 basis points (bps) of default interchange across all Visa and MasterCard credit card transactions for a period of eight consecutive months, which otherwise would have been paid to issuers and which effectively reduces credit interchange for that period of time; and (iii) modifications to certain Visa and MasterCard rules regarding merchant point of sale practices.

The court granted final approval of the class settlement agreement on December 13, 2013. Several class members appealed to the U.S. Court of Appeals for the Second Circuit and the court held oral argument on September 28, 2015.

On July 28, 2015, certain objectors to the class settlement filed motions asking the district court to vacate or set aside its final judgment approving the settlement, or in the alternative, to grant further discovery, in light of communications between one of MasterCard's former lawyers and one of the lawyers for the class plaintiffs. The defendants and the class plaintiffs filed responses to the motions on August 18, 2015 and the objectors filed replies on September 2, 2015. The court has not set oral argument.

Following approval of the class settlement agreement, a number of class members opted out of the settlement. As a result of various loss-sharing agreements from the main Interchange litigation, the Corporation remains liable for any settlement or judgment in opt-out suits where it is not named as a defendant. The Corporation has pending one opt-out suit, as well as an action brought by cardholders. All of the opt-out suits filed to date have been consolidated in the U.S. District Court for the Eastern District of New York. On July 18, 2014, the court denied defendants' motion to dismiss opt-out complaints filed by merchants, and on November 26, 2014, the court granted defendants' motion to dismiss the Sherman Act claim in the cardholder complaint. In the cardholder action, the parties have moved for reconsideration of the court's November 26, 2014 decision dismissing the Sherman Act claim, and have also appealed the decision to the U.S. Court of Appeals for the Second Circuit.

LIBOR, Other Reference Rate and Foreign Exchange (FX) Inquiries and Litigation

Government authorities in the Americas, Europe and the Asia Pacific region continue to conduct investigations and make inquiries of a significant number of FX market participants, including the Corporation, regarding FX market participants' conduct and systems and controls. Government authorities in these regions also continue to conduct investigations concerning submissions made by panel banks in connection with the setting of LIBOR and other reference rates. The Corporation is responding to and cooperating with these investigations.

In addition, the Corporation, BANA and certain Merrill Lynch affiliates have been named as defendants along with most of the other LIBOR panel banks in a series of individual and putative class actions relating to defendants' U.S. Dollar LIBOR contributions. All cases naming the Corporation and its affiliates relating to U.S. Dollar LIBOR have been or are in the process of being consolidated for pre-trial purposes in the U.S. District Court for the Southern District of New York by the Judicial Panel on Multidistrict Litigation. The Corporation expects that any future U.S. Dollar LIBOR cases naming it or its affiliates will similarly be consolidated for pre-trial purposes. Plaintiffs allege that they held or transacted in U.S. Dollar LIBOR-based financial instruments and sustained losses as a result of collusion or manipulation by defendants regarding the setting of U.S. Dollar LIBOR. Plaintiffs assert a variety of claims, including antitrust, Commodity Exchange Act (CEA), Racketeer Influenced and Corrupt Organizations (RICO), common law fraud, and breach of contract claims, and seek compensatory, treble and punitive damages, and injunctive relief.

In a series of rulings, the court dismissed antitrust, RICO and certain state law claims, and substantially limited the scope of CEA and various other claims. As to the Corporation and BANA, the court also dismissed manipulation claims based on alleged trader conduct. Some claims against the Corporation, BANA and certain Merrill Lynch affiliates remain pending, however, and the court is continuing to consider motions regarding them. Certain plaintiffs are also pursuing an appeal in the Second Circuit of the dismissal of their antitrust claims.

In addition, in a consolidated amended complaint filed on March 31, 2014, the Corporation and BANA were named as defendants along with other FX market participants in a putative class action filed in the U.S. District Court for the Southern District of New York on behalf of plaintiffs and a putative class who allegedly transacted in FX and are domiciled in the U.S. or transacted in FX in the U.S. The complaint alleges that class members sustained losses as a result of the defendants' alleged conspiracy to manipulate the WM/Reuters Closing Spot Rates. Plaintiffs assert a single claim for violations of Sections 1 and 3

of the Sherman Act and seek compensatory and treble damages, as well as declaratory and injunctive relief.

On January 28, 2015, the court denied defendants' motion to dismiss. In April 2015, the Corporation and BANA agreed to settle the class action for $180 million. On September 21, 2015, plaintiffs filed a second consolidated amended complaint, in which they named additional defendants, including MLPF&S, added claims for violations of the CEA, and expanded the scope of the FX transactions purportedly affected by the alleged conspiracy to include additional over-the-counter FX transactions and FX transactions on an exchange. On October 1, 2015, the Corporation, BANA and MLPF&S executed a final settlement agreement, which included the previously-referenced $180 million settlement for persons who transacted in FX over-the-counter and a $7.5 million settlement for persons who transacted in FX on an exchange only. The settlement is subject to final court approval.

Montgomery

The Corporation, several current and former officers and directors, Banc of America Securities LLC (BAS), MLPF&S and other unaffiliated underwriters have been named as defendants in a putative class action filed in the U.S. District Court for the Southern District of New York entitled *Montgomery v. Bank of America, et al.* Plaintiff filed an amended complaint on January 14, 2011. Plaintiff seeks to represent all persons who acquired certain series of preferred stock offered by the Corporation pursuant to a shelf registration statement dated May 5, 2006. Plaintiff's claims arise from three offerings dated January 24, 2008, January 28, 2008 and May 20, 2008, from which the Corporation allegedly received proceeds of $15.8 billion. The amended complaint asserts claims under Sections 11, 12(a)(2) and 15 of the Securities Act of 1933, and alleges that the prospectus supplements associated with the offerings: (i) failed to disclose that the Corporation's loans, leases, CDOs and commercial MBS were impaired to a greater extent than disclosed; (ii) misrepresented the extent of the impaired assets by failing to establish adequate reserves or properly record losses for its impaired assets; (iii) misrepresented the adequacy of the Corporation's internal controls in light of the alleged impairment of its assets; (iv) misrepresented the Corporation's capital base and Tier 1 leverage ratio for risk-based capital in light of the allegedly impaired assets; and (v) misrepresented the thoroughness and adequacy of the Corporation's due diligence in connection with its acquisition of Countrywide. The amended complaint seeks rescission, compensatory and other damages. On March 16, 2012, the court granted defendants' motion to dismiss the first amended complaint. On December 3, 2013, the court denied plaintiffs' motion to file a second amended complaint.

On June 15, 2015, the U.S. Court of Appeals for the Second Circuit affirmed the district court's denial of plaintiff's motion to amend. On June 29, 2015, plaintiff filed a petition for rehearing en banc.

On July 31, 2015, the U.S. Court of Appeals denied plaintiff's petition for rehearing en banc. On January 11, 2016, the U.S. Supreme Court denied plaintiff's petition for a writ of certiorari, thereby exhausting plaintiff's appellate options.

Mortgage-backed Securities Litigation

The Corporation and its affiliates, Countrywide entities and their affiliates, and Merrill Lynch entities and their affiliates have been named as defendants in a number of cases relating to their various roles as issuer, originator, seller, depositor, sponsor, underwriter and/or controlling entity in MBS offerings, pursuant to which the MBS investors were entitled to a portion of the cash flow from the underlying pools of mortgages. These cases generally include purported class action suits and actions by individual MBS purchasers. Although the allegations vary by lawsuit, these cases generally allege that the registration statements, prospectuses and prospectus supplements for securities issued by securitization trusts contained material misrepresentations and omissions, in violation of the Securities Act of 1933 and/or state securities laws and other state statutory and common laws.

These cases generally involve allegations of false and misleading statements regarding: (i) the process by which the properties that served as collateral for the mortgage loans underlying the MBS were appraised; (ii) the percentage of equity that mortgage borrowers had in their homes; (iii) the borrowers' ability to repay their mortgage loans; (iv) the underwriting practices by which those mortgage loans were originated; (v) the ratings given to the different tranches of MBS by rating agencies; and (vi) the validity of each issuing trust's title to the mortgage loans comprising the pool for that securitization (collectively, MBS Claims). Plaintiffs in these cases generally seek unspecified compensatory damages, unspecified costs and legal fees and, in some instances, seek rescission.

The Corporation, Countrywide, Merrill Lynch and their affiliates may have claims for or may be subject to claims for contractual indemnification in connection with their various roles in regard to MBS. Certain of these entities have received claims for indemnification related to MBS securities actions, including claims from underwriters of MBS that were issued by these entities, and from underwriters and issuers of MBS backed by loans originated by these entities.

FHLB Seattle Litigation

On December 23, 2009, the Federal Home Loan Bank of Seattle (FHLB Seattle) filed four separate complaints, each against different defendants, including the Corporation and its affiliates, Countrywide and its affiliates, and MLPF&S and its affiliates, as well as certain other defendants, in the Superior Court of Washington for King County entitled *Federal Home Loan Bank of Seattle v. UBS Securities LLC, et al.*; *Federal Home Loan Bank of Seattle v. Countrywide Securities Corp., et al.*; *Federal Home Loan Bank of Seattle v. Banc of America Securities LLC, et al.* and *Federal Home Loan Bank of Seattle v. Merrill Lynch, Pierce, Fenner & Smith, Inc., et al*. FHLB Seattle asserts certain MBS Claims pertaining to its alleged purchases in 12 MBS offerings between 2005 and 2007. In those complaints, FHLB Seattle seeks, among other relief, unspecified damages under the Securities Act of Washington. On July 19, 2011, the Court denied the defendants' motions to dismiss the complaints. In November 2015, the Court denied motions for summary judgment filed by all defendants that addressed certain common issues, including the method for calculating pre-judgment interest in the event an award of interest is ultimately made under the Securities Act of Washington. Motions for summary judgment filed by defendants addressing issues specific to each complaint and defendant, as well as additional issues common to all defendants, remain pending.

Luther Class Action Litigation and Related Actions

Beginning in 2007, a number of pension funds and other investors filed putative class action lawsuits alleging certain MBS Claims against Countrywide, several of its affiliates, MLPF&S, the

Corporation, NB Holdings Corporation and certain other defendants. Those class action lawsuits concerned a total of 429 MBS offerings involving over $350 billion in securities issued by subsidiaries of Countrywide between 2005 and 2007. The actions, entitled *Luther v. Countrywide Financial Corporation, et al., Maine State Retirement System v. Countrywide Financial Corporation, et al., Western Conference of Teamsters Pension Trust Fund v. Countrywide Financial Corporation, et al.,* and *Putnam Bank v. Countrywide Financial Corporation, et al.*, were all assigned to the Countrywide RMBS MDL court. On December 6, 2013, the court granted final approval to a settlement of these actions in the amount of $500 million. Beginning on January 14, 2014, a number of class members appealed to the U.S. Court of Appeals for the Ninth Circuit. Oral argument is expected to be held in the second quarter of 2016.

Mortgage Repurchase Litigation

U.S. Bank Litigation

On August 29, 2011, U.S. Bank, National Association (U.S. Bank), as trustee for the HarborView Mortgage Loan Trust 2005-10 (the Trust), a mortgage pool backed by loans originated by Countrywide Home Loans, Inc. (CHL), filed a complaint in New York Supreme Court, in a case entitled *U.S. Bank National Association, as Trustee for HarborView Mortgage Loan Trust, Series 2005-10 v. Countrywide Home Loans, Inc. (dba Bank of America Home Loans), Bank of America Corporation, Countrywide Financial Corporation, Bank of America, N.A. and NB Holdings Corporation.* U.S. Bank asserts that, as a result of alleged misrepresentations by CHL in connection with its sale of the loans, defendants must repurchase all the loans in the pool, or in the alternative that it must repurchase a subset of those loans as to which U.S. Bank alleges that defendants have refused specific repurchase demands. U.S. Bank asserts claims for breach of contract and seeks specific performance of defendants' alleged obligation to repurchase the entire pool of loans (alleged to have an original aggregate principal balance of $1.75 billion) or alternatively the aforementioned subset (alleged to have an aggregate principal balance of "over $100 million"), together with reimbursement of costs and expenses and other unspecified relief. On May 29, 2013, the New York Supreme Court dismissed U.S. Bank's claim for repurchase of all the mortgage loans in the Trust. The court granted U.S. Bank leave to amend this claim. On June 18, 2013, U.S. Bank filed its second amended complaint seeking to replead its claim for repurchase of all loans in the Trust.

On February 13, 2014, the court granted defendants' motion to dismiss the repleaded claim seeking repurchase of all mortgage loans in the Trust; plaintiff appealed that order. On November 13, 2014, the court granted U.S. Bank's motion for leave to amend the complaint; defendants appealed that order. The amended complaint alleges breach of contract based upon defendants' failure to repurchase loans that were the subject of specific repurchase demands and also alleges breach of contract based upon defendants' discovery, during origination and servicing, of loans with material breaches of representations and warranties.

On September 16, 2015, defendants (i) withdrew the appeal that had been noticed, but not briefed, regarding the court's November 13, 2014 order that had granted U.S. Bank's motion for leave to amend, and (ii) moved, on the ground of failure to perfect, for dismissal of U.S. Bank's appeal from the court's February 13, 2014 order that had dismissed a claim seeking repurchase of all mortgage loans and sought clarification of a prior dismissal order. On September 30, 2015, U.S. Bank advised the court that it did not oppose dismissal of its appeal from the February 13, 2014 order. On December 15, 2015, defendants' motion to dismiss U.S. Bank's appeal was granted.

U.S. Bank Summonses with Notice

On August 29, 2014 and September 2, 2014, U.S. Bank National Association (U.S. Bank), solely in its capacity as Trustee for seven securitization trusts (the Trusts), served seven summonses with notice commencing actions against First Franklin Financial Corporation, Merrill Lynch Mortgage Lending, Inc., Merrill Lynch Mortgage Investors, Inc. (MLMI), and Ownit Mortgage Solutions Inc. in New York Supreme Court. The summonses advance breach of contract claims alleging that defendants breached representations and warranties related to loans securitized in the Trusts. The summonses allege that defendants failed to repurchase breaching mortgage loans from the Trusts, and seek specific performance of defendants' alleged obligation to repurchase breaching loans, declaratory judgment, compensatory, rescissory and other damages, and indemnity.

U.S. Bank has served complaints on four of the seven Trusts. On December 7, 2015, the court granted in part and denied in part defendants' motion to dismiss the complaints. The court dismissed claims for breach of representations and warranties against MLMI, dismissed U.S. Bank's claims for indemnity and attorneys' fees, and deferred a ruling regarding defendants' alleged failure to provide notice of alleged representation and warranty breaches, but upheld the complaints in all other respects. Defendants have until June 8, 2016 to demand complaints relating to the remaining three Trusts.

O'Donnell Litigation

On February 24, 2012, Edward O'Donnell filed a sealed qui tam complaint under the False Claims Act against the Corporation, individually, and as successor to Countrywide, CHL and a Countrywide business division known as Full Spectrum Lending. On October 24, 2012, the Department of Justice filed a complaint-in-intervention to join the matter, adding a claim under the Financial Institutions Reform, Recovery and Enforcement Act of 1989 (FIRREA) and adding BANA as a defendant. The action is entitled *United States of America, ex rel, Edward O'Donnell, appearing Qui Tam v. Bank of America Corp., et al.,* and was filed in the U.S. District Court for the Southern District of New York. The complaint-in-intervention asserted certain fraud claims in connection with the sale of loans to FNMA and FHLMC by Full Spectrum Lending and by the Corporation and BANA. On January 11, 2013, the government filed an amended complaint which added Countrywide Bank, FSB (CFSB) and a former officer of the Corporation as defendants. The court dismissed False Claims Act counts on May 8, 2013. On September 6, 2013, the government filed a second amended complaint alleging claims under FIRREA concerning allegedly fraudulent loan sales to the GSEs between August 2007 and May 2008. On September 24, 2013, the government dismissed the Corporation as a defendant. Following a trial, on October 23, 2013, a verdict of liability was returned against CHL, CFSB, BANA and the former officer. On July 30, 2014, the court imposed a civil penalty of $1.3 billion on BANA. On February 3, 2015, the court denied the Corporation's motions for judgment as a matter of law, or in the alternative, a new trial.

On February 20, 2015, CHL, CFSB and BANA filed an appeal. The Second Circuit held oral argument on December 16, 2015, but has not issued a decision on the appeal.

Pennsylvania Public School Employees' Retirement System

The Corporation and several current and former officers were named as defendants in a putative class action filed in the U.S. District Court for the Southern District of New York entitled *Pennsylvania Public School Employees' Retirement System v. Bank of America, et al.*

Following the filing of a complaint on February 2, 2011, plaintiff subsequently filed an amended complaint on September 23, 2011 in which plaintiff sought to sue on behalf of all persons who acquired the Corporation's common stock between February 27, 2009 and October 19, 2010 and "Common Equivalent Securities" sold in a December 2009 offering. The amended complaint asserted claims under Sections 10(b) and 20(a) of the Securities Exchange Act of 1934 and Sections 11 and 15 of the Securities Act of 1933, and alleged that the Corporation's public statements: (i) concealed problems in the Corporation's mortgage servicing business resulting from the widespread use of the Mortgage Electronic Recording System; (ii) failed to disclose the Corporation's exposure to mortgage repurchase claims; (iii) misrepresented the adequacy of internal controls; and (iv) violated certain Generally Accepted Accounting Principles. The amended complaint sought unspecified damages.

On July 11, 2012, the court granted in part and denied in part defendants' motions to dismiss the amended complaint. All claims under the Securities Act were dismissed against all defendants, with prejudice. The motion to dismiss the claim against the Corporation under Section 10(b) of the Exchange Act was denied. All claims under the Exchange Act against the officers were dismissed, with leave to replead. Defendants moved to dismiss a second amended complaint in which plaintiff sought to replead claims against certain current and former officers under Sections 10(b) and 20(a). On April 17, 2013, the court granted in part and denied in part the motion to dismiss, sustaining Sections 10(b) and 20(a) claims against the current and former officers.

On August 12, 2015, the parties agreed to settle the claims for $335 million. The agreement is subject to final documentation and court approval.

Takefuji Litigation

In April 2010, Takefuji Corporation (Takefuji) filed a claim against Merrill Lynch International and Merrill Lynch Japan Securities (MLJS) in Tokyo District Court. The claim concerns Takefuji's purchase in 2007 of credit-linked notes structured and sold by defendants that resulted in a loss to Takefuji of approximately JPY29.0 billion (approximately $270 million) following an event of default. Takefuji alleges that defendants failed to meet certain disclosure obligations concerning the notes.

On July 19, 2013, the Tokyo District Court issued a judgment in defendants' favor, a decision that Takefuji subsequently appealed to the Tokyo High Court. On August 27, 2014, the Tokyo High Court vacated the decision of the District Court and issued a judgment awarding Takefuji JPY14.5 billion (approximately $135 million) in damages, plus interest at a rate of five percent from March 18, 2008. On September 10, 2014, defendants filed an appeal with the Japanese Supreme Court. The appeal hearing occurred on February 16, 2016. The Corporation expects a judgment to be issued in the coming months.

U.S. Securities and Exchange Commission (SEC) Investigations

The SEC has been conducting investigations of the Corporation's U.S. broker-dealer subsidiary, MLPF&S, regarding compliance with SEC Rule 15c3-3. The Corporation is cooperating with these investigations and is in discussions with the SEC regarding the possibility of resolving these matters. There can be no assurances that these discussions will lead to a resolution or whether the SEC will institute administrative or civil proceedings. The timing, amount and impact of these matters is uncertain.

NOTE 13 Shareholders' Equity

Common Stock

Declared Quarterly Cash Dividends on Common Stock [1]

Declaration Date	Record Date	Payment Date	Dividend Per Share
January 21, 2016	March 4, 2016	March 25, 2016	$ 0.05
October 22, 2015	December 4, 2015	December 24, 2015	0.05
July 23, 2015	September 4, 2015	September 25, 2015	0.05
April 16, 2015	June 5, 2015	June 26, 2015	0.05
February 10, 2015	March 6, 2015	March 27, 2015	0.05

[1] In 2015 and through February 24, 2016.

On March 11, 2015, the Corporation announced that the Federal Reserve completed its 2015 Comprehensive Capital Analysis and Review (CCAR) and advised that it did not object to the 2015 capital plan but gave a conditional non-objection under which the Corporation was required to resubmit its CCAR capital plan by September 30, 2015 and address certain weaknesses the Federal Reserve identified in the Corporation's capital planning process. The requested capital actions included a request to repurchase $4.0 billion of common stock over five quarters beginning in the second quarter of 2015, and to maintain the quarterly common stock dividend at the current rate of $0.05 per share. The Corporation resubmitted its CCAR capital plan on September 30, 2015 and on December 10, 2015, the Federal Reserve announced that it did not object to the resubmitted CCAR capital plan.

In 2015, the Corporation repurchased and retired 140.3 million shares of common stock in connection with the 2015 capital plan, which reduced shareholders' equity by $2.4 billion. In 2014 and 2013, the Corporation repurchased and retired 101.1 million and 231.7 million shares of common stock, which reduced shareholders' equity by $1.7 billion and $3.2 billion.

At December 31, 2015, the Corporation had warrants outstanding and exercisable to purchase 121.8 million shares of its common stock at an exercise price of $30.79 per share expiring on October 28, 2018, and warrants outstanding and exercisable to purchase 150.4 million shares of common stock at an exercise price of $13.107 per share expiring on January 16, 2019. These warrants were originally issued in connection with preferred stock issuances to the U.S. Department of the Treasury in 2009 and 2008, and are listed on the New York Stock Exchange. The exercise price of the warrants expiring on January 16, 2019 is subject to continued adjustment each time the quarterly cash dividend is in excess of $0.01 per common share to compensate the holders of the warrants for dilution resulting from an increased dividend. The Corporation had cash dividends of $0.05 per share per quarter, or $0.20 per share for the year, in 2015 resulting in an adjustment to the exercise price of these warrants in each quarter. As a result of the Corporation's 2015 dividends of $0.20 per common share, the exercise price of these warrants was adjusted to $13.107. The warrants expiring on October 28, 2018 also contain this anti-dilution provision except the adjustment is triggered only when the Corporation declares quarterly dividends at a level greater than $0.32 per common share.

In connection with the issuance of the Corporation's 6% Cumulative Perpetual Preferred Stock, Series T (the Series T Preferred Stock), the Corporation issued a warrant to purchase 700 million shares of the Corporation's common stock. The warrant is exercisable at the holder's option at any time, in whole or in part, until September 1, 2021, at an exercise price of $7.142857 per share of common stock. The warrant may be settled in cash or by exchanging all or a portion of the Series T Preferred Stock. For more information on the Series T Preferred Stock, see Preferred Stock in this Note.

In connection with employee stock plans, in 2015, the Corporation issued approximately 7 million shares and repurchased approximately 3 million shares of its common stock to satisfy tax withholding obligations. At December 31, 2015, the Corporation had reserved 1.6 billion unissued shares of common stock for future issuances under employee stock plans, common stock warrants, convertible notes and preferred stock.

Preferred Stock

The cash dividends declared on preferred stock were $1.5 billion, $1.0 billion and $1.2 billion for 2015, 2014 and 2013, respectively.

On January 29, 2016, the Corporation issued 44,000 shares of its 6.200% Non-Cumulative Preferred Stock, Series CC for $1.1 billion. Dividends are paid quarterly commencing on April 29, 2016. Series CC preferred stock has a liquidation preference of $25,000 per share and is subject to certain restrictions in the event that the Corporation fails to declare and pay full dividends.

On January 27, 2015, the Corporation issued 44,000 shares of its 6.500% Non-Cumulative Preferred Stock, Series Y for $1.1 billion. Dividends are paid quarterly commencing on April 27, 2015. On March 17, 2015, the corporation issued 76,000 shares of its Fixed-to-Floating Rate Non-Cumulative Preferred Stock, Series AA for $1.9 billion. Dividends are paid semi-annually commencing on September 17, 2015. Series Y and AA preferred stock have a liquidation preference of $25,000 per share and are subject to certain restrictions in the event that the Corporation fails to declare and pay full dividends.

At the Corporation's annual meeting of stockholders on May 7, 2014, the stockholders approved an amendment to the Series T Preferred Stock such that it qualifies as Tier 1 capital, and the amendment became effective in the three months ended June 30, 2014. The more significant changes to the terms of the Series T Preferred Stock in the amendment were: (1) dividends are no longer cumulative; (2) the dividend rate is fixed at 6%; and (3) the Corporation may redeem the Series T Preferred Stock only after the fifth anniversary of the effective date of the amendment.

In 2014, the Corporation issued $6.0 billion of its Preferred Stock, Series V, X, W and Z. On June 17, 2014, the Corporation issued 60,000 shares of its Fixed-to-Floating Rate Non-Cumulative Preferred Stock, Series V for $1.5 billion. Dividends are paid semi-annually commencing on December 17, 2014. On September 5, 2014, the Corporation issued 80,000 shares of its Fixed-to-Floating Rate Non-Cumulative Preferred Stock, Series X for $2.0 billion. Dividends are paid semi-annually commencing on March 5, 2015. On September 9, 2014, the Corporation issued 44,000 shares of its 6.625% Non-Cumulative Preferred Stock, Series W for $1.1 billion. Dividends are paid quarterly commencing on December 9, 2014. On October 23, 2014, the Corporation issued 56,000 shares of its Fixed-to-Floating Rate Non-Cumulative Preferred Stock, Series Z for $1.4 billion. Dividends are paid semi-annually commencing on April 23, 2015. Series V, X, W and Z preferred stock have a liquidation preference of $25,000 per share and are subject to certain restrictions in the event that the Corporation fails to declare and pay full dividends.

In 2013, the Corporation redeemed for $6.6 billion its Non-Cumulative Preferred Stock, Series H, J, 6, 7 and 8. The $100 million difference between the carrying value of $6.5 billion and the redemption price of the preferred stock was recorded as a preferred stock dividend. In addition, the Corporation issued $1.0 billion of its Fixed-to-Floating Rate Semi-annual Non-Cumulative Preferred Stock, Series U.

The table below presents a summary of perpetual preferred stock outstanding at December 31, 2015.

Preferred Stock Summary

(Dollars in millions, except as noted)

Series	Description	Initial Issuance Date	Total Shares Outstanding	Liquidation Preference per Share (in dollars)	Carrying Value [1]	Per Annum Dividend Rate	Redemption Period [2]
Series B	7% Cumulative Redeemable	June 1997	7,571	$ 100	$ 1	7.00%	n/a
Series D [3]	6.204% Non-Cumulative	September 2006	26,174	25,000	654	6.204%	On or after September 14, 2011
Series E [3]	Floating Rate Non-Cumulative	November 2006	12,691	25,000	317	3-mo. LIBOR + 35 bps [4]	On or after November 15, 2011
Series F	Floating Rate Non-Cumulative	March 2012	1,409	100,000	141	3-mo. LIBOR + 40 bps [4]	On or after March 15, 2012
Series G	Adjustable Rate Non-Cumulative	March 2012	4,926	100,000	493	3-mo. LIBOR + 40 bps [4]	On or after March 15, 2012
Series I [3]	6.625% Non-Cumulative	September 2007	14,584	25,000	365	6.625%	On or after October 1, 2017
Series K [5]	Fixed-to-Floating Rate Non-Cumulative	January 2008	61,773	25,000	1,544	8.00% to, but excluding, 1/30/18; 3-mo. LIBOR + 363 bps thereafter	On or after January 30, 2018
Series L	7.25% Non-Cumulative Perpetual Convertible	January 2008	3,080,182	1,000	3,080	7.25%	n/a
Series M [5]	Fixed-to-Floating Rate Non-Cumulative	April 2008	52,399	25,000	1,310	8.125% to, but excluding, 5/15/18; 3-mo. LIBOR + 364 bps thereafter	On or after May 15, 2018
Series T	6% Non-Cumulative	September 2011	50,000	100,000	2,918	6.00%	See description in Preferred Stock in this Note
Series U [5]	Fixed-to-Floating Rate Non-Cumulative	May 2013	40,000	25,000	1,000	5.2% to, but excluding, 6/1/23; 3-mo. LIBOR + 313.5 bps thereafter	On or after June 1, 2023
Series V [5]	Fixed-to-Floating Rate Non-Cumulative	June 2014	60,000	25,000	1,500	5.125% to, but excluding, 6/17/19; 3-mo. LIBOR + 338.7 bps thereafter	On or after June 17, 2019
Series W [3]	6.625% Non-Cumulative	September 2014	44,000	25,000	1,100	6.625%	On or after September 9, 2019
Series X [5]	Fixed-to-Floating Rate Non-Cumulative	September 2014	80,000	25,000	2,000	6.250% to, but excluding, 9/5/24; 3-mo. LIBOR + 370.5 bps thereafter	On or after September 5, 2024
Series Y [3]	6.500% Non-Cumulative	January 2015	44,000	25,000	1,100	6.500%	On or after January 27, 2020
Series Z [5]	Fixed-to-Floating Rate Non-Cumulative	October 2014	56,000	25,000	1,400	6.500% to, but excluding, 10/23/24; 3-mo. LIBOR + 417.4 bps thereafter	On or after October 23, 2024
Series AA [5]	Fixed-to-Floating Rate Non-Cumulative	March 2015	76,000	25,000	1,900	6.100% to, but excluding, 3/17/25; 3-mo. LIBOR + 389.8 bps thereafter	On or after March 17, 2025
Series 1 [6]	Floating Rate Non-Cumulative	November 2004	3,275	30,000	98	3-mo. LIBOR + 75 bps [7]	On or after November 28, 2009
Series 2 [6]	Floating Rate Non-Cumulative	March 2005	9,967	30,000	299	3-mo. LIBOR + 65 bps [7]	On or after November 28, 2009
Series 3 [6]	6.375% Non-Cumulative	November 2005	21,773	30,000	653	6.375%	On or after November 28, 2010
Series 4 [6]	Floating Rate Non-Cumulative	November 2005	7,010	30,000	210	3-mo. LIBOR + 75 bps [4]	On or after November 28, 2010
Series 5 [6]	Floating Rate Non-Cumulative	March 2007	14,056	30,000	422	3-mo. LIBOR + 50 bps [4]	On or after May 21, 2012
Total			**3,767,790**		**$ 22,505**		

[1] Amounts shown are before third-party issuance costs and certain book value adjustments of $232 million.
[2] The Corporation may redeem series of preferred stock on or after the redemption date, in whole or in part, at its option, at the liquidation preference plus declared and unpaid dividends. Series B and Series L Preferred Stock do not have early redemption/call rights.
[3] Ownership is held in the form of depositary shares, each representing a 1/1,000th interest in a share of preferred stock, paying a quarterly cash dividend, if and when declared.
[4] Subject to 4.00% minimum rate per annum.
[5] Ownership is held in the form of depositary shares, each representing a 1/25th interest in a share of preferred stock, paying a semi-annual cash dividend, if and when declared, until the first redemption date at which time, it adjusts to a quarterly cash dividend, if and when declared, thereafter.
[6] Ownership is held in the form of depositary shares, each representing a 1/1,200th interest in a share of preferred stock, paying a quarterly cash dividend, if and when declared.
[7] Subject to 3.00% minimum rate per annum.
n/a = not applicable

The 7.25% Non-Cumulative Perpetual Convertible Preferred Stock, Series L (Series L Preferred Stock) listed in the Preferred Stock Summary table does not have early redemption/call rights. Each share of the Series L Preferred Stock may be converted at any time, at the option of the holder, into 20 shares of the Corporation's common stock plus cash in lieu of fractional shares. The Corporation may cause some or all of the Series L Preferred Stock, at its option, at any time or from time to time, to be converted into shares of common stock at the then-applicable conversion rate if, for 20 trading days during any period of 30 consecutive trading days, the closing price of common stock exceeds 130 percent of the then-applicable conversion price of the Series L Preferred Stock. If a conversion of Series L Preferred Stock occurs at the option of the holder, subsequent to a dividend record date but prior to the dividend payment date, the Corporation will still pay any accrued dividends payable.

All series of preferred stock in the Preferred Stock Summary table have a par value of $0.01 per share, are not subject to the operation of a sinking fund, have no participation rights, and with the exception of the Series L Preferred Stock, are not convertible. The holders of the Series B Preferred Stock and Series 1 through 5 Preferred Stock have general voting rights, and the holders of the other series included in the table have no general voting rights. All outstanding series of preferred stock of the Corporation have preference over the Corporation's common stock with respect to the payment of dividends and distribution of the Corporation's assets in the event of a liquidation or dissolution. With the exception of the Series B, F, G and T Preferred Stock, if any dividend payable on these series is in arrears for three or more semi-annual or six or more quarterly dividend periods, as applicable (whether consecutive or not), the holders of these series and any other class or series of preferred stock ranking equally as to payment of dividends and upon which equivalent voting rights have been conferred and are exercisable (voting as a single class) will be entitled to vote for the election of two additional directors. These voting rights terminate when the Corporation has paid in full dividends on these series for at least two semi-annual or four quarterly dividend periods, as applicable, following the dividend arrearage.

NOTE 14 Accumulated Other Comprehensive Income (Loss)

The table below presents the changes in accumulated OCI after-tax for 2013, 2014 and 2015.

(Dollars in millions)	Available-for-Sale Debt Securities	Available-for-Sale Marketable Equity Securities	Debit Valuation Adjustments [1]	Derivatives	Employee Benefit Plans	Foreign Currency [2]	Total
Balance, December 31, 2012	$ 4,537	$ 462	n/a	$ (2,869)	$ (4,456)	$ (377)	$ (2,703)
Net change	(7,024)	(466)	n/a	592	2,049	(135)	(4,984)
Balance, December 31, 2013	$ (2,487)	$ (4)	n/a	$ (2,277)	$ (2,407)	$ (512)	$ (7,687)
Net change	4,128	21	n/a	616	(943)	(157)	3,665
Balance, December 31, 2014	$ 1,641	$ 17	n/a	$ (1,661)	$ (3,350)	$ (669)	$ (4,022)
Cumulative adjustment for accounting change	**—**	**—**	**$ (1,226)**	**—**	**—**	**—**	**(1,226)**
Net change	**(1,625)**	**45**	**615**	**584**	**394**	**(123)**	**(110)**
Balance, December 31, 2015	**$ 16**	**$ 62**	**$ (611)**	**$ (1,077)**	**$ (2,956)**	**$ (792)**	**$ (5,358)**

[1] For information on the impact of early adoption of new accounting guidance on recognition and measurement of financial instruments, see *Note 1 – Summary of Significant Accounting Principles.*
[2] The net change in fair value represents the impact of changes in spot foreign exchange rates on the Corporation's net investment in non-U.S. operations and related hedges.
n/a = not applicable

The table below presents the net change in fair value recorded in accumulated OCI, net realized gains and losses reclassified into earnings and other changes for each component of OCI before- and after-tax for 2015, 2014 and 2013.

Changes in OCI Components Before- and After-tax

	2015			2014			2013		
(Dollars in millions)	Before-tax	Tax effect	After-tax	Before-tax	Tax effect	After-tax	Before-tax	Tax effect	After-tax
Available-for-sale debt securities:									
Net increase (decrease) in fair value	**$ (1,564)**	**$ 595**	**$ (969)**	$ 8,064	$ (3,027)	$ 5,037	$ (9,791)	$ 3,610	$ (6,181)
Net realized gains reclassified into earnings	**(1,057)**	**401**	**(656)**	(1,465)	556	(909)	(1,360)	517	(843)
Net change	**(2,621)**	**996**	**(1,625)**	6,599	(2,471)	4,128	(11,151)	4,127	(7,024)
Available-for-sale marketable equity securities:									
Net increase in fair value	**72**	**(27)**	**45**	34	(13)	21	32	(12)	20
Net realized gains reclassified into earnings	**—**	**—**	**—**	—	—	—	(771)	285	(486)
Net change	**72**	**(27)**	**45**	34	(13)	21	(739)	273	(466)
Debit valuation adjustments:									
Net increase in fair value	**436**	**(166)**	**270**	n/a	n/a	n/a	n/a	n/a	n/a
Net realized losses reclassified into earnings	**556**	**(211)**	**345**	n/a	n/a	n/a	n/a	n/a	n/a
Net change	**992**	**(377)**	**615**	n/a	n/a	n/a	n/a	n/a	n/a
Derivatives:									
Net increase in fair value	**55**	**(22)**	**33**	195	(54)	141	156	(51)	105
Net realized losses reclassified into earnings	**883**	**(332)**	**551**	760	(285)	475	773	(286)	487
Net change	**938**	**(354)**	**584**	955	(339)	616	929	(337)	592
Employee benefit plans:									
Net increase (decrease) in fair value	**408**	**(121)**	**287**	(1,629)	614	(1,015)	2,985	(1,128)	1,857
Net realized losses reclassified into earnings	**169**	**(62)**	**107**	55	(23)	32	237	(79)	158
Settlements, curtailments and other	**1**	**(1)**	**—**	(1)	41	40	46	(12)	34
Net change	**578**	**(184)**	**394**	(1,575)	632	(943)	3,268	(1,219)	2,049
Foreign currency:									
Net decrease in fair value	**600**	**(723)**	**(123)**	714	(879)	(165)	244	(384)	(140)
Net realized losses reclassified into earnings	**(38)**	**38**	**—**	20	(12)	8	138	(133)	5
Net change	**562**	**(685)**	**(123)**	734	(891)	(157)	382	(517)	(135)
Total other comprehensive income (loss)	**$ 521**	**$ (631)**	**$ (110)**	$ 6,747	$ (3,082)	$ 3,665	$ (7,311)	$ 2,327	$ (4,984)

n/a = not applicable

The table below presents impacts on net income of significant amounts reclassified out of each component of accumulated OCI before- and after-tax for 2015, 2014 and 2013.

Reclassifications Out of Accumulated OCI

(Dollars in millions)

Accumulated OCI Components	Income Statement Line Item Impacted	2015	2014	2013
Available-for-sale debt securities:				
	Gains on sales of debt securities	**$ 1,138**	$ 1,481	$ 1,380
	Other loss	**(81)**	(16)	(20)
	Income before income taxes	**1,057**	1,465	1,360
	Income tax expense	**401**	556	517
	Reclassification to net income	**656**	909	843
Available-for-sale marketable equity securities:				
	Equity investment income	**—**	—	771
	Income before income taxes	**—**	—	771
	Income tax expense	**—**	—	285
	Reclassification to net income	**—**	—	486
Debit valuation adjustments:				
	Other loss	**(556)**	n/a	n/a
	Loss before income taxes	**(556)**	n/a	n/a
	Income tax benefit	**(211)**	n/a	n/a
	Reclassification to net income	**(345)**	n/a	n/a
Derivatives:				
Interest rate contracts	Net interest income	**(974)**	(1,119)	(1,119)
Commodity contracts	Trading account losses	**—**	—	(1)
Interest rate contracts	Other income	**—**	—	18
Equity compensation contracts	Personnel	**91**	359	329
	Loss before income taxes	**(883)**	(760)	(773)
	Income tax benefit	**(332)**	(285)	(286)
	Reclassification to net income	**(551)**	(475)	(487)
Employee benefit plans:				
Prior service cost	Personnel	**(5)**	(5)	(4)
Net actuarial losses	Personnel	**(164)**	(50)	(225)
Settlements and curtailments	Personnel	**—**	—	(8)
	Loss before income taxes	**(169)**	(55)	(237)
	Income tax benefit	**(62)**	(23)	(79)
	Reclassification to net income	**(107)**	(32)	(158)
Foreign currency:				
	Other income (loss)	**38**	(20)	(138)
	Income (loss) before income taxes	**38**	(20)	(138)
	Income tax expense (benefit)	**38**	(12)	(133)
	Reclassification to net income	**—**	(8)	(5)
Total reclassification adjustments		**$ (347)**	$ 394	$ 679

n/a = not applicable

NOTE 15 Earnings Per Common Share

The calculation of earnings per common share (EPS) and diluted EPS for 2015, 2014 and 2013 is presented below. For more information on the calculation of EPS, see *Note 1 – Summary of Significant Accounting Principles*.

(Dollars in millions, except per share information; shares in thousands)	2015	2014	2013
Earnings per common share			
Net income	**$ 15,836**	$ 5,520	$ 10,539
Preferred stock dividends	**(1,483)**	(1,044)	(1,349)
Net income applicable to common shareholders	**14,353**	4,476	9,190
Dividends and undistributed earnings allocated to participating securities	**—**	—	(2)
Net income allocated to common shareholders	**$ 14,353**	$ 4,476	$ 9,188
Average common shares issued and outstanding	**10,462,282**	10,527,818	10,731,165
Earnings per common share	**$ 1.37**	$ 0.43	$ 0.86
Diluted earnings per common share			
Net income applicable to common shareholders	**$ 14,353**	$ 4,476	$ 9,190
Add preferred stock dividends due to assumed conversions	**300**	—	300
Dividends and undistributed earnings allocated to participating securities	**—**	—	(2)
Net income allocated to common shareholders	**$ 14,653**	$ 4,476	$ 9,488
Average common shares issued and outstanding	**10,462,282**	10,527,818	10,731,165
Dilutive potential common shares [1]	**751,710**	56,717	760,253
Total diluted average common shares issued and outstanding	**11,213,992**	10,584,535	11,491,418
Diluted earnings per common share	**$ 1.31**	$ 0.42	$ 0.83

[1] Includes incremental dilutive shares from restricted stock units, restricted stock, stock options and warrants.

The Corporation previously issued a warrant to purchase 700 million shares of the Corporation's common stock to the holder of the Series T Preferred Stock. The warrant may be exercised, at the option of the holder, through tendering the Series T Preferred Stock or paying cash. For 2015 and 2013, the 700 million average dilutive potential common shares were included in the diluted share count under the "if-converted" method. For 2014, the 700 million average dilutive potential common shares were not included in the diluted share count because the result would have been antidilutive under the "if-converted" method. For additional information, see *Note 13 – Shareholders' Equity.*

For 2015, 2014 and 2013, 62 million average dilutive potential common shares associated with the Series L Preferred Stock were not included in the diluted share count because the result would have been antidilutive under the "if-converted" method. For 2015, 2014 and 2013, average options to purchase 66 million, 91 million and 126 million shares of common stock, respectively, were outstanding but not included in the computation of EPS because the result would have been antidilutive under the treasury stock method. For 2015 and 2014, average warrants to purchase 122 million shares of common stock were outstanding but not included in the computation of EPS because the result would have been antidilutive under the treasury stock method compared to 272 million shares for 2013. For 2015 and 2014, average warrants to purchase 150 million shares of common stock were included in the diluted EPS calculation under the treasury stock method.

In connection with the preferred stock actions described in *Note 13 – Shareholders' Equity*, the Corporation recorded a $100 million non-cash preferred stock dividend in 2013, which is included in the calculation of net income allocated to common shareholders.

NOTE 16 Regulatory Requirements and Restrictions

The Federal Reserve, Office of the Comptroller of the Currency (OCC) and FDIC (collectively, U.S. banking regulators) jointly establish regulatory capital adequacy guidelines for U.S. banking organizations. As a financial holding company, the Corporation is subject to capital adequacy rules issued by the Federal Reserve, and its banking entity affiliates, including BANA and Bank of America California, N.A., are subject to capital adequacy rules issued by their respective primary regulators.

On January 1, 2014, the Corporation and its affiliates became subject to Basel 3, which includes certain transition provisions through January 1, 2019. The Corporation and its primary banking entity affiliate, BANA, are Advanced approaches institutions under Basel 3.

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. Basel 3 revised minimum capital ratios and buffer requirements, added a supplementary leverage ratio, and addressed the adequately capitalized minimum requirements under the PCA framework. Finally, Basel 3 established two methods of calculating risk-weighted assets, the Standardized approach and the Advanced approaches.

As an Advanced approaches institution, under Basel 3, the Corporation was required to complete a qualification period (parallel run) to demonstrate compliance with the Basel 3 Advanced approaches to the satisfaction of U.S. banking regulators. The Corporation received approval to begin using the Advanced approaches capital framework to determine risk-based capital requirements in the fourth quarter of 2015. Having exited parallel run on October 1, 2015, the Corporation is 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, and was the Advanced approaches in the fourth quarter of 2015. Prior to the fourth quarter of 2015, the Corporation was required to report its capital adequacy under the Standardized approach only.

Effective July 1, 2016, the Corporation changed its accounting method for the amortization of premiums and accretion of discounts related to certain debt securities. Under the applicable bank regulatory rules, the Corporation is not required to and, accordingly, will not restate previously-filed capital ratios in connection with the change in accounting method related to certain debt securities. The cumulative impact of this change would have resulted in an insignificant pro forma change of the Corporation's capital metrics and ratios. For additional information, see *Note 1 – Summary of Significant Accounting Principles.*

The table below presents capital ratios and related information in accordance with Basel 3 Standardized and Advanced approaches – Transition as measured at December 31, 2015 and 2014 for the Corporation and BANA.

Regulatory Capital under Basel 3 – Transition [1]

(Dollars in millions)	December 31, 2015							
	Bank of America Corporation				Bank of America, N.A.			
	Standardized Approach	Advanced Approaches	Regulatory Minimum	Well-capitalized [2]	Standardized Approach	Advanced Approaches	Regulatory Minimum	Well-capitalized [2]
Risk-based capital metrics:								
Common equity tier 1 capital	$ 163,026	$ 163,026			$ 144,869	$ 144,869		
Tier 1 capital	180,778	180,778			144,869	144,869		
Total capital [3]	220,676	210,912			159,871	150,624		
Risk-weighted assets (in billions)	1,403	1,602			1,183	1,104		
Common equity tier 1 capital ratio	11.6%	10.2%	4.5%	n/a	12.2%	13.1%	4.5%	6.5%
Tier 1 capital ratio	12.9	11.3	6.0	6.0%	12.2	13.1	6.0	8.0
Total capital ratio	15.7	13.2	8.0	10.0	13.5	13.6	8.0	10.0
Leverage-based metrics:								
Adjusted quarterly average assets (in billions) [4]	$ 2,103	$ 2,103			$ 1,575	$ 1,575		
Tier 1 leverage ratio	8.6%	8.6%	4.0	n/a	9.2%	9.2%	4.0	5.0
	December 31, 2014							
Risk-based capital metrics:								
Common equity tier 1 capital	$ 155,361	n/a			$ 145,150	n/a		
Tier 1 capital	168,973	n/a			145,150	n/a		
Total capital [3]	208,670	n/a			161,623	n/a		
Risk-weighted assets (in billions)	1,262	n/a			1,105	n/a		
Common equity tier 1 capital ratio	12.3%	n/a	4.0%	n/a	13.1%	n/a	4.0%	n/a
Tier 1 capital ratio	13.4	n/a	5.5	6.0%	13.1	n/a	5.5	6.0%
Total capital ratio	16.5	n/a	8.0	10.0	14.6	n/a	8.0	10.0
Leverage-based metrics:								
Adjusted quarterly average assets (in billions) [4]	$ 2,060	$ 2,060			$ 1,509	$ 1,509		
Tier 1 leverage ratio	8.2%	8.2%	4.0	n/a	9.6%	9.6%	4.0	5.0

[1] The Corporation received approval to begin using the Advanced approaches capital framework to determine risk-based capital requirements in the fourth quarter of 2015. With the approval to exit parallel run, the Corporation is required to report regulatory capital risk-weighted assets and ratios under both the Standardized and Advanced approaches. The approach that yields the lower ratio is to be used to assess capital adequacy and was the Advanced approaches at December 31, 2015. Prior to exiting parallel run, the Corporation was required to report regulatory capital risk-weighted assets and ratios under the Standardized approach only. As previously disclosed, with the approval to exit parallel run, U.S. banking regulators requested modifications to certain internal analytical models including the wholesale (e.g., commercial) credit models which increased the Corporation's risk-weighted assets in the fourth quarter of 2015.

[2] To be "well capitalized" under the current U.S. banking regulatory agency definitions, a bank holding company or national bank must maintain these or higher ratios and not be subject to a Federal Reserve order or directive to maintain higher capital levels.

[3] Total capital under the Advanced approaches differs from the Standardized approach due to differences in the amount permitted in Tier 2 capital related to the qualifying allowance for credit losses.

[4] Reflects adjusted average assets for the three months ended December 31, 2015 and 2014.

n/a = not applicable

The capital adequacy rules issued by the U.S. banking regulators require institutions to meet the established minimums outlined in the Regulatory Capital under Basel 3 – Transition table. Failure to meet the minimum requirements can lead to certain mandatory and discretionary actions by regulators that could have a material adverse impact on the Corporation's financial position. At December 31, 2015 and 2014, the Corporation and its banking entity affiliates were "well capitalized."

Other Regulatory Matters

On February 18, 2014, the Federal Reserve approved a final rule implementing certain enhanced supervisory and prudential requirements established under the 2010 Dodd-Frank Wall Street Reform and Consumer Protection Act. The final rule formalizes risk management requirements primarily related to governance and liquidity risk management and reiterates the provisions of previously issued final rules related to risk-based and leverage capital and stress test requirements. Also, a debt-to-equity limit may be enacted for an individual BHC if it is determined to pose a grave threat to the financial stability of the U.S. Such limit is at the discretion of the Financial Stability Oversight Council (FSOC) or the Federal Reserve on behalf of the FSOC.

The Federal Reserve requires the Corporation's banking subsidiaries to maintain reserve requirements based on a percentage of certain deposits. The average daily reserve balance requirements, in excess of vault cash, maintained by the Corporation with the Federal Reserve were $9.8 billion and $9.1 billion for 2015 and 2014. At December 31, 2015 and 2014, the Corporation had cash in the amount of $12.1 billion and $7.7 billion, and securities with a fair value of $17.5 billion and $19.2 billion that were segregated in compliance with securities regulations or deposited with clearing organizations.

The primary sources of funds for cash distributions by the Corporation to its shareholders are capital distributions received from its banking subsidiaries, BANA and Bank of America California, N.A. In 2015, the Corporation received dividends of $18.8 billion from BANA and none from Bank of America California, N.A. The amount of dividends that a subsidiary bank may declare in a calendar year is the subsidiary bank's net profits for that year combined with its retained net profits for the preceding two years. Retained net profits, as defined by the OCC, consist of net income less dividends declared during the period. In 2016, BANA can declare and pay dividends of approximately $5.0 billion to the Corporation plus an additional amount equal to its retained net profits for 2016 up to the date of any such dividend declaration. Bank of America California, N.A. can pay dividends of $895 million in 2016 plus an additional amount equal to its retained net profits for 2016 up to the date of any such dividend declaration.

NOTE 17 Employee Benefit Plans

Pension and Postretirement Plans

The Corporation sponsors a qualified noncontributory trusteed pension plan, a number of noncontributory nonqualified pension plans, and postretirement health and life plans that cover eligible employees. Non-U.S. pension plans sponsored by the Corporation vary based on the country and local practices.

In 2013, the Corporation merged a defined benefit pension plan, which covered eligible employees of certain legacy companies, into the legacy Bank of America Pension Plan (the Pension Plan). This merged plan is referred to as the Qualified Pension Plan. The merger resulted in a remeasurement of the qualified pension obligations and plan assets at fair value as of the merger date which increased accumulated OCI by $2.0 billion, net-of-tax. The benefit structures under the merged legacy plans have not changed and remain intact in the Qualified Pension Plan.

Benefits earned under the Qualified Pension Plan have been frozen. Thereafter, the cash balance accounts continue to earn investment credits or interest credits in accordance with the terms of the plan document.

It is the policy of the Corporation to fund no less than the minimum funding amount required by the Employee Retirement Income Security Act of 1974 (ERISA).

The Pension Plan has a balance guarantee feature for account balances with participant-selected earnings, applied at the time a benefit payment is made from the plan that effectively provides principal protection for participant balances transferred and certain compensation credits. The Corporation is responsible for funding any shortfall on the guarantee feature.

The Corporation has an annuity contract that guarantees the payment of benefits vested under a terminated U.S. pension plan (the Other Pension Plan). The Corporation, under a supplemental agreement, may be responsible for, or benefit from actual experience and investment performance of the annuity assets. The Corporation made no contribution under this agreement in 2015 or 2014. Contributions may be required in the future under this agreement.

The Corporation's noncontributory, nonqualified pension plans are unfunded and provide supplemental defined pension benefits to certain eligible employees.

In addition to retirement pension benefits, certain benefits eligible to employees may become eligible to continue participation as retirees in health care and/or life insurance plans sponsored by the Corporation. Based on the other provisions of the individual plans, certain retirees may also have the cost of these benefits partially paid by the Corporation. These plans are referred to as the Postretirement Health and Life Plans.

The Pension and Postretirement Plans table summarizes the changes in the fair value of plan assets, changes in the projected benefit obligation (PBO), the funded status of both the accumulated benefit obligation (ABO) and the PBO, and the weighted-average assumptions used to determine benefit obligations for the pension plans and postretirement plans at December 31, 2015 and 2014. Amounts recognized at December 31, 2015 and 2014 are reflected in other assets, and in accrued expenses and other liabilities on the Consolidated Balance Sheet. The estimate of the Corporation's PBO associated with these plans considers various actuarial assumptions, including assumptions for mortality rates and discount rates. As of December 31, 2014, the Corporation adopted mortality assumptions published by the Society of Actuaries in October 2014, adjusted to reflect observed and anticipated future mortality experience of the participants in the Corporation's U.S. plans. The adoption of the new mortality assumptions resulted in an increase of the PBO of approximately $580 million at December 31, 2014. The discount rate assumptions are derived from a cash flow matching technique that utilizes rates that are based on Aa-rated corporate bonds with cash flows that match estimated benefit payments of each of the plans. The increase in the weighted-average discount rates in 2015 resulted in a decrease to the PBO of approximately $930 million at December 31, 2015. The decrease in the weighted-average discount rates in 2014 resulted in an increase to the PBO of approximately $1.9 billion at December 31, 2014.

The Corporation's best estimate of its contributions to be made to the Non-U.S. Pension Plans, Nonqualified and Other Pension Plans, and Postretirement Health and Life Plans in 2016 is $50 million, $103 million and $108 million, respectively. The Corporation does not expect to make a contribution to the Qualified Pension Plan in 2016.

Pension and Postretirement Plans

(Dollars in millions)	Qualified Pension Plan [1]		Non-U.S. Pension Plans [1]		Nonqualified and Other Pension Plans [1]		Postretirement Health and Life Plans [1]	
	2015	2014	**2015**	2014	**2015**	2014	**2015**	2014
Change in fair value of plan assets								
Fair value, January 1	**$ 18,614**	$ 18,276	**$ 2,564**	$ 2,457	**$ 2,927**	$ 2,720	**$ 28**	$ 72
Actual return on plan assets	**199**	1,261	**342**	256	**14**	336	**—**	6
Company contributions	**—**	—	**58**	84	**97**	97	**79**	53
Plan participant contributions	**—**	—	**1**	1	**—**	—	**127**	129
Settlements and curtailments	**—**	—	**(7)**	(5)	**—**	—	**—**	—
Benefits paid	**(851)**	(923)	**(78)**	(68)	**(233)**	(226)	**(247)**	(248)
Federal subsidy on benefits paid	**n/a**	n/a	**n/a**	n/a	**n/a**	n/a	**13**	16
Foreign currency exchange rate changes	**n/a**	n/a	**(142)**	(161)	**n/a**	n/a	**n/a**	n/a
Fair value, December 31	**$ 17,962**	$ 18,614	**$ 2,738**	$ 2,564	**$ 2,805**	$ 2,927	**$ —**	$ 28
Change in projected benefit obligation								
Projected benefit obligation, January 1	**$ 15,508**	$ 14,145	**$ 2,688**	$ 2,580	**$ 3,329**	$ 3,070	**$ 1,346**	$ 1,356
Service cost	**—**	—	**27**	29	**—**	1	**8**	8
Interest cost	**621**	665	**93**	109	**122**	133	**48**	58
Plan participant contributions	**—**	—	**1**	1	**—**	—	**127**	129
Plan amendments	**—**	—	**(1)**	1	**—**	—	**—**	—
Settlements and curtailments	**—**	—	**(7)**	(6)	**—**	—	**—**	—
Actuarial loss (gain)	**(817)**	1,621	**(2)**	208	**(165)**	351	**(141)**	29
Benefits paid	**(851)**	(923)	**(78)**	(68)	**(233)**	(226)	**(247)**	(248)
Federal subsidy on benefits paid	**n/a**	n/a	**n/a**	n/a	**n/a**	n/a	**13**	16
Foreign currency exchange rate changes	**n/a**	n/a	**(141)**	(166)	**n/a**	n/a	**(2)**	(2)
Projected benefit obligation, December 31	**$ 14,461**	$ 15,508	**$ 2,580**	$ 2,688	**$ 3,053**	$ 3,329	**$ 1,152**	$ 1,346
Amount recognized, December 31	**$ 3,501**	$ 3,106	**$ 158**	$ (124)	**$ (248)**	$ (402)	**$ (1,152)**	$ (1,318)
Funded status, December 31								
Accumulated benefit obligation	**$ 14,461**	$ 15,508	**$ 2,479**	$ 2,582	**$ 3,052**	$ 3,329	**n/a**	n/a
Overfunded (unfunded) status of ABO	**3,501**	3,106	**259**	(18)	**(247)**	(402)	**n/a**	n/a
Provision for future salaries	**—**	—	**101**	106	**1**	—	**n/a**	n/a
Projected benefit obligation	**14,461**	15,508	**2,580**	2,688	**3,053**	3,329	**$ 1,152**	$ 1,346
Weighted-average assumptions, December 31								
Discount rate	**4.51%**	4.12%	**3.59%**	3.56%	**4.34%**	3.80%	**4.32%**	3.75%
Rate of compensation increase	**n/a**	n/a	**4.64**	4.70	**4.00**	4.00	**n/a**	n/a

[1] The measurement date for the Qualified Pension Plan, Non-U.S. Pension Plans, Nonqualified and Other Pension Plans, and Postretirement Health and Life Plans was December 31 of each year reported.

n/a = not applicable

Amounts recognized on the Consolidated Balance Sheet at December 31, 2015 and 2014 are presented in the table below.

Amounts Recognized on Consolidated Balance Sheet

(Dollars in millions)	Qualified Pension Plan		Non-U.S. Pension Plans		Nonqualified and Other Pension Plans		Postretirement Health and Life Plans	
	2015	2014	**2015**	2014	**2015**	2014	**2015**	2014
Other assets	**$ 3,501**	$ 3,106	**$ 548**	$ 252	**$ 825**	$ 786	**$ —**	$ —
Accrued expenses and other liabilities	**—**	—	**(390)**	(376)	**(1,073)**	(1,188)	**(1,152)**	(1,318)
Net amount recognized at December 31	**$ 3,501**	$ 3,106	**$ 158**	$ (124)	**$ (248)**	$ (402)	**$ (1,152)**	$ (1,318)

Pension Plans with ABO and PBO in excess of plan assets as of December 31, 2015 and 2014 are presented in the table below. For the non-qualified plans not subject to ERISA or non-U.S. pension plans, funding strategies vary due to legal requirements and local practices.

Plans with PBO and ABO in Excess of Plan Assets

	Non-U.S. Pension Plans		Nonqualified and Other Pension Plans	
(Dollars in millions)	**2015**	2014	**2015**	2014
PBO	**$ 574**	$ 583	**$ 1,075**	$ 1,190
ABO	**551**	563	**1,074**	1,190
Fair value of plan assets	**183**	206	**1**	2

Net periodic benefit cost of the Corporation's plans for 2015, 2014 and 2013 included the following components.

Components of Net Periodic Benefit Cost

	Qualified Pension Plan			Non-U.S. Pension Plans		
(Dollars in millions)	**2015**	2014	2013	**2015**	2014	2013
Components of net periodic benefit cost (income)						
Service cost	**$ —**	$ —	$ —	**$ 27**	$ 29	$ 32
Interest cost	**621**	665	623	**93**	109	98
Expected return on plan assets	**(1,045)**	(1,018)	(1,024)	**(133)**	(137)	(121)
Amortization of prior service cost	**—**	—	—	**1**	1	—
Amortization of net actuarial loss	**170**	111	242	**6**	3	2
Recognized loss (gain) due to settlements and curtailments	**—**	—	17	**—**	2	(7)
Net periodic benefit cost (income)	**$ (254)**	$ (242)	$ (142)	**$ (6)**	$ 7	$ 4
Weighted-average assumptions used to determine net cost for years ended December 31						
Discount rate	**4.12%**	4.85%	4.00%	**3.56%**	4.30%	4.23%
Expected return on plan assets	**6.00**	6.00	6.50	**5.27**	5.52	5.50
Rate of compensation increase	**n/a**	n/a	n/a	**4.70**	4.91	4.37

	Nonqualified and Other Pension Plans			Postretirement Health and Life Plans		
(Dollars in millions)	**2015**	2014	2013	**2015**	2014	2013
Components of net periodic benefit cost (income)						
Service cost	**$ —**	$ 1	$ 1	**$ 8**	$ 8	$ 9
Interest cost	**122**	133	120	**48**	58	54
Expected return on plan assets	**(92)**	(124)	(109)	**(1)**	(4)	(5)
Amortization of prior service cost	**—**	—	—	**4**	4	4
Amortization of net actuarial loss (gain)	**34**	25	25	**(46)**	(89)	(42)
Recognized loss due to settlements and curtailments	**—**	—	2	**—**	—	6
Net periodic benefit cost (income)	**$ 64**	$ 35	$ 39	**$ 13**	$ (23)	$ 26
Weighted-average assumptions used to determine net cost for years ended December 31						
Discount rate	**3.80%**	4.55%	3.65%	**3.75%**	4.50%	3.65%
Expected return on plan assets	**3.26**	4.60	3.75	**6.00**	6.00	6.50
Rate of compensation increase	**4.00**	4.00	4.00	**n/a**	n/a	n/a

n/a = not applicable

The asset valuation method used to calculate the expected return on plan assets component of net period benefit cost for the Qualified Pension Plan recognizes 60 percent of the prior year's market gains or losses at the next measurement date with the remaining 40 percent spread equally over the subsequent four years.

Net periodic postretirement health and life expense was determined using the "projected unit credit" actuarial method. Gains and losses for all benefit plans except postretirement health care are recognized in accordance with the standard amortization provisions of the applicable accounting guidance. For the Postretirement Health Care Plans, 50 percent of the unrecognized gain or loss at the beginning of the fiscal year (or at subsequent remeasurement) is recognized on a level basis during the year.

Assumed health care cost trend rates affect the postretirement benefit obligation and benefit cost reported for the Postretirement Health and Life Plans. The assumed health care cost trend rate used to measure the expected cost of benefits covered by the Postretirement Health and Life Plans is 7.00 percent for 2016, reducing in steps to 5.00 percent in 2021 and later years. A one-percentage-point increase in assumed health care cost trend rates would have increased the service and interest costs, and the benefit obligation by $2 million and $34 million in 2015. A one-percentage-point decrease in assumed health care cost trend rates would have lowered the service and interest costs, and the benefit obligation by $2 million and $29 million in 2015.

The Corporation's net periodic benefit cost (income) recognized for the plans is sensitive to the discount rate and expected return

on plan assets. With all other assumptions held constant, a 25 basis point (bp) decline in the discount rate and expected return on plan asset assumptions would have resulted in an increase in the net periodic benefit cost for the Qualified Pension Plan recognized in 2015 of approximately $9 million and $44 million, and to be recognized in 2016 of approximately $9 million and $43 million. For the Postretirement Health and Life Plans, a 25 bp decline in the discount rate would have resulted in an increase in the net periodic benefit cost recognized in 2015 of approximately $9 million, and to be recognized in 2016 of approximately $8 million. For the Non-U.S. Pension Plans and the Nonqualified and Other Pension Plans, a 25 bp decline in discount rates would not have a significant impact on the net periodic benefit cost for 2015 and 2016.

Pretax amounts included in accumulated OCI for employee benefit plans at December 31, 2015 and 2014 are presented in the table below.

Pretax Amounts Included in Accumulated OCI

	Qualified Pension Plan		Non-U.S. Pension Plans		Nonqualified and Other Pension Plans		Postretirement Health and Life Plans		Total	
(Dollars in millions)	**2015**	2014	**2015**	2014	**2015**	2014	**2015**	2014	**2015**	2014
Net actuarial loss (gain)	**$ 3,920**	$ 4,061	**$ 137**	$ 355	**$ 848**	$ 968	**$ (150)**	$ (56)	**$ 4,755**	$ 5,328
Prior service cost (credits)	**—**	—	**(10)**	(9)	**—**	—	**16**	20	**6**	11
Amounts recognized in accumulated OCI	**$ 3,920**	$ 4,061	**$ 127**	$ 346	**$ 848**	$ 968	**$ (134)**	$ (36)	**$ 4,761**	$ 5,339

Pretax amounts recognized in OCI for employee benefit plans in 2015 included the following components.

Pretax Amounts Recognized in OCI

	Qualified Pension Plan		Non-U.S. Pension Plans		Nonqualified and Other Pension Plans		Postretirement Health and Life Plans		Total	
(Dollars in millions)	**2015**	2014	**2015**	2014	**2015**	2014	**2015**	2014	**2015**	2014
Current year actuarial loss (gain)	**$ 29**	$ 1,378	**$ (211)**	$ 87	**$ (86)**	$ 138	**$ (140)**	$ 26	**$ (408)**	$ 1,629
Amortization of actuarial gain (loss)	**(170)**	(111)	**(6)**	(3)	**(34)**	(25)	**46**	89	**(164)**	(50)
Current year prior service cost (credit)	**—**	—	**(1)**	1	**—**	—	**—**	—	**(1)**	1
Amortization of prior service cost	**—**	—	**(1)**	(1)	**—**	—	**(4)**	(4)	**(5)**	(5)
Amounts recognized in OCI	**$ (141)**	$ 1,267	**$ (219)**	$ 84	**$ (120)**	$ 113	**$ (98)**	$ 111	**$ (578)**	$ 1,575

The estimated pretax amounts that will be amortized from accumulated OCI into expense in 2016 are presented in the table below.

Estimated Pretax Amounts Amortized from Accumulated OCI into Period Cost in 2016

(Dollars in millions)	Qualified Pension Plan	Non-U.S. Pension Plans	Nonqualified and Other Pension Plans	Postretirement Health and Life Plans	Total
Net actuarial loss (gain)	$ 136	$ 6	$ 25	$ (67)	$ 100
Prior service cost	—	1	—	4	5
Total amounts amortized from accumulated OCI	**$ 136**	**$ 7**	**$ 25**	**$ (63)**	**$ 105**

Plan Assets

The Qualified Pension Plan has been established as a retirement vehicle for participants, and trusts have been established to secure benefits promised under the Qualified Pension Plan. The Corporation's policy is to invest the trust assets in a prudent manner for the exclusive purpose of providing benefits to participants and defraying reasonable expenses of administration. The Corporation's investment strategy is designed to provide a total return that, over the long term, increases the ratio of assets to liabilities. The strategy attempts to maximize the investment return on assets at a level of risk deemed appropriate by the Corporation while complying with ERISA and any applicable regulations and laws. The investment strategy utilizes asset allocation as a principal determinant for establishing the risk/return profile of the assets. Asset allocation ranges are established, periodically reviewed and adjusted as funding levels and liability characteristics change. Active and passive investment managers are employed to help enhance the risk/return profile of the assets. An additional aspect of the investment strategy used to minimize risk (part of the asset allocation plan) includes matching the equity exposure of participant-selected investment measures. For example, the common stock of the Corporation held in the trust is maintained as an offset to the exposure related to participants who elected to receive an investment measure based on the return performance of common stock of the Corporation. No plan assets are expected to be returned to the Corporation during 2016.

The assets of the Non-U.S. Pension Plans are primarily attributable to a U.K. pension plan. This U.K. pension plan's assets are invested prudently so that the benefits promised to members are provided with consideration given the nature and the duration of the plan's liabilities. The current investment strategy was set following an asset-liability study and advice from the trustee's investment advisors. The selected asset allocation strategy is designed to achieve a higher return than the lowest risk strategy while maintaining a prudent approach to meeting the plan's liabilities.

The expected return on plan assets assumption was developed through analysis of historical market returns, historical asset class volatility and correlations, current market conditions, anticipated future asset allocations, the funds' past experience, and expectations on potential future market returns. The expected return on plan assets assumption is determined using the calculated market-related value for the Qualified Pension Plan and the Other Pension Plan and the fair value for the Non-U.S. Pension Plans and Postretirement Health and Life Plans. The expected return on plan assets assumption represents a long-term average view of the performance of the assets in the Qualified Pension Plan, the Non-U.S. Pension Plans, the Other Pension Plan, and Postretirement Health and Life Plans, a return that may or may not be achieved during any one calendar year. The terminated Other U.S. Pension Plan is invested solely in an annuity contract which is primarily invested in fixed-income securities structured such that asset maturities match the duration of the plan's obligations.

The target allocations for 2016 by asset category for the Qualified Pension Plan, Non-U.S. Pension Plans, Nonqualified and Other Pension Plans, and Postretirement Health and Life Plans are presented in the table below.

2016 Target Allocation

	Percentage		
Asset Category	Qualified Pension Plan	Non-U.S. Pension Plans	Nonqualified and Other Pension Plans
Equity securities	20 - 60	10 - 35	0 - 5
Debt securities	40 - 80	40 - 80	95 - 100
Real estate	0 - 10	0 - 15	0 - 5
Other	0 - 5	0 - 15	0 - 5

Equity securities for the Qualified Pension Plan include common stock of the Corporation in the amounts of $189 million (1.05 percent of total plan assets) and $215 million (1.15 percent of total plan assets) at December 31, 2015 and 2014.

Fair Value Measurements

For information on fair value measurements, including descriptions of Level 1, 2 and 3 of the fair value hierarchy and the valuation methods employed by the Corporation, see *Note 1 – Summary of Significant Accounting Principles* and *Note 20 – Fair Value Measurements*.

Combined plan investment assets measured at fair value by level and in total at December 31, 2015 and 2014 are summarized in the Fair Value Measurements table.

Fair Value Measurements

	December 31, 2015			
(Dollars in millions)	Level 1	Level 2	Level 3	Total
Cash and short-term investments				
Money market and interest-bearing cash	$ 3,061	$ —	$ —	$ 3,061
Cash and cash equivalent commingled/mutual funds	—	4	—	4
Fixed income				
U.S. government and agency securities	2,723	881	11	3,615
Corporate debt securities	—	1,795	—	1,795
Asset-backed securities	—	1,939	—	1,939
Non-U.S. debt securities	632	662	—	1,294
Fixed income commingled/mutual funds	551	1,421	—	1,972
Equity				
Common and preferred equity securities	6,735	—	—	6,735
Equity commingled/mutual funds	3	1,503	—	1,506
Public real estate investment trusts	138	—	—	138
Real estate				
Private real estate	—	—	144	144
Real estate commingled/mutual funds	—	12	731	743
Limited partnerships	—	121	49	170
Other investments [1]	—	287	102	389
Total plan investment assets, at fair value	$ 13,843	$ 8,625	$ 1,037	$ 23,505

	December 31, 2014			
Cash and short-term investments				
Money market and interest-bearing cash	$ 3,814	$ —	$ —	$ 3,814
Cash and cash equivalent commingled/mutual funds	—	4	—	4
Fixed income				
U.S. government and agency securities	2,004	2,151	11	4,166
Corporate debt securities	—	1,454	—	1,454
Asset-backed securities	—	1,930	—	1,930
Non-U.S. debt securities	627	487	—	1,114
Fixed income commingled/mutual funds	101	1,397	—	1,498
Equity				
Common and preferred equity securities	6,628	—	—	6,628
Equity commingled/mutual funds	16	1,817	—	1,833
Public real estate investment trusts	124	—	—	124
Real estate				
Private real estate	—	—	127	127
Real estate commingled/mutual funds	—	4	632	636
Limited partnerships	—	122	65	187
Other investments [1]	1	490	127	618
Total plan investment assets, at fair value	$ 13,315	$ 9,856	$ 962	$ 24,133

[1] Other investments include interest rate swaps of $114 million and $297 million, participant loans of $58 million and $78 million, commodity and balanced funds of $165 million and $178 million and other various investments of $52 million and $65 million at December 31, 2015 and 2014.

The Level 3 Fair Value Measurements table presents a reconciliation of all plan investment assets measured at fair value using significant unobservable inputs (Level 3) during 2015, 2014 and 2013.

Level 3 Fair Value Measurements

(Dollars in millions)	Balance January 1	Actual Return on Plan Assets Still Held at the Reporting Date	Purchases, Sales and Settlements	Transfers out of Level 3	Balance December 31
2015					
Fixed income					
U.S. government and agency securities	**$ 11**	**$ —**	**$ —**	**$ —**	**$ 11**
Real estate					
Private real estate	**127**	**14**	**3**	**—**	**144**
Real estate commingled/mutual funds	**632**	**37**	**62**	**—**	**731**
Limited partnerships	**65**	**(1)**	**(15)**	**—**	**49**
Other investments	**127**	**(5)**	**(20)**	**—**	**102**
Total	**$ 962**	**$ 45**	**$ 30**	**$ —**	**$ 1,037**
2014					
Fixed income					
U.S. government and agency securities	$ 12	$ —	$ (1)	$ —	$ 11
Non-U.S. debt securities	6	—	(2)	(4)	—
Real estate					
Private real estate	119	5	3	—	127
Real estate commingled/mutual funds	462	20	150	—	632
Limited partnerships	145	5	(85)	—	65
Other investments	135	1	(9)	—	127
Total	$ 879	$ 31	$ 56	$ (4)	$ 962
2013					
Fixed income					
U.S. government and agency securities	$ 13	$ —	$ (1)	$ —	$ 12
Non-U.S. debt securities	10	(2)	(2)	—	6
Real estate					
Private real estate	110	4	5	—	119
Real estate commingled/mutual funds	324	15	123	—	462
Limited partnerships	231	8	(66)	(28)	145
Other investments	129	(6)	12	—	135
Total	$ 817	$ 19	$ 71	$ (28)	$ 879

Projected Benefit Payments

Benefit payments projected to be made from the Qualified Pension Plan, Non-U.S. Pension Plans, Nonqualified and Other Pension Plans, and Postretirement Health and Life Plans are presented in the table below.

Projected Benefit Payments

(Dollars in millions)	Qualified Pension Plan [1]	Non-U.S. Pension Plans [2]	Nonqualified and Other Pension Plans [2]	Postretirement Health and Life Plans	
				Net Payments [3]	Medicare Subsidy
2016	$ 915	$ 56	$ 246	$ 121	$ 13
2017	900	59	238	115	13
2018	902	62	240	111	13
2019	894	68	237	105	12
2020	903	71	236	101	12
2021 - 2025	4,409	463	1,110	450	52

[1] Benefit payments expected to be made from the plan's assets.
[2] Benefit payments expected to be made from a combination of the plans' and the Corporation's assets.
[3] Benefit payments (net of retiree contributions) expected to be made from a combination of the plans' and the Corporation's assets.

Defined Contribution Plans

The Corporation maintains qualified defined contribution retirement plans and nonqualified defined contribution retirement plans. The Corporation recorded expense of $1.0 billion, $1.0 billion and $1.1 billion in 2015, 2014 and 2013, respectively, related to the qualified defined contribution plans. At December 31, 2015 and 2014, 236 million and 238 million shares of the Corporation's common stock were held by these plans. Payments to the plans for dividends on common stock were $48 million, $29 million and $10 million in 2015, 2014 and 2013, respectively.

Certain non-U.S. employees are covered under defined contribution pension plans that are separately administered in accordance with local laws.

NOTE 18 Stock-based Compensation Plans

The Corporation administers a number of equity compensation plans, with awards being granted predominantly from the Bank of America Corporation 2003 Key Associate Stock Plan (KASP). Grants in 2015 from the KASP included restricted stock units (RSUs) which generally vest in three equal annual installments beginning one year from the grant date, and awards which will vest subject to the attainment of specified performance criteria. During 2015, the Corporation issued 131 million RSUs to certain employees under the KASP. RSUs may be settled in cash or in shares of common stock depending on the terms of the applicable award. In 2015, two million of these RSUs were authorized to be settled in shares of common stock with the remainder in cash. Certain awards contain cancellation and clawback provisions which permit the Corporation to cancel or recoup all or a portion of the award under specified circumstances. The compensation cost for these awards is accrued over the vesting period and adjusted to fair value based upon changes in the share price of the Corporation's common stock.

For most awards, expense is generally recognized ratably over the vesting period net of estimated forfeitures, unless the employee meets certain retirement eligibility criteria. For awards to employees that meet retirement eligibility criteria, the Corporation records the expense upon grant. For employees that become retirement eligible during the vesting period, the Corporation recognizes expense from the grant date to the date on which the employee becomes retirement eligible, net of estimated forfeitures. The compensation cost for the stock-based plans was $2.17 billion, $2.30 billion and $2.28 billion in 2015, 2014 and 2013, respectively. The related income tax benefit was $824 million, $854 million and $842 million for 2015, 2014 and 2013, respectively.

From time to time, the Corporation enters into equity total return swaps to hedge a portion of RSUs granted to certain employees as part of their compensation in prior periods in order to minimize the change in the expense to the Corporation driven by fluctuations in the fair value of the RSUs. Certain of these derivatives are designated as cash flow hedges of unrecognized unvested awards with the changes in fair value of the hedge recorded in accumulated OCI and reclassified into earnings in the same period as the RSUs affect earnings. The remaining derivatives are used to hedge the price risk of cash-settled awards with changes in fair value recorded in personnel expense. For information on amounts recognized on equity total return swaps used to hedge the Corporation's outstanding RSUs, see *Note 2 – Derivatives.*

On May 6, 2015, Bank of America shareholders approved the amendment and restatement of the KASP, and renamed it the Bank of America Corporation Key Employee Equity Plan (KEEP). Under the amendment and restatement of the KEEP, 450 million shares of the Corporation's common stock and any shares that were subject to an award as of December 31, 2014 under the KASP, if such award is canceled, terminates, expires, lapses or is settled in cash for any reason from and after January 1, 2015, are authorized to be used for grants of awards.

Restricted Stock/Units

The table below presents the status at December 31, 2015 of the share-settled restricted stock/units and changes during 2015.

Stock-settled Restricted Stock/Units

	Shares/Units	Weighted-average Grant Date Fair Value
Outstanding at January 1, 2015	29,882,769	$ 9.30
Granted	2,079,667	16.60
Vested	(8,750,921)	11.43
Canceled	(655,497)	9.52
Outstanding at December 31, 2015	22,556,018	$ 9.14

The table below presents the status at December 31, 2015 of the cash-settled RSUs granted under the KASP and changes during 2015.

Cash-settled Restricted Units

	Units
Outstanding at January 1, 2015	316,956,435
Granted	128,748,571
Vested	(176,407,854)
Canceled	(13,942,138)
Outstanding at December 31, 2015	255,355,014

At December 31, 2015, there was an estimated $1.2 billion of total unrecognized compensation cost related to certain share-based compensation awards that is expected to be recognized over a period of up to four years, with a weighted-average period of 1.7 years. The total fair value of restricted stock vested in 2015, 2014 and 2013 was $145 million, $704 million and $906 million, respectively. In 2015, 2014 and 2013, the amount of cash paid to settle equity-based awards for all equity compensation plans was $3.0 billion, $2.7 billion and $1.7 billion, respectively.

Stock Options

The table below presents the status of all option plans at December 31, 2015 and changes during 2015.

Stock Options

	Options	Weighted-average Exercise Price
Outstanding at January 1, 2015	88,087,054	$ 48.96
Forfeited	(24,211,579)	48.38
Outstanding at December 31, 2015	63,875,475	49.18

All options outstanding as of December 31, 2015 were vested and exercisable with a weighted-average remaining contractual term of 1.1 years and have no aggregate intrinsic value. No options have been granted since 2008.

NOTE 19 Income Taxes

The components of income tax expense for 2015, 2014 and 2013 are presented in the table below.

Income Tax Expense

(Dollars in millions)	2015	2014	2013
Current income tax expense			
U.S. federal	**$ 2,387**	$ 443	$ 180
U.S. state and local	**210**	340	786
Non-U.S.	**561**	513	513
Total current expense	**3,158**	1,296	1,479
Deferred income tax expense (benefit)			
U.S. federal	**1,964**	953	1,575
U.S. state and local	**515**	136	(160)
Non-U.S.	**597**	58	1,300
Total deferred expense	**3,076**	1,147	2,715
Total income tax expense	**$ 6,234**	$ 2,443	$ 4,194

Total income tax expense does not reflect the tax effects of items that are included in accumulated OCI. For additional information, see *Note 14 – Accumulated Other Comprehensive Income (Loss)*. These tax effects resulted in an expense of $631 million in 2015 and $3.1 billion in 2014, and a benefit of $2.3 billion in 2013, recorded in accumulated OCI. In addition, total income tax expense does not reflect tax effects associated with the Corporation's employee stock plans which decreased common stock and additional paid-in capital $44 million, $35 million and $128 million in 2015, 2014 and 2013, respectively.

Income tax expense for 2015, 2014 and 2013 varied from the amount computed by applying the statutory income tax rate to income before income taxes. A reconciliation of the expected U.S. federal income tax expense, calculated by applying the federal statutory tax rate of 35 percent, to the Corporation's actual income tax expense, and the effective tax rates for 2015, 2014 and 2013 are presented in the table below.

Reconciliation of Income Tax Expense

(Dollars in millions)	2015 Amount	2015 Percent	2014 Amount	2014 Percent	2013 Amount	2013 Percent
Expected U.S. federal income tax expense	**$ 7,725**	**35.0%**	$ 2,787	35.0%	$ 5,156	35.0%
Increase (decrease) in taxes resulting from:						
State tax expense, net of federal benefit	**471**	**2.1**	309	3.9	407	2.8
Affordable housing credits/other credits	**(1,087)**	**(4.9)**	(950)	(11.9)	(863)	(5.8)
Non-U.S. tax rate differential	**(559)**	**(2.5)**	(507)	(6.4)	(940)	(6.4)
Tax-exempt income, including dividends	**(539)**	**(2.5)**	(533)	(6.7)	(524)	(3.6)
Changes in prior period UTBs, including interest	**(85)**	**(0.4)**	(741)	(9.3)	(255)	(1.7)
Non-U.S. tax law changes	**289**	**1.3**	—	—	1,133	7.7
Nondeductible expenses	**40**	**0.2**	1,982	24.9	104	0.7
Other	**(21)**	**(0.1)**	96	1.2	(24)	(0.2)
Total income tax expense	**$ 6,234**	**28.2%**	$ 2,443	30.7%	$ 4,194	28.5%

The reconciliation of the beginning unrecognized tax benefits (UTB) balance to the ending balance is presented in the table below.

Reconciliation of the Change in Unrecognized Tax Benefits

(Dollars in millions)	2015	2014	2013
Balance, January 1	**$ 1,068**	$ 3,068	$ 3,677
Increases related to positions taken during the current year	**36**	75	98
Increases related to positions taken during prior years [1]	**187**	519	254
Decreases related to positions taken during prior years [1]	**(177)**	(973)	(508)
Settlements	**(1)**	(1,594)	(448)
Expiration of statute of limitations	**(18)**	(27)	(5)
Balance, December 31	**$ 1,095**	$ 1,068	$ 3,068

[1] The sum per year of positions taken during prior years differs from the $85 million, $741 million and $255 million in the Reconciliation of Income Tax Expense table due to temporary items, state items and jurisdictional offsets, as well as the inclusion of interest in the Reconciliation of Income Tax Expense table.

At December 31, 2015, 2014 and 2013, the balance of the Corporation's UTBs which would, if recognized, affect the Corporation's effective tax rate was $0.7 billion, $0.7 billion and $2.5 billion, respectively. Included in the UTB balance are some items the recognition of which would not affect the effective tax rate, such as the tax effect of certain temporary differences, the portion of gross state UTBs that would be offset by the tax benefit of the associated federal deduction and the portion of gross non-U.S. UTBs that would be offset by tax reductions in other jurisdictions.

The Corporation files income tax returns in more than 100 state and non-U.S. jurisdictions each year. The IRS and other tax authorities in countries and states in which the Corporation has significant business operations examine tax returns periodically (continuously in some jurisdictions). The Tax Examination Status table summarizes the status of significant examinations (U.S. federal unless otherwise noted) for the Corporation and various subsidiaries as of December 31, 2015.

Tax Examination Status

	Years under Examination	Status at December 31 2015
U.S.	2010 – 2011	IRS Appeals
U.S.	2012 – 2013	Field examination
New York	2008 – 2014	Field examination
U.K.	2012	Field examination

During 2015, the Corporation and IRS Appeals arrived at final agreement on the audit of Bank of America Corporation for the 2010 through 2011 tax years. While subject to review by the Joint Committee on Taxation of the U.S. Congress, the Corporation expects this examination will be concluded early in 2016.

It is reasonably possible that the UTB balance may decrease by as much as $0.1 billion during the next 12 months, since resolved items will be removed from the balance whether their resolution results in payment or recognition.

The Corporation recognized benefits of $82 million during 2015 and $196 million in 2014, and an expense of $127 million in 2013 for interest and penalties, net-of-tax, in income tax expense. At December 31, 2015 and 2014, the Corporation's accrual for interest and penalties that related to income taxes, net of taxes and remittances, was $288 million and $455 million.

Significant components of the Corporation's net deferred tax assets and liabilities at December 31, 2015 and 2014 are presented in the table below.

Deferred Tax Assets and Liabilities

(Dollars in millions)	December 31 2015	2014
Deferred tax assets		
Net operating loss carryforwards	**$ 9,494**	$ 10,955
Accrued expenses	**6,340**	6,309
Allowance for credit losses	**4,649**	5,478
Security, loan and debt valuations	**4,101**	5,381
Employee compensation and retirement benefits	**3,585**	3,899
Tax credit carryforwards	**2,707**	5,614
Available-for-sale securities	**152**	—
Other	**2,333**	1,800
Gross deferred tax assets	**33,361**	39,436
Valuation allowance	**(1,149)**	(1,111)
Total deferred tax assets, net of valuation allowance	**32,212**	38,325
Deferred tax liabilities		
Equipment lease financing	**3,016**	3,105
Intangibles	**1,306**	1,513
Fee income	**864**	881
Mortgage servicing rights	**466**	1,094
Long-term borrowings	**327**	630
Available-for-sale securities	**—**	828
Other	**1,752**	2,024
Gross deferred tax liabilities	**7,731**	10,075
Net deferred tax assets, net of valuation allowance	**$ 24,481**	$ 28,250

The table below summarizes the deferred tax assets and related valuation allowances recognized for the net operating loss (NOL) and tax credit carryforwards at December 31, 2015.

Net Operating Loss and Tax Credit Carryforward Deferred Tax Assets

(Dollars in millions)	Deferred Tax Asset	Valuation Allowance	Net Deferred Tax Asset	First Year Expiring
Net operating losses – U.S.	$ 2,507	$ —	**$ 2,507**	After 2027
Net operating losses – U.K.	5,657	—	**5,657**	None [1]
Net operating losses – other non-U.S.	432	(323)	**109**	Various
Net operating losses – U.S. states [2]	898	(405)	**493**	Various
General business credits	2,635	—	**2,635**	After 2031
Foreign tax credits	72	(72)	**—**	n/a

[1] The U.K. net operating losses may be carried forward indefinitely.
[2] The net operating losses and related valuation allowances for U.S. states before considering the benefit of federal deductions were $1.4 billion and $623 million.
n/a = not applicable

Management concluded that no valuation allowance was necessary to reduce the U.K. NOL carryforwards and U.S. NOL and general business credit carryforwards since estimated future taxable income will be sufficient to utilize these assets prior to their expiration. The majority of the Corporation's U.K. net deferred tax assets, which consist primarily of NOLs, are expected to be realized by certain subsidiaries over an extended number of years. Management's conclusion is supported by financial results and forecasts, the reorganization of certain business activities and the indefinite period to carry forward NOLs. However, significant changes to those estimates, such as changes that would be caused by a substantial and prolonged worsening of the condition of Europe's capital markets, or a change in applicable laws, could lead management to reassess its U.K. valuation allowance conclusions.

At December 31, 2015, U.S. federal income taxes had not been provided on $18.0 billion of undistributed earnings of non-U.S. subsidiaries that management has determined have been reinvested for an indefinite period of time. If the Corporation were to record a deferred tax liability associated with these undistributed earnings, the amount would be approximately $5.0 billion at December 31, 2015.

NOTE 20 Fair Value Measurements

Under applicable accounting guidance, fair value is defined as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. The Corporation determines the fair values of its financial instruments based on the fair value hierarchy established under applicable accounting guidance which requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. There are three levels of inputs used to measure fair value. The Corporation conducts a review of its fair value hierarchy classifications on a quarterly basis. Transfers into or out of fair value hierarchy classifications are made if the significant inputs used in the financial models measuring the fair values of the assets and liabilities became unobservable or observable, respectively, in the current marketplace. These transfers are considered to be effective as of the beginning of the quarter in which they occur. For more information regarding the fair value hierarchy and how the Corporation measures fair value, see *Note 1 – Summary of Significant Accounting Principles*. The Corporation accounts for certain financial instruments under the fair value option. For additional information, see *Note 21 – Fair Value Option*.

Valuation Processes and Techniques

The Corporation has various processes and controls in place to ensure that fair value is reasonably estimated. A model validation policy governs the use and control of valuation models used to estimate fair value. This policy requires review and approval of models by personnel who are independent of the front office, and periodic reassessments of models to ensure that they are continuing to perform as designed. In addition, detailed reviews of trading gains and losses are conducted on a daily basis by personnel who are independent of the front office. A price verification group, which is also independent of the front office, utilizes available market information including executed trades, market prices and market-observable valuation model inputs to ensure that fair values are reasonably estimated. The Corporation performs due diligence procedures over third-party pricing service providers in order to support their use in the valuation process. Where market information is not available to support internal valuations, independent reviews of the valuations are performed and any material exposures are escalated through a management review process.

While the Corporation believes its valuation methods are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine the fair value of certain financial instruments could result in a different estimate of fair value at the reporting date.

During 2015, there were no changes to the valuation techniques that had, or are expected to have, a material impact on the Corporation's consolidated financial position or results of operations.

Level 1, 2 and 3 Valuation Techniques

Financial instruments are considered Level 1 when the valuation is based on quoted prices in active markets for identical assets or liabilities. Level 2 financial instruments are valued using quoted prices for similar assets or liabilities, quoted prices in markets that are not active, or models using inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities. Financial instruments are considered Level 3 when their values are determined using pricing models, discounted cash flow methodologies or similar techniques, and at least one significant model assumption or input is unobservable and when determination of the fair value requires significant management judgment or estimation.

Trading Account Assets and Liabilities and Debt Securities

The fair values of trading account assets and liabilities are primarily based on actively traded markets where prices are based on either direct market quotes or observed transactions. The fair values of debt securities are generally based on quoted market prices or market prices for similar assets. Liquidity is a significant factor in the determination of the fair values of trading account assets and liabilities and debt securities. Market price quotes may not be readily available for some positions, or positions within a market sector where trading activity has slowed significantly or ceased. Some of these instruments are valued using a discounted cash flow model, which estimates the fair value of the securities using internal credit risk, interest rate and prepayment risk models that incorporate management's best estimate of current key assumptions such as default rates, loss severity and prepayment rates. Principal and interest cash flows are discounted using an observable discount rate for similar instruments with adjustments that management believes a market participant would consider in determining fair value for the specific security. Other instruments are valued using a net asset value approach which considers the value of the underlying securities. Underlying assets are valued using external pricing services, where available, or matrix pricing based on the vintages and ratings. Situations of illiquidity generally are triggered by the market's perception of credit uncertainty regarding a single company or a specific market sector. In these instances, fair value is determined based on limited available market information and other factors, principally from reviewing the issuer's financial statements and changes in credit ratings made by one or more rating agencies.

Derivative Assets and Liabilities

The fair values of derivative assets and liabilities traded in the OTC market are determined using quantitative models that utilize multiple market inputs including interest rates, prices and indices to generate continuous yield or pricing curves and volatility factors to value the position. The majority of market inputs are actively quoted and can be validated through external sources, including brokers, market transactions and third-party pricing services. When third-party pricing services are used, the methods and assumptions are reviewed by the Corporation. Estimation risk is greater for derivative asset and liability positions that are either option-based or have longer maturity dates where observable market inputs are less readily available, or are unobservable, in which case, quantitative-based extrapolations of rate, price or index scenarios are used in determining fair values. The fair values of derivative assets and liabilities include adjustments for market liquidity, counterparty credit quality and other instrument-specific factors, where appropriate. In addition, the Corporation incorporates within its fair value measurements of OTC derivatives a valuation adjustment to reflect the credit risk associated with the net position. Positions are netted by counterparty, and fair value for net long exposures is adjusted for counterparty credit risk while the fair value for net short exposures is adjusted for the

Corporation's own credit risk. The Corporation also incorporates FVA within its fair value measurements to include funding costs on uncollateralized derivatives and derivatives where the Corporation is not permitted to use the collateral it receives. An estimate of severity of loss is also used in the determination of fair value, primarily based on market data.

Loans and Loan Commitments

The fair values of loans and loan commitments are based on market prices, where available, or discounted cash flow analyses using market-based credit spreads of comparable debt instruments or credit derivatives of the specific borrower or comparable borrowers. Results of discounted cash flow analyses may be adjusted, as appropriate, to reflect other market conditions or the perceived credit risk of the borrower.

Mortgage Servicing Rights

The fair values of MSRs are determined using models that rely on estimates of prepayment rates, the resultant weighted-average lives of the MSRs and the option-adjusted spread levels. For more information on MSRs, see *Note 23 – Mortgage Servicing Rights*.

Loans Held-for-sale

The fair values of LHFS are based on quoted market prices, where available, or are determined by discounting estimated cash flows using interest rates approximating the Corporation's current origination rates for similar loans adjusted to reflect the inherent credit risk. The borrower-specific credit risk is embedded within the quoted market prices or is implied by considering loan performance when selecting comparables.

Private Equity Investments

Private equity investments consist of direct investments and fund investments which are initially valued at their transaction price. Thereafter, the fair value of direct investments is based on an assessment of each individual investment using methodologies that include publicly-traded comparables derived by multiplying a key performance metric (e.g., earnings before interest, taxes, depreciation and amortization) of the portfolio company by the relevant valuation multiple observed for comparable companies, acquisition comparables, entry level multiples and discounted cash flow analyses, and are subject to appropriate discounts for lack of liquidity or marketability. After initial recognition, the fair value of fund investments is based on the Corporation's proportionate interest in the fund's capital as reported by the respective fund managers.

Short-term Borrowings and Long-term Debt

The Corporation issues structured liabilities that have coupons or repayment terms linked to the performance of debt or equity securities, indices, currencies or commodities. The fair values of these structured liabilities are estimated using quantitative models for the combined derivative and debt portions of the notes. These models incorporate observable and, in some instances, unobservable inputs including security prices, interest rate yield curves, option volatility, currency, commodity or equity rates and correlations among these inputs. The Corporation also considers the impact of its own credit spreads in determining the discount rate used to value these liabilities. The credit spread is determined by reference to observable spreads in the secondary bond market.

Securities Financing Agreements

The fair values of certain reverse repurchase agreements, repurchase agreements and securities borrowed transactions are determined using quantitative models, including discounted cash flow models that require the use of multiple market inputs including interest rates and spreads to generate continuous yield or pricing curves, and volatility factors. The majority of market inputs are actively quoted and can be validated through external sources, including brokers, market transactions and third-party pricing services.

Deposits

The fair values of deposits are determined using quantitative models, including discounted cash flow models that require the use of multiple market inputs including interest rates and spreads to generate continuous yield or pricing curves, and volatility factors. The majority of market inputs are actively quoted and can be validated through external sources, including brokers, market transactions and third-party pricing services. The Corporation considers the impact of its own credit spreads in the valuation of these liabilities. The credit risk is determined by reference to observable credit spreads in the secondary cash market.

Asset-backed Secured Financings

The fair values of asset-backed secured financings are based on external broker bids, where available, or are determined by discounting estimated cash flows using interest rates approximating the Corporation's current origination rates for similar loans adjusted to reflect the inherent credit risk.

Recurring Fair Value

Assets and liabilities carried at fair value on a recurring basis at December 31, 2015 and 2014, including financial instruments which the Corporation accounts for under the fair value option, are summarized in the following tables.

	December 31, 2015				
	Fair Value Measurements				
(Dollars in millions)	Level 1	Level 2	Level 3	Netting Adjustments [1]	Assets/Liabilities at Fair Value
Assets					
Federal funds sold and securities borrowed or purchased under agreements to resell	$ —	$ 55,143	$ —	$ —	$ 55,143
Trading account assets:					
U.S. government and agency securities [2]	33,034	15,501	—	—	48,535
Corporate securities, trading loans and other	325	22,738	2,838	—	25,901
Equity securities	41,735	20,887	407	—	63,029
Non-U.S. sovereign debt	15,651	12,915	521	—	29,087
Mortgage trading loans and ABS	—	8,107	1,868	—	9,975
Total trading account assets	90,745	80,148	5,634	—	176,527
Derivative assets [3]	5,149	678,355	5,134	(638,648)	49,990
AFS debt securities:					
U.S. Treasury and agency securities	23,374	1,903	—	—	25,277
Mortgage-backed securities:					
Agency	—	228,947	—	—	228,947
Agency-collateralized mortgage obligations	—	10,985	—	—	10,985
Non-agency residential	—	3,073	106	—	3,179
Commercial	—	7,165	—	—	7,165
Non-U.S. securities	2,768	2,999	—	—	5,767
Corporate/Agency bonds	—	243	—	—	243
Other taxable securities	—	9,445	757	—	10,202
Tax-exempt securities	—	13,439	569	—	14,008
Total AFS debt securities	26,142	278,199	1,432	—	305,773
Other debt securities carried at fair value:					
Mortgage-backed securities:					
Agency-collateralized mortgage obligations	—	7	—	—	7
Non-agency residential	—	3,460	30	—	3,490
Non-U.S. securities	11,691	1,152	—	—	12,843
Other taxable securities	—	267	—	—	267
Total other debt securities carried at fair value	11,691	4,886	30	—	16,607
Loans and leases	—	5,318	1,620	—	6,938
Mortgage servicing rights	—	—	3,087	—	3,087
Loans held-for-sale	—	4,031	787	—	4,818
Other assets [4]	11,923	2,023	374	—	14,320
Total assets	$ 145,650	$ 1,108,103	$ 18,098	$ (638,648)	$ 633,203
Liabilities					
Interest-bearing deposits in U.S. offices	$ —	$ 1,116	$ —	$ —	$ 1,116
Federal funds purchased and securities loaned or sold under agreements to repurchase	—	24,239	335	—	24,574
Trading account liabilities:					
U.S. government and agency securities	14,803	169	—	—	14,972
Equity securities	27,898	2,392	—	—	30,290
Non-U.S. sovereign debt	13,589	1,951	—	—	15,540
Corporate securities and other	193	5,947	21	—	6,161
Total trading account liabilities	56,483	10,459	21	—	66,963
Derivative liabilities [3]	4,941	670,600	5,575	(642,666)	38,450
Short-term borrowings	—	1,295	30	—	1,325
Accrued expenses and other liabilities	11,656	2,234	9	—	13,899
Long-term debt	—	28,584	1,513	—	30,097
Total liabilities	$ 73,080	$ 738,527	$ 7,483	$ (642,666)	$ 176,424

[1] Amounts represent the impact of legally enforceable master netting agreements and also cash collateral held or placed with the same counterparties.

[2] Includes $14.8 billion of government-sponsored enterprise obligations.

[3] During 2015, $6.6 billion of derivative assets and $6.7 billion of derivative liabilities were transferred from Level 1 to Level 2 based on inputs used to measure fair value. Additionally, $6.4 billion of derivative assets and $6.2 billion of derivative liabilities were transferred from Level 2 to Level 1 due to additional information related to certain options. For further disaggregation of derivative assets and liabilities, see *Note 2 – Derivatives*.

[4] During 2015, approximately $327 million of assets were transferred from Level 2 to Level 1 due to a restriction that was lifted for an equity investment.

(Dollars in millions)	December 31, 2014				
	Fair Value Measurements				
	Level 1	Level 2	Level 3	Netting Adjustments [1]	Assets/Liabilities at Fair Value
Assets					
Federal funds sold and securities borrowed or purchased under agreements to resell	$ —	$ 62,182	$ —	$ —	$ 62,182
Trading account assets:					
U.S. government and agency securities [2]	33,470	17,549	—	—	51,019
Corporate securities, trading loans and other	243	31,699	3,270	—	35,212
Equity securities	33,518	22,488	352	—	56,358
Non-U.S. sovereign debt	20,348	15,332	574	—	36,254
Mortgage trading loans and ABS	—	10,879	2,063	—	12,942
Total trading account assets	87,579	97,947	6,259	—	191,785
Derivative assets [3]	4,957	968,857	6,851	(927,983)	52,682
AFS debt securities:					
U.S. Treasury and agency securities	67,413	2,182	—	—	69,595
Mortgage-backed securities:					
Agency	—	165,039	—	—	165,039
Agency-collateralized mortgage obligations	—	14,248	—	—	14,248
Non-agency residential	—	4,175	279	—	4,454
Commercial	—	4,000	—	—	4,000
Non-U.S. securities	3,191	3,029	10	—	6,230
Corporate/Agency bonds	—	368	—	—	368
Other taxable securities	20	9,104	1,667	—	10,791
Tax-exempt securities	—	8,950	599	—	9,549
Total AFS debt securities	70,624	211,095	2,555	—	284,274
Other debt securities carried at fair value:					
U.S. Treasury and agency securities	1,541	—	—	—	1,541
Mortgage-backed securities:					
Agency	—	15,704	—	—	15,704
Non-agency residential	—	3,745	—	—	3,745
Non-U.S. securities	13,270	1,862	—	—	15,132
Other taxable securities	—	299	—	—	299
Total other debt securities carried at fair value	14,811	21,610	—	—	36,421
Loans and leases	—	6,698	1,983	—	8,681
Mortgage servicing rights	—	—	3,530	—	3,530
Loans held-for-sale	—	6,628	173	—	6,801
Other assets [4]	11,581	1,381	911	—	13,873
Total assets	$ 189,552	$ 1,376,398	$ 22,262	$ (927,983)	$ 660,229
Liabilities					
Interest-bearing deposits in U.S. offices	$ —	$ 1,469	$ —	$ —	$ 1,469
Federal funds purchased and securities loaned or sold under agreements to repurchase	—	35,357	—	—	35,357
Trading account liabilities:					
U.S. government and agency securities	18,514	446	—	—	18,960
Equity securities	24,679	3,670	—	—	28,349
Non-U.S. sovereign debt	16,089	3,625	—	—	19,714
Corporate securities and other	189	6,944	36	—	7,169
Total trading account liabilities	59,471	14,685	36	—	74,192
Derivative liabilities [3]	4,493	965,416	7,771	(930,771)	46,909
Short-term borrowings	—	2,697	—	—	2,697
Accrued expenses and other liabilities	10,795	1,250	10	—	12,055
Long-term debt	—	34,042	2,362	—	36,404
Total liabilities	$ 74,759	$ 1,054,916	$ 10,179	$ (930,771)	$ 209,083

[1] Amounts represent the impact of legally enforceable master netting agreements and also cash collateral held or placed with the same counterparties.
[2] Includes $17.2 billion of government-sponsored enterprise obligations.
[3] For further disaggregation of derivative assets and liabilities, see *Note 2 – Derivatives*.
[4] During 2014, the Corporation reclassified certain assets and liabilities within its fair value hierarchy based on a review of its inputs used to measure fair value. Accordingly, approximately $4.1 billion of assets related to U.S. government and agency securities, non-U.S. government securities and equity derivatives, and $570 million of liabilities related to equity derivatives were transferred from Level 1 to Level 2.

The following tables present a reconciliation of all assets and liabilities measured at fair value on a recurring basis using significant unobservable inputs (Level 3) during 2015, 2014 and 2013, including net realized and unrealized gains (losses) included in earnings and accumulated OCI.

Level 3 – Fair Value Measurements [1]

	2015									
				Gross						
(Dollars in millions)	Balance January 1 2015	Gains (Losses) in Earnings	Gains (Losses) in OCI [2]	Purchases	Sales	Issuances	Settlements	Gross Transfers into Level 3	Gross Transfers out of Level 3	Balance December 31 2015
Trading account assets:										
Corporate securities, trading loans and other	$ 3,270	$ (31)	$ (11)	$ 1,540	$ (1,616)	$ —	$ (1,122)	$ 1,570	$ (762)	$ 2,838
Equity securities	352	9	—	49	(11)	—	(11)	41	(22)	407
Non-U.S. sovereign debt	574	114	(179)	185	(1)	—	(145)	—	(27)	521
Mortgage trading loans and ABS	2,063	154	1	1,250	(1,117)	—	(493)	50	(40)	1,868
Total trading account assets	6,259	246	(189)	3,024	(2,745)	—	(1,771)	1,661	(851)	5,634
Net derivative assets [3]	(920)	1,335	(7)	273	(863)	—	(261)	(40)	42	(441)
AFS debt securities:										
Non-agency residential MBS	279	(12)	—	134	—	—	(425)	167	(37)	106
Non-U.S. securities	10	—	—	—	—	—	(10)	—	—	—
Other taxable securities	1,667	—	—	189	—	—	(160)	—	(939)	757
Tax-exempt securities	599	—	—	—	—	—	(30)	—	—	569
Total AFS debt securities	2,555	(12)	—	323	—	—	(625)	167	(976)	1,432
Other debt securities carried at fair value – Non-agency residential MBS	—	(3)	—	33	—	—	—	—	—	30
Loans and leases [4, 5]	1,983	(23)	—	—	(4)	57	(237)	144	(300)	1,620
Mortgage servicing rights [5]	3,530	187	—	—	(393)	637	(874)	—	—	3,087
Loans held-for-sale [4]	173	(51)	(8)	771	(203)	61	(61)	203	(98)	787
Other assets [6]	911	(55)	—	11	(130)	—	(51)	10	(322)	374
Federal funds purchased and securities loaned or sold under agreements to repurchase [4]	—	(11)	—	—	—	(131)	217	(411)	1	(335)
Trading account liabilities – Corporate securities and other	(36)	19	—	30	(34)	—	—	—	—	(21)
Short-term borrowings [4]	—	17	—	—	—	(52)	10	(24)	19	(30)
Accrued expenses and other liabilities	(10)	1	—	—	—	—	—	—	—	(9)
Long-term debt [4]	(2,362)	287	19	616	—	(188)	273	(1,592)	1,434	(1,513)

(1) Assets (liabilities). For assets, increase (decrease) to Level 3 and for liabilities, (increase) decrease to Level 3.
(2) Includes unrealized gains (losses) on AFS debt securities, foreign currency translation adjustments and the impact on structured liabilities of changes in the Corporation's credit spreads. For more information, see *Note 1 – Summary of Significant Accounting Principles*.
(3) Net derivatives include derivative assets of $5.1 billion and derivative liabilities of $5.6 billion.
(4) Amounts represent instruments that are accounted for under the fair value option.
(5) Issuances represent loan originations and MSRs retained following securitizations or whole-loan sales.
(6) Other assets is primarily comprised of certain private equity investments.

Significant transfers into Level 3, primarily due to decreased price observability, during 2015 included:

- $1.7 billion of trading account assets
- $167 million of AFS debt securities
- $144 million of loans and leases
- $203 million of LHFS
- $411 million of federal funds purchased and securities loaned or sold under agreements to repurchase
- $1.6 billion of long-term debt. Transfers occur on a regular basis for these long-term debt instruments due to changes in the impact of unobservable inputs on the value of the embedded derivative in relation to the instrument as a whole.

Significant transfers out of Level 3, primarily due to increased price observability unless otherwise noted, during 2015 included:

- $851 million of trading account assets, primarily the result of increased market liquidity
- $976 million of AFS debt securities
- $300 million of loans and leases
- $322 million of other assets
- $1.4 billion of long-term debt

Level 3 – Fair Value Measurements [1]

(Dollars in millions)	Balance January 1 2014	Gains (Losses) in Earnings	Gains (Losses) in OCI	Gross Purchases	Gross Sales	Gross Issuances	Gross Settlements	Gross Transfers into Level 3	Gross Transfers out of Level 3	Balance December 31 2014
	2014									
Trading account assets:										
U.S. government and agency securities	$ —	$ —	$ —	$ 87	$ (87)	$ —	$ —	$ —	$ —	$ —
Corporate securities, trading loans and other	3,559	180	—	1,675	(857)	—	(938)	1,275	(1,624)	3,270
Equity securities	386	—	—	104	(86)	—	(16)	146	(182)	352
Non-U.S. sovereign debt	468	30	—	120	(34)	—	(19)	11	(2)	574
Mortgage trading loans and ABS	4,631	199	—	1,643	(1,259)	—	(585)	39	(2,605)	2,063
Total trading account assets	9,044	409	—	3,629	(2,323)	—	(1,558)	1,471	(4,413)	6,259
Net derivative assets [2]	(224)	463	—	823	(1,738)	—	(432)	28	160	(920)
AFS debt securities:										
Non-agency residential MBS	—	(2)	—	11	—	—	—	270	—	279
Non-U.S. securities	107	(7)	(11)	241	—	—	(147)	—	(173)	10
Corporate/Agency bonds	—	—	—	—	—	—	—	93	(93)	—
Other taxable securities	3,847	9	(8)	154	—	—	(1,381)	—	(954)	1,667
Tax-exempt securities	806	8	—	—	(16)	—	(235)	36	—	599
Total AFS debt securities	4,760	8	(19)	406	(16)	—	(1,763)	399	(1,220)	2,555
Loans and leases [3, 4]	3,057	69	—	—	(3)	699	(1,591)	25	(273)	1,983
Mortgage servicing rights [4]	5,042	(1,231)	—	—	(61)	707	(927)	—	—	3,530
Loans held-for-sale [4]	929	45	—	59	(725)	23	(216)	83	(25)	173
Other assets [5]	1,669	(98)	—	—	(430)	—	(245)	39	(24)	911
Trading account liabilities – Corporate securities and other	(35)	1	—	10	(13)	—	—	(9)	10	(36)
Accrued expenses and other liabilities	(10)	2	—	—	—	(3)	—	—	1	(10)
Long-term debt [3]	(1,990)	49	—	169	—	(615)	540	(1,581)	1,066	(2,362)

[1] Assets (liabilities). For assets, increase (decrease) to Level 3 and for liabilities, (increase) decrease to Level 3.
[2] Net derivatives include derivative assets of $6.9 billion and derivative liabilities of $7.8 billion.
[3] Amounts represent instruments that are accounted for under the fair value option.
[4] Issuances represent loan originations and MSRs retained following securitizations or whole-loan sales.
[5] Other assets is primarily comprised of certain long-term fixed-rate margin loans that are accounted for under the fair value option and certain private equity investments.

Significant transfers into Level 3, primarily due to decreased price observability, during 2014 included:

- $1.5 billion of trading account assets
- $399 million of AFS debt securities
- $1.6 billion of long-term debt. Transfers occur on a regular basis for these long-term debt instruments due to changes in the impact of unobservable inputs on the value of the embedded derivative in relation to the instrument as a whole.

Significant transfers out of Level 3, primarily due to increased price observability unless otherwise noted, during 2014 included:

- $4.4 billion of trading account assets, primarily the result of increased market liquidity
- $160 million of net derivative assets
- $1.2 billion of AFS debt securities
- $273 million of loans and leases
- $1.1 billion of long-term debt

Level 3 – Fair Value Measurements [1]

(Dollars in millions)	Balance January 1 2013	Gains (Losses) in Earnings	Gains (Losses) in OCI	Gross Purchases	Gross Sales	Gross Issuances	Gross Settlements	Gross Transfers into Level 3	Gross Transfers out of Level 3	Balance December 31 2013
	2013									
Trading account assets:										
Corporate securities, trading loans and other	$ 3,726	$ 242	$ —	$ 3,848	$ (3,110)	$ 59	$ (651)	$ 890	$ (1,445)	$ 3,559
Equity securities	545	74	—	96	(175)	—	(100)	70	(124)	386
Non-U.S. sovereign debt	353	50	—	122	(18)	—	(36)	2	(5)	468
Mortgage trading loans and ABS	4,935	53	—	2,514	(1,993)	—	(868)	20	(30)	4,631
Total trading account assets	9,559	419	—	6,580	(5,296)	59	(1,655)	982	(1,604)	9,044
Net derivative assets [2]	1,468	(304)	—	824	(1,467)	—	(1,362)	(10)	627	(224)
AFS debt securities:										
Commercial MBS	10	—	—	—	—	—	(10)	—	—	—
Non-U.S. securities	—	5	2	1	(1)	—	—	100	—	107
Corporate/Agency bonds	92	—	4	—	—	—	—	—	(96)	—
Other taxable securities	3,928	9	15	1,055	—	—	(1,155)	—	(5)	3,847
Tax-exempt securities	1,061	3	19	—	—	—	(109)	—	(168)	806
Total AFS debt securities	5,091	17	40	1,056	(1)	—	(1,274)	100	(269)	4,760
Loans and leases [3, 4]	2,287	98	—	310	(128)	1,252	(757)	19	(24)	3,057
Mortgage servicing rights [4]	5,716	1,941	—	—	(2,044)	472	(1,043)	—	—	5,042
Loans held-for-sale [3]	2,733	62	—	8	(402)	4	(1,507)	34	(3)	929
Other assets [5]	3,129	(288)	—	46	(383)	—	(1,019)	239	(55)	1,669
Trading account liabilities – Corporate securities and other	(64)	10	—	43	(54)	(5)	—	(9)	44	(35)
Accrued expenses and other liabilities [3]	(15)	30	—	—	—	(751)	724	(1)	3	(10)
Long-term debt [3]	(2,301)	13	—	358	(4)	(172)	258	(1,331)	1,189	(1,990)

[1] Assets (liabilities). For assets, increase (decrease) to Level 3 and for liabilities, (increase) decrease to Level 3.
[2] Net derivatives include derivative assets of $7.3 billion and derivative liabilities of $7.5 billion.
[3] Amounts represent instruments that are accounted for under the fair value option.
[4] Issuances represent loan originations and MSRs retained following securitizations or whole-loan sales.
[5] Other assets is primarily comprised of certain long-term fixed-rate margin loans that are accounted for under the fair value option and certain private equity investments.

Significant transfers into Level 3, primarily due to decreased price observability, during 2013 included:

- $982 million of trading account assets
- $100 million of AFS debt securities
- $239 million of other assets
- $1.3 billion of long-term debt. Transfers occur on a regular basis for these long-term debt instruments due to changes in the impact of unobservable inputs on the value of the embedded derivative in relation to the instrument as a whole.

Significant transfers out of Level 3, primarily due to increased price observability unless otherwise noted, during 2013 included:

- $1.6 billion of trading account assets
- $627 million of net derivative assets
- $269 million of AFS debt securities, primarily due to increased market liquidity
- $1.2 billion of long-term debt

The following tables summarize gains (losses) due to changes in fair value, including both realized and unrealized gains (losses), recorded in earnings for Level 3 assets and liabilities during 2015, 2014 and 2013. These amounts include gains (losses) on loans, LHFS, loan commitments and structured liabilities that are accounted for under the fair value option.

Level 3 – Total Realized and Unrealized Gains (Losses) Included in Earnings

(Dollars in millions)	2015 Trading Account Profits (Losses)	Mortgage Banking Income (Loss) [1]	Other	Total
Trading account assets:				
Corporate securities, trading loans and other	$ (31)	$ —	$ —	$ (31)
Equity securities	9	—	—	9
Non-U.S. sovereign debt	114	—	—	114
Mortgage trading loans and ABS	154	—	—	154
Total trading account assets	246	—	—	246
Net derivative assets	508	765	62	1,335
AFS debt securities – Non-agency residential MBS	—	—	(12)	(12)
Other debt securities carried at fair value – Non-agency residential MBS	—	—	(3)	(3)
Loans and leases [2]	(8)	—	(15)	(23)
Mortgage servicing rights	73	114	—	187
Loans held-for-sale [2]	(58)	—	7	(51)
Other assets	—	(66)	11	(55)
Federal funds purchased and securities loaned or sold under agreements to repurchase [2]	(11)	—	—	(11)
Trading account liabilities – Corporate securities and other	19	—	—	19
Short-term borrowings [2]	17	—	—	17
Accrued expenses and other liabilities	—	—	1	1
Long-term debt [2]	339	—	(52)	287
Total	$ 1,125	$ 813	$ (1)	$ 1,937

	2014			
Trading account assets:				
Corporate securities, trading loans and other	$ 180	$ —	$ —	$ 180
Non-U.S. sovereign debt	30	—	—	30
Mortgage trading loans and ABS	199	—	—	199
Total trading account assets	409	—	—	409
Net derivative assets	(475)	834	104	463
AFS debt securities:				
Non-agency residential MBS	—	—	(2)	(2)
Non-U.S. securities	—	—	(7)	(7)
Other taxable securities	—	—	9	9
Tax-exempt securities	—	—	8	8
Total AFS debt securities	—	—	8	8
Loans and leases [2]	—	—	69	69
Mortgage servicing rights	(6)	(1,225)	—	(1,231)
Loans held-for-sale [2]	(14)	—	59	45
Other assets	—	(79)	(19)	(98)
Trading account liabilities – Corporate securities and other	1	—	—	1
Accrued expenses and other liabilities	—	—	2	2
Long-term debt [2]	78	—	(29)	49
Total	$ (7)	$ (470)	$ 194	$ (283)

[1] Mortgage banking income (loss) does not reflect the impact of Level 1 and Level 2 hedges on MSRs.
[2] Amounts represent instruments that are accounted for under the fair value option.

Level 3 – Total Realized and Unrealized Gains (Losses) Included in Earnings (continued)

(Dollars in millions)	2013 Trading Account Profits (Losses)	Mortgage Banking Income (Loss) [1]	Other	Total
Trading account assets:				
Corporate securities, trading loans and other	$ 242	$ —	$ —	$ 242
Equity securities	74	—	—	74
Non-U.S. sovereign debt	50	—	—	50
Mortgage trading loans and ABS	53	—	—	53
Total trading account assets	419	—	—	419
Net derivative assets	(1,224)	927	(7)	(304)
AFS debt securities:				
Non-U.S. securities	—	—	5	5
Other taxable securities	—	—	9	9
Tax-exempt securities	—	—	3	3
Total AFS debt securities	—	—	17	17
Loans and leases [2]	—	(38)	136	98
Mortgage servicing rights	—	1,941	—	1,941
Loans held-for-sale [2]	—	2	60	62
Other assets	—	122	(410)	(288)
Trading account liabilities – Corporate securities and other	10	—	—	10
Accrued expenses and other liabilities	—	30	—	30
Long-term debt [2]	45	—	(32)	13
Total	$ (750)	$ 2,984	$ (236)	$ 1,998

[1] Mortgage banking income (loss) does not reflect the impact of Level 1 and Level 2 hedges on MSRs.
[2] Amounts represent instruments that are accounted for under the fair value option.

The table below summarizes changes in unrealized gains (losses) recorded in earnings during 2015, 2014 and 2013 for Level 3 assets and liabilities that were still held at December 31, 2015, 2014 and 2013. These amounts include changes in fair value on loans, LHFS, loan commitments and structured liabilities that are accounted for under the fair value option.

Level 3 – Changes in Unrealized Gains (Losses) Relating to Assets and Liabilities Still Held at Reporting Date

(Dollars in millions)	Trading Account Profits (Losses)	Mortgage Banking Income (Loss) [1]	Other	Total
	2015			
Trading account assets:				
Corporate securities, trading loans and other	$ (123)	$ —	$ —	$ (123)
Equity securities	3	—	—	3
Non-U.S. sovereign debt	74	—	—	74
Mortgage trading loans and ABS	(93)	—	—	(93)
Total trading account assets	(139)	—	—	(139)
Net derivative assets	507	36	62	605
Loans and leases [2]	(3)	—	16	13
Mortgage servicing rights	73	(158)	—	(85)
Loans held-for-sale [2]	(1)	—	(38)	(39)
Other assets	—	(41)	(20)	(61)
Trading account liabilities – Corporate securities and other	(3)	—	—	(3)
Short-term borrowings [2]	1	—	—	1
Accrued expenses and other liabilities	—	—	1	1
Long-term debt [2]	277	—	(22)	255
Total	$ 712	$ (163)	$ (1)	$ 548
	2014			
Trading account assets:				
Corporate securities, trading loans and other	$ 69	$ —	$ —	$ 69
Equity securities	(8)	—	—	(8)
Non-U.S. sovereign debt	31	—	—	31
Mortgage trading loans and ABS	79	—	—	79
Total trading account assets	171	—	—	171
Net derivative assets	(276)	85	104	(87)
Loans and leases [2]	—	—	76	76
Mortgage servicing rights	(6)	(1,747)	—	(1,753)
Loans held-for-sale [2]	(14)	—	10	(4)
Other assets	—	(50)	102	52
Trading account liabilities – Corporate securities and other	1	—	—	1
Accrued expenses and other liabilities	—	—	1	1
Long-term debt [2]	29	—	(37)	(8)
Total	$ (95)	$ (1,712)	$ 256	$ (1,551)
	2013			
Trading account assets:				
Corporate securities, trading loans and other	$ (130)	$ —	$ —	$ (130)
Equity securities	40	—	—	40
Non-U.S. sovereign debt	80	—	—	80
Mortgage trading loans and ABS	(174)	—	—	(174)
Total trading account assets	(184)	—	—	(184)
Net derivative assets	(1,375)	42	(7)	(1,340)
Loans and leases [2]	—	(34)	152	118
Mortgage servicing rights	—	1,541	—	1,541
Loans held-for-sale [2]	—	6	57	63
Other assets	—	166	14	180
Long-term debt [2]	(4)	—	(32)	(36)
Total	$ (1,563)	$ 1,721	$ 184	$ 342

[1] Mortgage banking income (loss) does not reflect the impact of Level 1 and Level 2 hedges on MSRs.
[2] Amounts represent instruments that are accounted for under the fair value option.

The following tables present information about significant unobservable inputs related to the Corporation's material categories of Level 3 financial assets and liabilities at December 31, 2015 and 2014.

Quantitative Information about Level 3 Fair Value Measurements at December 31, 2015

(Dollars in millions)

Financial Instrument	Fair Value	Valuation Technique	Inputs: Significant Unobservable Inputs	Inputs: Ranges of Inputs	Inputs: Weighted Average
Loans and Securities [1]					
Instruments backed by residential real estate assets	**$ 2,017**	Discounted cash flow, Market comparables	Yield	0% to 25%	6%
Trading account assets – Mortgage trading loans and ABS	400		Prepayment speed	0% to 27% CPR	11%
Loans and leases	1,520		Default rate	0% to 10% CDR	4%
Loans held-for-sale	97		Loss severity	0% to 90%	40%
Instruments backed by commercial real estate assets	**$ 852**	Discounted cash flow, Market comparables	Yield	0% to 25%	8%
Trading account assets – Mortgage trading loans and ABS	162		Price	$0 to $100	$73
Loans held-for-sale	690				
Commercial loans, debt securities and other	**$ 4,558**	Discounted cash flow, Market comparables	Yield	0% to 37%	13%
Trading account assets – Corporate securities, trading loans and other	2,503		Prepayment speed	5% to 20%	16%
Trading account assets – Non-U.S. sovereign debt	521		Default rate	2% to 5%	4%
Trading account assets – Mortgage trading loans and ABS	1,306		Loss severity	25% to 50%	37%
AFS debt securities – Other taxable securities	128		Duration	0 to 5 years	3 years
Loans and leases	100		Price	$0 to $258	$64
Auction rate securities	**$ 1,533**	Discounted cash flow, Market comparables	Price	$10 to $100	$94
Trading account assets – Corporate securities, trading loans and other	335				
AFS debt securities – Other taxable securities	629				
AFS debt securities – Tax-exempt securities	569				
Structured liabilities					
Long-term debt	**$ (1,513)**	Industry standard derivative pricing [2, 3]	Equity correlation	25% to 100%	67%
			Long-dated equity volatilities	4% to 101%	28%
Net derivative assets					
Credit derivatives	**$ (75)**	Discounted cash flow, Stochastic recovery correlation model	Yield	6% to 25%	16%
			Upfront points	0 to 100 points	60 points
			Credit spreads	0 bps to 447 bps	111 bps
			Credit correlation	31% to 99%	38%
			Prepayment speed	10% to 20% CPR	19%
			Default rate	1% to 4% CDR	3%
			Loss severity	35% to 40%	35%
Equity derivatives	**$ (1,037)**	Industry standard derivative pricing [2]	Equity correlation	25% to 100%	67%
			Long-dated equity volatilities	4% to 101%	28%
Commodity derivatives	**$ 169**	Discounted cash flow, Industry standard derivative pricing [2]	Natural gas forward price	$1/MMBtu to $6/MMBtu	$4/MMBtu
			Propane forward price	$0/Gallon to $1/Gallon	$1/Gallon
			Correlation	66% to 93%	84%
			Volatilities	18% to 125%	39%
Interest rate derivatives	**$ 502**	Industry standard derivative pricing [3]	Correlation (IR/IR)	17% to 99%	48%
			Correlation (FX/IR)	-15% to 40%	-9%
			Long-dated inflation rates	0% to 7%	3%
			Long-dated inflation volatilities	0% to 2%	1%
Total net derivative assets	**$ (441)**				

[1] The categories are aggregated based upon product type which differs from financial statement classification. The following is a reconciliation to the line items in the table on page 99: Trading account assets – Corporate securities, trading loans and other of $2.8 billion, Trading account assets – Non-U.S. sovereign debt of $521 million, Trading account assets – Mortgage trading loans and ABS of $1.9 billion, AFS debt securities – Other taxable securities of $757 million, AFS debt securities – Tax-exempt securities of $569 million, Loans and leases of $1.6 billion and LHFS of $787 million.
[2] Includes models such as Monte Carlo simulation and Black-Scholes.
[3] Includes models such as Monte Carlo simulation, Black-Scholes and other methods that model the joint dynamics of interest, inflation and foreign exchange rates.
CPR = Constant Prepayment Rate
CDR = Constant Default Rate
MMBtu = Million British thermal units
IR = Interest Rate
FX = Foreign Exchange

Quantitative Information about Level 3 Fair Value Measurements at December 31, 2014

(Dollars in millions)

Financial Instrument	Fair Value	Valuation Technique	Inputs: Significant Unobservable Inputs	Inputs: Ranges of Inputs	Inputs: Weighted Average
Loans and Securities [1]					
Instruments backed by residential real estate assets	**$ 2,030**	Discounted cash flow, Market comparables	Yield	0% to 25%	6%
Trading account assets – Mortgage trading loans and ABS	483		Prepayment speed	0% to 35% CPR	14%
Loans and leases	1,374		Default rate	2% to 15% CDR	7%
Loans held-for-sale	173		Loss severity	26% to 100%	34%
Commercial loans, debt securities and other	**$ 7,203**	Discounted cash flow, Market comparables	Yield	0% to 40%	9%
Trading account assets – Corporate securities, trading loans and other	3,224		Enterprise value/EBITDA multiple	0x to 30x	6x
Trading account assets – Non-U.S. sovereign debt	574		Prepayment speed	1% to 30%	12%
Trading account assets – Mortgage trading loans and ABS	1,580		Default rate	1% to 5%	4%
AFS debt securities – Other taxable securities	1,216		Loss severity	25% to 40%	38%
Loans and leases	609		Duration	0 to 5 years	3 years
			Price	$0 to $107	$76
Auction rate securities	**$ 1,096**	Discounted cash flow, Market comparables	Price	$60 to $100	$95
Trading account assets – Corporate securities, trading loans and other	46				
AFS debt securities – Other taxable securities	451				
AFS debt securities – Tax-exempt securities	599				
Structured liabilities					
Long-term debt	**$ (2,362)**	Industry standard derivative pricing [2, 3]	Equity correlation	20% to 98%	65%
			Long-dated equity volatilities	6% to 69%	24%
			Long-dated volatilities (IR)	0% to 2%	1%
Net derivative assets					
Credit derivatives	**$ 22**	Discounted cash flow, Stochastic recovery correlation model	Yield	0% to 25%	14%
			Upfront points	0 to 100 points	65 points
			Spread to index	25 bps to 450 bps	119 bps
			Credit correlation	24% to 99%	51%
			Prepayment speed	3% to 20% CPR	11%
			Default rate	4% CDR	n/a
			Loss severity	35%	n/a
Equity derivatives	**$ (1,560)**	Industry standard derivative pricing [2]	Equity correlation	20% to 98%	65%
			Long-dated equity volatilities	6% to 69%	24%
Commodity derivatives	**$ 141**	Discounted cash flow, Industry standard derivative pricing [2]	Natural gas forward price	$2/MMBtu to $7/MMBtu	$5/MMBtu
			Correlation	82% to 93%	90%
			Volatilities	16% to 98%	35%
Interest rate derivatives	**$ 477**	Industry standard derivative pricing [3]	Correlation (IR/IR)	11% to 99%	55%
			Correlation (FX/IR)	-48% to 40%	-5%
			Long-dated inflation rates	0% to 3%	1%
			Long-dated inflation volatilities	0% to 2%	1%
Total net derivative assets	**$ (920)**				

[1] The categories are aggregated based upon product type which differs from financial statement classification. The following is a reconciliation to the line items in the table on page 100: Trading account assets – Corporate securities, trading loans and other of $3.3 billion, Trading account assets – Non-U.S. sovereign debt of $574 million, Trading account assets – Mortgage trading loans and ABS of $2.1 billion, AFS debt securities – Other taxable securities of $1.7 billion, AFS debt securities – Tax-exempt securities of $599 million, Loans and leases of $2.0 billion and LHFS of $173 million.

[2] Includes models such as Monte Carlo simulation and Black-Scholes.

[3] Includes models such as Monte Carlo simulation, Black-Scholes and other methods that model the joint dynamics of interest, inflation and foreign exchange rates.

CPR = Constant Prepayment Rate
CDR = Constant Default Rate
EBITDA = Earnings before interest, taxes, depreciation and amortization
MMBtu = Million British thermal units
IR = Interest Rate
FX = Foreign Exchange
n/a = not applicable

In the tables above, instruments backed by residential and commercial real estate assets include RMBS, commercial mortgage-backed securities, whole loans and mortgage CDOs. Commercial loans, debt securities and other include corporate CLOs and CDOs, commercial loans and bonds, and securities backed by non-real estate assets. Structured liabilities primarily include equity-linked notes that are accounted for under the fair value option.

The Corporation uses multiple market approaches in valuing certain of its Level 3 financial instruments. For example, market comparables and discounted cash flows are used together. For a given product, such as corporate debt securities, market comparables may be used to estimate some of the unobservable inputs and then these inputs are incorporated into a discounted cash flow model. Therefore, the balances disclosed encompass both of these techniques.

The level of aggregation and diversity within the products disclosed in the tables result in certain ranges of inputs being wide and unevenly distributed across asset and liability categories.

For more information on the inputs and techniques used in the valuation of MSRs, see *Note 23 – Mortgage Servicing Rights*.

Sensitivity of Fair Value Measurements to Changes in Unobservable Inputs

Loans and Securities

For instruments backed by residential real estate assets, commercial real estate assets and commercial loans, debt securities and other, a significant increase in market yields, default rates, loss severities or duration would result in a significantly lower fair value for long positions. Short positions would be impacted in a directionally opposite way. The impact of changes in prepayment speeds would have differing impacts depending on the seniority of the instrument and, in the case of CLOs, whether prepayments can be reinvested.

For auction rate securities, a significant increase in price would result in a significantly higher fair value.

Structured Liabilities and Derivatives

For credit derivatives, a significant increase in market yield, including spreads to indices, upfront points (i.e., a single upfront payment made by a protection buyer at inception), credit spreads, default rates or loss severities would result in a significantly lower fair value for protection sellers and higher fair value for protection buyers. The impact of changes in prepayment speeds would have differing impacts depending on the seniority of the instrument and, in the case of CLOs, whether prepayments can be reinvested.

Structured credit derivatives, which include tranched portfolio CDS and derivatives with derivative product company (DPC) and monoline counterparties, are impacted by credit correlation, including default and wrong-way correlation. Default correlation is a parameter that describes the degree of dependence among credit default rates within a credit portfolio that underlies a credit derivative instrument. The sensitivity of this input on the fair value varies depending on the level of subordination of the tranche. For senior tranches that are net purchases of protection, a significant increase in default correlation would result in a significantly higher fair value. Net short protection positions would be impacted in a directionally opposite way. Wrong-way correlation is a parameter that describes the probability that as exposure to a counterparty increases, the credit quality of the counterparty decreases. A significantly higher degree of wrong-way correlation between a DPC counterparty and underlying derivative exposure would result in a significantly lower fair value.

For equity derivatives, commodity derivatives, interest rate derivatives and structured liabilities, a significant change in long-dated rates and volatilities and correlation inputs (e.g., the degree of correlation between an equity security and an index, between two different commodities, between two different interest rates, or between interest rates and foreign exchange rates) would result in a significant impact to the fair value; however, the magnitude and direction of the impact depends on whether the Corporation is long or short the exposure.

Nonrecurring Fair Value

The Corporation holds certain assets that are measured at fair value, but only in certain situations (e.g., impairment) and these measurements are referred to herein as nonrecurring. The amounts below represent assets still held as of the reporting date for which a nonrecurring fair value adjustment was recorded during 2015, 2014 and 2013.

Assets Measured at Fair Value on a Nonrecurring Basis

	December 31			
	2015		2014	
(Dollars in millions)	Level 2	Level 3	Level 2	Level 3
Assets				
Loans held-for-sale	$ 9	$ 33	$ 156	$ 30
Loans and leases [1]	—	2,739	5	4,636
Foreclosed properties [2, 3]	—	172	—	208
Other assets	88	—	111	—

	Gains (Losses)		
	2015	2014	2013
Assets			
Loans held-for-sale	$ (8)	$ (19)	$ (71)
Loans and leases [1]	(980)	(1,132)	(1,104)
Foreclosed properties [2, 3]	(57)	(66)	(63)
Other assets	(28)	(26)	(20)

(1) Includes $174 million of losses on loans that were written down to a collateral value of zero during 2015 compared to losses of $370 million and $365 million in 2014 and 2013.
(2) Amounts are included in other assets on the Consolidated Balance Sheet and represent the carrying value of foreclosed properties that were written down subsequent to their initial classification as foreclosed properties. Losses on foreclosed properties include losses taken during the first 90 days after transfer of a loan to foreclosed properties.
(3) Excludes $1.4 billion and $1.1 billion of properties acquired upon foreclosure of certain government-guaranteed loans (principally FHA-insured loans) as of December 31, 2015 and 2014.

The table below presents information about significant unobservable inputs related to the Corporation's nonrecurring Level 3 financial assets and liabilities at December 31, 2015 and 2014. Instruments backed by residential real estate assets represent residential mortgages where the loan has been written down to the fair value of the underlying collateral.

Quantitative Information about Nonrecurring Level 3 Fair Value Measurements

(Dollars in millions)	December 31, 2015		Inputs		
Financial Instrument	Fair Value	Valuation Technique	Significant Unobservable Inputs	Ranges of Inputs	Weighted Average
Loans and leases backed by residential real estate assets	$ 2,739	Market comparables	OREO discount	7% to 55%	20%
			Cost to sell	8% to 45%	10%
	December 31, 2014				
Loans and leases backed by residential real estate assets	$ 4,636	Market comparables	OREO discount	0% to 28%	8%
			Cost to sell	7% to 14%	8%

NOTE 21 Fair Value Option

Loans and Loan Commitments

The Corporation elects to account for certain commercial loans and loan commitments that exceed the Corporation's single name credit risk concentration guidelines under the fair value option. Lending commitments, both funded and unfunded, are actively managed and monitored and, as appropriate, credit risk for these lending relationships may be mitigated through the use of credit derivatives, with the Corporation's public side credit view and market perspectives determining the size and timing of the hedging activity. These credit derivatives do not meet the requirements for designation as accounting hedges and therefore are carried at fair value with changes in fair value recorded in other income (loss). Electing the fair value option allows the Corporation to carry these loans and loan commitments at fair value, which is more consistent with management's view of the underlying economics and the manner in which they are managed. In addition, election of the fair value option allows the Corporation to reduce the accounting volatility that would otherwise result from the asymmetry created by accounting for the financial instruments at historical cost and the credit derivatives at fair value. The Corporation also elected the fair value option for certain loans held in consolidated VIEs.

Loans Held-for-sale

The Corporation elects to account for residential mortgage LHFS, commercial mortgage LHFS and certain other LHFS under the fair value option with interest income on these LHFS recorded in other interest income. These loans are actively managed and monitored and, as appropriate, certain market risks of the loans may be mitigated through the use of derivatives. The Corporation has elected not to designate the derivatives as qualifying accounting hedges and therefore they are carried at fair value with changes in fair value recorded in other income (loss). The changes in fair value of the loans are largely offset by changes in the fair value of the derivatives. Election of the fair value option allows the Corporation to reduce the accounting volatility that would otherwise result from the asymmetry created by accounting for the financial instruments at the lower of cost or fair value and the derivatives at fair value. The Corporation has not elected to account for certain other LHFS under the fair value option primarily because these loans are floating-rate loans that are not hedged using derivative instruments.

Loans Reported as Trading Account Assets

The Corporation elects to account for certain loans that are held for the purpose of trading and are risk-managed on a fair value basis under the fair value option.

Other Assets

The Corporation elects to account for certain private equity investments that are not in an investment company under the fair value option as this measurement basis is consistent with applicable accounting guidance for similar investments that are in an investment company. The Corporation also elects to account for certain long-term fixed-rate margin loans that are hedged with derivatives under the fair value option. Election of the fair value option allows the Corporation to reduce the accounting volatility that would otherwise result from the asymmetry created by accounting for the financial instruments at historical cost and the derivatives at fair value.

Securities Financing Agreements

The Corporation elects to account for certain securities financing agreements, including resale and repurchase agreements, under the fair value option based on the tenor of the agreements, which reflects the magnitude of the interest rate risk. The majority of securities financing agreements collateralized by U.S. government securities are not accounted for under the fair value option as these contracts are generally short-dated and therefore the interest rate risk is not significant.

Long-term Deposits

The Corporation elects to account for certain long-term fixed-rate and rate-linked deposits that are hedged with derivatives that do not qualify for hedge accounting under the fair value option. Election of the fair value option allows the Corporation to reduce the accounting volatility that would otherwise result from the asymmetry created by accounting for the financial instruments at historical cost and the derivatives at fair value. The Corporation has not elected to carry other long-term deposits at fair value because they were not hedged using derivatives.

Short-term Borrowings

The Corporation elects to account for certain short-term borrowings, primarily short-term structured liabilities, under the fair value option because this debt is risk-managed on a fair value basis.

The Corporation elects to account for certain asset-backed secured financings, which are also classified in short-term borrowings, under the fair value option. Election of the fair value option allows the Corporation to reduce the accounting volatility that would otherwise result from the asymmetry created by accounting for the asset-backed secured financings at historical cost and the corresponding mortgage LHFS securing these financings at fair value.

Long-term Debt

The Corporation elects to account for certain long-term debt, primarily structured liabilities, under the fair value option. This long-term debt is either risk-managed on a fair value basis or the related hedges do not qualify for hedge accounting.

The table below provides information about the fair value carrying amount and the contractual principal outstanding of assets and liabilities accounted for under the fair value option at December 31, 2015 and 2014.

Fair Value Option Elections

(Dollars in millions)	December 31					
	2015			2014		
	Fair Value Carrying Amount	**Contractual Principal Outstanding**	**Fair Value Carrying Amount Less Unpaid Principal**	Fair Value Carrying Amount	Contractual Principal Outstanding	Fair Value Carrying Amount Less Unpaid Principal
Federal funds sold and securities borrowed or purchased under agreements to resell	**$ 55,143**	**$ 54,999**	**$ 144**	$ 62,182	$ 61,902	$ 280
Loans reported as trading account assets [1]	**4,995**	**9,214**	**(4,219)**	4,607	8,487	(3,880)
Trading inventory – other	**8,149**	**n/a**	**n/a**	6,865	n/a	n/a
Consumer and commercial loans	**6,938**	**7,293**	**(355)**	8,681	8,925	(244)
Loans held-for-sale	**4,818**	**6,157**	**(1,339)**	6,801	8,072	(1,271)
Other assets	**275**	**270**	**5**	253	270	(17)
Long-term deposits	**1,116**	**1,021**	**95**	1,469	1,361	108
Federal funds purchased and securities loaned or sold under agreements to repurchase	**24,574**	**24,718**	**(144)**	35,357	35,332	25
Short-term borrowings	**1,325**	**1,325**	**—**	2,697	2,697	—
Unfunded loan commitments	**658**	**n/a**	**n/a**	405	n/a	n/a
Long-term debt [2]	**30,097**	**30,593**	**(496)**	36,404	35,815	589

[1] A significant portion of the loans reported as trading account assets are distressed loans which trade and were purchased at a deep discount to par, and the remainder are loans with a fair value near contractual principal outstanding.

[2] Includes structured liabilities with a fair value of $29.0 billion and $35.3 billion, and contractual principal outstanding of $29.4 billion and $34.6 billion at December 31, 2015 and 2014.

n/a = not applicable

The following tables provide information about where changes in the fair value of assets and liabilities accounted for under the fair value option are included in the Consolidated Statement of Income for 2015, 2014 and 2013.

Gains (Losses) Relating to Assets and Liabilities Accounted for Under the Fair Value Option

(Dollars in millions)	2015 Trading Account Profits (Losses)	2015 Mortgage Banking Income (Loss)	2015 Other Income (Loss)	2015 Total
Federal funds sold and securities borrowed or purchased under agreements to resell	**$ (195)**	**$ —**	**$ —**	**$ (195)**
Loans reported as trading account assets	**(199)**	**—**	**—**	**(199)**
Trading inventory – other [1]	**1,284**	**—**	**—**	**1,284**
Consumer and commercial loans	**52**	**—**	**(295)**	**(243)**
Loans held-for-sale [2]	**(36)**	**673**	**63**	**700**
Other assets	**—**	**—**	**10**	**10**
Long-term deposits	**1**	**—**	**13**	**14**
Federal funds purchased and securities loaned or sold under agreements to repurchase	**33**	**—**	**—**	**33**
Short-term borrowings	**3**	**—**	**—**	**3**
Unfunded loan commitments	**—**	**—**	**(210)**	**(210)**
Long-term debt [3, 4]	**2,107**	**—**	**(633)**	**1,474**
Total	**$ 3,050**	**$ 673**	**$ (1,052)**	**$ 2,671**

	2014			
Federal funds sold and securities borrowed or purchased under agreements to resell	$ (114)	$ —	$ —	$ (114)
Loans reported as trading account assets	(87)	—	—	(87)
Trading inventory – other [1]	1,091	—	—	1,091
Consumer and commercial loans	(24)	—	69	45
Loans held-for-sale [2]	(56)	798	83	825
Long-term deposits	23	—	(26)	(3)
Federal funds purchased and securities loaned or sold under agreements to repurchase	4	—	—	4
Short-term borrowings	52	—	—	52
Unfunded loan commitments	—	—	(64)	(64)
Long-term debt [3]	239	—	407	646
Total	$ 1,128	$ 798	$ 469	$ 2,395

	2013			
Federal funds sold and securities borrowed or purchased under agreements to resell	$ (44)	$ —	$ —	$ (44)
Loans reported as trading account assets	83	—	—	83
Trading inventory – other [1]	1,355	—	—	1,355
Consumer and commercial loans	(28)	(38)	240	174
Loans held-for-sale [2]	7	966	75	1,048
Other assets	—	—	(77)	(77)
Long-term deposits	30	—	84	114
Federal funds purchased and securities loaned or sold under agreements to repurchase	(36)	—	—	(36)
Asset-backed secured financings	—	(91)	—	(91)
Short-term borrowings	(70)	—	—	(70)
Unfunded loan commitments	—	—	180	180
Long-term debt [3]	(602)	—	(649)	(1,251)
Total	$ 695	$ 837	$ (147)	$ 1,385

[1] The gains (losses) in trading account profits (losses) are primarily offset by gains (losses) on trading liabilities that hedge these assets.
[2] Includes the value of IRLCs on funded loans, including those sold during the period.
[3] The majority of the net gains (losses) in trading account profits relate to the embedded derivative in structured liabilities and are offset by gains (losses) on derivatives and securities that hedge these liabilities. In connection with the implementation of new accounting guidance relating to DVA on structured liabilities accounted for at fair value under the fair value option, unrealized DVA gains (losses) in 2015 are recorded in accumulated OCI while realized gains (losses) are recorded in other income (loss); for years prior to 2015, the realized and unrealized gains (losses) are reflected in other income (loss). For more information on the implementation of new accounting guidance, see *Note 1 – Summary of Significant Accounting Principles.*
[4] For the cumulative impact of changes in the Corporation's credit spreads and the amount recognized in OCI, see *Note 14 – Accumulated Other Comprehensive Income (Loss)*. For more information on how the Corporation's own credit spread is determined, see *Note 20 – Fair Value Measurements*.

Gains (Losses) Related to Borrower-specific Credit Risk for Assets Accounted for Under the Fair Value Option

(Dollars in millions)	December 31 2015	2014	2013
Loans reported as trading account assets	**$ 37**	$ 28	$ 56
Consumer and commercial loans	**(200)**	32	148
Loans held-for-sale	**37**	84	225

NOTE 22 Fair Value of Financial Instruments

Financial instruments are classified within the fair value hierarchy using the methodologies described in *Note 20 – Fair Value Measurements*. The following disclosures include financial instruments where only a portion of the ending balance at December 31, 2015 and 2014 was carried at fair value on the Consolidated Balance Sheet.

Short-term Financial Instruments

The carrying value of short-term financial instruments, including cash and cash equivalents, time deposits placed and other short-term investments, federal funds sold and purchased, certain resale and repurchase agreements, customer and other receivables, customer payables (within accrued expenses and other liabilities on the Consolidated Balance Sheet), and short-term borrowings approximates the fair value of these instruments. These financial instruments generally expose the Corporation to limited credit risk and have no stated maturities or have short-term maturities and carry interest rates that approximate market. The Corporation elected to account for certain resale and repurchase agreements under the fair value option.

Under the fair value hierarchy, cash and cash equivalents are classified as Level 1. Time deposits placed and other short-term investments, such as U.S. government securities and short-term commercial paper, are classified as Level 1 and Level 2. Federal funds sold and purchased are classified as Level 2. Resale and repurchase agreements are classified as Level 2 because they are generally short-dated and/or variable-rate instruments collateralized by U.S. government or agency securities. Customer and other receivables primarily consist of margin loans, servicing advances and other accounts receivable and are classified as Level 2 and Level 3. Customer payables and short-term borrowings are classified as Level 2.

Held-to-maturity Debt Securities

HTM debt securities, which consist primarily of U.S. agency debt securities, are classified as Level 2 using the same methodologies as AFS U.S. agency debt securities. For more information on HTM debt securities, see *Note 3 – Securities*.

Loans

The fair values for commercial and consumer loans are generally determined by discounting both principal and interest cash flows expected to be collected using a discount rate for similar instruments with adjustments that the Corporation believes a market participant would consider in determining fair value. The Corporation estimates the cash flows expected to be collected using internal credit risk, interest rate and prepayment risk models that incorporate the Corporation's best estimate of current key assumptions, such as default rates, loss severity and prepayment speeds for the life of the loan. The carrying value of loans is presented net of the applicable allowance for loan losses and excludes leases. The Corporation accounts for certain commercial loans and residential mortgage loans under the fair value option.

Deposits

The fair value for certain deposits with stated maturities was determined by discounting contractual cash flows using current market rates for instruments with similar maturities. The carrying value of non-U.S. time deposits approximates fair value. For deposits with no stated maturities, the carrying value was considered to approximate fair value and does not take into account the significant value of the cost advantage and stability of the Corporation's long-term relationships with depositors. The Corporation accounts for certain long-term fixed-rate deposits under the fair value option.

Long-term Debt

The Corporation uses quoted market prices, when available, to estimate fair value for its long-term debt. When quoted market prices are not available, fair value is estimated based on current market interest rates and credit spreads for debt with similar terms and maturities. The Corporation accounts for certain structured liabilities under the fair value option.

Fair Value of Financial Instruments

The carrying values and fair values by fair value hierarchy of certain financial instruments where only a portion of the ending balance was carried at fair value at December 31, 2015 and 2014 are presented in the table below.

Fair Value of Financial Instruments

	December 31, 2015			
		Fair Value		
(Dollars in millions)	Carrying Value	Level 2	Level 3	Total
Financial assets				
Loans	$ 863,561	$ 70,223	$ 805,371	$ 875,594
Loans held-for-sale	7,453	5,347	2,106	7,453
Financial liabilities				
Deposits	1,197,259	1,197,577	—	1,197,577
Long-term debt	236,764	239,596	1,513	241,109

	December 31, 2014			
Financial assets				
Loans	$ 842,259	$ 87,174	$ 776,370	$ 863,544
Loans held-for-sale	12,836	12,236	618	12,854
Financial liabilities				
Deposits	1,118,936	1,119,427	—	1,119,427
Long-term debt	243,139	249,692	2,362	252,054

Commercial Unfunded Lending Commitments

Fair values were generally determined using a discounted cash flow valuation approach which is applied using market-based CDS or internally developed benchmark credit curves. The Corporation accounts for certain loan commitments under the fair value option.

The carrying values and fair values of the Corporation's commercial unfunded lending commitments were $1.3 billion and $6.3 billion at December 31, 2015, and $932 million and $3.8 billion at December 31, 2014. Commercial unfunded lending commitments are primarily classified as Level 3. The carrying value of these commitments is classified in accrued expenses and other liabilities.

The Corporation does not estimate the fair values of consumer unfunded lending commitments because, in many instances, the Corporation can reduce or cancel these commitments by providing notice to the borrower. For more information on commitments, see *Note 12 – Commitments and Contingencies*.

NOTE 23 Mortgage Servicing Rights

The Corporation accounts for consumer MSRs at fair value with changes in fair value primarily recorded in mortgage banking income in the Consolidated Statement of Income. The Corporation manages the risk in these MSRs with derivatives such as options and interest rate swaps, which are not designated as accounting hedges, as well as securities including MBS and U.S. Treasury securities. The securities used to manage the risk in the MSRs are classified in other assets with changes in the fair value of the securities and the related interest income recorded in mortgage banking income.

The table below presents activity for residential mortgage and home equity MSRs for 2015 and 2014.

Rollforward of Mortgage Servicing Rights

(Dollars in millions)	2015	2014
Balance, January 1	**$ 3,530**	$ 5,042
Additions	**637**	707
Sales	**(393)**	(61)
Amortization of expected cash flows [1]	**(874)**	(927)
Impact of changes in interest rates and other market factors [2]	**41**	(1,191)
Model and other cash flow assumption changes: [3]		
Projected cash flows, including changes in costs to service loans	**100**	(163)
Impact of changes in the Home Price Index	**(13)**	(25)
Impact of changes to the prepayment model	**(10)**	243
Other model changes [4]	**69**	(95)
Balance, December 31 [5]	**$ 3,087**	$ 3,530
Mortgage loans serviced for investors (in billions)	**$ 394**	$ 490

(1) Represents the net change in fair value of the MSR asset due to the recognition of modeled cash flows.

(2) These amounts reflect the changes in modeled MSR fair value primarily due to observed changes in interest rates, volatility, spreads and the shape of the forward swap curve and periodic adjustments to valuation based on third-party discovery.

(3) These amounts reflect periodic adjustments to the valuation model to reflect changes in the modeled relationship between inputs and their impact on projected cash flows as well as changes in certain cash flow assumptions such as cost to service and ancillary income per loan.

(4) These amounts include the impact of periodic recalibrations of the model to reflect changes in the relationship between market interest rate spreads and projected cash flows. Also included is a decrease of $127 million for 2014 due to changes in option-adjusted spread rate assumptions.

(5) At December 31, 2015, includes $2.7 billion of U.S. and $407 million of non-U.S. consumer MSR balances compared to $3.3 billion and $259 million at December 31, 2014.

The Corporation primarily uses an option-adjusted spread (OAS) valuation approach which factors in prepayment risk to determine the fair value of MSRs. This approach consists of projecting servicing cash flows under multiple interest rate scenarios and discounting these cash flows using risk-adjusted discount rates. In addition to updating the valuation model for interest, discount and prepayment rates, periodic adjustments are made to recalibrate the valuation model for factors used to project cash flows. The changes to the factors capture the effect of variances related to actual versus estimated servicing proceeds.

Significant economic assumptions in estimating the fair value of MSRs at December 31, 2015 and 2014 are presented below. The change in fair value as a result of changes in OAS rates is included within "Model and other cash flow assumption changes" in the Rollforward of Mortgage Servicing Rights table. The weighted-average life is not an input in the valuation model but is a product of both changes in market rates of interest and changes in model and other cash flow assumptions. The weighted-average life represents the average period of time that the MSRs' cash flows are expected to be received. Absent other changes, an increase (decrease) to the weighted-average life would generally result in an increase (decrease) in the fair value of the MSRs.

Significant Economic Assumptions

	December 31			
	2015		2014	
	Fixed	Adjustable	Fixed	Adjustable
Weighted-average OAS	**4.62%**	**7.61%**	4.52%	7.61%
Weighted-average life, in years	**4.46**	**3.43**	4.53	2.95

The table below presents the sensitivity of the weighted-average lives and fair value of MSRs to changes in modeled assumptions. These sensitivities are hypothetical and should be used with caution. As the amounts indicate, changes in fair value based on variations in assumptions generally cannot be extrapolated because the relationship of the change in assumption to the change in fair value may not be linear. Also, the effect of a variation in a particular assumption on the fair value of MSRs that continue to be held by the Corporation is calculated without changing any other assumption. In reality, changes in one factor may result in changes in another, which might magnify or counteract the sensitivities. The below sensitivities do not reflect any hedge strategies that may be undertaken to mitigate such risk.

Sensitivity Impacts

	December 31, 2015		
	Change in Weighted-average Lives		
(Dollars in millions)	Fixed	Adjustable	Change in Fair Value
Prepayment rates			
Impact of 10% decrease	0.30 years	0.26 years	$ 183
Impact of 20% decrease	0.64	0.55	389
Impact of 10% increase	(0.26)	(0.23)	(163)
Impact of 20% increase	(0.50)	(0.43)	(310)
OAS level			
Impact of 100 bps decrease			$ 124
Impact of 200 bps decrease			259
Impact of 100 bps increase			(115)
Impact of 200 bps increase			(221)

NOTE 24 Business Segment Information

Effective April 1, 2016, to align the segments with how the Corporation manages the businesses beginning in the three months ended June 30, 2016, the Corporation changed its basis of presentation, and following such change, reports its results of operations through the following four business segments: *Consumer Bank*ing, *GWIM*, *Global Banking* and *Global Markets*, with the remaining operations recorded in *All Other*. For more information on this segment realignment, see *Note 24 – Business Segment Information* to the Consolidated Financial Statements of Exhibit 99.2 to the Corporation's Current Report on Form 8-K filed on August 1, 2016.

Consumer Banking

Consumer Banking offers a diversified range of credit, banking and investment products and services to consumers and small businesses. *Consumer Banking* product offerings include traditional savings accounts, money market savings accounts, CDs and IRAs, noninterest- and interest-bearing checking accounts, investment accounts and products, as well as credit and debit cards, residential mortgages and home equity loans, and direct and indirect loans to consumers and small businesses in the U.S. *Consumer Banking* includes the impact of servicing residential mortgages and home equity loans in the core portfolio. Customers and clients have access to a franchise network that stretches coast to coast through 33 states and the District of Columbia. The franchise network includes approximately 4,700 financial centers, 16,000 ATMs, nationwide call centers, and online and mobile platforms.

Global Wealth & Investment Management

GWIM provides a high-touch client experience through a network of financial advisors focused on clients with over $250,000 in total investable assets, including tailored solutions to meet clients' needs through a full set of investment management, brokerage, banking and retirement products. *GWIM* also provides comprehensive wealth management solutions targeted to high net worth and ultra high net worth clients, as well as customized solutions to meet clients' wealth structuring, investment management, trust and banking needs, including specialty asset management services.

Global Banking

Global Banking provides a wide range of lending-related products and services, integrated working capital management and treasury solutions to clients, and underwriting and advisory services through the Corporation's network of offices and client relationship teams. *Global Banking*'s lending products and services include commercial loans, leases, commitment facilities, trade finance, real estate lending and asset-based lending. *Global Banking*'s treasury solutions business includes treasury management, foreign exchange and short-term investing options. *Global Banking* also provides investment banking products to clients such as debt and equity underwriting and distribution, and merger-related and other advisory services. The economics of most investment banking and underwriting activities are shared primarily between *Global Banking* and *Global Markets* based on the activities performed by each segment. *Global Banking* clients generally include middle-market companies, commercial real estate firms, not-for-profit companies, large global corporations, financial institutions, leasing clients, and mid-sized U.S.-based businesses requiring customized and integrated financial advice and solutions.

Global Markets

Global Markets offers sales and trading services, 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 institutional investor clients in support of their investing and trading activities. *Global Markets* also works with 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 market-making activities in these products, *Global Markets* 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 ABS. In addition, the economics of most investment banking and underwriting activities are shared primarily between *Global Markets* and *Global Banking* based on the activities performed by each segment.

All Other

All Other consists of ALM activities, equity investments, the international consumer 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, 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 the business segments.

Basis of Presentation

The management accounting and reporting process derives segment and business results by utilizing allocation methodologies for revenue and expense. The net income derived for the businesses is dependent upon revenue and cost allocations using an activity-based costing model, funds transfer pricing, and other methodologies and assumptions management believes are appropriate to reflect the results of the business.

Total revenue, net of interest expense, includes net interest income on an FTE basis and noninterest income. The adjustment of net interest income to an FTE basis results in a corresponding increase in income tax expense. The segment results also reflect certain revenue and expense methodologies that are utilized to determine net income. The net interest income of the businesses includes the results of a funds transfer pricing process that matches assets and liabilities with similar interest rate sensitivity and maturity characteristics. In segments where the total of liabilities and equity exceeds assets, which are generally deposit-taking segments, the Corporation allocates assets to match liabilities. Net interest income of the business segments also includes an allocation of net interest income generated by certain of the Corporation's ALM activities.

In addition, the business segments are impacted by the migration of customers and clients and their deposit, loan and brokerage balances between businesses. Subsequent to the date of migration, the associated net interest income, noninterest income and noninterest expense are recorded in the business to which the customers or clients migrated.

The Corporation's ALM activities include an overall interest rate risk management strategy that incorporates the use of various derivatives and cash instruments to manage fluctuations in earnings and capital that are caused by interest rate volatility. The Corporation's goal is to manage interest rate sensitivity so that movements in interest rates do not significantly adversely affect earnings and capital. The results of a majority of the Corporation's ALM activities are allocated to the business segments and fluctuate based on the performance of the ALM activities. ALM activities include external product pricing decisions including deposit pricing strategies, the effects of the Corporation's internal funds transfer pricing process and the net effects of other ALM activities.

Certain expenses not directly attributable to a specific business segment are allocated to the segments. The most significant of these expenses include data and item processing costs and certain centralized or shared functions. Data processing costs are allocated to the segments based on equipment usage. Item processing costs are allocated to the segments based on the volume of items processed for each segment. The costs of certain other centralized or shared functions are allocated based on methodologies that reflect utilization.

The table below presents net income (loss) and the components thereto (with net interest income on an FTE basis) for 2015, 2014 and 2013, and total assets at December 31, 2015 and 2014 for each business segment, as well as *All Other*.

Results for Business Segments and All Other

At and for the Year Ended December 31	Total Corporation [1]			Consumer Banking		
(Dollars in millions)	**2015**	2014	2013	**2015**	2014	2013
Net interest income (FTE basis)	**$ 39,847**	$ 41,630	$ 41,578	**$ 20,428**	$ 20,790	$ 20,548
Noninterest income	**44,007**	45,115	46,783	**11,097**	11,038	11,820
Total revenue, net of interest expense (FTE basis)	**83,854**	86,745	88,361	**31,525**	31,828	32,368
Provision for credit losses	**3,161**	2,275	3,556	**2,346**	2,470	2,957
Noninterest expense	**57,734**	75,656	69,213	**18,716**	19,390	20,711
Income before income taxes (FTE basis)	**22,959**	8,814	15,592	**10,463**	9,968	8,700
Income tax expense (FTE basis)	**7,123**	3,294	5,053	**3,814**	3,717	3,186
Net income	**$ 15,836**	$ 5,520	$ 10,539	**$ 6,649**	$ 6,251	$ 5,514
Year-end total assets	**$ 2,144,287**	$ 2,104,539		**$ 645,427**	$ 599,066	

	Global Wealth & Investment Management			Global Banking		
	2015	2014	2013	**2015**	2014	2013
Net interest income (FTE basis)	**$ 5,527**	$ 5,830	$ 5,733	**$ 9,244**	$ 9,752	$ 9,485
Noninterest income	**12,507**	12,573	11,735	**8,377**	8,514	7,744
Total revenue, net of interest expense (FTE basis)	**18,034**	18,403	17,468	**17,621**	18,266	17,229
Provision for credit losses	**51**	14	56	**686**	325	1,140
Noninterest expense	**13,943**	13,836	13,219	**8,481**	8,806	8,149
Income before income taxes (FTE basis)	**4,040**	4,553	4,193	**8,454**	9,135	7,940
Income tax expense (FTE basis)	**1,473**	1,698	1,536	**3,114**	3,353	2,912
Net income	**$ 2,567**	$ 2,855	$ 2,657	**$ 5,340**	$ 5,782	$ 5,028
Year-end total assets	**$ 296,271**	$ 274,954		**$ 386,132**	$ 353,637	

	Global Markets			All Other		
	2015	2014	2013	**2015**	2014	2013
Net interest income (FTE basis)	**$ 4,191**	$ 3,851	$ 4,056	**$ 457**	$ 1,407	$ 1,756
Noninterest income	**10,822**	12,279	11,322	**1,204**	711	4,162
Total revenue, net of interest expense (FTE basis)	**15,013**	16,130	15,378	**1,661**	2,118	5,918
Provision for credit losses	**99**	110	143	**(21)**	(644)	(740)
Noninterest expense	**11,374**	11,989	12,222	**5,220**	21,635	14,912
Income (loss) before income taxes (FTE basis)	**3,540**	4,031	3,013	**(3,538)**	(18,873)	(8,254)
Income tax expense (benefit) (FTE basis)	**1,117**	1,441	2,012	**(2,395)**	(6,915)	(4,593)
Net income (loss)	**$ 2,423**	$ 2,590	$ 1,001	**$ (1,143)**	$ (11,958)	$ (3,661)
Year-end total assets	**$ 548,790**	$ 576,552		**$ 267,667**	$ 300,330	

[1] There were no material intersegment revenues.

The table below presents a reconciliation of the four business segments' total revenue, net of interest expense, on an FTE basis, and net income to the Consolidated Statement of Income, and total assets to the Consolidated Balance Sheet. The adjustments presented in the table below include consolidated income, expense and asset amounts not specifically allocated to individual business segments.

Business Segment Reconciliations

(Dollars in millions)	2015	2014	2013
Segments' total revenue, net of interest expense (FTE basis)	**$ 82,193**	$ 84,627	$ 82,443
Adjustments:			
ALM activities	**(231)**	(18)	(646)
Equity investment income	**261**	1,130	2,901
Liquidating businesses and other	**1,631**	1,006	3,663
FTE basis adjustment	**(889)**	(851)	(859)
Consolidated revenue, net of interest expense	**$ 82,965**	$ 85,894	$ 87,502
Segments' total net income	**$ 16,979**	$ 17,478	$ 14,200
Adjustments, net-of-taxes:			
ALM activities	**(708)**	(280)	(934)
Equity investment income	**162**	706	1,828
Liquidating businesses and other	**(597)**	(12,384)	(4,555)
Consolidated net income	**$ 15,836**	$ 5,520	$ 10,539

	December 31	
	2015	2014
Segments' total assets	**$ 1,876,620**	$ 1,804,209
Adjustments:		
ALM activities, including securities portfolio	**612,364**	569,320
Equity investments	**4,297**	4,871
Liquidating businesses and other	**140,013**	169,586
Elimination of segment asset allocations to match liabilities	**(489,007)**	(443,447)
Consolidated total assets	**$ 2,144,287**	$ 2,104,539

NOTE 25 Parent Company Information

The following tables present the Parent Company-only financial information. This financial information is presented in accordance with bank regulatory reporting requirements.

Condensed Statement of Income

(Dollars in millions)	2015	2014	2013
Income			
Dividends from subsidiaries:			
Bank holding companies and related subsidiaries	**$ 18,970**	$ 12,400	$ 8,532
Nonbank companies and related subsidiaries	**53**	149	357
Interest from subsidiaries	**2,004**	1,836	2,087
Other income (loss)	**(623)**	72	233
Total income	**20,404**	14,457	11,209
Expense			
Interest on borrowed funds from related subsidiaries	**1,169**	1,661	1,730
Other interest expense	**5,098**	5,552	6,379
Noninterest expense	**4,747**	4,471	10,938
Total expense	**11,014**	11,684	19,047
Income (loss) before income taxes and equity in undistributed earnings of subsidiaries	**9,390**	2,773	(7,838)
Income tax benefit	**(3,574)**	(4,079)	(7,227)
Income (loss) before equity in undistributed earnings of subsidiaries	**12,964**	6,852	(611)
Equity in undistributed earnings (losses) of subsidiaries:			
Bank holding companies and related subsidiaries	**3,068**	4,300	13,258
Nonbank companies and related subsidiaries	**(196)**	(5,632)	(2,108)
Total equity in undistributed earnings (losses) of subsidiaries	**2,872**	(1,332)	11,150
Net income	**$ 15,836**	$ 5,520	$ 10,539

Condensed Balance Sheet

	December 31	
(Dollars in millions)	**2015**	2014
Assets		
Cash held at bank subsidiaries [1]	**$ 98,024**	$ 100,304
Securities	**937**	932
Receivables from subsidiaries:		
Bank holding companies and related subsidiaries	**23,594**	23,356
Banks and related subsidiaries	**569**	2,395
Nonbank companies and related subsidiaries	**56,426**	52,251
Investments in subsidiaries:		
Bank holding companies and related subsidiaries	**272,567**	270,446
Nonbank companies and related subsidiaries	**2,402**	2,139
Other assets	**9,360**	14,599
Total assets	**$ 463,879**	$ 466,422
Liabilities and shareholders' equity		
Short-term borrowings	**$ 15**	$ 46
Accrued expenses and other liabilities	**13,900**	16,872
Payables to subsidiaries:		
Banks and related subsidiaries	**465**	2,559
Nonbank companies and related subsidiaries	**13,921**	17,698
Long-term debt	**179,402**	185,771
Total liabilities	**207,703**	222,946
Shareholders' equity	**256,176**	243,476
Total liabilities and shareholders' equity	**$ 463,879**	$ 466,422

[1] Balance includes third-party cash held of $28 million and $29 million at December 31, 2015 and 2014.

Condensed Statement of Cash Flows

(Dollars in millions)	2015	2014	2013
Operating activities			
Net income	**$ 15,836**	$ 5,520	$ 10,539
Reconciliation of net income to net cash provided by (used in) operating activities:			
Equity in undistributed (earnings) losses of subsidiaries	**(2,872)**	1,332	(11,150)
Other operating activities, net	**(2,509)**	2,143	(10,422)
Net cash provided by (used in) operating activities	**10,455**	8,995	(11,033)
Investing activities			
Net sales (purchases) of securities	**15**	(142)	459
Net payments from (to) subsidiaries	**(7,944)**	(5,902)	39,336
Other investing activities, net	**70**	19	3
Net cash provided by (used in) investing activities	**(7,859)**	(6,025)	39,798
Financing activities			
Net increase (decrease) in short-term borrowings	**(221)**	(55)	178
Net increase (decrease) in other advances	**(770)**	1,264	(14,378)
Proceeds from issuance of long-term debt	**26,492**	29,324	30,966
Retirement of long-term debt	**(27,393)**	(33,854)	(39,320)
Proceeds from issuance of preferred stock	**2,964**	5,957	1,008
Redemption of preferred stock	**—**	—	(6,461)
Common stock repurchased	**(2,374)**	(1,675)	(3,220)
Cash dividends paid	**(3,574)**	(2,306)	(1,677)
Net cash used in financing activities	**(4,876)**	(1,345)	(32,904)
Net increase (decrease) in cash held at bank subsidiaries	**(2,280)**	1,625	(4,139)
Cash held at bank subsidiaries at January 1	**100,304**	98,679	102,818
Cash held at bank subsidiaries at December 31	**$ 98,024**	$ 100,304	$ 98,679

NOTE 26 Performance by Geographical Area

Since the Corporation's operations are highly integrated, certain asset, liability, income and expense amounts must be allocated to arrive at total assets, total revenue, net of interest expense, income before income taxes and net income (loss) by geographic area. The Corporation identifies its geographic performance based on the business unit structure used to manage the capital or expense deployed in the region as applicable. This requires certain judgments related to the allocation of revenue so that revenue can be appropriately matched with the related capital or expense deployed in the region.

		December 31	Year Ended December 31		
(Dollars in millions)	Year	Total Assets [1]	Total Revenue, Net of Interest Expense [2]	Income Before Income Taxes	Net Income (Loss)
U.S. [3]	**2015**	**$ 1,849,099**	**$ 72,117**	**$ 20,064**	**$ 14,637**
	2014	1,792,724	74,607	5,751	3,992
	2013		75,172	11,782	9,696
Asia [4]	**2015**	**86,994**	**3,524**	**726**	**457**
	2014	92,005	3,605	759	473
	2013		4,442	1,382	887
Europe, Middle East and Africa	**2015**	**178,899**	**6,081**	**938**	**516**
	2014	190,365	6,409	1,098	813
	2013		6,353	1,003	(403)
Latin America and the Caribbean	**2015**	**29,295**	**1,243**	**342**	**226**
	2014	29,445	1,273	355	242
	2013		1,535	566	359
Total Non-U.S.	**2015**	**295,188**	**10,848**	**2,006**	**1,199**
	2014	311,815	11,287	2,212	1,528
	2013		12,330	2,951	843
Total Consolidated	**2015**	**$ 2,144,287**	**$ 82,965**	**$ 22,070**	**$ 15,836**
	2014	2,104,539	85,894	7,963	5,520
	2013		87,502	14,733	10,539

[1] Total assets include long-lived assets, which are primarily located in the U.S.
[2] There were no material intercompany revenues between geographic regions for any of the periods presented.
[3] Substantially reflects the U.S.
[4] Amounts include pretax gains of $753 million ($474 million net-of-tax) on the sale of common shares of CCB during 2013.

Bank of America Corporation and Subsidiaries **Exhibit 12**
Ratio of Earnings to Fixed Charges
Ratio of Earnings to Fixed Charges and Preferred Dividends

	Year Ended December 31				
(Dollars in millions)	**2015**	2014	2013	2012	2011
Excluding Interest on Deposits					
Income before income taxes	**$ 22,070**	$ 7,963	$ 14,733	$ 2,535	$ 205
Equity in undistributed earnings (loss) of unconsolidated subsidiaries	**(152)**	(222)	(66)	212	596
Fixed charges:					
Interest expense	**9,688**	9,855	11,359	14,754	18,618
1/3 of net rent expense [(1)]	**945**	1,023	1,091	1,092	1,072
Total fixed charges	**10,633**	10,878	12,450	15,846	19,690
Preferred dividend requirements	**2,067**	1,506	1,746	968	158
Fixed charges and preferred dividends	**12,700**	12,384	14,196	16,814	19,848
Earnings	**$ 32,551**	$ 18,619	$ 27,117	$ 18,593	$ 20,491
Ratio of earnings to fixed charges	**3.06**	1.71	2.18	1.17	1.04
Ratio of earnings to fixed charges and preferred dividends	**2.56**	1.50	1.91	1.11	1.03

	Year Ended December 31				
(Dollars in millions)	**2015**	2014	2013	2012	2011
Including Interest on Deposits					
Income before income taxes	**$ 22,070**	$ 7,963	$ 14,733	$ 2,535	$ 205
Equity in undistributed earnings (loss) of unconsolidated subsidiaries	**(152)**	(222)	(66)	212	596
Fixed charges:					
Interest expense	**10,549**	10,935	12,755	16,744	21,620
1/3 of net rent expense [(1)]	**945**	1,023	1,091	1,092	1,072
Total fixed charges	**11,494**	11,958	13,846	17,836	22,692
Preferred dividend requirements	**2,067**	1,506	1,746	968	158
Fixed charges and preferred dividends	**13,561**	13,464	15,592	18,804	22,850
Earnings	**$ 33,412**	$ 19,699	$ 28,513	$ 20,583	$ 23,493
Ratio of earnings to fixed charges	**2.91**	1.65	2.06	1.15	1.04
Ratio of earnings to fixed charges and preferred dividends	**2.46**	1.46	1.83	1.09	1.03

[(1)] Represents an appropriate interest factor.