BANK OF AMERICA CORP /DE/
Form 10-Q
August 01, 2016

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
FORM 10-Q
(Mark One)
[ü] QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the Quarterly Period Ended June 30, 2016
or
[ ] TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the transition period from to
Commission file number:
1-6523
Exact name of registrant as specified in its charter:
Bank of America Corporation
State or other jurisdiction of incorporation or organization:
Delaware
IRS Employer Identification No.:
56-0906609
Address of principal executive offices:
Bank of America Corporate Center
100 N. Tryon Street
Charlotte, North Carolina 28255
Registrant's telephone number, including area code:
(704) 386-5681
Former name, former address and former fiscal year, if changed since last report:
Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.
Yes ü No
Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).
Yes ü No
Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act (check one).

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

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

On July 29, 2016, there were 10,204,798,799 shares of Bank of America Corporation Common Stock outstanding.

Bank of America Corporation
June 30, 2016
Form 10-Q

INDEX

	Page
Part I. Financial Information	
Item 1. Financial Statements	
Consolidated Statement of Income	114
Consolidated Statement of Comprehensive Income	115
Consolidated Balance Sheet	116
Consolidated Statement of Changes in Shareholders' Equity	118
Consolidated Statement of Cash Flows	119
Notes to Consolidated Financial Statements	120
1 - Summary of Significant Accounting Principles	120
2 - Derivatives	122
3 - Securities	134
4 - Outstanding Loans and Leases	139
5 - Allowance for Credit Losses	158
6 - Securitizations and Other Variable Interest Entities	160
7 - Representations and Warranties Obligations and Corporate Guarantees	167
8 - Goodwill and Intangible Assets	171
9 - Federal Funds Sold or Purchased, Securities Financing Agreements and Short-term Borrowings	173
10 - Commitments and Contingencies	176
11 - Shareholders' Equity	180
12 - Accumulated Other Comprehensive Income (Loss)	183
13 - Earnings Per Common Share	185
14 - Fair Value Measurements	186
15 - Fair Value Option	201
16 - Fair Value of Financial Instruments	204
17 - Mortgage Servicing Rights	205
18 - Business Segment Information	207
Glossary	211
Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations	3
Executive Summary	4
Recent Events	5
Financial Highlights	7
Balance Sheet Overview	11
Supplemental Financial Data	16
Business Segment Operations	24
Consumer Banking	25
Global Wealth & Investment Management	32
Global Banking	36
Global Markets	40
All Other	43
Off-Balance Sheet Arrangements and Contractual Obligations	45
Managing Risk	47
Capital Management	48

Liquidity Risk	58
Credit Risk Management	64
Consumer Portfolio Credit Risk Management	65
Commercial Portfolio Credit Risk Management	81

Non-U.S. Portfolio	93
Provision for Credit Losses	95
Allowance for Credit Losses	95
Market Risk Management	101
Trading Risk Management	101
Interest Rate Risk Management for the Banking Book	106
Mortgage Banking Risk Management	109
Complex Accounting Estimates	109
Item 3. Quantitative and Qualitative Disclosures about Market Risk	113
Item 4. Controls and Procedures	113
Part II. Other Information	215
Item 1. Legal Proceedings	215
Item 1A. Risk Factors	215
Item 2. Unregistered Sales of Equity Securities and Use of Proceeds	216
Item 6. Exhibits	217
Signature	218
Index to Exhibits	219

Table of Contents

Item 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

This report on Form 10-Q, 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" and other similar expressions or future or conditional verbs such as "will," "may," "might," "should," "would" and "could." Forward-looking statements represent the Corporation's current expectations, plans or forecasts of its future results, revenues, expenses, efficiency ratio, capital measures, and future business and economic conditions more generally, and other future matters. These statements are not guarantees of future results or performance and involve certain known and unknown risks, uncertainties and assumptions that are difficult to predict and are often beyond the Corporation's control. Actual outcomes and results may differ materially from those expressed in, or implied by, any of these forward-looking statements.

You should not place undue reliance on any forward-looking statement and should consider the following uncertainties and risks, as well as the risks and uncertainties more fully discussed 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 New York Court of Appeals' ACE Securities Corp v. DB Structured Products, Inc. (ACE) decision or to assert other claims seeking to avoid the impact of the ACE decision; the possibility that the Corporation could face increased servicing, securities, fraud, indemnity, contribution or other claims from one or more counterparties, including trustees, purchasers of loans, underwriters, issuers, other parties involved in securitizations, monolines or private-label and other investors; the possibility that future representations and warranties losses may occur in excess of the Corporation's recorded liability and estimated range of possible loss for its representations and warranties exposures; potential claims, damages, penalties, fines and reputational damage resulting from pending or future litigation and regulatory proceedings, including the possibility that amounts may be in excess of the Corporation's recorded liability and estimated range of possible loss for litigation exposures; the possible outcome of LIBOR, other reference rate, financial instrument and foreign exchange inquiries, investigations and litigation; uncertainties about the financial stability and growth rates of non-U.S. jurisdictions, the risk that those jurisdictions may face difficulties servicing their sovereign debt, and related stresses on financial markets, currencies and trade, and the Corporation's exposures to such risks, including direct, indirect and operational; the impact of U.S. and global interest rates (including negative or continued low interest rates), currency exchange rates and economic conditions; the possibility that future credit losses may be higher than currently expected due to changes in economic assumptions, customer behavior and other uncertainties; the impact on the Corporation's business, financial condition and results of operations of a potential higher interest rate environment; the impact on the Corporation's business, financial condition and results of operations from a protracted period of lower oil prices or ongoing volatility with respect to oil prices; our ability to achieve our expense targets; 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 impact of recent proposed U.K. tax law changes including a further limitation on how much net operating losses can offset annual profits and a reduction to the U.K. corporate tax rate which, if enacted, will result in a tax charge upon enactment; the possible impact of Federal Reserve actions on the Corporation's capital plans; the possible impact of the Corporation's failure to remediate deficiencies identified by banking regulators in the Corporation's Recovery and Resolution plans; the

impact of implementation and compliance with U.S. and international laws, regulations and regulatory interpretations, including, but not limited to, recovery and resolution planning requirements, FDIC assessments, 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; the impact on the Corporation's business, financial condition and results of operations from the potential exit of the United Kingdom from the European Union; 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-period amounts have been reclassified to conform to current period presentation. Throughout the MD&A, the Corporation uses certain acronyms and abbreviations which are defined in the Glossary.

Table of Contents

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 June 30, 2016, the Corporation had approximately $2.2 trillion in assets and approximately 211,000 full-time equivalent employees.

In the Annual Report on Form 10-K for the year ended December 31, 2015, we reported our results of operations through five business segments: Consumer Banking, Global Wealth & Investment Management (GWIM), Global Banking, Global Markets and Legacy Assets & Servicing (LAS), with the remaining operations recorded in All Other. Effective April 1, 2016, to align the segments with how we now manage our businesses, we changed our basis of presentation to eliminate the LAS segment, and following such change, we report our results of operations through the following four business segments: Consumer Banking, GWIM, Global Banking and Global Markets, with the remaining operations recorded in All Other. Consumer real estate loans, including loans previously held in or serviced by LAS, have been designated as either core or non-core based on criteria described in Business Segment Operations on page 24. Following the realignment, core loans owned by the Corporation, which include all loans originated after the realignment, are held in the Consumer Banking and GWIM segments. Non-core loans owned by the Corporation, which are principally run-off portfolios, as well as loans held for asset and liability management (ALM) activities, are held in All Other. Mortgage servicing rights (MSRs) pertaining to core and non-core loans serviced for others are held in Consumer Banking and All Other, respectively. Prior periods have been reclassified to conform to current period presentation.

As of June 30, 2016, we operated in all 50 states, the District of Columbia, the U.S. Virgin Islands, Puerto Rico and more than 35 countries. Our retail banking footprint covers approximately 80 percent of the U.S. population, and we serve approximately 47 million consumer and small business relationships with approximately 4,700 retail financial centers, approximately 16,000 ATMs, and leading online and mobile banking platforms with approximately 33 million active accounts and more than 20 million mobile active users (www.bankofamerica.com). We offer industry-leading support to approximately three million small business owners. Our wealth management businesses, with client balances of $2.4 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.

Second-Quarter 2016 Economic and Business Environment

In the U.S., the economy showed renewed signs of momentum in the second quarter of 2016. Consumer spending accelerated, as retail sales and service spending increased. The housing sector continued to expand, reflecting continued low mortgage rates and growing disposable income, but the pace of expansion slowed from recent quarters. While oil prices slightly rebounded from earlier declines, business spending remained suppressed by the delayed impact on the demand for capital goods in the energy sector. With numerous uncertainties during the quarter, businesses continued to reduce inventory accumulation, restraining the manufacturing sector. As a result, production growth lagged behind strong gains in domestic final sales, which exclude net exports and inventory investments. However, an increase in manufacturing activity late in the quarter signaled a positive business response to

strengthening domestic demand.

In contrast to the increase in consumer demand, payroll gains slowed further, showing almost no net new job creation earlier in the quarter before rebounding in June. The unemployment rate moved slightly lower, largely as a result of a stagnant labor force as recent gains in participation rates were partially reversed. The split between stronger domestic demand and a softer labor market is expected to be resolved in the second half of the year. Core inflation maintained the momentum gained early in the year, but remained below the Board of Governors of the Federal Reserve System's (Federal Reserve) longer-term annual target of two percent.

The Federal Open Market Committee (FOMC) left its federal funds rate target unchanged in the quarter. Members of the FOMC remained concerned about conditions abroad (including the outcome of the U.K.’s Referendum on exiting the European Union (EU) (U.K. Referendum)) and the slowdown in payroll gains. At the June meeting, members both slowed their projected pace of tightening and lowered the expected longer-run level of the federal funds rate. In response, treasury yields fell during the quarter, especially in the first few days after the U.K. Referendum. Equities rose slightly during the quarter.

Table of Contents

International concerns centered on Europe where the run-up to the U.K. Referendum, as well as the result, increased uncertainty. When the U.K. voted on June 23, 2016 to leave the EU, the British pound fell and market volatility temporarily increased. For more information on the U.K. Referendum, see Executive Summary – Recent Events on page 5. Financial markets settled down in the ensuing days, but the outcome of the U.K. Referendum was generally seen as reducing confidence and is expected to have a negative impact on the British economy in the near term. The European Central Bank and the Bank of Japan maintained accommodative conditions during the quarter by expanding the overall monetary supply in order to boost slowed economic growth. International yields fell, with German 10-year Bund yields dropping into negative territory. Among emerging nations, Brazil continued to struggle with a deep recession and high inflation, and Venezuela experienced unrest related to a rapidly shrinking economy and deteriorating political situation. Russia benefited from the recovery in oil prices, with economic growth likely to resume in the second half of the year. The Chinese economy was stable during the quarter. In early July, a coup attempt in Turkey increased political instability, although the current government remained in power and financial market reaction outside of Turkey was minimal.

Recent Events

United Kingdom Referendum to Exit the European Union

The U.K. Referendum was held on June 23, 2016, which resulted in a majority vote in favor of exiting the EU. At this time, the ultimate impact of the U.K.'s potential exit from the EU is unknown. The timing of the U.K.'s formal commencement of the exit process is uncertain. Once the exit process begins, negotiations to agree on the terms of the exit are expected to be a multi-year process. During this transition period, the ultimate impact of the U.K.'s potential exit from the EU will remain unclear and economic and market volatility may continue. If uncertainty resulting from the U.K.'s potential exit from the EU negatively impacts economic conditions, financial markets and consumer confidence, our business, results of operations, financial position and/or operational model could be affected. For more information about the potential impact on us of the U.K.'s exit from the EU, see Item 1A. Risk Factors on page 215.

Capital Management

In April 2016, we submitted our 2016 Comprehensive Capital Analysis and Review (CCAR) capital plan which included a request to repurchase $5.0 billion of common stock over four quarters beginning in the third quarter of 2016, and to increase the quarterly common stock dividend from $0.05 per share to $0.075 per share. In addition, our capital plan includes the repurchase of common shares to offset the dilution resulting from certain equity compensation. On June 29, 2016, following the Federal Reserve's non-objection to our 2016 CCAR capital plan, the Board of Directors (the Board) authorized the common stock repurchases described above. The common stock repurchase authorization includes both common stock and warrants. On July 27, 2016, the Board declared a quarterly common stock dividend of $0.075 per share, payable on September 23, 2016 to shareholders of record as of September 2, 2016. For additional information, see the Corporation's Current Report on Form 8-K as filed on June 29, 2016.

During the three and six months ended June 30, 2016, we repurchased $783 million and $1.6 billion of common stock in connection with our 2015 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. Additionally, on March 18, 2016, the Corporation announced that the Board authorized additional repurchases of common stock up to $800 million outside of the scope of the 2015 CCAR capital plan to offset the share count dilution resulting from equity incentive compensation awarded to retirement-eligible employees, to which the Federal Reserve did not object. In connection with this authorization, the Corporation repurchased $600 million and $800 million of common stock during the three and six months ended June 30, 2016. For additional information, see Capital Management on page 48.

5

Table of Contents

Selected Financial Data

Table 1 provides selected consolidated financial data for the three and six months ended June 30, 2016 and 2015, and at June 30, 2016 and December 31, 2015.

Table 1
Selected Financial Data [1]

	Three Months Ended June 30		Six Months Ended June 30	
(Dollars in millions, except per share information)	2016	2015	2016	2015
Income statement				
Revenue, net of interest expense	$20,398	$21,956	$39,910	$42,870
Net income	4,232	5,134	6,912	8,231
Diluted earnings per common share	0.36	0.43	0.56	0.68
Dividends paid per common share	0.05	0.05	0.10	0.10
Performance ratios				
Return on average assets	0.78 %	0.96 %	0.64 %	0.77 %
Return on average common shareholders' equity	6.48	8.42	5.14	6.68
Return on average tangible common shareholders' equity [2]	9.24	12.31	7.34	9.79
Efficiency ratio	66.14	63.57	70.93	69.48

	June 30 2016	December 31 2015
Balance sheet		
Total loans and leases [3]	$903,153	$896,983
Total assets	2,186,609	2,144,316
Total deposits	1,216,091	1,197,259
Total common shareholders' equity	241,849	233,932
Total shareholders' equity	267,069	256,205

(1) Certain amounts in the table that have been reported in previous filings using fully taxable-equivalent (FTE) basis (a non-GAAP financial measure) are now shown on a GAAP basis. See Table 11 for a reconciliation.

(2) Return on average tangible common shareholders' equity is a non-GAAP financial measure. Other companies may define or calculate this measure differently. For more information and a corresponding reconciliation to GAAP financial measures, see Supplemental Financial Data on page 16.

(3) Beginning in the first quarter of 2016, the Corporation classifies certain leases in other assets. Previously these leases were classified in loans and leases. For December 31, 2015, $6.0 billion of these leases were reclassified from loans and leases to other assets to conform to this presentation.

Table of Contents

Financial Highlights

Net income was $4.2 billion, or $0.36 per diluted share, and $6.9 billion, or $0.56 per diluted share for the three and six months ended June 30, 2016 compared to $5.1 billion, or $0.43, and $8.2 billion, or $0.68 for the same periods in 2015. The results for the three and six months ended June 30, 2016 compared to the prior-year periods were primarily driven by declines in net interest income and noninterest income, and higher provision for credit losses, partially offset by lower noninterest expense. Included in net interest income were negative market-related adjustments on debt securities of $974 million and $2.2 billion for the three and six months ended June 30, 2016 compared to positive market-related adjustments on debt securities of $669 million and $185 million for the same periods in 2015.

Total assets increased $42.3 billion from December 31, 2015 to $2.2 trillion at June 30, 2016 primarily driven by higher securities borrowed or purchased under agreements to resell due to increased customer financing activity, higher cash and cash equivalents due to strong deposit inflows, and an increase in loans and leases driven by demand for commercial loans outpacing consumer loan sales and run-off. Total liabilities increased $31.4 billion from December 31, 2015 to $1.9 trillion at June 30, 2016 primarily driven by increases in deposits, trading account liabilities and short-term borrowings, partially offset by a decrease in long-term debt. During the six months ended June 30, 2016, we returned $4.2 billion in capital to shareholders through common and preferred stock dividends and common stock repurchases. For more information on the balance sheet, see Executive Summary – Balance Sheet Overview on page 11.

From a capital management perspective, during the six months ended June 30, 2016, we maintained our strong capital position with Common equity tier 1 capital of $161.8 billion, risk-weighted assets of $1,542 billion and a Common equity tier 1 capital ratio of 10.5 percent at June 30, 2016 as measured under the Basel 3 Advanced approaches, on a fully phased-in basis. The Corporation's fully phased-in supplementary leverage ratio (SLR) was 6.9 percent and 6.4 percent at June 30, 2016 and December 31, 2015, both above the 5.0 percent required minimum (including leverage buffer) effective January 1, 2018. Our Global Excess Liquidity Sources (GELS) were $515 billion with time-to-required funding at 35 months at June 30, 2016 compared to $504 billion and 39 months at December 31, 2015. For additional information, see Capital Management on page 48 and Liquidity Risk on page 58.

Table 2
Summary Income Statement [1]

	Three Months Ended June 30		Six Months Ended June 30	
(Dollars in millions)	2016	2015	2016	2015
Net interest income	$9,213	$10,461	$18,384	$19,872
Noninterest income	11,185	11,495	21,526	22,998
Total revenue, net of interest expense	20,398	21,956	39,910	42,870
Provision for credit losses	976	780	1,973	1,545
Noninterest expense	13,493	13,958	28,309	29,785
Income before income taxes	5,929	7,218	9,628	11,540
Income tax expense	1,697	2,084	2,716	3,309
Net income	4,232	5,134	6,912	8,231
Preferred stock dividends	361	330	818	712
Net income applicable to common shareholders	$3,871	$4,804	$6,094	$7,519
Per common share information				
Earnings	$0.38	$0.46	$0.59	$0.72
Diluted earnings	0.36	0.43	0.56	0.68

(1)

Certain amounts in the table that have been reported in previous filings using FTE basis (a non-GAAP financial measure) are now shown on a GAAP basis. See Table 11 for a reconciliation.

Table of Contents

Net Interest Income

Net interest income decreased $1.2 billion to $9.2 billion ($9.4 billion on an FTE basis), and $1.5 billion to $18.4 billion ($18.8 billion on an FTE basis) for the three and six months ended June 30, 2016 compared to the same periods in 2015. The net interest yield decreased 34 basis points (bps) to 1.98 percent (2.03 percent on an FTE basis), and 23 bps to 1.99 percent (2.04 percent on an FTE basis). The decreases for the three- and six-month periods were primarily driven by a negative change in market-related adjustments on debt securities and the impact of lower consumer loan balances, partially offset by growth in commercial loans, the impact of higher short-end interest rates and increased debt securities. Market-related adjustments on debt securities resulted in an expense of $974 million and $2.2 billion for the three and six months ended June 30, 2016 compared to a benefit of $669 million and $185 million for the same periods in 2015. Negative market-related adjustments on debt securities were primarily due to the acceleration of premium amortization on debt securities as the decline in long-term interest rates shortened the estimated lives of mortgage-related debt securities. Also included in market-related adjustments is hedge ineffectiveness that impacted net interest income. For additional information, see Note 1 – Summary of Significant Accounting Principles to the Consolidated Financial Statements of the Corporation's 2015 Annual Report on Form 10-K.

Noninterest Income

Table 3
Noninterest Income

	Three Months Ended June 30		Six Months Ended June 30	
(Dollars in millions)	2016	2015	2016	2015
Card income	$1,464	$1,477	$2,894	$2,871
Service charges	1,871	1,857	3,708	3,621
Investment and brokerage services	3,201	3,387	6,383	6,765
Investment banking income	1,408	1,526	2,561	3,013
Trading account profits	2,018	1,647	3,680	3,894
Mortgage banking income	312	1,001	745	1,695
Gains on sales of debt securities	267	168	493	436
Other income	644	432	1,062	703
Total noninterest income	$11,185	$11,495	$21,526	$22,998

Noninterest income decreased $310 million to $11.2 billion, and $1.5 billion to $21.5 billion for the three and six months ended June 30, 2016 compared to the same periods in 2015. The following highlights the significant changes.

- Investment and brokerage services income decreased $186 million and $382 million driven by lower advisory fees due to lower market levels and lower transactional revenue.

- Investment banking income decreased $118 million and $452 million primarily driven by lower equity issuance fees due to a decline in market fee pools.

- Trading account profits increased $371 million for the three months ended June 30, 2016 compared to the same period in 2015 driven by stronger performance in rates products, as well as improved credit market conditions. Trading account profits decreased $214 million for the six months ended June 30, 2016 compared to the same period in 2015 driven by declines in credit-related products due to challenging market conditions during the first quarter of 2016, as well as reduced client activity in equities in Asia and lower revenue in currencies which performed strongly in the same period in 2015.

- Mortgage banking income decreased $689 million and $950 million primarily due to less favorable MSR net-of-hedge performance, a provision for representations and warranties in the current-year periods compared to a benefit in the prior-year periods, as well as declines in production income and, to a lesser extent, servicing fees.

Other income increased $212 million and $359 million primarily due to improvements of $172 million and $497 million in debit valuation adjustments (DVA) on structured liabilities, as well as improved results from loan hedging activities in the fair value option portfolio, partially offset by lower gains on asset sales. DVA losses related to structured liabilities were $23 million and $53 million for the three and six months ended June 30, 2016 compared to $195 million and $550 million in the same periods in 2015.

Table of Contents

Provision for Credit Losses

Table 4
Credit Quality Data

	Three Months Ended June 30		Six Months Ended June 30	
(Dollars in millions)	2016	2015	2016	2015
Provision for credit losses				
Consumer	$733	$553	$1,135	$1,172
Commercial	243	227	838	373
Total provision for credit losses	$976	$780	$1,973	$1,545
Net charge-offs [1]	$985	$1,068	$2,053	$2,262
Net charge-off ratio [2]	0.44 %	0.49 %	0.46 %	0.53 %

[1] Net charge-offs exclude write-offs in the purchased credit-impaired (PCI) loan portfolio.

[2] Net charge-off ratios are calculated as annualized 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 $196 million to $976 million, and $428 million to $2.0 billion for the three and six months ended June 30, 2016 compared to the same periods in 2015. The provision for credit losses in the consumer portfolio increased $180 million for the three months ended June 30, 2016 compared to the prior-year period due to a slower pace of improvement. The provision for credit losses in the consumer portfolio remained relatively unchanged at $1.1 billion for the six months ended June 30, 2016 compared to the same period in 2015. The provision for credit losses for the commercial portfolio increased $16 million and $465 million compared to the same periods in 2015, with the increase for the six months ended June 30, 2016 primarily driven by an increase in energy sector reserves to increase the allowance coverage for the higher risk sub-sectors. For more information on our energy sector exposure, see Commercial Portfolio Credit Risk Management – Industry Concentrations on page 89. The decreases in net charge-offs for the three and six months ended June 30, 2016 were primarily driven by charge-offs related to the consumer relief portion of the settlement with the U.S. Department of Justice (DoJ) in the prior-year periods and credit quality improvement in the consumer portfolio, partially offset by higher energy-related net charge-offs in the commercial portfolio.

For the remainder of 2016, we currently expect that provision expense should approximate net charge-offs. For more information on the provision for credit losses, see Provision for Credit Losses on page 95.

Noninterest Expense

Table 5
Noninterest Expense

	Three Months Ended June 30		Six Months Ended June 30	
(Dollars in millions)	2016	2015	2016	2015
Personnel	$7,722	$7,890	$16,574	$17,504
Occupancy	1,036	1,027	2,064	2,054
Equipment	451	500	914	1,012
Marketing	414	445	833	885
Professional fees	472	494	897	915
Amortization of intangibles	186	212	373	425
Data processing	717	715	1,555	1,567

Telecommunications	189	202	362	373
Other general operating	2,306	2,473	4,737	5,050
Total noninterest expense	$13,493	$13,958	$28,309	$29,785

Noninterest expense decreased $465 million to $13.5 billion, and $1.5 billion to $28.3 billion for the three and six months ended June 30, 2016 compared to the same periods in 2015. Personnel expense decreased $168 million and $930 million as we continue to manage headcount and achieve cost savings. Continued expense management, as well as the expiration of fully-amortized advisor retention awards, more than offset the increases in client-facing professionals. Other general operating expense decreased $167 million and $313 million primarily due to lower foreclosed properties expense.

Table of Contents

The Corporation has previously announced an annual noninterest expense target of approximately $53 billion for the year 2018. See information about forward-looking statements described in Item 2. Management's Discussion and Analysis on page 3.

Income Tax Expense

Table 6
Income Tax Expense

	Three Months Ended June 30		Six Months Ended June 30	
(Dollars in millions)	2016	2015	2016	2015
Income before income taxes	$5,929	$7,218	$9,628	$11,540
Income tax expense	1,697	2,084	2,716	3,309
Effective tax rate	28.6 %	28.9 %	28.2 %	28.7 %

The effective tax rates for the three and six months ended June 30, 2016 and 2015 were driven by our recurring tax preference items. We expect an effective tax rate of approximately 29 percent for the remainder of 2016, absent unusual items.

The U.K. Chancellor's Budget 2016 was announced on March 16, 2016 and proposes to further reduce the U.K. corporate income tax rate by one percent to 17 percent effective April 1, 2020. This reduction would favorably affect income tax expense on future U.K. earnings but also would require us to remeasure, in the period of enactment, our U.K. net deferred tax assets using the lower tax rate. Accordingly, upon enactment, we would expect to record a charge to income tax expense of approximately $350 million. In addition, for banking companies, the portion of U.K. taxable income that can be reduced by net operating loss carryforwards would be further restricted from 50 percent to 25 percent retroactive to April 1, 2016.

The majority of our U.K. deferred tax assets, which consist primarily of net operating losses, are expected to be realized by certain subsidiaries over a number of years. Significant changes to management's earnings forecasts for those subsidiaries, such as changes caused by a substantial and prolonged worsening of the condition of Europe's capital markets, changes in applicable laws, further changes in tax laws or the ability of our U.K. subsidiaries to conduct business in the EU, could lead management to reassess our ability to realize the U.K. deferred tax assets. For information on potential impacts of the U.K.'s exit from the EU, see Item 1A. Risk Factors on page 215.

Table of Contents

Balance Sheet Overview

Table 7
Selected Balance Sheet Data

(Dollars in millions)	June 30 2016	December 31 2015	% Change
Assets			
Cash and cash equivalents	$171,207	$159,353	7 %
Federal funds sold and securities borrowed or purchased under agreements to resell	213,737	192,482	11
Trading account assets	175,365	176,527	(1)
Debt securities	411,949	407,005	1
Loans and leases	903,153	896,983	1
Allowance for loan and lease losses	(11,837)	(12,234)	(3)
All other assets	323,035	324,200	<(1)
Total assets	$2,186,609	$2,144,316	2
Liabilities			
Deposits	$1,216,091	$1,197,259	2 %
Federal funds purchased and securities loaned or sold under agreements to repurchase	178,062	174,291	2
Trading account liabilities	74,282	66,963	11
Short-term borrowings	33,051	28,098	18
Long-term debt	229,617	236,764	(3)
All other liabilities	188,437	184,736	2
Total liabilities	1,919,540	1,888,111	2
Shareholders' equity	267,069	256,205	4
Total liabilities and shareholders' equity	$2,186,609	$2,144,316	2

Assets

At June 30, 2016, total assets were approximately $2.2 trillion, up $42.3 billion from December 31, 2015. The increase in assets was primarily driven by higher securities borrowed or purchased under agreements to resell due to increased customer financing activity, higher cash and cash equivalents driven by strong deposit inflows, and an increase in loans and leases driven by demand for commercial loans outpacing consumer loan sales and run-off.

Liabilities and Shareholders' Equity

At June 30, 2016, total liabilities were approximately $1.9 trillion, up $31.4 billion from December 31, 2015, primarily driven by increases in deposits, trading account liabilities and short-term borrowings, partially offset by a decrease in long-term debt.

Shareholders' equity of $267.1 billion at June 30, 2016 increased $10.9 billion from December 31, 2015 driven by earnings, an increase in accumulated other comprehensive income (OCI) due to a positive net change in the fair value of available-for-sale (AFS) debt securities as a result of lower interest rates, and preferred stock issuances, partially offset by returns of capital to shareholders of $4.2 billion through common and preferred stock dividends and common stock repurchases.

Table of Contents

Table 8
Selected Quarterly Financial Data

	2016 Quarters		2015 Quarters		
(In millions, except per share information)	Second	First	Fourth	Third	Second
Income statement					
Net interest income	$9,213	$9,171	$9,756	$9,471	$10,461
Noninterest income	11,185	10,341	9,911	11,042	11,495
Total revenue, net of interest expense	20,398	19,512	19,667	20,513	21,956
Provision for credit losses	976	997	810	806	780
Noninterest expense	13,493	14,816	14,010	13,940	13,958
Income before income taxes	5,929	3,699	4,847	5,767	7,218
Income tax expense	1,697	1,019	1,511	1,446	2,084
Net income	4,232	2,680	3,336	4,321	5,134
Net income applicable to common shareholders	3,871	2,223	3,006	3,880	4,804
Average common shares issued and outstanding	10,254	10,340	10,399	10,444	10,488
Average diluted common shares issued and outstanding	11,059	11,100	11,153	11,197	11,238
Performance ratios					
Return on average assets	0.78 %	0.50 %	0.61 %	0.79 %	0.96 %
Four quarter trailing return on average assets [1]	0.67	0.71	0.74	0.73	0.52
Return on average common shareholders' equity	6.48	3.77	5.08	6.65	8.42
Return on average tangible common shareholders' equity [2]	9.24	5.41	7.32	9.65	12.31
Return on average shareholders' equity	6.42	4.14	5.15	6.75	8.20
Return on average tangible shareholders' equity [2]	8.79	5.72	7.15	9.43	11.51
Total ending equity to total ending assets	12.21	12.02	11.95	11.89	11.71
Total average equity to total average assets	12.12	11.98	11.79	11.71	11.67
Dividend payout	13.39	23.23	17.27	13.43	10.90
Per common share data					
Earnings	$0.38	$0.21	$0.29	$0.37	$0.46
Diluted earnings	0.36	0.21	0.28	0.35	0.43
Dividends paid	0.05	0.05	0.05	0.05	0.05
Book value	23.67	23.12	22.54	22.41	21.91
Tangible book value [2]	16.68	16.17	15.62	15.50	15.02
Market price per share of common stock					
Closing	$13.27	$13.52	$16.83	$15.58	$17.02
High closing	15.11	16.43	17.95	18.45	17.67
Low closing	12.18	11.16	15.38	15.26	15.41
Market capitalization	$135,577	$139,427	$174,700	$162,457	$178,231

(1) Calculated as total net income for four consecutive quarters divided by annualized average assets for four consecutive quarters.

(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 and for corresponding reconciliations to GAAP financial measures, see Supplemental Financial Data on page 16.

(3) For more information on the impact of the PCI loan portfolio on asset quality, see Consumer Portfolio Credit Risk Management on page 65.

(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 79 and corresponding Table 40, and Commercial Portfolio Credit Risk Management – Nonperforming Commercial Loans, Leases and Foreclosed Properties Activity on page 88 and corresponding Table 49.

(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 $82 million, $105 million, $82 million, $148 million and $290 million of write-offs in the PCI loan portfolio in the second and first quarters of 2016 and in the fourth, third and second quarters of 2015, respectively. For more information on PCI write-offs, see Consumer Portfolio Credit Risk Management – Purchased Credit-impaired Loan Portfolio on page 76.

(8) Risk-based capital ratios reported under Basel 3 Advanced - Transition beginning in the fourth quarter of 2015. Prior to the fourth quarter of 2015, we were required to report risk-based capital ratios under Basel 3 Standardized - Transition only. For additional information, see Capital Management on page 48.

Table of Contents

Table 8
Selected Quarterly Financial Data (continued)

	2016 Quarters		2015 Quarters		
(Dollars in millions)	Second	First	Fourth	Third	Second
Average balance sheet					
Total loans and leases	$899,670	$892,984	$886,156	$877,429	$876,178
Total assets	2,187,909	2,173,618	2,180,472	2,168,993	2,151,966
Total deposits	1,213,291	1,198,455	1,186,051	1,159,231	1,146,789
Long-term debt	233,061	233,654	237,384	240,520	242,230
Common shareholders' equity	240,166	237,123	234,851	231,620	228,780
Total shareholders' equity	265,144	260,317	257,125	253,893	251,054
Asset quality [3]					
Allowance for credit losses [4]	$12,587	$12,696	$12,880	$13,318	$13,656
Nonperforming loans, leases and foreclosed properties [5]	8,799	9,281	9,836	10,336	11,565
Allowance for loan and lease losses as a percentage of total loans and leases outstanding [5]	1.32 %	1.35 %	1.37 %	1.45 %	1.50 %
Allowance for loan and lease losses as a percentage of total nonperforming loans and leases [5]	142	136	130	129	122
Allowance for loan and lease losses as a percentage of total nonperforming loans and leases, excluding the PCI loan portfolio [5]	135	129	122	120	111
Amounts included in allowance for loan and lease losses for loans and leases that are excluded from nonperforming loans and leases [6]	$4,087	$4,138	$4,518	$4,682	$5,050
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]	93 %	90 %	82 %	81 %	75 %
Net charge-offs [7]	$985	$1,068	$1,144	$932	$1,068
Annualized net charge-offs as a percentage of average loans and leases outstanding [5, 7]	0.44 %	0.48 %	0.52 %	0.43 %	0.49 %
Annualized net charge-offs as a percentage of average loans and leases outstanding, excluding the PCI loan portfolio [5]	0.45	0.49	0.53	0.43	0.50
Annualized net charge-offs and PCI write-offs as a percentage of average loans and leases outstanding [5]	0.48	0.53	0.55	0.49	0.63
Nonperforming loans and leases as a percentage of total loans and leases outstanding [5]	0.94	0.99	1.05	1.12	1.23
Nonperforming loans, leases and foreclosed properties as a percentage of total loans, leases and foreclosed properties [5]	0.98	1.04	1.10	1.18	1.32
Ratio of the allowance for loan and lease losses at period end to annualized net charge-offs [7]	2.99	2.81	2.70	3.42	3.05
Ratio of the allowance for loan and lease losses at period end to annualized net charge-offs, excluding the PCI loan portfolio	2.85	2.67	2.52	3.18	2.79
	2.76	2.56	2.52	2.95	2.40

Ratio of the allowance for loan and lease losses at period end to annualized net charge-offs and PCI write-offs						
Capital ratios at period end						
Risk-based capital: [8]						
Common equity tier 1 capital	10.6	% 10.3	% 10.2	% 11.6	% 11.2	%
Tier 1 capital	12.0	11.5	11.3	12.9	12.5	
Total capital	13.9	13.4	13.2	15.8	15.5	
Tier 1 leverage	8.9	8.7	8.6	8.5	8.5	
Tangible equity [2]	9.2	9.0	8.9	8.8	8.6	
Tangible common equity [2]	8.1	7.9	7.8	7.8	7.6	

For footnotes see page 12.

Table of Contents

Table 9
Selected Year-to-Date Financial Data

	Six Months Ended June 30	
(In millions, except per share information)	2016	2015
Income statement		
Net interest income	$18,384	$19,872
Noninterest income	21,526	22,998
Total revenue, net of interest expense	39,910	42,870
Provision for credit losses	1,973	1,545
Noninterest expense	28,309	29,785
Income before income taxes	9,628	11,540
Income tax expense	2,716	3,309
Net income	6,912	8,231
Net income applicable to common shareholders	6,094	7,519
Average common shares issued and outstanding	10,297	10,503
Average diluted common shares issued and outstanding	11,080	11,252
Performance ratios		
Return on average assets	0.64 %	0.77 %
Return on average common shareholders' equity	5.14	6.68
Return on average tangible common shareholders' equity [1]	7.34	9.79
Return on average shareholders' equity	5.29	6.68
Return on average tangible shareholders' equity [1]	7.28	9.42
Total ending equity to total ending assets	12.21	11.71
Total average equity to total average assets	12.05	11.58
Dividend payout	16.98	13.96
Per common share data		
Earnings	$0.59	$0.72
Diluted earnings	0.56	0.68
Dividends paid	0.10	0.10
Book value	23.67	21.91
Tangible book value [1]	16.68	15.02
Market price per share of common stock		
Closing	$13.27	$17.02
High closing	16.43	17.90
Low closing	11.16	15.15
Market capitalization	$135,577	$178,231

Tangible equity ratios and tangible book value per share of common stock are non-GAAP financial measures.

(1) Other companies may define or calculate these measures differently. For more information on these ratios and for corresponding reconciliations to GAAP financial measures, see Supplemental Financial Data on page 16.

(2) For more information on the impact of the PCI loan portfolio on asset quality, see Consumer Portfolio Credit Risk Management on page 65.

(3) Includes the allowance for loan and lease losses and the reserve for unfunded lending commitments.

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 79 and corresponding Table 40, and Commercial Portfolio Credit Risk Management – Nonperforming Commercial Loans, Leases and Foreclosed Properties Activity on page 88 and corresponding Table 49.

(4)

(5)

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.

(6) Net charge-offs exclude $187 million and $578 million of write-offs in the PCI loan portfolio for the six months ended June 30, 2016 and 2015. For more information on purchased credit-impaired write-offs, see Consumer Portfolio Credit Risk Management – Purchased Credit-impaired Loan Portfolio on page 76.

Table of Contents

Table 9
Selected Year-to-Date Financial Data (continued)

	Six Months Ended June 30			
(Dollars in millions)	2016		2015	
Average balance sheet				
Total loans and leases	$896,327		$871,699	
Total assets	2,180,763		2,145,307	
Total deposits	1,205,873		1,138,801	
Long-term debt	233,358		241,184	
Common shareholders' equity	238,645		227,078	
Total shareholders' equity	262,731		248,413	
Asset quality [2]				
Allowance for credit losses [3]	$12,587		$13,656	
Nonperforming loans, leases and foreclosed properties [4]	8,799		11,565	
Allowance for loan and lease losses as a percentage of total loans and leases outstanding [4]	1.32	%	1.50	%
Allowance for loan and lease losses as a percentage of total nonperforming loans and leases [4]	142		122	
Allowance for loan and lease losses as a percentage of total nonperforming loans and leases, excluding the PCI loan portfolio [4]	135		111	
Amounts included in allowance for loan and lease losses for loans and leases that are excluded from nonperforming loans and leases [5]	$4,087		$5,050	
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 [4, 5]	93	%	75	%
Net charge-offs [6]	$2,053		$2,262	
Annualized net charge-offs as a percentage of average loans and leases outstanding [4, 6]	0.46	%	0.53	%
Annualized net charge-offs as a percentage of average loans and leases outstanding, excluding the PCI loan portfolio [4]	0.47		0.54	
Annualized net charge-offs and PCI write-offs as a percentage of average loans and leases outstanding [4]	0.51		0.66	
Nonperforming loans and leases as a percentage of total loans and leases outstanding [4]	0.94		1.23	
Nonperforming loans, leases and foreclosed properties as a percentage of total loans, leases and foreclosed properties [4]	0.98		1.32	
Ratio of the allowance for loan and lease losses at period end to annualized net charge-offs [6]	2.87		2.86	
Ratio of the allowance for loan and lease losses at period end to annualized net charge-offs, excluding the PCI loan portfolio	2.74		2.62	
Ratio of the allowance for loan and lease losses at period end to annualized net charge-offs and PCI write-offs	2.63		2.28	

For footnotes see page 14.

Table of Contents

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 meaningful 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 may present certain key performance indicators and ratios excluding certain items (e.g., market-related adjustments on net interest income, DVA, charge-offs related to the settlement with the DoJ) which result in non-GAAP financial measures. We believe the use of these non-GAAP financial measures provides additional clarity in understanding our results of operations and trends.

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 Tables 8 and 9.

Table 10 presents certain non-GAAP financial measures and performance measurements on an FTE basis.

Table 10
Supplemental Financial Data

	Three Months Ended June 30		Six Months Ended June 30	
(Dollars in millions)	2016	2015	2016	2015
Fully taxable-equivalent basis data				
Net interest income	$9,436	$10,684	$18,822	$20,310
Total revenue, net of interest expense	20,621	22,179	40,348	43,308

Net interest yield	2.03	%	2.37	%	2.04	%	2.27	%
Efficiency ratio	65.43		62.93		70.16		68.77	

Table of Contents

Tables 11 and 12 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 11

Quarterly and Year-to-Date Supplemental Financial Data and Reconciliations to GAAP Financial Measures

	Three Months Ended June 30					
	2016			2015		
(Dollars in millions)	As Reported	Fully taxable-equivalent adjustment	Fully taxable-equivalent basis	As Reported	Fully taxable-equivalent adjustment	Fully taxable-equivalent basis
Net interest income	$9,213	$ 223	$ 9,436	$10,461	$ 223	$ 10,684
Total revenue, net of interest expense	20,398	223	20,621	21,956	223	22,179
Income tax expense	1,697	223	1,920	2,084	223	2,307
	Six Months Ended June 30					
	2016			2015		
Net interest income	$18,384	$ 438	$ 18,822	$19,872	$ 438	$ 20,310
Total revenue, net of interest expense	39,910	438	40,348	42,870	438	43,308
Income tax expense	2,716	438	3,154	3,309	438	3,747

Table 12

Period-end and Average Supplemental Financial Data and Reconciliations to GAAP Financial Measures

	Period-end		Average			
			Three Months Ended June 30		Six Months Ended June 30	
(Dollars in millions)	June 30 2016	December 31 2015	2016	2015	2016	2015
Common shareholders' equity	$241,849	$233,932	$240,166	$228,780	$238,645	$227,078
Goodwill	(69,744)	(69,761)	(69,751)	(69,775)	(69,756)	(69,776)
Intangible assets (excluding MSRs)	(3,352)	(3,768)	(3,480)	(4,307)	(3,584)	(4,412)
Related deferred tax liabilities	1,637	1,716	1,662	1,885	1,684	1,922
Tangible common shareholders' equity	$170,390	$162,119	$168,597	$156,583	$166,989	$154,812
Shareholders' equity	$267,069	$256,205	$265,144	$251,054	$262,731	$248,413
Goodwill	(69,744)	(69,761)	(69,751)	(69,775)	(69,756)	(69,776)
Intangible assets (excluding MSRs)	(3,352)	(3,768)	(3,480)	(4,307)	(3,584)	(4,412)
Related deferred tax liabilities	1,637	1,716	1,662	1,885	1,684	1,922
Tangible shareholders' equity	$195,610	$184,392	$193,575	$178,857	$191,075	$176,147
Total assets	$2,186,609	$2,144,316				
Goodwill	(69,744)	(69,761)				
Intangible assets (excluding MSRs)	(3,352)	(3,768)				
Related deferred tax liabilities	1,637	1,716				
Tangible assets	$2,115,150	$2,072,503				

17

Table of Contents

Table 13
Quarterly Average Balances and Interest Rates – FTE Basis

(Dollars in millions)	Second Quarter 2016			First Quarter 2016		
	Average Balance	Interest Income/ Expense	Yield/ Rate	Average Balance	Interest Income/ Expense	Yield/ Rate
Earning assets						
Interest-bearing deposits with the Federal Reserve, non-U.S. central banks and other banks	$135,312	$ 157	0.47 %	$138,574	$ 155	0.45 %
Time deposits placed and other short-term investments	7,855	35	1.79	9,156	32	1.41
Federal funds sold and securities borrowed or purchased under agreements to resell	223,005	260	0.47	209,183	276	0.53
Trading account assets	127,189	1,109	3.50	136,306	1,212	3.57
Debt securities [1]	418,748	1,378	1.33	399,809	1,224	1.23
Loans and leases [2]:						
Residential mortgage	186,752	1,626	3.48	186,980	1,629	3.49
Home equity	73,141	703	3.86	75,328	711	3.79
U.S. credit card	86,705	1,983	9.20	87,163	2,021	9.32
Non-U.S. credit card	9,988	250	10.06	9,822	253	10.36
Direct/Indirect consumer [3]	91,643	563	2.47	89,342	550	2.48
Other consumer [4]	2,220	16	3.00	2,138	16	3.03
Total consumer	450,449	5,141	4.58	450,773	5,180	4.61
U.S. commercial	276,640	2,006	2.92	270,511	1,936	2.88
Commercial real estate [5]	57,772	434	3.02	57,271	434	3.05
Commercial lease financing	20,874	147	2.81	21,077	182	3.46
Non-U.S. commercial	93,935	564	2.42	93,352	585	2.52
Total commercial	449,221	3,151	2.82	442,211	3,137	2.85
Total loans and leases	899,670	8,292	3.70	892,984	8,317	3.74
Other earning assets	55,955	660	4.74	58,638	694	4.76
Total earning assets [6]	1,867,734	11,891	2.56	1,844,650	11,910	2.59
Cash and due from banks	27,924			28,844		
Other assets, less allowance for loan and lease losses	292,251			300,124		
Total assets	$2,187,909			$2,173,618		

(1) Yields on debt securities excluding the impact of market-related adjustments were 2.34 percent and 2.45 percent in the second and first quarters of 2016, and 2.47 percent, 2.50 percent and 2.48 percent in the fourth, third and second quarters of 2015, respectively. Yields on debt securities excluding the impact of market-related adjustments are non-GAAP financial measures. The Corporation believes the use of this non-GAAP financial measure provides additional clarity in assessing its results.

(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 remaining life of the loan.

(3) Includes non-U.S. consumer loans of $3.4 billion and $3.8 billion in the second and first quarters of 2016, and $4.0 billion for each of the quarters of 2015.

(4) Includes consumer finance loans of $526 million and $551 million in the second and first quarters of 2016, and $578 million, $605 million and $632 million in the fourth, third and second quarters of 2015, respectively; consumer leases of $1.5 billion and $1.4 billion in the second and first quarters of 2016, and $1.3 billion, $1.2 billion and $1.1 billion in the fourth, third and second quarters of 2015, respectively; and consumer overdrafts of $166 million and $161 million in the second and first quarters of 2016, and $174 million, $177 million and $131 million in the fourth, third and second quarters of 2015, respectively.

(5) Includes U.S. commercial real estate loans of $54.3 billion and $53.8 billion in the second and first quarters of 2016, and $52.8 billion, $49.8 billion and $47.6 billion in the fourth, third and second quarters of 2015, respectively; and non-U.S. commercial real estate loans of $3.5 billion and $3.4 billion in the second and first quarters of 2016, and $3.3 billion, $3.8 billion and $2.8 billion in the fourth, third and second quarters of 2015, respectively.

(6) Interest income includes the impact of interest rate risk management contracts, which decreased interest income on the underlying assets by $56 million and $35 million in the second and first quarters of 2016, and $32 million, $8 million and $8 million in the fourth, third and second quarters of 2015, respectively. Interest expense includes the impact of interest rate risk management contracts, which decreased interest expense on the underlying liabilities by $610 million and $565 million in the second and first quarters of 2016, and $681 million, $590 million and $509 million in the fourth, third and second quarters of 2015, respectively. For additional information, see Interest Rate Risk Management for the Banking Book on page 106.

(7) 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 of the Corporation's 2015 Annual Report on Form 10-K. The yield on long-term debt excluding the adjustment is a non-GAAP financial measure.

Table of Contents

Table 13
Quarterly Average Balances and Interest Rates – FTE Basis (continued)

	Fourth Quarter 2015			Third Quarter 2015			Second Quarter 2015		
(Dollars in millions)	Average Balance	Interest Income/ Expense	Yield/ Rate	Average Balance	Interest Income/ Expense	Yield/ Rate	Average Balance	Interest Income/ Expense	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 %	$125,762	$ 81	0.26 %
Time deposits placed and other short-term investments	10,120	41	1.61	11,503	38	1.32	8,183	34	1.64
Federal funds sold and securities borrowed or purchased under agreements to resell	207,585	214	0.41	210,127	275	0.52	214,326	268	0.50
Trading account assets	134,797	1,141	3.37	140,484	1,170	3.31	137,137	1,114	3.25
Debt securities [1]	399,423	2,541	2.55	394,420	1,853	1.88	386,357	3,082	3.21
Loans and leases [2]:									
Residential mortgage	189,650	1,644	3.47	193,791	1,690	3.49	207,356	1,782	3.44
Home equity	77,109	715	3.69	79,715	730	3.64	82,640	769	3.73
U.S. credit card	88,623	2,045	9.15	88,201	2,033	9.15	87,460	1,980	9.08
Non-U.S. credit card	10,155	258	10.07	10,244	267	10.34	10,012	264	10.56
Direct/Indirect consumer [3]	87,858	530	2.40	85,975	515	2.38	83,698	504	2.42
Other consumer [4]	2,039	11	2.09	1,980	15	3.01	1,885	15	3.14
Total consumer	455,434	5,203	4.55	459,906	5,250	4.54	473,051	5,314	4.50
U.S. commercial	261,727	1,790	2.72	251,908	1,744	2.75	244,540	1,704	2.80
Commercial real estate [5]	56,126	408	2.89	53,605	384	2.84	50,478	382	3.03
Commercial lease financing	20,422	155	3.03	20,013	153	3.07	19,486	149	3.05
Non-U.S. commercial	92,447	530	2.27	91,997	514	2.22	88,623	479	2.17
Total commercial	430,722	2,883	2.66	417,523	2,795	2.66	403,127	2,714	2.70
Total loans and leases	886,156	8,086	3.63	877,429	8,045	3.65	876,178	8,028	3.67
Other earning assets	61,070	748	4.87	62,847	716	4.52	62,712	721	4.60
Total earning assets [6]	1,847,253	12,879	2.77	1,841,984	12,193	2.63	1,810,655	13,328	2.95
Cash and due from banks	29,503			27,730			30,751		
Other assets, less allowance for loan and lease losses	303,716			299,279			310,560		
Total assets	$2,180,472			$2,168,993			$2,151,966		

For footnotes see page 18.

Table of Contents

Table 13
Quarterly Average Balances and Interest Rates – FTE Basis (continued)

(Dollars in millions)	Second Quarter 2016			First Quarter 2016		
	Average Balance	Interest Income/ Expense	Yield/ Rate	Average Balance	Interest Income/ Expense	Yield/ Rate
Interest-bearing liabilities						
U.S. interest-bearing deposits:						
Savings	$50,105	$ 1	0.01%	$47,845	$ 1	0.01%
NOW and money market deposit accounts	583,913	72	0.05	577,779	71	0.05
Consumer CDs and IRAs	48,450	33	0.28	49,617	35	0.28
Negotiable CDs, public funds and other deposits	32,879	35	0.42	31,739	29	0.37
Total U.S. interest-bearing deposits	715,347	141	0.08	706,980	136	0.08
Non-U.S. interest-bearing deposits:						
Banks located in non-U.S. countries	4,235	10	0.98	4,123	9	0.84
Governments and official institutions	1,542	2	0.66	1,472	2	0.53
Time, savings and other	60,311	92	0.61	56,943	78	0.55
Total non-U.S. interest-bearing deposits	66,088	104	0.63	62,538	89	0.57
Total interest-bearing deposits	781,435	245	0.13	769,518	225	0.12
Federal funds purchased, securities loaned or sold under agreements to repurchase and short-term borrowings	215,852	625	1.17	221,990	614	1.11
Trading account liabilities	73,773	242	1.32	72,299	292	1.63
Long-term debt (7)	233,061	1,343	2.31	233,654	1,393	2.39
Total interest-bearing liabilities (6)	1,304,121	2,455	0.76	1,297,461	2,524	0.78
Noninterest-bearing sources:						
Noninterest-bearing deposits	431,856			428,937		
Other liabilities	186,788			186,903		
Shareholders' equity	265,144			260,317		
Total liabilities and shareholders' equity	$2,187,909			$2,173,618		
Net interest spread			1.80%			1.81%
Impact of noninterest-bearing sources			0.23			0.24
Net interest income/yield on earning assets		$ 9,436	2.03%		$ 9,386	2.05%

For footnotes see page 18.

Table of Contents

Table 13
Quarterly Average Balances and Interest Rates – FTE Basis (continued)

	Fourth Quarter 2015			Third Quarter 2015			Second Quarter 2015		
(Dollars in millions)	Average Balance	Interest Income/ Expense	Yield/ Rate	Average Balance	Interest Income/ Expense	Yield/ Rate	Average Balance	Interest Income/ Expense	Yield/ Rate
Interest-bearing liabilities									
U.S. interest-bearing deposits:									
Savings	$46,094	$ 1	0.01%	$46,297	$ 2	0.02%	$47,381	$2	0.02%
NOW and money market deposit accounts	558,441	68	0.05	545,741	67	0.05	536,201	71	0.05
Consumer CDs and IRAs	51,107	37	0.29	53,174	38	0.29	55,832	42	0.30
Negotiable CDs, public funds and other deposits	30,546	25	0.32	30,631	26	0.33	29,904	22	0.30
Total U.S. interest-bearing deposits	686,188	131	0.08	675,843	133	0.08	669,318	137	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	5,162	9	0.67
Governments and official institutions	1,687	2	0.37	1,654	1	0.33	1,239	1	0.38
Time, savings and other	55,965	71	0.51	53,793	73	0.53	55,030	69	0.51
Total non-U.S. interest-bearing deposits	61,649	80	0.52	59,643	81	0.54	61,431	79	0.52
Total interest-bearing deposits	747,837	211	0.11	735,486	214	0.12	730,749	216	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	252,088	686	1.09
Trading account liabilities	73,139	272	1.48	77,443	342	1.75	77,772	335	1.73
Long-term debt (7)	237,384	1,895	3.18	240,520	1,343	2.22	242,230	1,407	2.33
Total interest-bearing liabilities (6)	1,290,010	2,897	0.89	1,310,772	2,496	0.76	1,302,839	2,644	0.81
Noninterest-bearing sources:									
Noninterest-bearing deposits	438,214			423,745			416,040		
Other liabilities	195,123			180,583			182,033		
Shareholders' equity	257,125			253,893			251,054		
Total liabilities and shareholders' equity	$2,180,472			$2,168,993			$2,151,966		
Net interest spread			1.88%			1.87%			2.14%
Impact of noninterest-bearing sources			0.27			0.23			0.23
Net interest income/yield on earning assets		$ 9,982	2.15%		$ 9,697	2.10%		$10,684	2.37%

For footnotes see page 18.

Table of Contents

Table 14

Year-to-Date Average Balances and Interest Rates – FTE Basis

	Six Months Ended June 30					
	2016			2015		
(Dollars in millions)	Average Balance	Interest Income/ Expense	Yield/ Rate	Average Balance	Interest Income/ Expense	Yield/ Rate
Earning assets						
Interest-bearing deposits with the Federal Reserve, non-U.S. central banks and other banks	$136,943	$ 312	0.46 %	$125,974	$ 165	0.26 %
Time deposits placed and other short-term investments	8,506	67	1.59	8,280	67	1.63
Federal funds sold and securities borrowed or purchased under agreements to resell	216,094	536	0.50	214,130	499	0.47
Trading account assets	131,748	2,321	3.54	138,036	2,236	3.26
Debt securities [1]	409,279	2,602	1.28	384,747	4,980	2.61
Loans and leases [2]:						
Residential mortgage	186,866	3,255	3.48	211,172	3,633	3.44
Home equity	74,235	1,414	3.82	83,771	1,539	3.69
U.S. credit card	86,934	4,004	9.26	88,074	4,007	9.18
Non-U.S. credit card	9,905	503	10.21	10,007	526	10.60
Direct/Indirect consumer [3]	90,493	1,113	2.47	82,214	995	2.44
Other consumer [4]	2,178	32	3.01	1,866	30	3.22
Total consumer	450,611	10,321	4.60	477,104	10,730	4.52
U.S. commercial	273,576	3,942	2.90	239,751	3,349	2.82
Commercial real estate [5]	57,521	868	3.03	49,362	729	2.98
Commercial lease financing	20,975	329	3.14	19,379	320	3.30
Non-U.S. commercial	93,644	1,149	2.47	86,103	964	2.26
Total commercial	445,716	6,288	2.84	394,595	5,362	2.74
Total loans and leases	896,327	16,609	3.72	871,699	16,092	3.71
Other earning assets	57,295	1,354	4.75	62,081	1,427	4.63
Total earning assets [6]	1,856,192	23,801	2.57	1,804,947	25,466	2.84
Cash and due from banks	28,384			29,231		
Other assets, less allowance for loan and lease losses	296,187			311,129		
Total assets	$2,180,763			$2,145,307		

(1) Yields on debt securities excluding the impact of market-related adjustments were 2.39 percent and 2.51 percent for the six months ended June 30, 2016 and 2015. Yields on debt securities excluding the impact of market-related adjustments are non-GAAP financial measures. The Corporation believes the use of this non-GAAP financial measure provides additional clarity in assessing its results.

(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 remaining life of the loan.

(3) Includes non-U.S. consumer loans of $3.6 billion and $4.0 billion for the six months ended June 30, 2016 and 2015.

(4) Includes consumer finance loans of $538 million and $647 million, consumer leases of $1.5 billion and $1.1 billion, and consumer overdrafts of $163 million and $136 million for the six months ended June 30, 2016 and 2015.

(5) Includes U.S. commercial real estate loans of $54.1 billion and $46.6 billion, and non-U.S. commercial real estate loans of $3.5 billion and $2.8 billion for the six months ended June 30, 2016 and 2015.

(6)

Interest income includes the impact of interest rate risk management contracts, which decreased interest income on the underlying assets by $91 million and $19 million for the six months ended June 30, 2016 and 2015. Interest expense includes the impact of interest rate risk management contracts, which decreased interest expense on the underlying liabilities by $1.2 billion and $1.1 billion for the six months ended June 30, 2016 and 2015. For additional information, see Interest Rate Risk Management for the Banking Book on page 106.

Table of Contents

Table 14

Year-to-Date Average Balances and Interest Rates – FTE Basis (continued)

	Six Months Ended June 30					
	2016			2015		
(Dollars in millions)	Average Balance	Interest Income/ Expense	Yield/ Rate	Average Balance	Interest Income/ Expense	Yield/ Rate
Interest-bearing liabilities						
U.S. interest-bearing deposits:						
Savings	$48,975	$2	0.01%	$46,806	$4	0.02%
NOW and money market deposit accounts	580,846	143	0.05	534,026	138	0.05
Consumer CDs and IRAs	49,034	68	0.28	57,260	87	0.31
Negotiable CDs, public funds and other deposits	32,308	64	0.40	29,353	44	0.31
Total U.S. interest-bearing deposits	711,163	277	0.08	667,445	273	0.08
Non-U.S. interest-bearing deposits:						
Banks located in non-U.S. countries	4,179	19	0.91	4,855	17	0.70
Governments and official institutions	1,507	4	0.60	1,310	2	0.29
Time, savings and other	58,627	170	0.58	54,655	144	0.53
Total non-U.S. interest-bearing deposits	64,313	193	0.60	60,820	163	0.54
Total interest-bearing deposits	775,476	470	0.12	728,265	436	0.12
Federal funds purchased, securities loaned or sold under agreements to repurchase and short-term borrowings	218,921	1,239	1.14	248,133	1,271	1.03
Trading account liabilities	73,036	534	1.47	78,277	729	1.88
Long-term debt	233,358	2,736	2.35	241,184	2,720	2.27
Total interest-bearing liabilities [(6)]	1,300,791	4,979	0.77	1,295,859	5,156	0.80
Noninterest-bearing sources:						
Noninterest-bearing deposits	430,397			410,536		
Other liabilities	186,844			190,499		
Shareholders' equity	262,731			248,413		
Total liabilities and shareholders' equity	$2,180,763			$2,145,307		
Net interest spread			1.80%			2.04%
Impact of noninterest-bearing sources			0.24			0.23
Net interest income/yield on earning assets		$18,822	2.04%		$20,310	2.27%

For footnotes see page 22.

Table of Contents

Business Segment Operations

Segment Description and Basis of Presentation

In the Corporation's Annual Report on Form 10-K for the year ended December 31, 2015, we reported our results of operations through five business segments: Consumer Banking, GWIM, Global Banking, Global Markets and LAS, with the remaining operations recorded in All Other. Effective April 1, 2016, to align the segments with how we now manage the businesses, we changed our basis of presentation to eliminate the LAS segment, and following such change, we report our results of operations through the following four business segments: Consumer Banking, GWIM, Global Banking and Global Markets, with the remaining operations recorded in All Other.

The Corporation, in connection with the aforementioned realignment of our business segments, completed a review of all consumer real estate-secured lending and servicing activities within LAS, Consumer Banking, GWIM and All Other with a view to strategically align the business activities and loans, including loans serviced for others, into core and non-core categories, with core loans reflected on the balance sheet of the appropriate business segment and non-core loans, which are principally run-off portfolios, exclusively on the balance sheet of All Other. The analysis was performed on the basis of loan and customer characteristics such as origination date, product type, loan-to-value (LTV), Fair Isaac Corporation (FICO) score and delinquency status consistent with our current consumer and mortgage servicing strategy. Generally, loans that were originated after January 1, 2010, qualified under 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 (TDR) prior to 2016 are generally characterized as non-core loans. The segment realignment resulted in a net $23 billion and $1 billion increase in consumer real estate loans held on the balance sheet of Consumer Banking and All Other, as of April 1, 2016. MSRs pertaining to core and non-core loans serviced for others are held in Consumer Banking and All Other, respectively. Prior period balances and related metrics have been reclassified to conform to these revised classifications.

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 47. 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.

For more information on the basis of presentation for business segments and reconciliations to consolidated total revenue, net income and period-end total assets, see Note 18 – Business Segment Information to the Consolidated Financial Statements.

Table of Contents

Consumer Banking

	Three Months Ended June 30						
	Deposits		Consumer Lending		Total Consumer Banking		
(Dollars in millions)	2016	2015	2016	2015	2016	2015	% Change
Net interest income (FTE basis)	$2,677	$2,366	$2,599	$2,677	$5,276	$5,043	5 %
Noninterest income:							
Card income	2	3	1,214	1,204	1,216	1,207	1
Service charges	1,011	1,033	—	—	1,011	1,033	(2)
Mortgage banking income	—	—	267	359	267	359	(26)
All other income	99	119	(5)	(4)	94	115	(18)
Total noninterest income	1,112	1,155	1,476	1,559	2,588	2,714	(5)
Total revenue, net of interest expense (FTE basis)	3,789	3,521	4,075	4,236	7,864	7,757	1
Provision for credit losses	41	24	685	446	726	470	54
Noninterest expense	2,378	2,382	2,038	2,255	4,416	4,637	(5)
Income before income taxes (FTE basis)	1,370	1,115	1,352	1,535	2,722	2,650	3
Income tax expense (FTE basis)	505	415	499	573	1,004	988	2
Net income	$865	$700	$853	$962	$1,718	$1,662	3
Net interest yield (FTE basis)	1.81 %	1.73 %	4.36 %	4.71 %	3.39 %	3.49 %	
Return on average allocated capital	29	23	16	18	20	20	
Efficiency ratio (FTE basis)	62.72	67.65	50.02	53.25	56.14	59.78	

Balance Sheet

	Three Months Ended June 30						
Average	2016	2015	2016	2015	2016	2015	% Change
Total loans and leases	$4,792	$4,694	$238,129	$226,010	$242,921	$230,704	5 %
Total earning assets [1]	594,748	549,060	239,645	228,124	626,811	579,920	8
Total assets [1]	621,445	576,247	251,239	241,372	665,102	620,355	7
Total deposits	589,295	544,341	7,179	8,632	596,474	552,973	8
Allocated capital	12,000	12,000	22,000	21,000	34,000	33,000	3

(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.

Table of Contents

	Six Months Ended June 30						
	Deposits		Consumer Lending		Total Consumer Banking		
(Dollars in millions)	2016	2015	2016	2015	2016	2015	% Change
Net interest income (FTE basis)	$5,322	$ 4,637	$5,226	$5,409	$10,548	$ 10,046	5 %
Noninterest income:							
Card income	5	6	2,422	2,369	2,427	2,375	2
Service charges	2,008	1,998	—	1	2,008	1,999	<1
Mortgage banking income	—	—	457	827	457	827	(45)
All other income	214	223	11	2	225	225	—
Total noninterest income	2,227	2,227	2,890	3,199	5,117	5,426	(6)
Total revenue, net of interest expense (FTE basis)	7,549	6,864	8,116	8,608	15,665	15,472	1
Provision for credit losses	89	87	1,168	1,052	1,257	1,139	10
Noninterest expense	4,832	4,854	4,122	4,515	8,954	9,369	(4)
Income before income taxes (FTE basis)	2,628	1,923	2,826	3,041	5,454	4,964	10
Income tax expense (FTE basis)	967	714	1,040	1,132	2,007	1,846	9
Net income	$1,661	$ 1,209	$1,786	$1,909	$3,447	$3,118	11
Net interest yield (FTE basis)	1.83 %	1.72 %	4.43 %	4.79 %	3.44 %	3.54 %	
Return on average allocated capital	28	20	16	18	20	19	
Efficiency ratio (FTE basis)	64.00	70.71	50.79	52.45	57.16	60.55	

Balance Sheet

	Six Months Ended June 30						
Average	2016	2015	2016	2015	2016	2015	% Change
Total loans and leases	$4,761	$ 4,770	$235,653	$225,763	$240,414	$230,533	4 %
Total earning assets [1]	585,692	542,238	237,003	227,744	617,062	572,712	8
Total assets [1]	612,437	569,225	249,008	241,166	655,812	613,121	7
Total deposits	580,378	537,354	6,957	8,416	587,335	545,770	8
Allocated capital	12,000	12,000	22,000	21,000	34,000	33,000	3

Period end	June 30 2016	December 31 2015	June 30 2016	December 31 2015	June 30 2016	December 31 2015	% Change
Total loans and leases	$4,845	$ 4,735	$242,277	$234,116	$247,122	$238,851	3 %
Total earning assets [1]	597,993	576,108	244,699	235,496	630,143	605,012	4
Total assets [1]	624,658	603,448	256,361	248,571	668,470	645,427	4
Total deposits	592,442	571,467	7,015	6,365	599,457	577,832	4

For footnote see page 25.

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

Three Months Ended June 30, 2016 Compared to Three Months Ended June 30, 2015

Net income for Consumer Banking increased $56 million to $1.7 billion primarily driven by higher net interest income and lower noninterest expense, partially offset by higher provision for credit losses and lower noninterest income. Net interest income increased $233 million to $5.3 billion primarily due to the beneficial impact of an increase in investable assets as a result of higher deposits, as well as loan growth. Noninterest income decreased $126 million to $2.6 billion due to lower mortgage banking income and service charges, as well as the impact on revenue of certain divestitures.

The provision for credit losses increased $256 million to $726 million primarily driven by a slower pace of improvement in the U.S. credit card portfolio, as well as the consumer auto and specialty lending portfolio. Noninterest expense decreased $221 million to $4.4 billion primarily driven by lower operating expenses from improved efficiency and automation.

Table of Contents

The return on average allocated capital remained unchanged at 20 percent. For more information on capital allocations, see Business Segment Operations on page 24.

Six Months Ended June 30, 2016 Compared to Six Months Ended June 30, 2015

Net income for Consumer Banking increased $329 million to $3.4 billion primarily driven by the same factors as described in the three-month discussion above. Net interest income increased $502 million to $10.5 billion due to the same factors as described in the three-month discussion above, partially offset by lower credit card balances. Noninterest income decreased $309 million to $5.1 billion due to lower mortgage banking income and the impact on revenue of certain divestitures, partially offset by higher card income and higher service charges.

The provision for credit losses increased $118 million to $1.3 billion and noninterest expense decreased $415 million to $9.0 billion both primarily driven by the same factors as described in the three-month discussion above.

The return on average allocated capital was 20 percent, up from 19 percent, reflecting higher net income.

Deposits

Deposits includes the results of consumer deposit activities which consist of a comprehensive range of products provided to consumers and small businesses. Our deposit products include traditional savings accounts, money market savings accounts, CDs and IRAs, noninterest- and interest-bearing checking accounts, as well as investment accounts and products. The revenue is allocated to the deposit products using our funds transfer pricing process that matches assets and liabilities with similar interest rate sensitivity and maturity characteristics. Deposits generates fees such as account service fees, non-sufficient funds fees, overdraft charges and ATM fees, as well as investment and brokerage fees from Merrill Edge accounts. Merrill Edge is an integrated investing and banking service targeted at customers with less than $250,000 in investable assets. Merrill Edge provides investment advice and guidance, client brokerage asset services, a self-directed online investing platform and key banking capabilities including access to the Corporation's network of financial centers and ATMs.

Deposits includes the net impact of migrating customers and their related deposit and brokerage asset balances between Deposits and GWIM as well as other client-managed businesses. For more information on the migration of customer balances to or from GWIM, see GWIM on page 32.

Three Months Ended June 30, 2016 Compared to Three Months Ended June 30, 2015

Net income for Deposits increased $165 million to $865 million driven by higher revenue. Net interest income increased $311 million to $2.7 billion primarily due to the beneficial impact of an increase in investable assets as a result of higher deposits. Noninterest income decreased $43 million to $1.1 billion primarily driven by lower service charges.

The provision for credit losses increased $17 million to $41 million. Noninterest expense of $2.4 billion remained relatively unchanged.

Average deposits increased $45.0 billion to $589.3 billion 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 $51.7 billion was partially offset by a decline in time deposits of $6.8 billion. As a result of our continued pricing discipline and the shift in the mix of deposits, the rate paid on average deposits declined by one bp to four bps.

Six Months Ended June 30, 2016 Compared to Six Months Ended June 30, 2015

Net income for Deposits increased $452 million to $1.7 billion driven by higher revenue. Net interest income increased $685 million to $5.3 billion primarily due to the same factor as described in the three-month discussion above. Noninterest income of $2.2 billion remained relatively unchanged.

The provision for credit losses remained relatively unchanged at $89 million. Noninterest expense of $4.8 billion remained relatively unchanged.

Average deposits increased $43.0 billion to $580.4 billion driven by a continuing customer shift to more liquid products in the low rate environment.

Table of Contents

Key Statistics – Deposits

	Three Months Ended June 30		Six Months Ended June 30	
	2016	2015	2016	2015
Total deposit spreads (excludes noninterest costs) [1]	1.66%	1.61%	1.65 %	1.61 %
Period end				
Client brokerage assets (in millions)			$131,698	$121,961
Online banking active accounts (units in thousands)			33,022	31,365
Mobile banking active users (units in thousands)			20,227	17,626
Financial centers			4,681	4,789
ATMs			15,998	15,992

[1] Includes deposits held in Consumer Lending.

Client brokerage assets increased $9.7 billion driven by strong account flows, partially offset by lower market valuations. Mobile banking active users increased 2.6 million reflecting continuing changes in our customers' banking preferences. The number of financial centers declined 108 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, 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. At June 30, 2016, total owned loans in the core portfolio held in Consumer Lending were $95.4 billion, up $7.6 billion from June 30, 2015 primarily driven by higher residential mortgage balances, partially offset by a decline in home equity balances. For more information on the core and non-core portfolios, see Consumer Portfolio Credit Risk Management on page 65.

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 32.

Three Months Ended June 30, 2016 Compared to Three Months Ended June 30, 2015

Net income for Consumer Lending decreased $109 million to $853 million driven by higher provision for credit losses and a decline in revenue, partially offset by lower noninterest expense. Net interest income decreased $78 million to $2.6 billion primarily driven by lower average credit card balances and higher funding costs, partially offset by an increase in consumer auto lending balances. Noninterest income decreased $83 million to $1.5 billion due to lower mortgage banking income and the impact on revenue of certain divestitures, partially offset by higher card income.

The provision for credit losses increased $239 million to $685 million driven by a slower pace of improvement in the U.S. credit card portfolio, as well as the consumer auto and specialty lending portfolio. Noninterest expense decreased $217 million to $2.0 billion primarily driven by lower fraud expenses due to the benefit of the Europay, MasterCard and Visa (EMV) chip implementation, and lower operating expenses from improved efficiency and automation.

Average loans increased $12.1 billion to $238.1 billion primarily driven by increases in residential mortgages and consumer vehicle loans, partially offset by lower home equity loans.

Table of Contents

Six Months Ended June 30, 2016 Compared to Six Months Ended June 30, 2015

Net income for Consumer Lending decreased $123 million to $1.8 billion, net interest income decreased $183 million to $5.2 billion and noninterest income decreased $309 million to $2.9 billion all driven by the same factors as described in the three-month discussion above.

The provision for credit losses increased $116 million to $1.2 billion driven by the same factors as described in the three-month discussion above. Noninterest expense decreased $393 million to $4.1 billion primarily driven by the same factors as described in the three-month discussion above, as well as lower personnel expense.

Average loans increased $9.9 billion to $235.7 billion primarily driven by the same factors as described in the three-month discussion above.

Key Statistics – Consumer Lending

	Three Months Ended June 30		Six Months Ended June 30	
(Dollars in millions)	2016	2015	2016	2015
Total U.S. credit card [1]				
Gross interest yield	9.20 %	9.08 %	9.26 %	9.18 %
Risk-adjusted margin	8.79	8.89	8.92	8.95
New accounts (in thousands)	1,313	1,295	2,521	2,456
Purchase volumes	$56,667	$55,976	$107,821	$106,154
Debit card purchase volumes	$72,120	$70,754	$141,267	$137,653

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

During the three and six months ended June 30, 2016, the total U.S. credit card risk-adjusted margin decreased 10 bps and three bps compared to the same periods in 2015. Total U.S. credit card purchase volumes increased $691 million to $56.7 billion, and $1.7 billion to $107.8 billion, and debit card purchase volumes increased $1.4 billion to $72.1 billion, and $3.6 billion to $141.3 billion, reflecting higher levels of consumer spending. The increases in total U.S. credit card purchase volumes were partially offset by the impact of certain divestitures.

Table of Contents

Mortgage Banking Income

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

	Three Months Ended June 30		Six Months Ended June 30	
(Dollars in millions)	2016	2015	2016	2015
Mortgage banking income				
Consumer Banking mortgage banking income				
Total production income	$182	$272	$320	$578
Net servicing income				
Servicing fees	179	208	363	450
Amortization of expected cash flows [1]	(146)	(168)	(300)	(347)
Fair value changes of MSRs, net of risk management activities used to hedge certain market risks [2]	52	47	74	146
Total net servicing income	85	87	137	249
Total Consumer Banking mortgage banking income	267	359	457	827
Other mortgage banking income				
Other production income [3]	14	25	108	24
Representations and warranties provision	(22)	204	(66)	114
Net servicing income				
Servicing fees	119	152	237	306
Amortization of expected cash flows [1]	(19)	(19)	(37)	(38)
Fair value changes of MSRs, net of risk management activities used to hedge certain market risks [2]	10	146	115	297
Total net servicing income	110	279	315	565
Eliminations [4]	(57)	134	(69)	165
Total other mortgage banking income	45	642	288	868
Total consolidated mortgage banking income	$312	$1,001	$745	$1,695

(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) Consists primarily of revenue from sales of repurchased loans that had returned to performing status.

(4) 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 for the three and six months ended June 30, 2016 decreased $90 million to $182 million, and $258 million to $320 million compared to the same periods in 2015 due to a decrease in production volume to be sold, resulting from a decision to retain certain residential mortgage loans in Consumer Banking.

Table of Contents

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 for the three months ended June 30, 2016 of $85 million remained relatively unchanged, as lower servicing fees due to a smaller servicing portfolio were offset by improved MSR net-of-hedge performance. Servicing income for the six months ended June 30, 2016 decreased $112 million to $137 million compared to the same period in 2015 driven by lower servicing fees due to a smaller servicing portfolio and lower MSR net-of-hedge performance. Servicing fees for the three and six months ended June 30, 2016 declined 14 percent to $179 million and 19 percent to $363 million compared to the same periods in 2015 as the size of the servicing portfolio continued to decline.

Mortgage Servicing Rights

At June 30, 2016, the balance of consumer MSRs managed within Consumer Lending and All Other, which excludes $481 million of certain non-U.S. residential mortgage MSRs recorded in Global Markets, was $1.8 billion compared to $3.2 billion at June 30, 2015. The decrease was primarily driven by higher expected prepayments resulting from lower interest rates, recognition of modeled cash flows and sales of MSRs, partially offset by new loan originations. The core MSR portfolio, held in Consumer Banking, totaled $1.5 billion and $2.7 billion and the non-core MSR portfolio, held in All Other, totaled $320 million and $486 million at June 30, 2016 and 2015. For more information on MSRs, see Note 17 – Mortgage Servicing Rights to the Consolidated Financial Statements.

Key Statistics – Mortgage Banking Income

	Three Months Ended June 30		Six Months Ended June 30	
(Dollars in millions)	2016	2015	2016	2015
Loan production [1]:				
Total [2]:				
First mortgage	$16,314	$15,962	$28,937	$29,675
Home equity	4,303	3,209	8,108	6,426
Consumer Banking:				
First mortgage	$11,541	$11,265	$20,619	$21,120
Home equity	3,881	2,939	7,396	5,957

(1) The loan production amounts represent the unpaid principal balance of loans and in the case of home equity, the principal amount of the total line of credit.

(2) In addition to loan production in Consumer Banking, there is also first mortgage and home equity loan production in GWIM.

First mortgage loan originations in Consumer Banking and for the total Corporation increased $276 million and $352 million for the three months ended June 30, 2016 compared to the same period in 2015 driven by higher purchase

activity. First mortgage loan originations in Consumer Banking and for the total Corporation decreased $501 million and $738 million for the six months ended June 30, 2016 compared to the same period in 2015 driven by lower refinance activity, partially offset by higher purchase activity.

Home equity production for the total Corporation was $4.3 billion and $8.1 billion for the three and six months ended June 30, 2016 compared to $3.2 billion and $6.4 billion for the same periods in 2015, with the increases due to a higher demand in the market based on improving housing trends, as well as improved financial center engagement with customers and more competitive pricing.

Table of Contents

Global Wealth & Investment Management

(Dollars in millions)	Three Months Ended June 30 2016	2015	% Change	Six Months Ended June 30 2016	2015	% Change
Net interest income (FTE basis)	$1,434	$1,352	6 %	$2,922	$2,695	8 %
Noninterest income:						
Investment and brokerage services	2,598	2,749	(5)	5,134	5,472	(6)
All other income	424	466	(9)	844	910	(7)
Total noninterest income	3,022	3,215	(6)	5,978	6,382	(6)
Total revenue, net of interest expense (FTE basis)	4,456	4,567	(2)	8,900	9,077	(2)
Provision for credit losses	14	15	(7)	39	38	3
Noninterest expense	3,288	3,485	(6)	6,563	6,974	(6)
Income before income taxes (FTE basis)	1,154	1,067	8	2,298	2,065	11
Income tax expense (FTE basis)	432	398	9	852	768	11
Net income	$722	$669	8	$1,446	$1,297	11
Net interest yield (FTE basis)	2.11 %	2.16 %		2.12 %	2.13 %	
Return on average allocated capital	22	22		22	22	
Efficiency ratio (FTE basis)	73.78	76.31		73.74	76.83	

Balance Sheet

Average	Three Months Ended June 30 2016	2015	% Change	Six Months Ended June 30 2016	2015	% Change
Total loans and leases	$141,181	$131,364	7 %	$140,140	$129,275	8 %
Total earning assets	273,874	251,601	9	276,740	254,631	9
Total assets	289,646	268,908	8	292,679	272,036	8
Total deposits	254,804	239,974	6	257,643	241,758	7
Allocated capital	13,000	12,000	8	13,000	12,000	8

Period end	June 30 2016	December 31 2015	% Change
Total loans and leases	$142,633	$139,039	3 %
Total earning assets	270,974	279,597	(3)
Total assets	286,846	296,271	(3)
Total deposits	250,976	260,893	(4)

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.

Table of Contents

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 periods is primarily the net client flows for liquidity AUM.

On April 6, 2016, the Department of Labor released its final rule regarding fiduciary advice to retirement investors. The rule will require advisors to make investment recommendations with regard to retirement assets that are in their clients' "best interest," commonly referred to as the Employee Retirement Income Security Act of 1974 fiduciary standard. The final rule and exemptions allow the requirements to be phased in beginning April 2017. We do not expect this to have a material financial impact on the Corporation's results in 2016, and we continue to evaluate the impact, if any, thereafter.

Three Months Ended June 30, 2016 Compared to Three Months Ended June 30, 2015

Net income for GWIM increased $53 million to $722 million driven by a decrease in noninterest expense, partially offset by a decrease in revenue. Net interest income increased $82 million to $1.4 billion driven by growth in deposit and loan balances. Noninterest income, which primarily includes investment and brokerage services income, decreased $193 million to $3.0 billion driven by lower market valuations and lower transactional revenue, partially offset by a modest gain on the sale of BofA Global Capital Management's AUM. Noninterest expense decreased $197 million to $3.3 billion primarily due to the expiration of fully amortized advisor retention awards, as well as lower revenue-related incentives.

Return on average allocated capital remained unchanged at 22 percent. For more information on capital allocated to the business segments, see Business Segment Operations on page 24.

Six Months Ended June 30, 2016 Compared to Six Months Ended June 30, 2015

Net income for GWIM increased $149 million to $1.4 billion driven by a decrease in noninterest expense, partially offset by a decrease in revenue. Net interest income increased $227 million to $2.9 billion, noninterest income, which primarily includes investment and brokerage services income, decreased $404 million to $6.0 billion and noninterest expense decreased $411 million to $6.6 billion driven by the same factors as described in the three-month discussion above.

Return on average allocated capital remained unchanged at 22 percent.

Table of Contents

Key Indicators and Metrics

(Dollars in millions, except as noted)	Three Months Ended June 30 2016	2015	Six Months Ended June 30 2016	2015
Revenue by Business				
Merrill Lynch Global Wealth Management	$3,626	$3,788	$7,273	$7,531
U.S. Trust	769	762	1,541	1,511
Other [1]	61	17	86	35
Total revenue, net of interest expense (FTE basis)	$4,456	$4,567	$8,900	$9,077
Client Balances by Business, at period end				
Merrill Lynch Global Wealth Management			$2,026,392	$2,052,636
U.S. Trust			393,089	388,829
Other [1]			—	81,318
Total client balances			$2,419,481	$2,522,783
Client Balances by Type, at period end				
Long-term assets under management			$832,394	$849,046
Liquidity assets under management			—	81,314
Assets under management			832,394	930,360
Brokerage assets			1,070,014	1,079,084
Assets in custody			120,505	138,774
Deposits			250,976	237,624
Loans and leases [2]			145,592	136,941
Total client balances			$2,419,481	$2,522,783
Assets Under Management Rollforward				
Assets under management, beginning balance	$890,663	$917,257	$900,863	$902,872
Net long-term client flows	10,055	8,593	9,456	23,247
Net liquidity client flows	(4,170)	6,023	(7,990)	4,530
Market valuation/other	(64,154)	(1,513)	(69,935)	(289)
Total assets under management, ending balance	$832,394	$930,360	$832,394	$930,360
Associates, at period end [3, 4]				
Number of financial advisors			16,664	16,313
Total wealth advisors, including financial advisors			18,159	17,734
Total client-facing professionals, including financial advisors and wealth advisors			20,562	20,231
Merrill Lynch Global Wealth Management Metric [4]				
Financial advisor productivity [5] (in thousands)	$984	$1,050	$984	$1,046
U.S. Trust Metric, at period end [4]				
Client-facing professionals			2,229	2,168

(1) Includes the results of BofA Global Capital Management, the cash management division of Bank of America, and certain administrative items. BofA Global Capital Management's AUM were sold during the three months ended June 30, 2016.

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

(3) Includes financial advisors in the Consumer Banking segment of 2,248 and 2,048 at June 30, 2016 and 2015.
(4) Headcount computation is based upon full-time equivalents.
(5) Financial advisor productivity is defined as annualized 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 $103.3 billion, or four percent, to $2.4 trillion primarily driven by the transfer of approximately $80 billion of BofA Global Capital Management's AUM and lower market valuations, partially offset by net inflows.

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

Table of Contents

Three Months Ended June 30, 2016 Compared to Three Months Ended June 30, 2015

Revenue from MLGWM of $3.6 billion decreased four percent driven by a decline in noninterest income, partially offset by an increase in net interest income. Noninterest income decreased driven by lower market valuations and lower transactional revenue. Net interest income increased driven by growth in deposit and loan balances.

Revenue from U.S. Trust of $769 million increased one percent driven by an increase in net interest income, largely offset by a decrease in noninterest income. Net interest income increased driven by growth in deposit and loan balances. Noninterest income decreased driven by lower market valuations.

Six Months Ended June 30, 2016 Compared to Six Months Ended June 30, 2015

Revenue from MLGWM of $7.3 billion decreased three percent and revenue from U.S. Trust of $1.5 billion increased two percent, both driven by the same factors as described in the three-month discussion above.

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]

	Three Months Ended June 30		Six Months Ended June 30	
(Dollars in millions)	2016	2015	2016	2015
Total deposits, net – to (from) GWIM	$(666)	$(44)	$(1,057)	$(527)
Total loans, net – to (from) GWIM	5	(28)	15	(54)
Total brokerage, net – to (from) GWIM	(326)	(675)	(566)	(1,257)

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

Table of Contents

Global Banking

(Dollars in millions)	Three Months Ended June 30 2016	2015	% Change	Six Months Ended June 30 2016	2015	% Change
Net interest income (FTE basis)	$2,421	$2,170	12 %	$4,902	$4,371	12 %
Noninterest income:						
Service charges	759	728	4	1,504	1,438	5
Investment banking fees	799	777	3	1,435	1,629	(12)
All other income	711	561	27	1,239	1,184	5
Total noninterest income	2,269	2,066	10	4,178	4,251	(2)
Total revenue, net of interest expense (FTE basis)	4,690	4,236	11	9,080	8,622	5
Provision for credit losses	203	177	15	756	273	177
Noninterest expense	2,126	2,086	2	4,297	4,235	1
Income before income taxes (FTE basis)	2,361	1,973	20	4,027	4,114	(2)
Income tax expense (FTE basis)	870	737	18	1,482	1,531	(3)
Net income	$1,491	$1,236	21	$2,545	$2,583	(1)
Net interest yield (FTE basis)	2.84 %	2.79 %		2.90 %	2.83 %	
Return on average allocated capital	16	14		14	15	
Efficiency ratio (FTE basis)	45.33	49.24		47.33	49.11	

Balance Sheet

Average	Three Months Ended June 30 2016	2015	% Change	Six Months Ended June 30 2016	2015	% Change
Total loans and leases	$330,273	$295,405	12 %	$327,402	$289,876	13 %
Total earning assets	343,225	311,674	10	340,250	311,699	9
Total assets	391,839	361,867	8	389,740	361,819	8
Total deposits	298,805	288,117	4	297,969	287,280	4
Allocated capital	37,000	35,000	6	37,000	35,000	6

Period end	June 30 2016	December 31 2015	% Change
Total loans and leases	$330,709	$319,580	3 %
Total earning assets	344,805	330,658	4
Total assets	393,380	381,975	3
Total deposits	304,577	296,162	3

Global Banking, which includes Global Corporate Banking, Global Commercial Banking, Business Banking and Global Investment Banking, provides a wide range of lending-related products and services, integrated working capital management and treasury solutions 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.

Table of Contents

Three Months Ended June 30, 2016 Compared to Three Months Ended June 30, 2015

Net income for Global Banking increased $255 million to $1.5 billion primarily driven by higher revenue, partially offset by higher noninterest expense and provision for credit losses.

Revenue increased $454 million to $4.7 billion due to higher net interest income and noninterest income. Net interest income increased $251 million to $2.4 billion driven by the impact of growth in loan and leasing-related balances. Noninterest income increased $203 million to $2.3 billion primarily due to the impact from loans and related loan hedging activities in the fair value option portfolio, higher leasing and treasury-related revenues, as well as higher advisory fees.

The provision for credit losses increased $26 million to $203 million. Noninterest expense increased $40 million to $2.1 billion primarily driven by investments in client-facing professionals in Commercial and Business Banking.

The return on average allocated capital was 16 percent, up from 14 percent, due to higher net income, partially offset by increased capital allocations. For more information on capital allocated to the business segments, see Business Segment Operations on page 24.

Six Months Ended June 30, 2016 Compared to Six Months Ended June 30, 2015

Net income for Global Banking of $2.5 billion declined modestly as higher provision for credit losses and noninterest expense were largely offset by higher revenue.

Revenue increased $458 million to $9.1 billion primarily due to higher net interest income, partially offset by lower noninterest income. Net interest income increased $531 million to $4.9 billion driven by the same factors as described in the three-month discussion above. Noninterest income decreased $73 million to $4.2 billion primarily due to lower investment banking fees and the impact from loans and related loan hedging activities in the fair value option portfolio, partially offset by higher leasing and treasury-related revenues and card income.

The provision for credit losses increased $483 million to $756 million driven by increases in energy-related reserves. For more information on our energy exposure, see Commercial Portfolio Credit Risk Management – Industry Concentrations on page 89. Noninterest expense of $4.3 billion remained relatively unchanged as investments in client-facing professionals in Commercial and Business Banking and higher severance costs were offset by lower revenue-related expenses.

The return on average allocated capital was 14 percent, down from 15 percent, due to increased capital allocations and lower net income.

Table of Contents

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

	Three Months Ended June 30							
	Global Corporate Banking		Global Commercial Banking		Business Banking		Total	
(Dollars in millions)	2016	2015	2016	2015	2016	2015	2016	2015
Revenue								
Business Lending	$1,066	$846	$1,058	$1,000	$93	$89	$2,217	$1,935
Global Transaction Services	724	703	675	635	183	169	1,582	1,507
Total revenue, net of interest expense	$1,790	$1,549	$1,733	$1,635	$276	$258	$3,799	$3,442
Balance Sheet								
Average								
Total loans and leases	$150,019	$131,528	$162,710	$146,725	$17,496	$17,097	$330,225	$295,350
Total deposits	139,844	136,872	124,529	118,745	34,433	32,505	298,806	288,122
	Six Months Ended June 30							
	2016	2015	2016	2015	2016	2015	2016	2015
Revenue								
Business Lending	$2,081	$1,867	$2,061	$1,908	$190	$178	$4,332	$3,953
Global Transaction Services	1,432	1,351	1,368	1,277	367	333	3,167	2,961
Total revenue, net of interest expense	$3,513	$3,218	$3,429	$3,185	$557	$511	$7,499	$6,914
Balance Sheet								
Average								
Total loans and leases	$148,415	$128,824	$161,604	$144,022	$17,346	$16,999	$327,365	$289,845
Total deposits	138,740	135,382	124,925	119,682	34,307	32,219	297,972	287,283
Period end								
Total loans and leases	$149,474	$136,256	$163,655	$148,077	$17,548	$17,163	$330,677	$301,496
Total deposits	141,795	137,462	127,996	121,664	34,787	33,140	304,578	292,266

Business Lending revenue increased $282 million and $379 million for the three and six months ended June 30, 2016 compared to the same periods in 2015 due to the impact of loan growth, as well as the impact from loans and related loan hedging activities in the fair value option portfolio.

Global Transaction Services revenue increased $75 million and $206 million for the three and six months ended June 30, 2016 compared to the same periods in 2015 primarily due to higher net interest income driven by the beneficial impact of an increase in investable assets as a result of higher deposits, and growth in treasury services and card

income.

Average loans and leases increased 12 percent and 13 percent for the three and six months ended June 30, 2016 compared to the same periods in 2015 driven by growth in the commercial and industrial, commercial real estate and leasing portfolios. Average deposits increased four percent for both the three and six months ended June 30, 2016 compared to the same periods in 2015 due to continued portfolio growth with new and existing clients.

Table of Contents

Global Investment Banking

Client teams and product specialists underwrite and distribute debt, equity and loan products, and provide advisory services and tailored risk management solutions. The economics of certain investment banking and underwriting activities are shared primarily between Global Banking and Global Markets under an internal revenue-sharing arrangement. To provide a complete discussion of our consolidated investment banking fees, the following table presents total Corporation investment banking fees and the portion attributable to Global Banking.

Investment Banking Fees

	Three Months Ended June 30				Six Months Ended June 30			
	Global Banking		Total Corporation		Global Banking		Total Corporation	
(Dollars in millions)	2016	2015	2016	2015	2016	2015	2016	2015
Products								
Advisory	$313	$247	$333	$276	$618	$634	$679	$704
Debt issuance	390	371	889	887	655	706	1,558	1,668
Equity issuance	96	159	232	417	162	289	420	762
Gross investment banking fees	799	777	1,454	1,580	1,435	1,629	2,657	3,134
Self-led deals	(14)	(17)	(46)	(54)	(25)	(39)	(96)	(121)
Total investment banking fees	$785	$760	$1,408	$1,526	$1,410	$1,590	$2,561	$3,013

Total Corporation investment banking fees of $1.4 billion, excluding self-led deals, primarily included within Global Banking and Global Markets, decreased eight percent for the three months ended June 30, 2016 compared to the same period in 2015 driven by lower equity issuance fees, partially offset by higher advisory fees. Total Corporation investment banking fees of $2.6 billion decreased 15 percent for the six months ended June 30, 2016 compared to the same period in 2015 driven by lower fees across all products due to a significant decline in overall market fee pools.

Table of Contents

Global Markets

(Dollars in millions)	Three Months Ended June 30 2016	2015	% Change	Six Months Ended June 30 2016	2015	% Change
Net interest income (FTE basis)	$1,093	$988	11 %	$2,273	$1,961	16 %
Noninterest income:						
Investment and brokerage services	525	556	(6)	1,093	1,129	(3)
Investment banking fees	603	718	(16)	1,097	1,348	(19)
Trading account profits	1,872	1,703	10	3,467	3,841	(10)
All other income (loss)	220	(15)	n/m	330	(138)	n/m
Total noninterest income	3,220	2,962	9	5,987	6,180	(3)
Total revenue, net of interest expense (FTE basis)	4,313	3,950	9	8,260	8,141	1
Provision for credit losses	(5)	6	n/m	4	27	(85)
Noninterest expense	2,582	2,748	(6)	5,032	5,909	(15)
Income before income taxes (FTE basis)	1,736	1,196	45	3,224	2,205	46
Income tax expense (FTE basis)	620	410	51	1,138	755	51
Net income	$1,116	$786	42	$2,086	$1,450	44
Return on average allocated capital	12 %	9 %		11 %	8 %	
Efficiency ratio (FTE basis)	59.88	69.56		60.93	72.58	

Balance Sheet

Average	Three Months Ended June 30 2016	2015	% Change	Six Months Ended June 30 2016	2015	% Change
Trading-related assets:						
Trading account securities	$178,047	$197,117	(10)%	$182,989	$195,313	(6)%
Reverse repurchases	92,805	109,293	(15)	89,108	112,221	(21)
Securities borrowed	89,779	81,091	11	85,293	79,909	7
Derivative assets	50,654	54,674	(7)	52,083	55,540	(6)
Total trading-related assets [1]	411,285	442,175	(7)	409,473	442,983	(8)
Total loans and leases	69,620	61,819	13	69,452	59,224	17
Total earning assets [1]	422,815	433,254	(2)	420,506	432,579	(3)
Total assets	580,701	599,985	(3)	580,963	597,801	(3)
Total deposits	34,518	39,051	(12)	35,202	39,169	(10)
Allocated capital	37,000	35,000	6	37,000	35,000	6

Period end	June 30 2016	December 31 2015	% Change
Total trading-related assets [1]	$405,037	$373,926	8 %
Total loans and leases	70,766	73,208	(3)
Total earning assets [1]	416,325	384,046	8
Total assets	577,428	548,790	5
Total deposits	33,506	37,038	(10)

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

n/m = not meaningful

Table of Contents

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, mortgage-backed securities (MBS), commodities and asset-backed securities (ABS). The economics of certain investment banking and underwriting activities are shared primarily between Global Markets and Global Banking under an internal revenue-sharing arrangement. Global Banking originates certain deal-related transactions with our corporate and commercial clients that are executed and distributed by Global Markets. For more information on investment banking fees on a consolidated basis, see page 39.

Three Months Ended June 30, 2016 Compared to Three Months Ended June 30, 2015

Net income for Global Markets increased $330 million to $1.1 billion. Net DVA losses were $164 million compared to losses of $199 million. Excluding net DVA, net income increased $309 million to $1.2 billion primarily driven by higher sales and trading revenue and lower noninterest expense, partially offset by lower equity capital markets investment banking fees. Sales and trading revenue, excluding net DVA, increased $387 million primarily driven by stronger performance globally across rates and currencies and improved credit market conditions. Noninterest expense decreased $166 million to $2.6 billion largely due to lower operating and support costs.

Average earning assets decreased $10.4 billion to $422.8 billion largely driven by a decrease in match book financing activity and trading inventory, partially offset by higher loans.

The return on average allocated capital was 12 percent, up from nine percent, reflecting an increase in net income, partially offset by an increase in allocated capital. For more information on capital allocated to the business segments, see Business Segment Operations on page 24.

Six Months Ended June 30, 2016 Compared to Six Months Ended June 30, 2015

Net income for Global Markets increased $636 million to $2.1 billion. Net DVA losses were $10 million compared to losses of $600 million. Excluding net DVA, net income increased $270 million to $2.1 billion primarily driven by lower noninterest expense, partially offset by lower sales and trading revenue and investment banking fees. Sales and trading revenue, excluding net DVA, decreased $218 million primarily driven by challenging credit market conditions in early 2016 as well as reduced client activity within equities in Asia. Noninterest expense decreased $877 million to $5.0 billion largely due to lower litigation expense and lower revenue-related expenses.

Average earning assets decreased $12.1 billion to $420.5 billion largely driven by a decrease in match book financing activity due to a reduction in client demand and continuing balance sheet optimization efforts across Global Markets. Period-end trading-related assets increased $31.1 billion from December 31, 2015 primarily driven by higher securities borrowed or purchased under agreements to resell due to increased customer financing activity.

The return on average allocated capital was 11 percent, up from eight percent, reflecting an increase in net income, partially offset by an increase in allocated capital.

41

Table of Contents

Sales and Trading Revenue

Sales and trading revenue includes unrealized and realized gains and losses on trading and other assets, net interest income, and fees primarily from commissions on equity securities. Sales and trading revenue is segregated into fixed-income (government debt obligations, investment and non-investment grade corporate debt obligations, commercial MBS, residential mortgage-backed securities (RMBS), collateralized loan obligations (CLOs), interest rate and credit derivative contracts), currencies (interest rate and foreign exchange contracts), commodities (primarily futures, forwards, swaps and options) and equities (equity-linked derivatives and cash equity activity). The table below 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 table below 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. The explanations for period-over-period changes in sales and trading, Fixed-income, currencies and commodities (FICC) and Equities results, as set forth below, are the same whether or not net DVA is included.

Sales and Trading Revenue [1, 2]

	Three Months Ended June 30		Six Months Ended June 30	
(Dollars in millions)	2016	2015	2016	2015
Sales and trading revenue				
Fixed-income, currencies and commodities	$2,458	$1,942	$4,861	$4,295
Equities	1,082	1,176	2,119	2,313
Total sales and trading revenue	$3,540	$3,118	$6,980	$6,608
Sales and trading revenue, excluding net DVA [3]				
Fixed-income, currencies and commodities	$2,618	$2,142	$4,881	$4,887
Equities	1,086	1,175	2,109	2,321
Total sales and trading revenue, excluding net DVA [3]	$3,704	$3,317	$6,990	$7,208

(1) Includes FTE adjustments of $45 million and $89 million for the three and six months ended June 30, 2016 compared to $47 million and $94 million for the same periods in 2015. For more information on sales and trading revenue, see Note 2 – Derivatives to the Consolidated Financial Statements.

(2) Includes Global Banking sales and trading revenue of $121 million and $281 million for the three and six months ended June 30, 2016 compared to $133 million and $208 million for the same periods in 2015.

(3) FICC and Equities sales and trading revenue, excluding net DVA, is a non-GAAP financial measure. FICC net DVA losses were $160 million and $20 million for the three and six months ended June 30, 2016 compared to net DVA losses of $200 million and $592 million for the same periods in 2015. Equities net DVA losses were $4 million and gains were $10 million for the three and six months ended June 30, 2016 compared to net DVA gains of $1 million and losses of $8 million for the same periods in 2015.

Three Months Ended June 30, 2016 Compared to Three Months Ended June 30, 2015

FICC revenue, excluding net DVA, increased $476 million to $2.6 billion, due to stronger performance globally across rates and currencies products, in particular with increased client activity in shorter dated derivatives, and strong financing activity as well as an improved sentiment in local currency trading in Asia and Latin America. A general rally in credit markets improved performance; in particular, secondary loan trading increased and municipal bond activity benefited from strong retail demand. Mortgage results benefited from higher loan balances and credit spreads tightening in reaction to the overall improvement in interest rates. Equities revenue, excluding net DVA, decreased $89 million to $1.1 billion reflecting lower levels of client activity in Asia compared with a strong year-ago period, which benefited from increased market volumes relating to stock market rallies in the region.

Six Months Ended June 30, 2016 Compared to Six Months Ended June 30, 2015

FICC revenue, excluding net DVA, remained relatively unchanged as rates products improved on increased customer flow, offset by reduced performance in G10 currencies, compared to a particularly favorable trading environment in the first half of 2015. Equities revenue, excluding net DVA, decreased $212 million to $2.1 billion primarily driven by the same factors as described in the three-month discussion above, as well as weaker trading performance in the challenging market conditions in early 2016.

Table of Contents

All Other

(Dollars in millions)	Three Months Ended June 30 2016	2015	% Change	Six Months Ended June 30 2016	2015	% Change
Net interest income (FTE basis)	$(788)	$1,131	n/m	$(1,823)	$ 1,237	n/m
Noninterest income:						
Card income	55	65	(15)%	99	132	(25)%
Mortgage banking income	44	639	(93)	286	863	(67)
Gains on sales of debt securities	267	162	65	493	425	16
All other loss	(280)	(328)	(15)	(612)	(661)	(7)
Total noninterest income	86	538	(84)	266	759	(65)
Total revenue, net of interest expense (FTE basis)	(702)	1,669	n/m	(1,557)	1,996	n/m
Provision (benefit) for credit losses	38	112	(66)	(83)	68	n/m
Noninterest expense	1,081	1,002	8	3,463	3,298	5
Income (loss) before income taxes (FTE basis)	(1,821)	555	n/m	(4,937)	(1,370)	n/m
Income tax benefit (FTE basis)	(1,006)	(226)	n/m	(2,325)	(1,153)	102
Net income (loss)	$(815)	$781	n/m	$(2,612)	$ (217)	n/m

Balance Sheet

Average	Three Months Ended June 30 2016	2015	% Change	Six Months Ended June 30 2016	2015	% Change
Total loans and leases	$115,675	$156,886	(26)%	$118,919	$ 162,791	(27)%
Total assets [1]	260,621	300,851	(13)	261,569	300,530	(13)
Total deposits	28,690	26,674	8	27,724	24,824	12

Period end	June 30 2016	December 31 2015	% Change
Total loans and leases	$111,923	$ 126,305	(11)%
Total assets [1]	260,485	271,853	(4)
Total deposits	27,575	25,334	9

(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 $499.1 billion and $496.3 billion for the three and six months ended June 30, 2016 compared to $460.4 billion and $464.6 billion for the same periods in 2015, and $492.0 billion and $489.0 billion at June 30, 2016 and December 31, 2015.

n/m = not meaningful

Table of Contents

All Other consists of ALM activities, equity investments, the international consumer card business, non-core mortgage loans and servicing activities, liquidating businesses, residual expense allocations and other. ALM activities encompass certain residential mortgages, debt securities, interest rate and foreign currency risk management activities, the impact of certain allocation methodologies and accounting hedge ineffectiveness. The results of certain ALM activities are allocated to our business segments. For more information on our ALM activities, see Note 18 – 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 10 – 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 58 and Interest Rate Risk Management for the Banking Book on page 106. During the six months ended June 30, 2016, residential mortgage loans held for ALM activities decreased $5.2 billion to $37.9 billion at June 30, 2016 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 the six months ended June 30, 2016, total non-core loans decreased $8.3 billion to $60.4 billion at June 30, 2016 due largely to payoffs and paydowns, as well as loan sales.

Three Months Ended June 30, 2016 Compared to Three Months Ended June 30, 2015

Net income for All Other decreased $1.6 billion to a net loss of $815 million due to lower net interest income, lower mortgage banking income, lower gains on sales of consumer real estate loans and an increase in noninterest expense, partially offset by higher gains on sales of debt securities and a decrease in the provision for credit losses. Net interest income decreased $1.9 billion primarily driven by negative market-related adjustments on debt securities. Negative market-related adjustments on debt securities were $974 million compared to a positive $669 million in the prior-year period. Gains on the sales of loans, including nonperforming and other delinquent loans, net of hedges, were $21 million compared to gains of $359 million in the prior-year period.

The provision for credit losses decreased $74 million to $38 million primarily driven by continued portfolio improvement within the PCI portfolio.

Noninterest expense increased $79 million to $1.1 billion driven by higher litigation expense. The income tax benefit was $1.0 billion compared to a benefit of $226 million, driven by the change in the pretax loss. In addition, both periods included income tax benefit adjustments to eliminate the FTE treatment in noninterest income of certain tax credits recorded in Global Banking.

Six Months Ended June 30, 2016 Compared to Six Months Ended June 30, 2015

The net loss for All Other increased $2.4 billion to $2.6 billion due to lower net interest income, lower mortgage banking income, lower gains on sales of consumer real estate loans and an increase in noninterest expense, partially offset by an improvement in the provision for credit losses. Net interest income decreased $3.1 billion primarily driven by negative market-related adjustments on debt securities. Negative market-related adjustments on debt securities were $2.2 billion compared to a positive $185 million in the prior-year period. Gains on the sales of loans, including nonperforming and other delinquent loans, net of hedges, were $178 million compared to gains of $576 million in the prior-year period.

The provision for credit losses improved $151 million to a benefit of $83 million primarily driven by continued portfolio improvement within the PCI portfolio.

Noninterest expense increased $165 million to $3.5 billion driven by the same factors as described in the three-month discussion above. The income tax benefit was $2.3 billion compared to a benefit of $1.2 billion, driven by the change in the pretax loss. In addition, both periods included income tax benefit adjustments to eliminate the FTE treatment in noninterest income of certain tax credits recorded in Global Banking.

Table of Contents

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. For more information on obligations and commitments, see Note 10 – Commitments and Contingencies to the Consolidated Financial Statements, Off-Balance Sheet Arrangements and Contractual Obligations on page 46 of the MD&A of the Corporation's 2015 Annual Report on Form 10-K, as well as Note 11 – Long-term Debt and Note 12 – Commitments and Contingencies to the Consolidated Financial Statements of the Corporation's 2015 Annual Report on Form 10-K.

Representations and Warranties

We securitize first-lien residential mortgage loans generally in the form of RMBS guaranteed by the government-sponsored enterprises (GSEs), which include Freddie Mac (FHLMC) and Fannie Mae (FNMA), or by the Government National Mortgage Association (GNMA) in the case of Federal Housing Administration (FHA)-insured, U.S. Department of Veterans Affairs-guaranteed and Rural Housing Service-guaranteed mortgage loans, and sell pools of first-lien residential mortgage loans in the form of whole loans. In addition, in prior years, legacy companies and certain subsidiaries sold pools of first-lien residential mortgage loans and home equity loans as private-label securitizations or in the form of whole loans. In connection with these transactions, we or certain of our subsidiaries or legacy companies made various representations and warranties. Breaches of these representations and warranties have resulted in and may continue to result in the requirement to repurchase mortgage loans or to otherwise make whole or provide other remedies to investors, guarantors, insurers or other parties (collectively, repurchases).

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 Bank of New York Mellon (BNY Mellon), as trustee for certain securitization trusts.

For more information on accounting for and other information related to representations and warranties, repurchase claims and related exposures, see Note 7 – Representations and Warranties Obligations and Corporate Guarantees to the Consolidated Financial Statements, Off-balance Sheet Arrangements and Contractual Obligations in the MD&A of the Corporation's 2015 Annual Report on Form 10-K, Note 7 – Representations and Warranties Obligations and Corporate Guarantees to the Consolidated Financial Statements of the Corporation's 2015 Annual Report on Form 10-K and Item 1A. Risk Factors of the Corporation's 2015 Annual Report on Form 10-K.

Unresolved Repurchase Claims

Unresolved representations and warranties repurchase claims represent the notional amount of repurchase claims made by counterparties, typically the outstanding principal balance or the unpaid principal balance at the time of default. In the case of first-lien mortgages, the claim amount is often significantly greater than the expected loss amount due to the benefit of collateral and, in some cases, mortgage insurance (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. We do not include duplicate claims in the amounts disclosed.

At June 30, 2016, we had $18.3 billion of unresolved repurchase claims, predominantly related to subprime and pay option first-lien loans, and home equity loans, compared to $18.4 billion at December 31, 2015. The notional amount

of unresolved repurchase claims at both June 30, 2016 and December 31, 2015 included $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. At both June 30, 2016 and December 31, 2015, for loans originated from 2004 through 2008, 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. At June 30, 2016 and December 31, 2015, the notional amount of unresolved repurchase claims submitted by the GSEs for loans originated prior to 2009 was $7 million and $14 million. During the six months ended June 30, 2016, we continued to have 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 more information on unresolved repurchase claims, see Off-Balance Sheet Arrangements and Contractual Obligations – Unresolved Repurchase Claims on page 47 of the MD&A of the Corporation's 2015 Annual Report on Form 10-K.

Table of Contents

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. At June 30, 2016 and December 31, 2015, the liability for representations and warranties was $2.7 billion and $11.3 billion. The reduction in the liability was primarily the result of an $8.5 billion cash payment in February 2016 to BNY Mellon as part of the settlement with BNY Mellon. For the three and six months ended June 30, 2016, the representations and warranties provision was $17 million and $59 million compared to a benefit of $205 million and $121 million for the same periods in 2015.

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 settlement with BNY Mellon, 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 New York Court of Appeals' ACE Securities Corp. v. DB Structured Products, Inc. (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. For more information on the settlement with BNY Mellon, and the ACE decision and its impact on unresolved repurchase claims, see Note 7 – Representations and Warranties Obligations and Corporate Guarantees to the Consolidated Financial Statements of the Corporation's 2015 Annual Report on Form 10-K.

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 June 30, 2016. 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 Note 7 – Representations and Warranties Obligations and Corporate Guarantees to the Consolidated Financial Statements and Item 1A. Risk Factors of the Corporation's 2015 Annual Report on Form 10-K 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 104 of the MD&A of the Corporation's 2015 Annual Report on Form 10-K.

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 for certain litigation matters and on regulatory investigations, see Note 10 – Commitments and Contingencies to the Consolidated Financial Statements.

Table of Contents

Managing Risk

Risk is inherent in all our business activities. The seven key types of risk faced by the Corporation are strategic, credit, market, liquidity, compliance, operational and reputational risks. 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 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.

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 more information on our risk management activities, including our Risk Framework, see pages 49 through 100 of the MD&A of the Corporation's 2015 Annual Report on Form 10-K. For information on our strategic, compliance, operational and reputational risk management, see page 53 and pages 99 through 100 of the MD&A of the Corporation's 2015 Annual Report on Form 10-K.

Table of Contents

Capital Management

The Corporation manages its capital position to ensure capital is more than adequate to support its business activities and to maintain capital, risk and risk appetite commensurate with one another. Additionally, we seek to maintain safety and soundness at all times, even under adverse scenarios, take advantage of organic growth opportunities, ensure obligations to creditors and counterparties are met, 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 adequately captured in our forecasts or stress tests. We assess the potential capital impacts of proposed changes to regulatory capital requirements. Management evaluates ICAAP results and provides documented quarterly assessments of the adequacy of our capital guidelines and capital position to the Board or its committees.

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 24.

CCAR and Capital Planning

The Federal Reserve requires BHCs to submit a capital plan and requests for capital actions on an annual basis, consistent with the rules governing the CCAR capital plan.

In April 2016, we submitted our 2016 CCAR capital plan and related supervisory stress tests. The 2016 CCAR capital plan included a request to repurchase $5.0 billion of common stock over four quarters beginning in the third quarter of 2016, and to increase the quarterly common stock dividend from $0.05 per share to $0.075 per share. On June 29, 2016, following the Federal Reserve's non-objection to our 2016 CCAR capital plan, the Board authorized the common stock repurchase beginning July 1, 2016. The common stock repurchase authorization includes both common stock and warrants, and is net of shares awarded under the Corporation's equity-based compensation plans. The timing and amount of common stock repurchases will be subject to various factors, including the Corporation's capital position, liquidity, financial performance and alternative uses of capital, stock trading price, and general market conditions, and may be suspended at any time. The common stock repurchases may be effected through open market purchases or privately negotiated transactions, including repurchase plans that satisfy the conditions of Rule 10b5-1 of the Securities Exchange Act of 1934. As a "well-capitalized" BHC, we may notify the Federal Reserve of our intention to make additional capital distributions not to exceed one percent of Tier 1 capital and which were not contemplated in our capital plan, subject to the Federal Reserve's non-objection.

As of June 30, 2016, in connection with our 2015 CCAR capital plan that began in the second quarter of 2015, we repurchased $4.0 billion of common stock. During the six months ended June 30, 2016, we also repurchased $800 million of additional common stock outside of the scope of the 2015 CCAR capital plan to offset share count dilution resulting from equity incentive compensation awarded to retirement-eligible employees.

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.

Table of Contents

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 Prompt Corrective Action (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, 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. For additional information, see Capital Management – Standardized Approach and Capital Management – Advanced Approaches on page 50.

Regulatory Capital Composition

Basel 3 requires certain deductions from and adjustments to capital, which are primarily those related to goodwill, deferred tax assets, intangibles, MSRs and defined benefit pension fund 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 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 15 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 15
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: 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	20%	40%	60%	80%	100%
Percent of total amount used to adjust Common equity tier 1 capital includes [1]: Net unrealized gains (losses) on debt and certain marketable equity securities recorded in accumulated OCI; employee benefit plan adjustments recorded in accumulated OCI	80%	60%	40%	20%	0%
Tier 1 capital					
Percent of total amount deducted from Tier 1 capital includes: 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	80%	60%	40%	20%	0%

(1) Represents the phase-out percentage of the exclusion by year (e.g., 60 percent of net unrealized gains (losses) on debt and certain marketable equity securities recorded in accumulated OCI will be included in 2016).

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 June 30, 2016, our qualifying Trust Securities were $3.4 billion, approximately 22 bps of the Total 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 June 30, 2016.

Table of Contents

On January 1, 2016, we became subject to a capital conservation buffer, a countercyclical capital buffer and a global systemically important bank (G-SIB) surcharge which will be phased in over a three-year period ending January 1, 2019. Once fully phased in, the Corporation's risk-based capital ratio requirements will include a capital conservation buffer greater than 2.5 percent, plus any applicable countercyclical capital buffer and 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. Under the phase-in provisions, in 2016 we must maintain a capital conservation buffer greater than 0.625 percent plus a G-SIB surcharge of 0.75 percent. The countercyclical capital buffer is currently set at zero. U.S. banking regulators must jointly decide on any increase in the countercyclical capital buffer, after which time institutions will have up to one year for implementation. The G-SIB surcharge is calculated on an annual basis and determined by using the higher of two scores based on distinct systemic indicator-based methodologies. Method 1 is consistent with the approach prescribed by the Basel Committee on Banking Supervision (Basel Committee) and uses indicators for size, complexity, cross-jurisdictional activity, inter-connectedness and substitutability/financial institution infrastructure to determine a score relative to the global banking industry. 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. Once fully phased in, we estimate that our G-SIB surcharge will be 3.0 percent under method 2 and 1.5 percent under method 1. The G-SIB surcharge may differ from this estimate over time.

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. 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 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.

Table of Contents

Capital Composition and Ratios

Table 16 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 June 30, 2016 and December 31, 2015. Fully phased-in estimates are non-GAAP financial measures. For reconciliations to GAAP financial measures, see Table 19. As of June 30, 2016 and December 31, 2015, the Corporation meets the definition of "well capitalized" under current regulatory requirements.

Table 16
Bank of America Corporation Regulatory Capital under Basel 3 [1]

	June 30, 2016					
	Transition			Fully Phased-in		
(Dollars in millions)	Standardized Approach	Advanced Approaches	Regulatory Minimum [2, 3]	Standardized Approach	Advanced Approaches [4]	Regulatory Minimum [5]
Risk-based capital metrics:						
Common equity tier 1 capital	$166,173	$166,173		$161,831	$161,831	
Tier 1 capital	187,209	187,209		186,633	186,633	
Total capital [6]	226,949	217,828		222,928	213,807	
Risk-weighted assets (in billions)	1,396	1,562		1,414	1,542	
Common equity tier 1 capital ratio	11.9 %	10.6 %	5.875 %	11.4 %	10.5 %	10.0 %
Tier 1 capital ratio	13.4	12.0	7.375	13.2	12.1	11.5
Total capital ratio	16.3	13.9	9.375	15.8	13.9	13.5
Leverage-based metrics:						
Adjusted quarterly average assets (in billions) [7]	$2,109	$2,109		$2,110	$2,110	
Tier 1 leverage ratio	8.9 %	8.9 %	4.0	8.8 %	8.8 %	4.0
SLR leverage exposure (in billions)					$2,694	
SLR					6.9 %	5.0
	December 31, 2015					
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 %	10.8 %	9.8 %	10.0 %
Tier 1 capital ratio	12.9	11.3	6.0	12.3	11.2	11.5
Total capital ratio	15.7	13.2	8.0	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	8.4 %	8.4 %	4.0
SLR leverage exposure (in billions)					$2,727	
SLR					6.4 %	5.0

(1) As an Advanced approaches institution, 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 June 30, 2016 and December 31, 2015.

(2) The June 30, 2016 amount includes a transition capital conservation buffer of 0.625 percent and a transition G-SIB surcharge of 0.75 percent. The 2016 countercyclical capital buffer is zero.

(3) To be "well capitalized" under the current U.S. banking regulatory agency definitions, we must maintain a higher Total capital ratio of 10 percent.

(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 June 30, 2016, we did not have regulatory approval for the IMM model.

(5) Fully phased-in regulatory capital 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. The fully phased-in SLR minimum assumes a leverage buffer of 2.0 percent and is applicable on January 1, 2018.

(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 June 30, 2016 and December 31, 2015.

Table of Contents

Common equity tier 1 capital under Basel 3 Advanced – Transition was $166.2 billion at June 30, 2016, an increase of $3.1 billion compared to December 31, 2015 driven by earnings and an increase in accumulated OCI, partially offset by dividends, common stock repurchases and the impact of certain transition provisions under the Basel 3 rules. For more information on Basel 3 transition provisions, see Table 15. During the six months ended June 30, 2016, Total capital increased $6.9 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.

Risk-weighted assets decreased $41 billion during the six months ended June 30, 2016 to $1,562 billion primarily due to lower market risk, lower exposures and improved credit quality on retail products.

Table 17 presents the capital composition as measured under Basel 3 – Transition at June 30, 2016 and December 31, 2015.

Table 17
Capital Composition under Basel 3 – Transition[1]

(Dollars in millions)	June 30 2016	December 31 2015
Total common shareholders' equity	$241,849	$ 233,932
Goodwill	(69,194)	(69,215)
Deferred tax assets arising from net operating loss and tax credit carryforwards	(5,245)	(3,434)
Unamortized net periodic benefit costs recorded in accumulated OCI, net-of-tax	1,173	1,774
Net unrealized (gains) losses on debt and equity securities and net (gains) losses on derivatives recorded in accumulated OCI, net-of-tax	(605)	1,220
Intangibles, other than mortgage servicing rights and goodwill	(1,359)	(1,039)
DVA related to liabilities and derivatives	157	204
Other	(603)	(416)
Common equity tier 1 capital	166,173	163,026
Qualifying preferred stock, net of issuance cost	25,220	22,273
Deferred tax assets arising from net operating loss and tax credit carryforwards	(3,496)	(5,151)
Trust preferred securities	—	1,430
Defined benefit pension fund assets	(378)	(568)
DVA related to liabilities and derivatives under transition	104	307
Other	(414)	(539)
Total Tier 1 capital	187,209	180,778
Long-term debt qualifying as Tier 2 capital	23,757	22,579
Eligible credit reserves included in Tier 2 capital	3,466	3,116
Nonqualifying capital instruments subject to phase out from Tier 2 capital	3,408	4,448
Other	(12)	(9)
Total Basel 3 capital	$217,828	$ 210,912

(1) As an Advanced approaches institution, 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 June 30, 2016 and December 31, 2015.

Table of Contents

Table 18 presents the components of our risk-weighted assets as measured under Basel 3 – Transition at June 30, 2016 and December 31, 2015.

Table 18
Risk-weighted assets under Basel 3 – Transition

(Dollars in billions)	June 30, 2016		December 31, 2015	
	Standardized Approach	Advanced Approaches	Standardized Approach	Advanced Approaches
Credit risk	$1,328	$ 920	$1,314	$ 940
Market risk	68	65	89	86
Operational risk	n/a	500	n/a	500
Risks related to CVA	n/a	77	n/a	76
Total risk-weighted assets	$1,396	$ 1,562	$1,403	$ 1,602

n/a = not applicable

Table of Contents

Table 19 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 June 30, 2016 and December 31, 2015.

Table 19
Regulatory Capital Reconciliations between Basel 3 Transition to Fully Phased-in [1]

(Dollars in millions)	June 30 2016	December 31 2015
Common equity tier 1 capital (transition)	$166,173	$163,026
Deferred tax assets arising from net operating loss and tax credit carryforwards phased in during transition	(3,496)	(5,151)
Accumulated OCI phased in during transition	359	(1,917)
Intangibles phased in during transition	(907)	(1,559)
Defined benefit pension fund assets phased in during transition	(378)	(568)
DVA related to liabilities and derivatives phased in during transition	104	307
Other adjustments and deductions phased in during transition	(24)	(54)
Common equity tier 1 capital (fully phased-in)	161,831	154,084
Additional Tier 1 capital (transition)	21,036	17,752
Deferred tax assets arising from net operating loss and tax credit carryforwards phased out during transition	3,496	5,151
Trust preferred securities phased out during transition	—	(1,430)
Defined benefit pension fund assets phased out during transition	378	568
DVA related to liabilities and derivatives phased out during transition	(104)	(307)
Other transition adjustments to additional Tier 1 capital	(4)	(4)
Additional Tier 1 capital (fully phased-in)	24,802	21,730
Tier 1 capital (fully phased-in)	186,633	175,814
Tier 2 capital (transition)	30,619	30,134
Nonqualifying capital instruments phased out during transition	(3,408)	(4,448)
Other transition adjustments to Tier 2 capital	9,084	9,667
Tier 2 capital (fully phased-in)	36,295	35,353
Basel 3 Standardized approach Total capital (fully phased-in)	222,928	211,167
Change in Tier 2 qualifying allowance for credit losses	(9,121)	(9,764)
Basel 3 Advanced approaches Total capital (fully phased-in)	$213,807	$201,403
Risk-weighted assets – As reported to Basel 3 (fully phased-in)		
Basel 3 Standardized approach risk-weighted assets as reported	$1,396,277	$1,403,293
Changes in risk-weighted assets from reported to fully phased-in	17,689	24,089
Basel 3 Standardized approach risk-weighted assets (fully phased-in)	$1,413,966	$1,427,382
Basel 3 Advanced approaches risk-weighted assets as reported	$1,561,567	$1,602,373
Changes in risk-weighted assets from reported to fully phased-in	(19,600)	(27,690)
Basel 3 Advanced approaches risk-weighted assets (fully phased-in) [2]	$1,541,967	$1,574,683

(1) As an Advanced approaches institution, 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 June 30, 2016 and December 31, 2015.

(2) Basel 3 fully phased-in Advanced approaches estimates assume approval by U.S. banking regulators of our internal analytical models, including approval of the IMM. As of June 30, 2016, we did not have regulatory approval for the IMM model.

54

Table of Contents

Bank of America, N.A. Regulatory Capital

Table 20 presents transition regulatory capital information for BANA in accordance with Basel 3 Standardized and Advanced approaches as measured at June 30, 2016 and December 31, 2015.

Table 20
Bank of America, N.A. Regulatory Capital under Basel 3

	June 30, 2016					
	Standardized Approach			Advanced Approaches		
(Dollars in millions)	Ratio	Amount	Minimum Required [1]	Ratio	Amount	Minimum Required [1]
Common equity tier 1 capital	13.0%	$151,078	6.5%	14.3%	$151,078	6.5%
Tier 1 capital	13.0	151,078	8.0	14.3	151,078	8.0
Total capital	14.2	165,264	10.0	14.8	156,626	10.0
Tier 1 leverage	9.5	151,078	5.0	9.5	151,078	5.0
	December 31, 2015					
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

[1] Percent required to meet guidelines to be considered "well capitalized" under the PCA framework.

Regulatory Developments

Minimum Total Loss-Absorbing Capacity

On October 30, 2015, the Federal Reserve issued a notice of proposed rulemaking (NPR) 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 approach for operational risk, revisions to the CVA risk framework and constraints on the use of internal models. The Basel Committee has also finalized a revised standardized model for counterparty credit risk, revisions to the securitization framework and its fundamental review of the trading book, which updates both modeled and standardized approaches for market risk measurement. These revisions are to 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, both at the input parameter and aggregate risk-weighted asset level. 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.

Single-Counterparty Credit Limits

On March 4, 2016, the Federal Reserve issued an NPR to establish Single-Counterparty Credit Limits (SCCL) for large U.S. BHCs. The SCCL rule is designed to complement and serve as a backstop to risk-based capital requirements to ensure that the maximum possible loss that a bank could incur due to a single counterparty's default would not endanger the bank's survival. Under the proposal, U.S. BHCs must calculate SCCL by dividing the net aggregate credit exposure to a given counterparty by a bank's eligible Tier 1 capital base, ensuring that exposure to G-SIBs and other nonbank systemically important financial institutions do not breach 15 percent and exposures to other counterparties do not breach 25 percent.

Table of Contents

Broker-dealer Regulatory Capital and Securities Regulation

The Corporation's principal U.S. broker-dealer subsidiaries are Merrill Lynch, Pierce, Fenner & Smith, Inc. (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 June 30, 2016, 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 $3.1 billion exceeded the minimum requirement of $534 million by $2.6 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 Securities and Exchange Commission in the event its tentative net capital is less than $5.0 billion. At June 30, 2016, 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 June 30, 2016, MLI's capital resources were $35.0 billion which exceeded the minimum requirement of $16.4 billion.

Table of Contents

Common and Preferred Stock Dividends

For a summary of our declared quarterly cash dividends on common stock during the second quarter of 2016 and through August 1, 2016, see Note 11 – Shareholders' Equity to the Consolidated Financial Statements.

Table 21 is a summary of our cash dividend declarations on preferred stock during the second quarter of 2016 and through August 1, 2016. During the second quarter of 2016, we declared $361 million of cash dividends on preferred stock. For more information on preferred stock, see Note 11 – Shareholders' Equity to the Consolidated Financial Statements.

Table 21
Preferred Stock Cash Dividend Summary

Preferred Stock	Outstanding Notional Amount (in millions)	Declaration Date	Record Date	Payment Date	Per Annum Dividend Rate	Dividend Per Share
Series B [1]	$ 1	April 27, 2016	July 11, 2016	July 25, 2016	7.00 %	$1.75
		July 27, 2016	October 11, 2016	October 25, 2016	7.00	1.75
Series D [2]	$ 654	April 15, 2016	May 31, 2016	June 14, 2016	6.204 %	$0.38775
		July 7, 2016	August 31, 2016	September 14, 2016	6.204	0.38775
Series E [2]	$ 317	April 15, 2016	April 29, 2016	May 16, 2016	Floating	$0.25000
		July 7, 2016	July 29, 2016	August 15, 2016	Floating	0.25556
Series F	$ 141	April 15, 2016	May 31, 2016	June 15, 2016	Floating	$1,022.22222
		July 7, 2016	August 31, 2016	September 15, 2016	Floating	1,022.22222
Series G	$ 493	April 15, 2016	May 31, 2016	June 15, 2016	Adjustable	$1,022.22222
		July 7, 2016	August 31, 2016	September 15, 2016	Adjustable	1,022.22222
Series I [2]	$ 365	April 15, 2016	June 15, 2016	July 1, 2016	6.625 %	$0.4140625
		July 7, 2016	September 15, 2016	October 3, 2016	6.625	0.4140625
Series K [3, 4]	$ 1,544	July 7, 2016	July 15, 2016	August 1, 2016	Fixed-to-floating	$40.00
Series L	$ 3,080	June 17, 2016	July 1, 2016	August 1, 2016	7.25 %	$18.125
Series M [3, 4]	$ 1,310	April 15, 2016	April 30, 2016	May 16, 2016	Fixed-to-floating	$40.625
Series T	$ 5,000	April 27, 2016	June 25, 2016	July 11, 2016	6.00 %	$1,500.00
		July 27, 2016	September 25, 2016	October 11, 2016	6.00	1,500.00
Series U [3, 4]	$ 1,000	April 15, 2016	May 15, 2016	June 1, 2016	Fixed-to-floating	$26.00
Series V [3, 4]	$ 1,500	April 15, 2016	June 1, 2016	June 17, 2016	Fixed-to-floating	$25.625
Series W [2]	$ 1,100	April 15, 2016	May 15, 2016	June 9, 2016	6.625 %	$0.4140625
		July 7, 2016	August 15, 2016	September 9, 2016	6.625	0.4140625
Series X [3, 4]	$ 2,000	July 7, 2016	August 15, 2016	September 6, 2016	Fixed-to-floating	$31.25
Series Y [2]	$ 1,100	June 17, 2016	July 1, 2016	July 27, 2016	6.50 %	$0.40625
Series AA [3, 4]	$ 1,900	July 7, 2016	September 1, 2016	September 19, 2016	Fixed-to-floating	$30.50
Series CC [2]	$ 1,100	June 17, 2016	July 1, 2016	July 29, 2016	6.20 %	$0.3875
	$ 1,000	July 7, 2016	August 15, 2016		Fixed-to-floating	$31.50

Series DD [3, 4]				September 12, 2016		
Series EE [2]	$ 900	June 17, 2016	July 1, 2016	July 25, 2016	6.00 %	$0.375

(1) Dividends are cumulative.

(2) Dividends per depositary share, each representing a 1/1,000th interest in a share of preferred stock.

(3) Initially pays dividends semi-annually.

(4) Dividends per depositary share, each representing a 1/25th interest in a share of preferred stock.

Table of Contents

Table 21
Preferred Stock Cash Dividend Summary (continued)

Preferred Stock	Outstanding Notional Amount (in millions)	Declaration Date	Record Date	Payment Date	Per Annum Dividend Rate	Dividend Per Share
Series 1 [5]	$ 98	April 15, 2016	May 15, 2016	May 31, 2016	Floating	$0.18750
		July 7, 2016	August 15, 2016	August 30, 2016	Floating	0.18750
Series 2 [5]	$ 299	April 15, 2016	May 15, 2016	May 31, 2016	Floating	$0.18750
		July 7, 2016	August 15, 2016	August 30, 2016	Floating	0.19167
Series 3 [5]	$ 653	April 15, 2016	May 15, 2016	May 31, 2016	6.375 %	$0.3984375
		July 7, 2016	August 15, 2016	August 29, 2016	6.375	0.3984375
Series 4 [5]	$ 210	April 15, 2016	May 15, 2016	May 31, 2016	Floating	$0.25000
		July 7, 2016	August 15, 2016	August 30, 2016	Floating	0.25556
Series 5 [5]	$ 422	April 15, 2016	May 1, 2016	May 23, 2016	Floating	$0.25000
		July 7, 2016	August 1, 2016	August 22, 2016	Floating	0.25556

[5] Dividends per depositary share, each representing a 1/1,200th interest in a share of preferred stock.

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 businesses and customers with the appropriate funding sources 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 liquidity and access to diverse funding sources, including our stable deposit base, and seek to align liquidity-related incentives and risks.

We define liquidity as readily available assets, limited to cash and high-quality, liquid, unencumbered securities that we can use to meet our contractual and contingent financial obligations as those obligations arise. We manage our liquidity position through line of business and asset-liability management activities, as well as through our legal entity funding strategy, on both a forward and current (including intraday) basis under both expected and stressed conditions. We believe that a centralized approach to funding and liquidity management 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. For more information regarding global funding and liquidity risk management, see Liquidity Risk – Funding and Liquidity Risk Management on page 60 of the MD&A of the Corporation's 2015 Annual Report on Form 10-K.

Global Excess Liquidity Sources and Other Unencumbered Assets

We maintain 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 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. Liquidity Coverage Ratio (LCR) rules. For more information on the final rules, see Liquidity Risk – Basel 3 Liquidity Standards on page 60.

Table of Contents

Our GELS were $515 billion and $504 billion at June 30, 2016 and December 31, 2015 and were as shown in Table 22.

Table 22
Global Excess Liquidity Sources

(Dollars in billions)	June 30 2016	December 31 2015	Average for Three Months Ended June 30, 2016
Parent company	$ 85	$ 96	$ 88
Bank subsidiaries	386	361	384
Other regulated entities	44	47	46
Total Global Excess Liquidity Sources	$ 515	$ 504	$ 518

As shown in Table 22, parent company GELS totaled $85 billion and $96 billion at June 30, 2016 and December 31, 2015. The decrease in parent company liquidity was primarily due to the BNY Mellon settlement payment in the first quarter of 2016. Typically, parent company liquidity is in the form of cash deposited with BANA.

GELS available to our bank subsidiaries totaled $386 billion and $361 billion at June 30, 2016 and December 31, 2015. The increase in bank subsidiaries' liquidity was primarily due to deposit inflows. 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 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 $282 billion and $252 billion at June 30, 2016 and December 31, 2015. 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 $44 billion and $47 billion at June 30, 2016 and December 31, 2015. Our other regulated entities also held 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 23 presents the composition of GELS at June 30, 2016 and December 31, 2015.

Table 23
Global Excess Liquidity Sources Composition

(Dollars in billions)	June 30 2016	December 31 2015
Cash on deposit	$ 133	$ 119
U.S. Treasury securities	36	38
U.S. agency securities and mortgage-backed securities	329	327

Non-U.S. government and supranational securities	17	20
Total Global Excess Liquidity Sources	$ 515	$ 504

Time-to-required Funding and Stress Modeling

We use a variety of metrics to determine the appropriate amounts of liquidity to maintain at the parent company, our bank subsidiaries and other regulated entities. One metric we use to evaluate the appropriate level of liquidity at the parent company is "time-to-required funding." This debt coverage measure indicates the number of months 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 35 months at June 30, 2016.

We also utilize liquidity stress analysis to assist us in determining the appropriate amounts of 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

Table of Contents

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

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

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. 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 June 30, 2016, 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. In April 2016, U.S. banking regulators issued a proposal for an NSFR requirement applicable to U.S. financial institutions. The U.S. NSFR would apply to the Corporation on a consolidated basis and to our insured depository institutions beginning on January 1, 2018. 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 $1.22 trillion and $1.20 trillion at June 30, 2016 and December 31, 2015. Deposits are primarily generated by our Consumer Banking, GWIM and Global Banking segments. These deposits are diversified by clients, product type and geography, and the majority of our U.S. deposits are insured by the FDIC. We consider a substantial portion of our deposits to be a stable, low-cost and consistent source of funding. We believe this deposit funding is generally less sensitive to interest rate changes, market volatility or changes in our credit ratings than wholesale funding sources. Our lending activities may also be financed through secured borrowings, including credit card securitizations and securitizations with GSEs, the FHA and private-label investors, as well as FHLB loans.

Table of Contents

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 9 – 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 the three and six months ended June 30, 2016, we issued $9.6 billion and $15.9 billion of long-term debt, consisting of $7.3 billion and $11.6 billion for Bank of America Corporation, $885 million and $931 million for Bank of America, N.A. and $1.4 billion and $3.4 billion of other debt.

Table 24 presents the carrying value of aggregate annual contractual maturities of long-term debt as of June 30, 2016. During the six months ended June 30, 2016, we had total long-term debt maturities and purchases of $27.9 billion consisting of $13.9 billion for Bank of America Corporation, $8.5 billion for Bank of America, N.A. and $5.5 billion of other debt.

Table 24
Long-term Debt By Maturity

(Dollars in millions)	Remainder of 2016	2017	2018	2019	2020	Thereafter	Total
Bank of America Corporation							
Senior notes	$ 9,012	$18,375	$20,150	$16,961	$11,630	$ 48,945	$125,073
Senior structured notes	1,682	3,460	2,697	1,407	975	7,797	18,018
Subordinated notes	1,774	5,026	2,753	1,494	3	21,605	32,655
Junior subordinated notes	—	—	—	—	—	5,850	5,850
Total Bank of America Corporation	12,468	26,861	25,600	19,862	12,608	84,197	181,596
Bank of America, N.A.							
Senior notes	2,499	3,650	5,801	—	—	19	11,969
Subordinated notes	—	3,381	—	1	—	1,833	5,215
Advances from Federal Home Loan Banks	501	9	9	14	12	121	666
Securitizations and other Bank VIEs [1]	45	3,544	2,300	3,200	—	131	9,220
Other	2	2,708	118	96	18	127	3,069
Total Bank of America, N.A.	3,047	13,292	8,228	3,311	30	2,231	30,139
Other debt							
Structured liabilities	1,418	3,446	1,016	1,101	1,034	7,569	15,584
Nonbank VIEs [1]	457	244	30	16	—	1,496	2,243
Other	—	1	—	—	—	54	55
Total other debt	1,875	3,691	1,046	1,117	1,034	9,119	17,882

Total long-term debt	$ 17,390	$43,844	$34,874	$24,290	$13,672	$ 95,547	$229,617

(1) Represents the total long-term debt included in the liabilities of consolidated variable interest entities (VIEs) on the Consolidated Balance Sheet.

Table of Contents

Table 25 presents our long-term debt by major currency at June 30, 2016 and December 31, 2015.

Table 25
Long-term Debt By Major Currency

(Dollars in millions)	June 30 2016	December 31 2015
U.S. Dollar	$185,444	$ 190,381
Euro	27,274	29,797
British Pound	6,716	7,080
Japanese Yen	4,325	3,099
Australian Dollar	2,443	2,534
Canadian Dollar	1,121	1,428
Swiss Franc	623	872
Other	1,671	1,573
Total long-term debt	$229,617	$ 236,764

Total long-term debt decreased $7.1 billion, or three percent, during the six months ended June 30, 2016 primarily due to maturities outpacing issuances, partially offset by changes in basis adjustments on debt in fair value hedge relationships and the impact of revaluation of non-U.S. Dollar debt. These impacts were substantially offset through derivative hedge transactions. 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 of the Corporation's 2015 Annual Report on Form 10-K and for more information regarding funding and liquidity risk management, see page 60 of the MD&A of the Corporation's 2015 Annual Report on Form 10-K.

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 the Banking Book on page 106.

We may also issue unsecured debt in the form of structured notes for client purposes. During the three and six months ended June 30, 2016, we issued $1.5 billion and $3.4 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 note obligations for cash or other securities prior to maturity under certain circumstances, which we consider for liquidity planning purposes. We believe, however, that a portion of such borrowings will remain outstanding beyond the earliest put or redemption date.

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

Contingency Planning

We maintain contingency funding plans that outline our potential responses to liquidity stress events at various levels of severity. These policies and plans are based on stress scenarios and include potential funding strategies and

communication and notification procedures that we would implement in the event we experienced stressed liquidity conditions. We periodically review and test the contingency funding plans to validate efficacy and assess readiness.

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

Table of Contents

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.

Table 26 presents the Corporation's current long-term/short-term senior debt ratings and outlooks expressed by the rating agencies. These ratings have not changed from those disclosed in the Corporation's 2015 Annual Report on Form 10-K. For more information on credit ratings, see Liquidity Risk – Credit Ratings on page 63 of the MD&A of the Corporation's 2015 Annual Report on Form 10-K.

Table 26
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, Inc.	NR	NR	NR	A	A-1	CreditWatch Positive	A+	F1	Stable
Merrill Lynch	NR	NR	NR	A	A-1	CreditWatch Positive	A	F1	Positive

International
(1) Standard & Poor's Ratings Services 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 59.

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 herein and Item 1A. Risk Factors of the Corporation's 2015 Annual Report on Form 10-K.

Table of Contents

Credit Risk Management

Overall credit quality remained strong in the second quarter of 2016. Consumer portfolios continued to improve driven by lower U.S. unemployment and improving home prices. Overall, commercial portfolios, outside of the energy sector, remained strong. Additionally, our proactive credit risk management activities positively impacted our credit portfolio as nonperforming loans and leases and delinquencies continued to improve. For additional information, see Executive Summary – Second Quarter 2016 Economic and Business Environment on page 4.

We proactively 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 93 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, and we continue to proactively monitor energy and energy-related exposures as well as any ancillary impacts on our customers and clients. For more information on our exposures and related risks in the energy sector, see Commercial Portfolio Credit Risk Management – Industry Concentrations on page 89 as well as Table 51.

For more information on our credit risk management activities, see Consumer Portfolio Credit Risk Management on page 65, Commercial Portfolio Credit Risk Management on page 81, Non-U.S. Portfolio on page 93, Provision for Credit Losses on page 95, Allowance for Credit Losses on page 95, and Note 4 – Outstanding Loans and Leases and Note 5 – Allowance for Credit Losses to the Consolidated Financial Statements.

Table of Contents

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.

Consumer Credit Portfolio

Improvement in the U.S. unemployment rate and home prices continued during the three and six months ended June 30, 2016 resulting in improved credit quality and lower credit losses across most major consumer portfolios compared to the same periods in 2015. The 30 and 90 days or more past due balances declined across nearly all consumer loan portfolios during the six months ended June 30, 2016 as a result of improved delinquency trends.

Improved credit quality, continued loan balance run-off and sales across the consumer portfolio drove an $842 million decrease in the consumer allowance for loan and lease losses during the six months ended June 30, 2016 to $6.5 billion at June 30, 2016. For additional information, see Allowance for Credit Losses on page 95.

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 of the Corporation's 2015 Annual Report on Form 10-K. 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 45 and Note 7 – Representations and Warranties Obligations and Corporate Guarantees to the Consolidated Financial Statements.

Table of Contents

Table 27 presents our outstanding consumer loans and leases, and the PCI loan portfolio. In addition to being included in the "Outstandings" columns in Table 27, 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 76 and Note 4 – Outstanding Loans and Leases to the Consolidated Financial Statements.

Table 27
Consumer Loans and Leases

	Outstandings		Purchased Credit-impaired Loan Portfolio	
(Dollars in millions)	June 30 2016	December 31 2015	June 30 2016	December 31 2015
Residential mortgage [1]	$ 185,943	$ 187,911	$ 11,107	$ 12,066
Home equity	71,587	75,948	4,121	4,619
U.S. credit card	88,103	89,602	n/a	n/a
Non-U.S. credit card	9,380	9,975	n/a	n/a
Direct/Indirect consumer [2]	92,746	88,795	n/a	n/a
Other consumer [3]	2,284	2,067	n/a	n/a
Consumer loans excluding loans accounted for under the fair value option	450,043	454,298	15,228	16,685
Loans accounted for under the fair value option [4]	1,844	1,871	n/a	n/a
Total consumer loans and leases	$ 451,887	$ 456,169	$ 15,228	$ 16,685

(1) Outstandings include pay option loans of $2.1 billion and $2.3 billion at June 30, 2016 and December 31, 2015. We no longer originate pay option loans.

(2) Outstandings include auto and specialty lending loans of $47.0 billion and $42.6 billion, unsecured consumer lending loans of $696 million and $886 million, U.S. securities-based lending loans of $40.1 billion and $39.8 billion, non-U.S. consumer loans of $3.4 billion and $3.9 billion, student loans of $531 million and $564 million and other consumer loans of $1.1 billion and $1.0 billion at June 30, 2016 and December 31, 2015.

(3) Outstandings include consumer finance loans of $512 million and $564 million, consumer leases of $1.6 billion and $1.4 billion and consumer overdrafts of $191 million and $146 million at June 30, 2016 and December 31, 2015.

(4) Consumer loans accounted for under the fair value option include residential mortgage loans of $1.5 billion and $1.6 billion and home equity loans of $354 million and $250 million at June 30, 2016 and December 31, 2015. For more information on the fair value option, see Note 15 – Fair Value Option to the Consolidated Financial Statements.

n/a = not applicable

Table of Contents

Table 28 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 28
Consumer Credit Quality

	Nonperforming		Accruing Past Due 90 Days or More	
(Dollars in millions)	June 30 2016	December 31 2015	June 30 2016	December 31 2015
Residential mortgage [1]	$3,592	$ 4,803	$5,659	$ 7,150
Home equity	3,085	3,337	—	—
U.S. credit card	n/a	n/a	693	789
Non-U.S. credit card	n/a	n/a	69	76
Direct/Indirect consumer	27	24	26	39
Other consumer	1	1	2	3
Total [2]	$6,705	$ 8,165	$6,449	$ 8,057
Consumer loans and leases as a percentage of outstanding consumer loans and leases [2]	1.49 %	1.80 %	1.43 %	1.77 %
Consumer loans and leases as a percentage of outstanding loans and leases, excluding PCI and fully-insured loan portfolios [2]	1.66	2.04	0.20	0.23

(1) Residential mortgage loans accruing past due 90 days or more are fully-insured loans. At June 30, 2016 and December 31, 2015, residential mortgage included $3.3 billion and $4.3 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 $2.4 billion and $2.9 billion of loans on which interest was still accruing.

(2) Balances exclude consumer loans accounted for under the fair value option. At June 30, 2016 and December 31, 2015, $238 million and $293 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 29 presents net charge-offs and related ratios for consumer loans and leases.

Table 29
Consumer Net Charge-offs and Related Ratios

	Net Charge-offs [1]				Net Charge-off Ratios [1, 2]			
	Three Months Ended June 30		Six Months Ended June 30		Three Months Ended June 30		Six Months Ended June 30	
(Dollars in millions)	2016	2015	2016	2015	2016	2015	2016	2015
Residential mortgage	$34	$177	$125	$374	0.07%	0.35%	0.14%	0.36%

Home equity	126	151	238	323	0.70	0.73	0.65	0.78
U.S. credit card	573	584	1,160	1,205	2.66	2.68	2.68	2.76
Non-U.S. credit card	46	51	91	95	1.85	2.03	1.85	1.91
Direct/Indirect consumer	23	24	57	58	0.10	0.11	0.13	0.14
Other consumer	47	33	95	82	8.40	7.00	8.73	8.91
Total	$849	$1,020	$1,766	$2,137	0.76	0.87	0.79	0.91

(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 76.

(2) Net charge-off ratios are calculated as annualized net charge-offs divided by average outstanding loans and leases excluding loans accounted for under the fair value option.

Table of Contents

Net charge-off ratios, excluding the PCI and fully-insured loan portfolios, were 0.10 percent and 0.18 percent for residential mortgage, 0.74 percent and 0.69 percent for home equity, and 0.85 percent and 0.89 percent for the total consumer portfolio for the three and six months ended June 30, 2016, respectively. Net charge-off ratios, excluding the PCI and fully-insured loan portfolios, were 0.52 percent and 0.55 percent for residential mortgage, 0.78 percent and 0.83 percent for home equity, and 1.00 percent and 1.05 percent for the total consumer portfolio for the three and six months ended June 30, 2015, respectively. These are the only product classifications that include PCI and fully-insured loans for these periods.

Net charge-offs, as shown in Tables 29 and 30, exclude write-offs in the PCI loan portfolio of $37 million and $76 million in residential mortgage for the three and six months ended June 30, 2016 compared to $264 million and $452 million for the same periods in 2015. Net charge-offs, as shown in Tables 29 and 30, exclude write-offs in the PCI loan portfolio of $45 million and $111 million in home equity for the three and six months ended June 30, 2016 compared to $26 million and $126 million for the same periods in 2015. Net charge-off ratios including the PCI write-offs were 0.15 percent and 0.22 percent for residential mortgage for the three and six months ended June 30, 2016 compared to 0.86 percent and 0.80 percent for the same periods in 2015. Net charge-off ratios including the PCI write-offs were 0.95 percent for home equity for both the three and six months ended June 30, 2016 compared to 0.86 percent and 1.08 percent for the same periods in 2015. For more information on PCI write-offs, see Consumer Portfolio Credit Risk Management – Purchased Credit-impaired Loan Portfolio on page 76.

Table 30 presents outstandings, nonperforming balances, net charge-offs, allowance for loan and lease losses and provision for loan and lease losses for the core and non-core portfolio within the consumer real estate portfolio.

Following the realignment of our business segments effective April 1, 2016, we now 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 TDR prior to 2016 are generally characterized as non-core loans, and are principally run-off portfolios. Core loans as reported within Table 30 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 of Contents

Table 30

Consumer Real Estate Portfolio [1]

	Outstandings		Nonperforming		Net Charge-offs [2]			
					Three Months Ended June 30		Six Months Ended June 30	
(Dollars in millions)	June 30 2016	December 31 2015	June 30 2016	December 31 2015	2016	2015	2016	2015
Core portfolio								
Residential mortgage	$146,100	$ 141,795	$1,492	$ 1,825	$7	$21	$(11)	$66
Home equity	52,477	54,917	937	974	28	45	46	80
Total core portfolio	198,577	196,712	2,429	2,799	35	66	35	146
Non-core portfolio								
Residential mortgage	39,843	46,116	2,100	2,978	27	156	136	308
Home equity	19,110	21,031	2,148	2,363	98	106	192	243
Total non-core portfolio	58,953	67,147	4,248	5,341	125	262	328	551
Consumer real estate portfolio								
Residential mortgage	185,943	187,911	3,592	4,803	34	177	125	374
Home equity	71,587	75,948	3,085	3,337	126	151	238	323
Total consumer real estate portfolio	$257,530	$ 263,859	$6,677	$ 8,140	$160	$328	$363	$697

	Allowance for Loan and Lease Losses		Provision for Loan and Lease Losses			
			Three Months Ended June 30		Six Months Ended June 30	
	June 30 2016	December 31 2015	2016	2015	2016	2015
Core portfolio						
Residential mortgage	$281	$ 319	$—	$(21)	$(53)	$(4)
Home equity	626	664	8	23	8	4
Total core portfolio	907	983	8	2	(45)	—
Non-core portfolio						
Residential mortgage	911	1,181	(50)	33	(54)	(73)
Home equity	1,391	1,750	37	73	(56)	153
Total non-core portfolio	2,302	2,931	(13)	106	(110)	80
Consumer real estate portfolio						
Residential mortgage	1,192	1,500	(50)	12	(107)	(77)
Home equity	2,017	2,414	45	96	(48)	157
Total consumer real estate portfolio	$3,209	$ 3,914	$(5)	$108	$(155)	$80

(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 $1.5 billion and $1.6 billion and home equity loans of $354 million and $250 million at June 30, 2016 and December 31, 2015. For more information on the fair value option, see Note 15 – 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 76.

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 76.

Table of Contents

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 June 30, 2016. Approximately 42 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 32 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 $2.0 billion during the six months ended June 30, 2016 due to loan sales of $4.5 billion and runoff, partially offset by the retention of new originations. Loan sales primarily included $2.7 billion of loans in consolidated agency residential mortgage securitization vehicles and $1.3 billion of nonperforming and other delinquent loans.

At June 30, 2016 and December 31, 2015, the residential mortgage portfolio included $31.5 billion and $37.1 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 June 30, 2016 and December 31, 2015, $26.4 billion and $33.4 billion had FHA insurance with the remainder protected by long-term standby agreements. At June 30, 2016 and December 31, 2015, $8.8 billion and $11.2 billion of the FHA-insured loan population were repurchases of delinquent FHA loans pursuant to our servicing agreements with GNMA.

Table 31 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 76.

Table 31
Residential Mortgage – Key Credit Statistics

	Reported Basis [1]		Excluding Purchased Credit-impaired and Fully-insured Loans	
(Dollars in millions)	June 30 2016	December 31 2015	June 30 2016	December 31 2015
Outstandings	$185,943	$187,911	$143,357	$138,768
Accruing past due 30 days or more	8,942	11,423	1,464	1,568
Accruing past due 90 days or more	5,659	7,150	—	—
Nonperforming loans	3,592	4,803	3,592	4,803
Percent of portfolio				
Refreshed LTV greater than 90 but less than or equal to 100	6 %	7 %	4 %	5 %
Refreshed LTV greater than 100	7	8	4	4
	10	13	5	6

Refreshed FICO score below 620								
2006 and 2007 vintages [2]	16	17	15	17				

	Reported Basis				Excluding Purchased Credit-impaired and Fully-insured Loans			
	Three Months Ended June 30		Six Months Ended June 30		Three Months Ended June 30		Six Months Ended June 30	
	2016	2015	2016	2015	2016	2015	2016	2015
Net charge-off ratio [3]	0.07%	0.35%	0.14%	0.36%	0.10 %	0.52 %	0.18 %	0.55 %

(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 $1.2 billion, or 33 percent, and $1.6 billion, or 34 percent of nonperforming residential mortgage loans at June 30, 2016 and December 31, 2015. For the three and six months ended June 30, 2016, these vintages accounted for $9 million, or 26 percent, and $16 million, or 13 percent of total residential mortgage net charge-offs. For the three and six months ended June 30, 2015, these vintages accounted for $71 million, or 40 percent, and $118 million, or 32 percent of total residential mortgage net charge-offs.

(3) Net charge-off ratios are calculated as annualized net charge-offs divided by average outstanding loans excluding loans accounted for under the fair value option.

Table of Contents

Nonperforming residential mortgage loans decreased $1.2 billion during the six months ended June 30, 2016 as outflows, including sales of $951 million, outpaced new inflows. Of the nonperforming residential mortgage loans at June 30, 2016, $1.2 billion, or 32 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, $1.6 billion, or 45 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 $104 million during the six months ended June 30, 2016.

Net charge-offs decreased $143 million to $34 million for the three months ended June 30, 2016, or 0.10 percent of total average residential mortgage loans, compared to net charge-offs of $177 million, or 0.52 percent, for the same period in 2015. Net charge-offs decreased $249 million to $125 million for the six months ended June 30, 2016, or 0.18 percent of total average residential mortgage loans, compared to net charge-offs of $374 million, or 0.55 percent, for the same period in 2015. These decreases in net charge-offs were primarily driven by charge-offs related to the consumer relief portion of the settlement with the DoJ of $145 million and $330 million in the prior-year periods, partially offset by charge-offs of $0 and $42 million related to nonperforming loan sales during the three and six months ended June 30, 2016 compared to recoveries of $22 million and $62 million for the same periods in 2015. 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 four percent and five percent of the residential mortgage portfolio at June 30, 2016 and December 31, 2015. Loans with a refreshed LTV greater than 100 percent represented four percent of the residential mortgage loan portfolio at both June 30, 2016 and December 31, 2015. Of the loans with a refreshed LTV greater than 100 percent, 98 percent were performing at both June 30, 2016 and December 31, 2015. 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 five percent and six percent of the residential mortgage portfolio at June 30, 2016 and December 31, 2015.

Of the $143.4 billion in total residential mortgage loans outstanding at June 30, 2016, as shown in Table 32, 39 percent were originated as interest-only loans. The outstanding balance of interest-only residential mortgage loans that have entered the amortization period was $11.6 billion, or 21 percent, at June 30, 2016. 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 June 30, 2016, $215 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 $1.5 billion, or one percent for the entire residential mortgage portfolio. In addition, at June 30, 2016, $581 million, or five percent of outstanding interest-only residential mortgage loans that had entered the amortization period were nonperforming, of which $287 million were contractually current, compared to $3.6 billion, or three percent for the entire residential mortgage portfolio, of which $1.2 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. More than 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 of Contents

Table 32 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 15 percent and 14 percent of outstandings at June 30, 2016 and December 31, 2015. For the three and six months ended June 30, 2016, loans within this MSA contributed net charge-offs of $2 million and net recoveries of $1 million within the residential mortgage portfolio compared to net recoveries of $0 and $5 million for the same periods in 2015. In the New York area, the New York-Northern New Jersey-Long Island MSA made up 11 percent of outstandings at both June 30, 2016 and December 31, 2015. For the three and six months ended June 30, 2016, loans within this MSA contributed net charge-offs of $5 million and $27 million within the residential mortgage portfolio compared to net charge-offs of $34 million and $73 million for the same periods in 2015.

Table 32
Residential Mortgage State Concentrations

	Outstandings [1]		Nonperforming [1]		Net Charge-offs [2]			
					Three Months Ended June 30		Six Months Ended June 30	
(Dollars in millions)	June 30 2016	December 31 2015	June 30 2016	December 31 2015	2016	2015	2016	2015
California	$52,883	$ 48,865	$710	$ 977	$(7)	$2	$(30)	$(7)
New York [3]	13,084	12,696	344	399	4	22	18	35
Florida [3]	9,969	10,001	377	534	2	22	17	46
Texas	6,328	6,208	150	185	2	4	8	9
Massachusetts	4,955	4,799	87	118	1	—	4	—
Other U.S./Non-U.S.	56,138	56,199	1,924	2,590	32	127	108	291
Residential mortgage loans [4]	$143,357	$ 138,768	$3,592	$ 4,803	$34	$177	$125	$374
Fully-insured loan portfolio	31,479	37,077						
Purchased credit-impaired residential mortgage loan portfolio [5]	11,107	12,066						
Total residential mortgage loan portfolio	$185,943	$ 187,911						

(1) Outstandings and nonperforming loans exclude loans accounted for under the fair value option.

(2) Net charge-offs exclude $37 million and $76 million of write-offs in the residential mortgage PCI loan portfolio for the three and six months ended June 30, 2016 compared to $264 million and $452 million for the same periods in 2015. For more information on PCI write-offs, see Consumer Portfolio Credit Risk Management – Purchased Credit-impaired Loan Portfolio on page 76.

(3) In these states, foreclosure requires a court order following a legal proceeding (judicial states).

(4) Amounts exclude the PCI residential mortgage and fully-insured loan portfolios.

(5) At June 30, 2016 and December 31, 2015, 48 percent and 47 percent of PCI residential mortgage loans were in California. 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 $7.8 billion and $8.0 billion at June 30, 2016 and December 31, 2015, or six percent of the residential mortgage portfolio. The CRA portfolio included $403 million and $552 million of nonperforming loans at June 30, 2016 and December 31, 2015, representing 11 percent of total nonperforming residential mortgage loans. Net charge-offs in the CRA portfolio were $21 million and $71 million for the six months ended June 30, 2016 and 2015, or 17 percent and 19 percent of total net charge-offs for the residential mortgage portfolio.

Home Equity

At June 30, 2016, the home equity portfolio made up 16 percent of the consumer portfolio and is comprised of home equity lines of credit (HELOCs), home equity loans and reverse mortgages.

At June 30, 2016, our HELOC portfolio had an outstanding balance of $62.5 billion, or 87 percent of the total home equity portfolio compared to $66.1 billion, or 87 percent, at December 31, 2015. 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.

Table of Contents

At June 30, 2016, our home equity loan portfolio had an outstanding balance of $7.1 billion, or 10 percent of the total home equity portfolio compared to $7.9 billion, or 10 percent, at December 31, 2015. Home equity loans are almost all fixed-rate loans with amortizing payment terms of 10 to 30 years and of the $7.1 billion at June 30, 2016, 55 percent have 25- to 30-year terms. At both June 30, 2016 and 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. We no longer originate reverse mortgages.

At June 30, 2016, approximately 66 percent of the home equity portfolio was included in Consumer Banking, 27 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 $4.4 billion during the six months ended June 30, 2016 primarily due to paydowns and charge-offs outpacing new originations and draws on existing lines. Of the total home equity portfolio at June 30, 2016 and December 31, 2015, $20.2 billion and $20.3 billion, or 28 percent and 27 percent, were in first-lien positions (30 percent and 28 percent excluding the PCI home equity portfolio). At June 30, 2016, 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 $11.9 billion, or 18 percent of our total home equity portfolio excluding the PCI loan portfolio.

Unused HELOCs totaled $48.8 billion at June 30, 2016 compared to $50.3 billion at December 31, 2015. 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 56 percent at June 30, 2016 compared to 57 percent at December 31, 2015.

Table 33 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 76.

Table 33
Home Equity – Key Credit Statistics

	Reported Basis [1]		Excluding Purchased Credit-impaired Loans	
(Dollars in millions)	June 30 2016	December 31 2015	June 30 2016	December 31 2015
Outstandings	$71,587	$ 75,948	$67,466	$ 71,329
Accruing past due 30 days or more [2]	555	613	555	613
Nonperforming loans [2]	3,085	3,337	3,085	3,337
Percent of portfolio				
Refreshed CLTV greater than 90 but less than or equal to 100	6 %	6 %	5 %	6 %
Refreshed CLTV greater than 100	11	12	10	11
Refreshed FICO score below 620	7	7	6	7
2006 and 2007 vintages [3]	40	43	38	41

Reported Basis	Excluding Purchased Credit-impaired Loans

	Three Months Ended June 30		Six Months Ended June 30		Three Months Ended June 30		Six Months Ended June 30	
	2016	2015	2016	2015	2016	2015	2016	2015
Net charge-off ratio [4]	0.70%	0.73%	0.65%	0.78%	0.74 %	0.78 %	0.69 %	0.83 %

(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 $75 million and $89 million and nonperforming loans include $345 million and $396 million of loans where we serviced the underlying first-lien at June 30, 2016 and December 31, 2015.

(3) These vintages of loans have higher refreshed combined LTV ratios and accounted for 46 percent and 45 percent of nonperforming home equity loans at June 30, 2016 and December 31, 2015, and 44 percent and 42 percent of net charge-offs for the three and six months ended June 30, 2016 and 57 percent and 58 percent for the three and six months ended June 30, 2015.

(4) Net charge-off ratios are calculated as annualized net charge-offs divided by average outstanding loans excluding loans accounted for under the fair value option.

Table of Contents

Nonperforming outstanding balances in the home equity portfolio decreased $252 million during the six months ended June 30, 2016 as outflows, including sales of $143 million, outpaced new inflows. Of the nonperforming home equity portfolio at June 30, 2016, $1.5 billion, or 49 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, $1.1 billion, or 34 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 $58 million during the six months ended June 30, 2016.

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 June 30, 2016, we estimate that $1.1 billion of current and $139 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 $181 million of these combined amounts, with the remaining $1.0 billion serviced by third parties. Of the $1.2 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 approximately $449 million had first-lien loans that were 90 days or more past due.

Net charge-offs decreased $25 million to $126 million for the three months ended June 30, 2016, or 0.74 percent of the total average home equity portfolio, compared to $151 million, or 0.78 percent for the same period in 2015. Net charge-offs decreased $85 million to $238 million for the six months ended June 30, 2016, or 0.69 percent of the total average home equity portfolio, compared to $323 million, or 0.83 percent for the same period in 2015. These decreases in net charge-offs were primarily driven by charge-offs of $21 million and $66 million related to the consumer relief portion of the settlement with the DoJ in the prior-year period, and favorable portfolio trends due in part to improvement in home prices and the U.S. economy.

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 five percent and six percent of the home equity portfolio at June 30, 2016 and December 31, 2015. Outstanding balances with a refreshed CLTV greater than 100 percent comprised 10 percent and 11 percent of the home equity portfolio at June 30, 2016 and December 31, 2015. 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 June 30, 2016. Outstanding balances in the home equity portfolio to borrowers with a refreshed FICO score below 620 represented six percent and seven percent of the home equity portfolio at June 30, 2016 and December 31, 2015.

Of the $67.5 billion in total home equity portfolio outstandings at June 30, 2016, as shown in Table 34, 61 percent require interest-only payments, almost all of which were HELOCs that had not yet entered the amortization period. The outstanding balance of HELOCs that have entered the amortization period was $12.4 billion, or 20 percent of total HELOCs at June 30, 2016. 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 June 30, 2016, $250 million, or two percent of outstanding HELOCs that had entered the amortization period were accruing past due 30 days or more compared to $511 million, or one percent for the entire HELOC portfolio. In addition, at June 30, 2016, $1.6 billion, or 13 percent of outstanding HELOCs that had entered the amortization period were nonperforming, of which $767 million were contractually current, compared to $2.8 billion, or five percent for the entire HELOC portfolio, of which $1.3 billion were contractually current. Loans in our HELOC portfolio generally have an initial draw period of 10 years and 40 percent of these loans will enter the amortization period in the remainder of 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 the three months ended June 30, 2016, approximately 47 percent of these customers with an outstanding balance did not pay any principal on their HELOCs.

Table of Contents

Table 34 presents outstandings, nonperforming balances and net charge-offs by certain state concentrations for the home equity portfolio. In the New York area, the New York-Northern New Jersey-Long Island MSA made up 13 percent of the outstanding home equity portfolio at both June 30, 2016 and December 31, 2015. For the three and six months ended June 30, 2016, loans within this MSA contributed 18 percent and 16 percent of net charge-offs within the home equity portfolio compared to 12 percent of net charge-offs for the same periods in 2015. The Los Angeles-Long Beach-Santa Ana MSA within California made up 11 percent and 12 percent of the outstanding home equity portfolio at June 30, 2016 and December 31, 2015. For the three and six months ended June 30, 2016, loans within this MSA contributed zero percent and one percent of net charge-offs within the home equity portfolio compared to three percent and four percent of net charge-offs for the same periods in 2015.

Table 34
Home Equity State Concentrations

	Outstandings [1]		Nonperforming [1]		Net Charge-offs [2]			
					Three Months Ended June 30		Six Months Ended June 30	
(Dollars in millions)	June 30 2016	December 31 2015	June 30 2016	December 31 2015	2016	2015	2016	2015
California	$19,134	$ 20,356	$877	$ 902	$(1)	$13	$9	$37
Florida [3]	7,884	8,474	470	518	24	32	41	62
New Jersey [3]	5,392	5,570	206	230	14	12	25	25
New York [3]	4,995	5,249	284	316	16	13	26	25
Massachusetts	3,277	3,378	104	115	5	4	8	9
Other U.S./Non-U.S.	26,784	28,302	1,144	1,256	68	77	129	165
Home equity loans [4]	$67,466	$ 71,329	$3,085	$ 3,337	$126	$151	$238	$323
Purchased credit-impaired home equity portfolio [5]	4,121	4,619						
Total home equity loan portfolio	$71,587	$ 75,948						

(1) Outstandings and nonperforming loans exclude loans accounted for under the fair value option.

(2) Net charge-offs exclude $45 million and $111 million of write-offs in the home equity PCI loan portfolio for the three and six months ended June 30, 2016 compared to $26 million and $126 million for the same periods in 2015. For more information on PCI write-offs, see Consumer Portfolio Credit Risk Management – Purchased Credit-impaired Loan Portfolio on page 76.

(3) In these states, foreclosure requires a court order following a legal proceeding (judicial states).

(4) Amount excludes the PCI home equity portfolio.

(5) At both June 30, 2016 and December 31, 2015, 29 percent of PCI home equity loans were in California. There were no other significant single state concentrations.

Table of Contents

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 of the Corporation's 2015 Annual Report on Form 10-K.

Table 35 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 35
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
	June 30, 2016				
Residential mortgage	$11,342	$11,107	$ 223	$ 10,884	95.96 %
Home equity	4,192	4,121	305	3,816	91.03
Total purchased credit-impaired loan portfolio	$15,534	$15,228	$ 528	$ 14,700	94.63
	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

The total PCI unpaid principal balance decreased $1.5 billion, or nine percent, during the six months ended June 30, 2016 primarily driven by payoffs, sales, paydowns and write-offs. During the six months ended June 30, 2016, we sold PCI loans with a carrying value of $324 million compared to sales of $987 million for the same period in 2015.

Of the unpaid principal balance of $15.5 billion at June 30, 2016, $13.7 billion, or 88 percent, was current based on the contractual terms, $1.0 billion, or six percent, was in early stage delinquency, and $662 million was 180 days or more past due, including $573 million of first-lien mortgages and $89 million of home equity loans.

During the three months ended June 30, 2016, we recorded a provision benefit of $12 million for the PCI loan portfolio which included an expense of $9 million for home equity and a benefit of $21 million for residential mortgage. During the six months ended June 30, 2016, we recorded a provision benefit of $89 million for the PCI loan portfolio which included a benefit of $50 million for home equity and $39 million for residential mortgage. This compared to a total provision expense of $78 million and $28 million for the three and six months ended June 30, 2015. The provision benefit for the six months ended June 30, 2016 was primarily driven by lower default estimates on second-lien loans and continued home price improvement.

The PCI valuation allowance declined $276 million during the six months ended June 30, 2016 due to write-offs in the PCI loan portfolio of $76 million in residential mortgage and $111 million in home equity, combined with a provision benefit of $89 million.

Purchased Credit-impaired Residential Mortgage Loan Portfolio

The PCI residential mortgage loan portfolio represented 73 percent of the total PCI loan portfolio at June 30, 2016. Those loans to borrowers with a refreshed FICO score below 620 represented 29 percent of the PCI residential mortgage loan portfolio at June 30, 2016. Loans with a refreshed LTV greater than 90 percent, after consideration of purchase accounting adjustments and the related valuation allowance, represented 27 percent of the PCI residential mortgage loan portfolio and 31 percent based on the unpaid principal balance at June 30, 2016.

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.

Table of Contents

At June 30, 2016, the unpaid principal balance and carrying value of pay option loans was $2.1 billion, including $1.8 billion of loans that were credit-impaired upon acquisition. The total unpaid principal balance of pay option loans with accumulated negative amortization was $394 million, including $21 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 June 30, 2016, $185 million have not experienced a payment reset, of which 23 percent are 90 days or more past due.

Purchased Credit-impaired Home Equity Loan Portfolio

The PCI home equity portfolio represented 27 percent of the total PCI loan portfolio at June 30, 2016. Those loans with a refreshed FICO score below 620 represented 15 percent of the PCI home equity portfolio at June 30, 2016. Loans with a refreshed CLTV greater than 90 percent, after consideration of purchase accounting adjustments and the related valuation allowance, represented 56 percent of the PCI home equity portfolio and 59 percent based on the unpaid principal balance at June 30, 2016.

U.S. Credit Card

At June 30, 2016, 97 percent of the U.S. credit card portfolio was managed in Consumer Banking with the remainder in GWIM. Outstandings in the U.S. credit card portfolio decreased $1.5 billion during the six months ended June 30, 2016 due to a seasonal decline in retail transaction volume. Net charge-offs decreased $11 million to $573 million and $45 million to $1.2 billion during the three and six months ended June 30, 2016 compared to the same periods 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 $187 million while loans 90 days or more past due and still accruing interest decreased $96 million during the six months ended June 30, 2016 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 $319.8 billion and $312.5 billion at June 30, 2016 and December 31, 2015. The $7.3 billion increase was driven by account growth, lines of credit increases and a seasonal decrease in line utilization due to a decrease in transaction volume.

Table 36 presents certain key credit statistics for the U.S. credit card portfolio.

Table 36
U.S. Credit Card – Key Credit Statistics

(Dollars in millions)	June 30 2016	December 31 2015
Outstandings	$88,103	$ 89,602
Accruing past due 30 days or more	1,388	1,575
Accruing past due 90 days or more	693	789

	Three Months Ended June 30		Six Months Ended June 30	
	2016	2015	2016	2015
Net charge-offs	$573	$584	$1,160	$ 1,205
Net charge-off ratios [1]	2.66 %	2.68 %	2.68 %	2.76 %

(1) Net charge-off ratios are calculated as annualized net charge-offs divided by average outstanding loans.

Table of Contents

Table 37 presents certain state concentrations for the U.S. credit card portfolio.

Table 37
U.S. Credit Card State Concentrations

	Outstandings		Accruing Past Due 90 Days or More		Net Charge-offs			
	June 30 2016	December 31 2015	June 30 2016	December 31 2015	Three Months Ended June 30		Six Months Ended June 30	
(Dollars in millions)					2016	2015	2016	2015
California	$13,547	$ 13,658	$104	$ 115	$91	$89	$183	$183
Florida	7,330	7,420	72	81	60	61	124	128
Texas	6,608	6,620	53	58	41	39	82	80
New York	5,425	5,547	51	57	41	41	81	83
Washington	3,915	3,907	17	19	15	16	29	31
Other U.S.	51,278	52,450	396	459	325	338	661	700
Total U.S. credit card portfolio	$88,103	$ 89,602	$693	$ 789	$573	$584	$1,160	$1,205

Non-U.S. Credit Card

Outstandings in the non-U.S. credit card portfolio, which are recorded in All Other, decreased $595 million during the six months ended June 30, 2016 driven by weakening of the British Pound against the U.S. Dollar. For the three and six months ended June 30, 2016, net charge-offs decreased $5 million to $46 million and $4 million to $91 million compared to the same periods in 2015.

Unused lines of credit for non-U.S. credit card totaled $26.2 billion and $27.9 billion at June 30, 2016 and December 31, 2015. The $1.7 billion 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 38 presents certain key credit statistics for the non-U.S. credit card portfolio.

Table 38
Non-U.S. Credit Card – Key Credit Statistics

(Dollars in millions)	June 30 2016	December 31 2015
Outstandings	$9,380	$ 9,975
Accruing past due 30 days or more	129	146
Accruing past due 90 days or more	69	76

	Three Months Ended June 30		Six Months Ended June 30	
	2016	2015	2016	2015
Net charge-offs	$46	$51	$91	$ 95
Net charge-off ratios [1]	1.85%	2.03%	1.85 %	1.91 %

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

Direct/Indirect Consumer

At June 30, 2016, approximately 51 percent of the direct/indirect portfolio was included in Consumer Banking (consumer auto and specialty lending – automotive, marine, aircraft, recreational vehicle loans, and consumer personal loans), 48 percent was included in GWIM (principally securities-based lending loans) and the remainder was primarily student loans in All Other.

Outstandings in the direct/indirect portfolio increased $4.0 billion during the six months ended June 30, 2016 primarily in the consumer auto loan portfolio, partially offset by lower outstandings in the securities-based lending and the unsecured consumer lending portfolios.

For the three and six months ended June 30, 2016, net charge-offs decreased $1 million to $23 million, and $1 million to $57 million, or 0.10 percent and 0.13 percent of total average direct/indirect loans, compared to 0.11 percent and 0.14 percent for the same periods in 2015.

Table of Contents

Direct/indirect loans that were past due 30 days or more and still accruing interest declined $40 million to $288 million during the six months ended June 30, 2016 due to decreases in the consumer auto and specialty lending portfolios.

Table 39 presents certain state concentrations for the direct/indirect consumer loan portfolio.

Table 39
Direct/Indirect State Concentrations

	Outstandings		Accruing Past Due 90 Days or More		Net Charge-offs			
	June 30 2016	December 31 2015	June 30 2016	December 31 2015	Three Months Ended June 30 2016	Three Months Ended June 30 2015	Six Months Ended June 30 2016	Six Months Ended June 30 2015
(Dollars in millions)								
California	$11,274	$ 10,735	$2	$ 3	$1	$ 1	$5	$ 4
Texas	9,218	8,514	3	4	4	4	8	8
Florida	9,057	8,835	2	3	6	4	13	8
New York	5,323	5,077	1	1	—	—	1	1
Georgia	3,059	2,869	4	4	1	1	3	3
Other U.S./Non-U.S.	54,815	52,765	14	24	11	14	27	34
Total direct/indirect loan portfolio	$92,746	$ 88,795	$26	$ 39	$23	$ 24	$57	$ 58

Other Consumer

At June 30, 2016, approximately 69 percent of the $2.3 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 40 presents nonperforming consumer loans, leases and foreclosed properties activity for the three and six months ended June 30, 2016 and 2015. 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 of the Corporation's 2015 Annual Report on Form 10-K. During the six months ended June 30, 2016, nonperforming consumer loans declined $1.5 billion to $6.7 billion primarily driven by loan sales of $1.1 billion. Excluding these sales, nonperforming loans declined as outflows 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 June 30, 2016, $3.1 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 $2.7 billion of nonperforming loans 180 days or more past due and $416 million of foreclosed properties. In addition, at June 30, 2016, $2.7 billion, or 38 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 $28 million during the six months ended June 30, 2016 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 decreased $67 million during the six months ended June 30, 2016. Not included in foreclosed properties at June 30, 2016 was $1.3 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.

Table of Contents

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 40.

Table 40

Nonperforming Consumer Loans, Leases and Foreclosed Properties Activity [1]

	Three Months Ended June 30		Six Months Ended June 30	
(Dollars in millions)	2016	2015	2016	2015
Nonperforming loans and leases, beginning of period	$7,247	$10,209	$8,165	$10,819
Additions to nonperforming loans and leases:				
New nonperforming loans and leases	799	1,424	1,750	2,893
Reductions to nonperforming loans and leases:				
Paydowns and payoffs	(252)	(289)	(385)	(542)
Sales	(271)	(542)	(1,094)	(913)
Returns to performing status [2]	(396)	(631)	(837)	(1,498)
Charge-offs	(334)	(484)	(729)	(944)
Transfers to foreclosed properties [3]	(88)	(112)	(165)	(240)
Total net reductions to nonperforming loans and leases	(542)	(634)	(1,460)	(1,244)
Total nonperforming loans and leases, June 30 [4]	6,705	9,575	6,705	9,575
Foreclosed properties, beginning of period	421	632	444	630
Additions to foreclosed properties:				
New foreclosed properties [3]	130	157	240	353
Reductions to foreclosed properties:				
Sales	(117)	(202)	(236)	(370)
Write-downs	(18)	(34)	(32)	(60)
Total net reductions to foreclosed properties	(5)	(79)	(28)	(77)
Total foreclosed properties, June 30 [5]	416	553	416	553
Nonperforming consumer loans, leases and foreclosed properties, June 30	$7,121	$10,128	$7,121	$10,128
Nonperforming consumer loans and leases as a percentage of outstanding consumer loans and leases [6]	1.49 %	2.06 %		
Nonperforming consumer loans, leases and foreclosed properties as a percentage of outstanding consumer loans, leases and foreclosed properties [6]	1.58	2.17		

(1) Balances do not include nonperforming LHFS of $20 million and $8 million and nonaccruing TDRs removed from the PCI loan portfolio prior to January 1, 2010 of $38 million and $72 million at June 30, 2016 and 2015 as well as loans accruing past due 90 days or more as presented in Table 28 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) At June 30, 2016, 40 percent of nonperforming loans were 180 days or more past due.

(5) Foreclosed property balances do not include properties insured by certain government-guaranteed loans, principally FHA-insured loans, of $1.3 billion at both June 30, 2016 and 2015.

(6) 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 40 are net of $24 million and $42 million of charge-offs and write-offs of PCI loans for the three and six months ended June 30, 2016 compared to $44 million and $76 million for the same periods in 2015, recorded during the first 90 days after transfer.

Table of Contents

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 June 30, 2016 and December 31, 2015, $449 million and $484 million of such junior-lien home equity loans were included in nonperforming loans and leases.

Table 41 presents TDRs for the consumer real estate portfolio. Performing TDR balances are excluded from nonperforming loans and leases in Table 40.

Table 41
Consumer Real Estate Troubled Debt Restructurings

	June 30, 2016			December 31, 2015		
(Dollars in millions)	Total	Nonperforming	Performing	Total	Nonperforming	Performing
Residential mortgage [1, 2]	$15,086	$ 2,361	$ 12,725	$18,372	$ 3,284	$ 15,088
Home equity [3]	2,756	1,644	1,112	2,686	1,649	1,037
Total consumer real estate troubled debt restructurings	$17,842	$ 4,005	$ 13,837	$21,058	$ 4,933	$ 16,125

(1) Residential mortgage TDRs deemed collateral dependent totaled $3.9 billion and $4.9 billion, and included $1.9 billion and $2.7 billion of loans classified as nonperforming and $2.0 billion and $2.2 billion of loans classified as performing at June 30, 2016 and December 31, 2015.

(2) Residential mortgage performing TDRs included $6.9 billion and $8.7 billion of loans that were fully-insured at June 30, 2016 and December 31, 2015.

(3) Home equity TDRs deemed collateral dependent totaled $1.6 billion and included $1.3 billion of loans classified as nonperforming at both June 30, 2016 and December 31, 2015. Loans classified as performing totaled $298 million and $290 million at June 30, 2016 and December 31, 2015.

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 40 as substantially all of the loans remain on accrual status until either charged off or paid in full. At June 30, 2016 and December 31, 2015, our renegotiated TDR portfolio was $672 million and $779 million, of which $555 million and $635 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

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 46, 51 and 56 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 four percent of total commercial utilized exposure at both June 30, 2016 and December 31, 2015, see Commercial Portfolio Credit Risk Management – Industry Concentrations on page 89 and Table 51.

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 of the Corporation's 2015 Annual Report on Form 10-K.

Table of Contents

Commercial Credit Portfolio

During the six months ended June 30, 2016, other than in the energy sector, credit quality among large corporate borrowers was strong. While we experienced some deterioration in the energy sector in the three months ended March 31, 2016, oil prices stabilized during the three months ended June 30, 2016 which contributed to a modest improvement in energy-related exposure. Credit quality of commercial real estate borrowers continued to be strong with market rents continuing to rise and vacancy rates remaining low.

Outstanding commercial loans and leases increased $10.5 billion during the six months ended June 30, 2016, primarily in U.S. commercial. Nonperforming commercial loans and leases increased $499 million during the six months ended June 30, 2016. Nonperforming commercial loans and leases as a percentage of outstanding loans and leases, excluding loans accounted for under the fair value option, increased during the six months ended June 30, 2016 to 0.37 percent from 0.28 percent at December 31, 2015. Reservable criticized balances increased $2.2 billion to $18.1 billion during the six months ended June 30, 2016 as a result of downgrades outpacing paydowns and upgrades. The increase in nonperforming loans and reservable criticized balances was primarily due to our energy exposure. The allowance for loan and lease losses for the commercial portfolio increased $445 million to $5.3 billion at June 30, 2016 compared to December 31, 2015. For additional information, see Allowance for Credit Losses on page 95.

Table 42 presents our commercial loans and leases portfolio, and related credit quality information at June 30, 2016 and December 31, 2015.

Table 42
Commercial Loans and Leases

	Outstandings		Nonperforming		Accruing Past Due 90 Days or More	
(Dollars in millions)	June 30 2016	December 31 2015	June 30 2016	December 31 2015	June 30 2016	December 31 2015
U.S. commercial	$263,467	$ 252,771	$1,349	$ 867	$55	$ 113
Commercial real estate [1]	57,612	57,199	84	93	6	3
Commercial lease financing	21,203	21,352	13	12	29	15
Non-U.S. commercial	89,048	91,549	144	158	1	1
	431,330	422,871	1,590	1,130	91	132
U.S. small business commercial [2]	13,120	12,876	69	82	61	61
Commercial loans excluding loans accounted for under the fair value option	444,450	435,747	1,659	1,212	152	193
Loans accounted for under the fair value option [3]	6,816	5,067	65	13	—	—
Total commercial loans and leases	$451,266	$ 440,814	$1,724	$ 1,225	$152	$ 193

(1) Includes U.S. commercial real estate loans of $54.3 billion and $53.6 billion and non-U.S. commercial real estate loans of $3.3 billion and $3.5 billion at June 30, 2016 and December 31, 2015.

(2) Includes card-related products.

(3) Commercial loans accounted for under the fair value option include U.S. commercial loans of $2.7 billion and $2.3 billion and non-U.S. commercial loans of $4.1 billion and $2.8 billion at June 30, 2016 and December 31, 2015. For more information on the fair value option, see Note 15 – Fair Value Option to the Consolidated Financial Statements.

Table of Contents

Table 43 presents net charge-offs and related ratios for our commercial loans and leases for the three and six months ended June 30, 2016 and 2015. The increase in net charge-offs of $162 million for the six months ended June 30, 2016 compared to the same period in 2015 was primarily due to higher energy sector related losses.

Table 43
Commercial Net Charge-offs and Related Ratios

	Net Charge-offs				Net Charge-off Ratios [1]			
	Three Months Ended June 30		Six Months Ended June 30		Three Months Ended June 30		Six Months Ended June 30	
(Dollars in millions)	2016	2015	2016	2015	2016	2015	2016	2015
U.S. commercial	$28	$(1)	$93	$6	0.04 %	— %	0.07 %	0.01%
Commercial real estate	(2)	(4)	(8)	1	(0.01)	(0.03)	(0.03)	0.01
Commercial lease financing	15	—	13	5	0.30	—	0.13	0.05
Non-U.S. commercial	45	2	87	—	0.20	0.01	0.19	—
	86	(3)	185	12	0.08	—	0.09	0.01
U.S. small business commercial	50	51	102	113	1.55	1.56	1.59	1.73
Total commercial	$136	$48	$287	$125	0.12	0.05	0.13	0.06

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

Table 44 presents commercial credit exposure by type for utilized, unfunded and total binding committed credit exposure. Commercial utilized credit exposure includes standby letters of credit (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 $18.1 billion during the six months ended June 30, 2016 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 58 percent and 56 percent at June 30, 2016 and December 31, 2015.

Table 44
Commercial Credit Exposure by Type

	Commercial Utilized [1]		Commercial Unfunded [2, 3, 4]		Total Commercial Committed	
(Dollars in millions)	June 30 2016	December 31 2015	June 30 2016	December 31 2015	June 30 2016	December 31 2015
Loans and leases [5]	$456,877	$ 446,832	$353,998	$ 376,478	$810,875	$ 823,310
Derivative assets [6]	55,264	49,990	—	—	55,264	49,990
Standby letters of credit and financial guarantees	34,748	33,236	624	690	35,372	33,926
Debt securities and other investments	22,699	21,709	5,372	4,173	28,071	25,882
Loans held-for-sale	5,544	5,456	823	1,203	6,367	6,659
Commercial letters of credit	1,968	1,725	145	390	2,113	2,115
Bankers' acceptances	262	298	—	—	262	298
Other	334	317	—	—	334	317
Total	$577,696	$ 559,563	$360,962	$ 382,934	$938,658	$ 942,497

(1) Total commercial utilized exposure includes loans of $6.8 billion and $5.1 billion and issued letters of credit with a notional amount of $321 million and $290 million accounted for under the fair value option at June 30, 2016 and December 31, 2015.

(2) Total commercial unfunded exposure includes loan commitments accounted for under the fair value option with a notional amount of $7.8 billion and $10.6 billion at June 30, 2016 and December 31, 2015.

(3) Excludes unused business card lines which are not legally binding.

(4) Includes the notional amount of unfunded legally binding lending commitments net of amounts distributed (e.g., syndicated or participated) to other financial institutions of $13.9 billion and $14.3 billion at June 30, 2016 and December 31, 2015.

(5) Includes credit risk exposure associated with assets under operating lease arrangements of $5.6 billion and $6.0 billion at June 30, 2016 and December 31, 2015.

(6) Derivative assets are carried at fair value, reflect the effects of legally enforceable master netting agreements and have been reduced by cash collateral of $50.7 billion and $41.9 billion at June 30, 2016 and December 31, 2015. Not reflected in utilized and committed exposure is additional non-cash derivative collateral held of $24.5 billion and $23.3 billion which consists primarily of other marketable securities.

Table of Contents

Table 45 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 $2.2 billion, or 14 percent, during the six months ended June 30, 2016 driven by downgrades primarily related to our energy exposure outpacing paydowns and upgrades. Approximately 77 percent and 78 percent of commercial utilized reservable criticized exposure was secured at June 30, 2016 and December 31, 2015.

Table 45
Commercial Utilized Reservable Criticized Exposure

	June 30, 2016		December 31, 2015	
(Dollars in millions)	Amount (1)	Percent (2)	Amount (1)	Percent (2)
U.S. commercial	$12,332	4.21 %	$9,965	3.56 %
Commercial real estate	444	0.75	513	0.87
Commercial lease financing	832	3.93	708	3.31
Non-U.S. commercial	3,727	3.92	3,944	4.04
	17,335	3.70	15,130	3.30
U.S. small business commercial	752	5.73	766	5.95
Total commercial utilized reservable criticized exposure	$18,087	3.76	$15,896	3.38

(1) Total commercial utilized reservable criticized exposure includes loans and leases of $16.6 billion and $14.5 billion and commercial letters of credit of $1.5 billion and $1.4 billion at June 30, 2016 and December 31, 2015.

(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 June 30, 2016, 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 $10.7 billion, or four percent, during the six months ended June 30, 2016 due to growth across all of the commercial businesses. Energy exposure largely drove increases in reservable criticized balances of $2.4 billion, or 24 percent, and nonperforming loans and leases of $482 million, or 56 percent, during the six months ended June 30, 2016, as well as increases in net charge-offs of $29 million and $87 million for the three and six months ended June 30, 2016 compared to the same periods in 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 23 percent and 21 percent of the commercial real estate loans and leases portfolio at June 30, 2016 and December 31, 2015. 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 $413 million, or one percent, during the six months ended June 30, 2016 due to new originations primarily in major metropolitan markets.

For the three and six months ended June 30, 2016, we continued to see low default rates and solid credit quality in both the residential and non-residential portfolios. We use a number of proactive risk mitigation initiatives to reduce

adversely rated exposure in the commercial real estate portfolio including transfers of deteriorating exposures to management by independent special asset officers and the pursuit of loan restructurings or asset sales to achieve the best results for our customers and the Corporation.

Nonperforming commercial real estate loans and foreclosed properties decreased $5 million, or five percent, and reservable criticized balances decreased $69 million, or 13 percent, during the six months ended June 30, 2016. The decrease in reservable criticized balances was primarily due to loan resolutions and strong commercial real estate fundamentals in most sectors. Net recoveries were $2 million and $8 million for the three and six months ended June 30, 2016 compared to net recoveries of $4 million and net charge-offs of $1 million for the same periods in 2015.

Table of Contents

Table 46 presents outstanding commercial real estate loans by geographic region, based on the geographic location of the collateral, and by property type.

Table 46
Outstanding Commercial Real Estate Loans

(Dollars in millions)	June 30 2016	December 31 2015
By Geographic Region		
California	$13,113	$ 12,063
Northeast	10,145	10,292
Southwest	7,546	7,789
Southeast	6,169	6,066
Midwest	4,184	3,780
Florida	3,013	3,330
Illinois	2,580	2,536
Midsouth	2,526	2,435
Northwest	2,118	2,327
Non-U.S.	3,321	3,549
Other [(1)]	2,897	3,032
Total outstanding commercial real estate loans	$57,612	$ 57,199
By Property Type		
Non-residential		
Office	$15,823	$ 15,246
Multi-family rental	9,199	8,956
Shopping centers/retail	8,968	8,594
Hotels/motels	5,353	5,415
Industrial/warehouse	5,172	5,501
Multi-use	3,015	3,003
Unsecured	1,686	2,056
Land and land development	374	539
Other	5,859	5,791
Total non-residential	55,449	55,101
Residential	2,163	2,098
Total outstanding commercial real estate loans	$57,612	$ 57,199

(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.

Table of Contents

Tables 47 and 48 present commercial real estate credit quality data by non-residential and residential property types. The residential portfolio presented in Tables 46, 47 and 48 includes condominiums and other residential real estate. Other property types in Tables 46, 47 and 48 primarily include special purpose, nursing/retirement homes, medical facilities and restaurants.

Table 47
Commercial Real Estate Credit Quality Data

	Nonperforming Loans and Foreclosed Properties [1]		Utilized Reservable Criticized Exposure [2]	
(Dollars in millions)	June 30 2016	December 31 2015	June 30 2016	December 31 2015
Non-residential				
Office	$ 17	$ 14	$157	$ 110
Multi-family rental	15	18	76	69
Shopping centers/retail	11	12	107	183
Hotels/motels	14	18	15	16
Industrial/warehouse	4	6	8	16
Multi-use	14	15	38	42
Unsecured	1	1	4	4
Land and land development	2	2	3	3
Other	14	8	28	59
Total non-residential	92	94	436	502
Residential	11	14	8	11
Total commercial real estate	$ 103	$ 108	$444	$ 513

[1] Includes commercial foreclosed properties of $19 million and $15 million at June 30, 2016 and December 31, 2015.

[2] Includes loans, SBLCs and bankers' acceptances and excludes loans accounted for under the fair value option.

Table 48
Commercial Real Estate Net Charge-offs and Related Ratios

	Net Charge-offs				Net Charge-off Ratios [1]			
	Three Months Ended June 30		Six Months Ended June 30		Three Months Ended June 30		Six Months Ended June 30	
(Dollars in millions)	2016	2015	2016	2015	2016	2015	2016	2015
Non-residential								
Office	$—	$—	$—	$ 4	— %	— %	— %	0.07 %
Multi-family rental	3	—	3	—	0.11	—	0.07	—
Shopping centers/retail	(1)	—	—	—	(0.04)	—	—	—
Hotels/motels	—	—	1	5	—	—	0.05	0.27
Industrial/warehouse	—	—	2	(2)	—	—	0.06	(0.07)
Multi-use	(1)	1	(9)	—	(0.09)	0.20	(0.63)	—
Unsecured	(2)	(1)	(3)	(2)	(0.38)	(0.12)	(0.28)	(0.26)
Land and land development	—	(6)	—	(6)	—	(4.14)	—	(2.19)
Other	—	—	(1)	—	—	—	(0.02)	—
Total non-residential	(1)	(6)	(7)	(1)	(0.01)	(0.05)	(0.02)	—

Residential	(1)	2	(1)	2	(0.12)	0.38	(0.07)	0.17
Total commercial real estate	$(2)	$(4)	$(8)	$ 1	(0.01)	(0.03)	(0.03)	0.01

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

Table of Contents

At June 30, 2016, total committed non-residential exposure was $77.8 billion compared to $81.0 billion at December 31, 2015, of which $55.4 billion and $55.1 billion were funded loans. Non-residential nonperforming loans and foreclosed properties decreased $2 million, or two percent, to $92 million at June 30, 2016 compared to December 31, 2015 primarily due to decreases across most property types. The non-residential nonperforming loans and foreclosed properties represented 0.16 percent and 0.17 percent of total non-residential loans and foreclosed properties at June 30, 2016 and December 31, 2015. Non-residential utilized reservable criticized exposure decreased $66 million, or 13 percent, to $436 million at June 30, 2016 compared to $502 million at December 31, 2015, which represented 0.77 percent and 0.89 percent of non-residential utilized reservable exposure. For the non-residential portfolio, net recoveries decreased $5 million to $1 million and increased $6 million to $7 million for the three and six months ended June 30, 2016 compared to the same periods in 2015.

At June 30, 2016, total committed residential exposure was $4.2 billion compared to $4.1 billion at December 31, 2015, of which $2.2 billion and $2.1 billion were funded secured loans. Residential nonperforming loans and foreclosed properties and residential utilized reservable criticized exposure remained relatively unchanged for the six months ended June 30, 2016. The nonperforming loans, leases and foreclosed properties and the utilized reservable criticized ratios for the residential portfolio were 0.52 percent and 0.36 percent at June 30, 2016 compared to 0.66 percent and 0.52 percent at December 31, 2015.

At June 30, 2016 and December 31, 2015, the commercial real estate loan portfolio included $6.9 billion and $7.6 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 $116 million and $108 million, and nonperforming construction and land development loans and foreclosed properties totaled $37 million and $44 million at June 30, 2016 and December 31, 2015. 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 June 30, 2016, 79 percent of the non-U.S. commercial loan portfolio was managed in Global Banking and 21 percent in Global Markets. Outstanding loans, excluding loans accounted for under the fair value option, decreased $2.5 billion during the six months ended June 30, 2016 primarily due to increased payoffs. Net charge-offs increased $43 million and $87 million for the three and six months ended June 30, 2016 compared to the same periods in 2015, primarily due to higher energy sector related losses. For more information on the non-U.S. commercial portfolio, see Non-U.S. Portfolio on page 93.

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 47 percent and 45 percent of the U.S. small business commercial portfolio at June 30, 2016 and December 31, 2015. Net charge-offs decreased $1 million to $50 million and $11 million to $102 million for the three and six months ended June 30, 2016 compared to the same periods in 2015, primarily driven by portfolio improvement. Of the U.S. small business commercial net charge-offs, 87 percent and 88 percent were credit card-related products for the three and six months ended June 30, 2016 compared to 93 percent and 84 percent for the same periods in 2015.

Table of Contents

Nonperforming Commercial Loans, Leases and Foreclosed Properties Activity

Table 49 presents the nonperforming commercial loans, leases and foreclosed properties activity during the three and six months ended June 30, 2016 and 2015. Nonperforming loans do not include loans accounted for under the fair value option. During the three and six months ended June 30, 2016, nonperforming commercial loans and leases increased $56 million and $447 million to $1.7 billion primarily due to energy sector related exposure. Approximately 94 percent of commercial nonperforming loans, leases and foreclosed properties were secured and approximately 68 percent were contractually current. Commercial nonperforming loans were carried at approximately 83 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 49
Nonperforming Commercial Loans, Leases and Foreclosed Properties Activity [1, 2]

	Three Months Ended June 30		Six Months Ended June 30	
(Dollars in millions)	2016	2015	2016	2015
Nonperforming loans and leases, beginning of period	$1,603	$996	$1,212	$1,113
Additions to nonperforming loans and leases:				
New nonperforming loans and leases	489	419	1,186	706
Advances	2	15	11	17
Reductions to nonperforming loans and leases:				
Paydowns	(211)	(103)	(331)	(213)
Sales	(87)	(65)	(93)	(81)
Returns to performing status [3]	(29)	(27)	(76)	(51)
Charge-offs	(106)	(56)	(248)	(107)
Transfers to foreclosed properties [4]	(2)	(7)	(2)	(212)
Total net additions to nonperforming loans and leases	56	176	447	59
Total nonperforming loans and leases, June 30	1,659	1,172	1,659	1,172
Foreclosed properties, beginning of period	10	264	15	67
Additions to foreclosed properties:				
New foreclosed properties [4]	22	7	22	207
Reductions to foreclosed properties:				
Sales	(13)	(5)	(18)	(7)
Write-downs	—	(1)	—	(2)
Total net additions to foreclosed properties	9	1	4	198
Total foreclosed properties, June 30	19	265	19	265
Nonperforming commercial loans, leases and foreclosed properties, June 30	$1,678	$1,437	$1,678	$1,437
Nonperforming commercial loans and leases as a percentage of outstanding commercial loans and leases [5]	0.37 %	0.28 %		
Nonperforming commercial loans, leases and foreclosed properties as a percentage of outstanding commercial loans, leases and foreclosed properties [5]	0.38	0.35		

(1) Balances do not include nonperforming LHFS of $203 million and $298 million at June 30, 2016 and 2015.

(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) Outstanding commercial loans exclude loans accounted for under the fair value option.

Table of Contents

Table 50 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 50
Commercial Troubled Debt Restructurings

	June 30, 2016			December 31, 2015		
(Dollars in millions)	Total	Non-performing	Performing	Total	Non-performing	Performing
U.S. commercial	$1,980	$ 827	$ 1,153	$1,225	$ 394	$ 831
Commercial real estate	110	39	71	118	27	91
Commercial lease financing	3	3	—	—	—	—
Non-U.S. commercial	273	59	214	363	136	227
	2,366	928	1,438	1,706	557	1,149
U.S. small business commercial	18	3	15	29	10	19
Total commercial troubled debt restructurings	$2,384	$ 931	$ 1,453	$1,735	$ 567	$ 1,168

Industry Concentrations

Table 51 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 decreased $3.8 billion, during the six months ended June 30, 2016 to $938.7 billion. Decreases in commercial committed exposure were concentrated in diversified financials, technology hardware and equipment, banking, and energy, partially offset by higher exposure to healthcare equipment and services, and capital goods.

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. The Management Risk Committee (MRC) oversees industry limit governance.

Diversified financials, our largest industry concentration with committed exposure of $122.5 billion, decreased $5.9 billion, or five percent, during the six months ended June 30, 2016. The decrease was primarily due to a reduction in bridge financing exposure and cancellation of a commitment.

Real estate, our second largest industry concentration with committed exposure of $84.5 billion, decreased $3.1 billion during the six months ended June 30, 2016. Real estate construction and land development exposure represented 13 percent and 14 percent of the total real estate industry committed exposure at June 30, 2016 and December 31, 2015. For more information on the commercial real estate and related portfolios, see Commercial Portfolio Credit Risk Management – Commercial Real Estate on page 84.

The decline in oil prices 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. Our energy-related committed exposure decreased $3.3 billion to $40.5 billion during the six months ended June 30, 2016. Within the higher risk sub-sectors of exploration and production and oil field services, total committed exposure declined $2.0 billion to $16.1 billion, or 40 percent of total committed energy exposure, during the six months ended June 30, 2016. Total utilized exposure to these sub-sectors declined approximately $800 million to $7.6 billion during the six months ended June 30, 2016, and

represents less than one percent of total loans and leases. Of the total utilized exposure to the higher risk sub-sectors, 57 percent was criticized at June 30, 2016. Energy sector net charge-offs increased $178 million to $181 million for the six months ended June 30, 2016 compared to the same period in 2015 and energy sector reservable criticized exposure increased $1.6 billion to $6.2 billion during the six months ended June 30, 2016 due to sustained low oil prices. The energy allowance for credit losses increased to $1.0 billion during the six months ended June 30, 2016 primarily due to increased allowance coverage for the higher risk sub-sectors.

Table of Contents

Our committed state and municipal exposure of $46.5 billion at June 30, 2016 consisted of $38.6 billion of commercial utilized exposure (including $18.7 billion of funded loans, $7.4 billion of SBLCs and $4.1 billion of derivative assets) and $7.9 billion of unfunded commercial exposure (primarily unfunded loan commitments) and is reported in the government and public education industry in Table 51. 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.

Table 51
Commercial Credit Exposure by Industry [1]

(Dollars in millions)	Commercial Utilized		Total Commercial Committed [2]	
	June 30 2016	December 31 2015	June 30 2016	December 31 2015
Diversified financials	$78,799	$ 79,496	$122,504	$ 128,436
Real estate [3]	61,539	61,759	84,543	87,650
Healthcare equipment and services	37,483	35,134	67,494	57,901
Retailing	39,934	37,675	63,589	63,975
Capital goods	34,866	30,790	63,171	58,583
Government and public education	45,956	44,835	55,019	53,133
Banking	44,002	45,952	50,437	53,825
Materials	23,373	24,012	44,607	46,013
Food, beverage and tobacco	20,594	18,316	41,495	43,164
Energy	21,220	21,257	40,467	43,811
Consumer services	25,656	24,084	40,132	37,058
Commercial services and supplies	21,335	19,552	33,818	32,045
Utilities	12,868	11,396	28,426	27,849
Transportation	20,117	19,369	27,392	27,371
Media	13,137	12,833	25,101	24,194
Individuals and trusts	16,397	17,992	21,638	23,176
Technology hardware and equipment	7,492	6,337	19,185	24,734
Software and services	7,990	6,617	18,380	18,362
Pharmaceuticals and biotechnology	6,389	6,302	16,202	16,472
Automobiles and components	5,414	4,804	12,447	11,329
Telecommunication services	5,352	4,717	12,092	10,645
Insurance, including monolines	5,395	5,095	10,670	10,728
Consumer durables and apparel	5,635	6,053	10,390	11,165
Food and staples retailing	4,827	4,351	8,890	9,439
Religious and social organizations	4,619	4,526	6,373	5,929
Other	7,307	6,309	14,196	15,510
Total commercial credit exposure by industry	$577,696	$ 559,563	$938,658	$ 942,497
Net credit default protection purchased on total commitments [4]			$(5,396)	$ (6,677)

(1) Includes U.S. small business commercial exposure.

(2) Includes the notional amount of unfunded legally binding lending commitments net of amounts distributed (e.g., syndicated or participated) to other financial institutions of $13.9 billion and $14.3 billion at June 30, 2016 and December 31, 2015.

(3) Industries are viewed from a variety of perspectives to best isolate the perceived risks. For purposes of this table, the real estate industry is defined based on the borrowers' or counterparties' primary business activity using operating cash flows and primary source of repayment as key factors.

(4)

Represents net notional credit protection purchased. For additional information, see Commercial Portfolio Credit Risk Management – Risk Mitigation on page 91.

Table of Contents

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 June 30, 2016 and December 31, 2015, 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 $5.4 billion and $6.7 billion. We recorded net losses of $125 million and $328 million for the three and six months ended June 30, 2016 compared to net losses of $42 million and $113 million for the same periods in 2015 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 59. For additional information, see Trading Risk Management on page 101.

Tables 52 and 53 present the maturity profiles and the credit exposure debt ratings of the net credit default protection portfolio at June 30, 2016 and December 31, 2015.

Table 52
Net Credit Default Protection by Maturity

	June 30 2016	December 31 2015
Less than or equal to one year	52 %	39 %
Greater than one year and less than or equal to five years	45	59
Greater than five years	3	2
Total net credit default protection	100 %	100 %

Table 53
Net Credit Default Protection by Credit Exposure Debt Rating

(Dollars in millions)	June 30, 2016		December 31, 2015	
Ratings [1, 2]	Net Notional [3]	Percent of Total	Net Notional [3]	Percent of Total
A	$(713)	13.2 %	$(752)	11.3 %
BBB	(2,656)	49.2	(3,030)	45.4
BB	(1,190)	22.1	(2,090)	31.3
B	(794)	14.7	(634)	9.5
CCC and below	(14)	0.3	(139)	2.1
NR [4]	(29)	0.5	(32)	0.4
Total net credit default protection	$(5,396)	100.0%	$(6,677)	100.0%

(1) Ratings are refreshed on a quarterly basis.
(2) Ratings of BBB- or higher are considered to meet the definition of investment grade.
(3) Represents net credit default protection purchased.
(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 of Contents

Table 54 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 54 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 54
Credit Derivatives

	June 30, 2016		December 31, 2015	
(Dollars in millions)	Contract/ Notional	Credit Risk	Contract/ Notional	Credit Risk
Purchased credit derivatives:				
Credit default swaps	$856,588	$3,081	$928,300	$3,677
Total return swaps/other	37,428	423	26,427	1,596
Total purchased credit derivatives	$894,016	$3,504	$954,727	$5,273
Written credit derivatives:				
Credit default swaps	$844,003	n/a	$924,143	n/a
Total return swaps/other	41,506	n/a	39,658	n/a
Total written credit derivatives	$885,509	n/a	$963,801	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 55. 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 55
Credit Valuation Gains and Losses

Gains (Losses)	Three Months Ended June 30						Six Months Ended June 30					
	2016			2015			2016			2015		
(Dollars in millions)	Gross	Hedge	Net	Gross	Hedge	Net	Gross	Hedge	Net	Gross	Hedge	Net
Credit valuation	$(26)	$ 59	$33	$215	$(232)	$(17)	$(235)	$ 320	$85	$223	$(116)	$107

92

Table of Contents

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 56 presents our 20 largest non-U.S. country exposures at June 30, 2016. These exposures accounted for 87 percent and 85 percent of our total non-U.S. exposure at June 30, 2016 and December 31, 2015. Net country exposure for these 20 countries increased $25.8 billion from December 31, 2015 primarily driven by increases in Germany, Canada, France, and the United Kingdom. On a product basis, the increase was driven by an increase in funded loans and loan equivalents in Germany and the United Kingdom, primarily in the form of central bank placements in preparation of potential liquidity needs following the U.K. Referendum, higher securities in France, Germany, Canada and Netherlands, and higher net counterparty exposure in Canada and Luxembourg. These increases were partially offset by reductions in unfunded commitments in the United Kingdom and Germany.

Non-U.S. exposure is presented on an internal risk management basis and includes sovereign and non-sovereign credit exposure, securities and other investments issued by or domiciled in countries other than the U.S. 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.

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.

93

Table of Contents

Table 56
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 June 30 2016	Hedges and Credit Default Protection	Net Country Exposure at June 30 2016	Increase (Decrease) from December 31 2015
United Kingdom	$ 34,260	$ 13,922	$ 9,752	$ 2,207	$ 60,141	$ (3,831)	$ 56,310	$ 3,064
Germany	13,368	5,394	2,256	4,410	25,428	(4,109)	21,319	7,915
Canada	7,220	6,751	4,024	3,811	21,806	(1,437)	20,369	5,637
Brazil	9,518	280	1,268	4,385	15,451	(217)	15,234	(416)
Japan	13,901	599	1,600	750	16,850	(2,073)	14,777	413
France	3,474	4,699	2,234	7,074	17,481	(3,462)	14,019	5,333
China	8,483	534	1,486	1,618	12,121	(392)	11,729	1,255
India	6,467	258	356	3,376	10,457	(257)	10,200	(154)
Australia	4,771	2,190	1,043	1,472	9,476	(348)	9,128	(417)
Netherlands	3,018	2,868	729	2,653	9,268	(1,235)	8,033	399
Hong Kong	5,829	202	936	595	7,562	(9)	7,553	(36)
South Korea	4,110	729	904	1,728	7,471	(406)	7,065	207
Switzerland	3,390	3,121	417	603	7,531	(1,179)	6,352	89
Mexico	3,210	995	231	1,294	5,730	(263)	5,467	413
Singapore	2,516	285	822	1,717	5,340	(49)	5,291	562
Italy	2,876	888	800	1,032	5,596	(772)	4,824	(484)
United Arab Emirates	2,132	231	1,139	49	3,551	(58)	3,493	467
Luxembourg	433	742	2,613	77	3,865	(392)	3,473	1,319
Turkey	3,181	86	64	24	3,355	(60)	3,295	155
Israel	205	2,405	138	88	2,836	—	2,836	86
Total top 20 non-U.S. countries exposure	$ 132,362	$ 47,179	$ 32,812	$ 38,963	$ 251,316	$ (20,549)	$ 230,767	$ 25,807

Weakening of commodity prices, signs of slowing growth in China, a recession in Brazil and recent political events in Turkey are driving risk aversion in emerging markets. At June 30, 2016, net exposure to China was $11.7 billion, concentrated in large state-owned companies, subsidiaries of multinational corporations and commercial banks. At June 30, 2016, net exposure to Brazil was $15.2 billion, concentrated in sovereign securities, oil and gas companies and commercial banks. At June 30, 2016, net exposure to Turkey was $3.3 billion, concentrated in commercial banks.

The U.K. Referendum has led to political and economic uncertainty that may continue over the next several years. At June 30, 2016, net exposure to the U.K. was $56.3 billion, concentrated in multinational corporations and sovereign clients. For additional information, see Executive Summary – Recent Events on page 5 and Item 1A. Risk Factors on page 215.

Certain European countries, including Italy, Spain, Greece and Portugal, have experienced varying degrees of financial stress in recent years. While market uncertainty increased in Europe due to the results of the U.K. Referendum to leave the European Union, 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. At June 30, 2016, net exposure to Italy was $4.8 billion as presented in Table 56. At June 30, 2016, net exposure to Spain, Greece and Portugal was $2.6 billion, $261 million and $10

million, respectively. 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 of Contents

Provision for Credit Losses

The provision for credit losses increased $196 million to $976 million, and $428 million to $2.0 billion for the three and six months ended June 30, 2016 compared to the same periods in 2015. The provision for credit losses was $9 million and $80 million lower than net charge-offs for the three and six months ended June 30, 2016, resulting in a reduction in the allowance for credit losses. This compared to a reduction of $288 million and $717 million in the allowance for credit losses for the three and six months ended June 30, 2015. For the remainder of 2016, we currently expect that provision expense should approximate net charge-offs.

The provision for credit losses for the consumer portfolio increased $180 million to $733 million for the three months ended June 30, 2016 compared to the same period in 2015 due to a slower pace of improvement. The provision for credit losses remained relatively unchanged at $1.1 billion for the six months ended June 30, 2016 compared to the same period in 2015. Included in the provision is a benefit of $12 million and $89 million related to the PCI loan portfolio for the three and six months ended June 30, 2016 compared to an expense of $78 million and $28 million for the same periods in 2015.

The provision for credit losses for the commercial portfolio, including unfunded lending commitments, increased $16 million to $243 million, and $465 million to $838 million for the three and six months ended June 30, 2016 compared to the same periods in 2015, with the increase for the six months ended June 30, 2016 primarily driven by an increase in energy sector reserves to increase the allowance coverage for the higher risk sub-sectors. The decline in oil prices 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 with the magnitude of the impact over time depending in part on the level and duration of future oil prices.

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 June 30, 2016, the loss forecast process resulted in reductions in the allowance for most major consumer portfolios compared to December 31, 2015.

Table of Contents

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 June 30, 2016, the allowance increased for the U.S. commercial and non-U.S. commercial portfolios and decreased for the commercial real estate and commercial leasing portfolios compared to December 31, 2015.

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 the three and six months ended June 30, 2016, 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, loan sales, returns to performing status, paydowns and charge-offs continued to outpace new nonaccrual loans. During the six months ended June 30, 2016, the allowance for loan and lease losses in the commercial portfolio reflected increased coverage for the energy sector due to sustained low oil prices which impacted the financial performance of energy clients and contributed to an increase in reservable criticized balances.

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.

Table of Contents

The allowance for loan and lease losses for the consumer portfolio, as presented in Table 58, was $6.5 billion at June 30, 2016, a decrease of $842 million from December 31, 2015. The decrease was primarily in the home equity, residential mortgage and credit card portfolios. Reductions in the residential mortgage and home equity portfolios were due to improved home prices, lower delinquencies and a decrease in consumer loan balances, as well as 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 $1.4 billion at June 30, 2016 from $1.6 billion (to 1.58 percent from 1.76 percent of outstanding U.S. credit card loans) at December 31, 2015, and accruing loans 90 days or more past due decreased to $693 million at June 30, 2016 from $789 million (to 0.79 percent from 0.88 percent of outstanding U.S. credit card loans) at December 31, 2015. See Tables 28, 29, 36 and 38 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 58, was $5.3 billion at June 30, 2016, an increase of $445 million from December 31, 2015 driven by increased allowance coverage for the higher risk energy sub-sectors as a result of sustained low oil prices. Commercial utilized reservable criticized exposure increased to $18.1 billion at June 30, 2016 from $15.9 billion (to 3.76 percent from 3.38 percent of total commercial utilized reservable exposure) at December 31, 2015, largely due to downgrades in the energy portfolio. Nonperforming commercial loans increased to $1.7 billion at June 30, 2016 from $1.2 billion (to 0.37 percent from 0.28 percent of outstanding commercial loans excluding loans accounted for under the fair value option) at December 31, 2015 with the increase primarily in the energy sector. Commercial loans and leases outstanding increased to $451.3 billion at June 30, 2016 from $440.8 billion at December 31, 2015. See Tables 42, 43 and 45 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 1.32 percent at June 30, 2016 compared to 1.37 percent at December 31, 2015. The decrease in the ratio was primarily due to improved credit quality in the consumer portfolios driven by improved economic conditions and write-offs in the PCI loan portfolio. The June 30, 2016 and December 31, 2015 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 1.29 percent and 1.31 percent at June 30, 2016 and December 31, 2015.

Table of Contents

Table 57 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 the three and six months ended June 30, 2016 and 2015.

Table 57
Allowance for Credit Losses

	Three Months Ended June 30		Six Months Ended June 30	
(Dollars in millions)	2016	2015	2016	2015
Allowance for loan and lease losses, beginning of period	$12,069	$13,676	$12,234	$14,419
Loans and leases charged off				
Residential mortgage	(88)	(270)	(273)	(570)
Home equity	(216)	(263)	(409)	(515)
U.S. credit card	(680)	(691)	(1,373)	(1,420)
Non-U.S. credit card	(63)	(73)	(124)	(143)
Direct/Indirect consumer	(88)	(92)	(189)	(198)
Other consumer	(53)	(40)	(110)	(99)
Total consumer charge-offs	(1,188)	(1,429)	(2,478)	(2,945)
U.S. commercial [1]	(124)	(113)	(282)	(222)
Commercial real estate	(3)	(5)	(8)	(18)
Commercial lease financing	(17)	(3)	(17)	(10)
Non-U.S. commercial	(46)	(3)	(89)	(3)
Total commercial charge-offs	(190)	(124)	(396)	(253)
Total loans and leases charged off	(1,378)	(1,553)	(2,874)	(3,198)
Recoveries of loans and leases previously charged off				
Residential mortgage	54	93	148	196
Home equity	90	112	171	192
U.S. credit card	107	107	213	215
Non-U.S. credit card	17	22	33	48
Direct/Indirect consumer	65	68	132	140
Other consumer	6	7	15	17
Total consumer recoveries	339	409	712	808
U.S. commercial [2]	46	63	87	103
Commercial real estate	5	9	16	17
Commercial lease financing	2	3	4	5
Non-U.S. commercial	1	1	2	3
Total commercial recoveries	54	76	109	128
Total recoveries of loans and leases previously charged off	393	485	821	936
Net charge-offs	(985)	(1,068)	(2,053)	(2,262)
Write-offs of PCI loans	(82)	(290)	(187)	(578)
Provision for loan and lease losses	952	729	1,968	1,485
Other [3]	(117)	21	(125)	4
Allowance for loan and lease losses, June 30	11,837	13,068	11,837	13,068
Reserve for unfunded lending commitments, beginning of period	627	537	646	528
Provision for unfunded lending commitments	24	51	5	60
Other [3]	99	—	99	—
Reserve for unfunded lending commitments, June 30	750	588	750	588
Allowance for credit losses, June 30	$12,587	$13,656	$12,587	$13,656

(1) Includes U.S. small business commercial charge-offs of $61 million and $123 million for the three and six months ended June 30, 2016 compared to $72 million and $150 million for the same periods in 2015.

(2) Includes U.S. small business commercial recoveries of $11 million and $21 million for the three and six months ended June 30, 2016 compared to $21 million and $37 million for the same periods in 2015.

(3) Primarily represents the net impact of portfolio sales, consolidations and deconsolidations, foreign currency translation adjustments and certain other reclassifications.

Table of Contents

Table 57
Allowance for Credit Losses (continued)

(Dollars in millions)	Three Months Ended June 30 2016	2015	Six Months Ended June 30 2016	2015
Loan and allowance ratios:				
Loans and leases outstanding at June 30 [4]	$894,493	$873,567	$894,493	$873,567
Allowance for loan and lease losses as a percentage of total loans and leases outstanding at June 30 [4]	1.32 %	1.50 %	1.32 %	1.50 %
Consumer allowance for loan and lease losses as a percentage of total consumer loans and leases outstanding at June 30 [5]	1.45	1.81	1.45	1.81
Commercial allowance for loan and lease losses as a percentage of total commercial loans and leases outstanding at June 30 [6]	1.19	1.13	1.19	1.13
Average loans and leases outstanding [4]	$890,603	$868,440	$888,130	$863,403
Annualized net charge-offs as a percentage of average loans and leases outstanding [4, 7]	0.44 %	0.49 %	0.46 %	0.53 %
Annualized net charge-offs and PCI write-offs as a percentage of average loans and leases outstanding [4]	0.48	0.63	0.51	0.66
Allowance for loan and lease losses as a percentage of total nonperforming loans and leases at June 30 [4, 8]	142	122	142	122
Ratio of the allowance for loan and lease losses at June 30 to annualized net charge-offs [7]	2.99	3.05	2.87	2.86
Ratio of the allowance for loan and lease losses at June 30 to annualized net charge-offs and PCI write-offs	2.76	2.40	2.63	2.28
Amounts included in allowance for loan and lease losses for loans and leases that are excluded from nonperforming loans and leases at June 30 [9]	$4,087	$5,050	$4,087	$5,050
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 June 30 [4, 9]	93 %	75 %	93 %	75 %
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 June 30 [4]	1.29 %	1.40 %	1.29 %	1.40 %
Consumer allowance for loan and lease losses as a percentage of total consumer loans and leases outstanding at June 30 [5]	1.38	1.64	1.38	1.64
Annualized net charge-offs as a percentage of average loans and leases outstanding [4]	0.45	0.50	0.47	0.54
Allowance for loan and lease losses as a percentage of total nonperforming loans and leases at June 30 [4, 8]	135	111	135	111
Ratio of the allowance for loan and lease losses at June 30 to annualized net charge-offs	2.85	2.79	2.74	2.62

(4) Outstanding loan and lease balances and ratios do not include loans accounted for under the fair value option of $8.7 billion and $7.6 billion at June 30, 2016 and 2015. Average loans accounted for under the fair value option were $9.1 billion and $8.2 billion for the three and six months ended June 30, 2016 compared to $7.7 billion and $8.3 billion for the same periods in 2015.

(5) Excludes consumer loans accounted for under the fair value option of $1.8 billion and $2.0 billion at June 30, 2016 and 2015.

(6) Excludes commercial loans accounted for under the fair value option of $6.8 billion and $5.7 billion at June 30, 2016 and 2015.

(7) Net charge-offs exclude $82 million and $187 million of write-offs in the PCI loan portfolio for the three and six months ended June 30, 2016 compared to $290 million and $578 million for the same periods in 2015. For more information on PCI write-offs, see Consumer Portfolio Credit Risk Management – Purchased Credit-impaired Loan Portfolio on page 76.

(8) For more information on our definition of nonperforming loans, see pages 79 and 88.

(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.

Table of Contents

For reporting purposes, we allocate the allowance for credit losses across products. Table 58 presents our allocation by product type.

Table 58
Allocation of the Allowance for Credit Losses by Product Type

	June 30, 2016			December 31, 2015		
(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	$1,192	10.07 %	0.64 %	$1,500	12.26 %	0.80 %
Home equity	2,017	17.04	2.82	2,414	19.73	3.18
U.S. credit card	2,806	23.71	3.18	2,927	23.93	3.27
Non-U.S. credit card	256	2.16	2.73	274	2.24	2.75
Direct/Indirect consumer	224	1.89	0.24	223	1.82	0.25
Other consumer	48	0.41	2.11	47	0.38	2.27
Total consumer	6,543	55.28	1.45	7,385	60.36	1.63
U.S. commercial [2]	3,441	29.07	1.24	2,964	24.23	1.12
Commercial real estate	919	7.76	1.60	967	7.90	1.69
Commercial lease financing	145	1.22	0.68	164	1.34	0.77
Non-U.S. commercial	789	6.67	0.89	754	6.17	0.82
Total commercial [3]	5,294	44.72	1.19	4,849	39.64	1.11
Allowance for loan and lease losses [4]	11,837	100.00%	1.32	12,234	100.00%	1.37
Reserve for unfunded lending commitments	750			646		
Allowance for credit losses	$12,587			$12,880		

(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 $1.5 billion and $1.6 billion and home equity loans of $354 million and $250 million at June 30, 2016 and December 31, 2015. Commercial loans accounted for under the fair value option included U.S. commercial loans of $2.7 billion and $2.3 billion and non-U.S. commercial loans of $4.1 billion and $2.8 billion at June 30, 2016 and December 31, 2015.

(2) Includes allowance for loan and lease losses for U.S. small business commercial loans of $466 million and $507 million at June 30, 2016 and December 31, 2015.

(3) Includes allowance for loan and lease losses for impaired commercial loans of $238 million and $217 million at June 30, 2016 and December 31, 2015.

(4) Includes $528 million and $804 million of valuation allowance presented with the allowance for loan and lease losses related to PCI loans at June 30, 2016 and December 31, 2015.

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 $750 million at June 30, 2016, an increase of $104 million from December 31, 2015, with the increase attributable primarily to the reclassification of allowance for loan losses to the reserve for unfunded lending commitments for the commercial portfolio.

Table of Contents

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 the Banking Book on page 106.

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.

Quantitative risk models, such as VaR, are an essential component in evaluating the market risks within a portfolio. A subcommittee of the 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 14 – Fair Value Measurements to the Consolidated Financial Statements. For more information on our market risk management process, see page 92 of the MD&A of the Corporation's 2015 Annual Report on Form 10-K.

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.

Table of Contents

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. For more information regarding ICAAP, see Capital Management on page 48.

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 59 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 59 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 59 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 59 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 of Contents

Table 59 presents period-end, average, high and low daily trading VaR for the three months ended June 30, 2016, March 31, 2016 and June 30, 2015, as well as average daily trading VaR for the six months ended June 30, 2016 and 2015, using a 99 percent confidence level.

Table 59
Market Risk VaR for Trading Activities

	Three Months Ended												Six Months Ended	
	June 30, 2016				March 31, 2016				June 30, 2015				June 30	
(Dollars in millions)	Period End	Average	High[1]	Low[1]	Period End	Average	High[1]	Low[1]	Period End	Average	High[1]	Low[1]	2016 Average	2015 Average
Foreign exchange	$7	$ 9	$ 11	$7	$10	$ 11	$ 16	$7	$11	$ 8	$ 23	$6	$10	$ 9
Interest rate	22	20	28	15	18	23	30	16	19	26	38	16	22	28
Credit	28	31	34	27	31	31	35	27	31	36	42	31	31	39
Equity	21	20	30	12	15	19	27	13	13	13	18	9	20	13
Commodity	8	6	8	4	5	5	7	3	4	6	8	4	6	6
Portfolio diversification	(42)	(46)	—	—	(44)	(50)	—	—	(32)	(45)	—	—	(49)	(46)
Total covered positions trading portfolio	44	40	49	30	35	39	50	29	46	44	65	35	40	49
Impact from less liquid exposures	4	6	—	—	5	3	—	—	9	11	—	—	4	10
Total market-based trading portfolio	48	46	58	35	40	42	58	34	55	55	74	47	44	59
Fair value option loans	21	25	29	21	28	35	40	28	19	21	28	17	30	26
Fair value option hedges	11	12	15	10	15	18	22	14	10	9	14	8	15	13
Fair value option portfolio diversification	(20)	(23)	—	—	(31)	(38)	—	—	(17)	(18)	—	—	(30)	(25)
Total fair value option portfolio	12	14	17	12	12	15	20	11	12	12	16	10	15	14
Portfolio diversification	(3)	(6)	—	—	(4)	(7)	—	—	(5)	(6)	—	—	(7)	(7)
Total market-based portfolio	$57	$ 54	$ 70	$44	$48	$ 50	$ 69	$40	$62	$ 61	$ 80	$52	$52	$ 66

(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 for the three months ended June 30, 2016 compared to the same period in 2015 primarily due to reduced exposure to the credit and interest rate markets.

The graph below presents the daily total market-based trading portfolio VaR for the previous five quarters, corresponding to the data in Table 59.

Table of Contents

Additional VaR statistics produced within the Corporation's single VaR model are provided in Table 60 at the same level of detail as in Table 59. 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 60 presents average trading VaR statistics for 99 percent and 95 percent confidence levels for the three months ended June 30, 2016, March 31, 2016 and June 30, 2015.

Table 60
Average Market Risk VaR for Trading Activities – 99 Percent and 95 Percent VaR Statistics

	Three Months Ended					
	June 30, 2016		March 31, 2016		June 30, 2015	
(Dollars in millions)	99 percent	95 percent	99 percent	95 percent	99 percent	95 percent
Foreign exchange	$9	$ 5	$11	$ 6	$8	$ 5
Interest rate	20	12	23	14	26	15
Credit	31	19	31	18	36	20
Equity	20	13	19	12	13	7
Commodity	6	3	5	2	6	3
Portfolio diversification	(46)	(31)	(50)	(31)	(45)	(31)
Total covered positions trading portfolio	40	21	39	21	44	19
Impact from less liquid exposures	6	3	3	2	11	4
Total market-based trading portfolio	46	24	42	23	55	23
Fair value option loans	25	14	35	19	21	12
Fair value option hedges	12	8	18	11	9	6
Fair value option portfolio diversification	(23)	(14)	(38)	(21)	(18)	(11)
Total fair value option portfolio	14	8	15	9	12	7
Portfolio diversification	(6)	(5)	(7)	(5)	(6)	(5)
Total market-based portfolio	$54	$ 27	$50	$ 27	$61	$ 25

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.

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

We conduct daily backtesting on 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.

During the three and six months ended June 30, 2016, there were no days in which there was a backtesting excess for our total market-based portfolio VaR, utilizing a one-day holding period. The backtesting results for our total market-based portfolio VaR differ from the backtesting results used for regulatory capital calculations.

Table of Contents

Total Trading-related Revenue

Total trading-related revenue, excluding brokerage fees, and CVA, DVA and FVA gains (losses), represent 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 14 – Fair Value Measurements to the Consolidated Financial Statements. Trading-related revenue can be volatile and is largely driven by general market conditions and customer demand. Also, trading-related revenue is dependent on the volume and type of transactions, the level of risk assumed, and the volatility of price and rate movements at any given time within the ever-changing market environment. Significant daily revenue by business is monitored and the primary drivers of these are reviewed.

The histogram below is a graphic depiction of trading volatility and illustrates the daily level of trading-related revenue for the three months ended June 30, 2016 compared to the three months ended March 31, 2016. During the three months ended June 30, 2016, positive trading-related revenue was recorded for 100 percent of the trading days, of which 95 percent were daily trading gains of over $25 million. This compares to the three months ended March 31, 2016, where positive trading-related revenue was recorded for 98 percent of the trading days, of which 75 percent were daily trading gains of over $25 million and the largest loss was $14 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 on page 47.

Table of Contents

Interest Rate Risk Management for the Banking Book

The following discussion presents net interest income for banking book activities.

Interest rate risk represents the most significant market risk exposure to our banking book balance sheet. Our banking book balance sheet includes all on- and off-balance sheet financial instruments of the Corporation except for those positions that are held for trading purposes. Interest rate risk in our banking book is measured as the potential change in net interest income caused by movements in market interest rates and excludes positions held for trading purposes. 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 61 presents the spot and 12-month forward rates used in our baseline forecasts at June 30, 2016 and December 31, 2015.

Table 61
Forward Rates

	June 30, 2016			December 31, 2015		
	Federal Funds	Three-month LIBOR	10-Year Swap	Federal Funds	Three-month LIBOR	10-Year Swap
Spot rates	0.50%	0.65 %	1.36 %	0.50%	0.61 %	2.19 %
12-month forward rates	0.50	0.72	1.52	1.00	1.22	2.39

Table of Contents

Table 62 shows the pretax dollar impact to forecasted net interest income over the next 12 months from June 30, 2016 and December 31, 2015, 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.

In the three and six months ended June 30, 2016, the asset sensitivity of our balance sheet increased, primarily driven by lower long-end rates and an increase in projected deposit growth. We continue to be asset sensitive to a parallel move in interest rates with the majority of that benefit coming from the long end of the yield curve, including the impact of market-related adjustments for bond premium amortization which results from the Corporation's application of Accounting Standards Codification (ASC) 310-20-35-26, "Estimating Principal Prepayments" (formerly known as FAS 91). 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 48.

Table 62
Estimated Banking Book Net Interest Income Sensitivity

(Dollars in millions) Curve Change	Short Rate (bps)	Long Rate (bps)	June 30 2016	December 31 2015
Parallel shifts				
+100 bps instantaneous shift [1]	+100	+100	$7,461	$ 4,306
-50 bps instantaneous shift [1]	-50	-50	(5,076)	(3,903)
Flatteners				
Short-end instantaneous change	+100	—	3,118	2,417
Long-end instantaneous change [1]	—	-50	(2,045)	(2,212)
Steepeners				
Short-end instantaneous change	-50	—	(3,016)	(1,671)
Long-end instantaneous change [1]	—	+100	4,454	1,919

(1) As of June 30, 2016, market-related adjustments for bond premium amortization from the application of ASC 310-20-35-26 with respect to a +100 bps instantaneous change or shift in long-end interest rates were approximately $2.5 billion, and with respect to a -50 bps instantaneous change or shift in long-end interest rates, approximately $(1.0) billion.

The sensitivity analysis in Table 62 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 62 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 the six months ended June 30, 2016 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 of Contents

Table 63 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 June 30, 2016 and December 31, 2015. These amounts do not include derivative hedges on our MSRs.

Table 63
Asset and Liability Management Interest Rate and Foreign Exchange Contracts

		June 30, 2016 Expected Maturity						
(Dollars in millions, average estimated duration in years)	Fair Value	Total	Remainder of 2016	2017	2018	2019	2020	Thereafter	Average Estimated Duration
Receive-fixed interest rate swaps [1]	$9,829								5.36
Notional amount		$115,675	$10,161	$21,453	$21,850	$9,783	$7,015	$45,413	
Weighted-average fixed-rate		2.99 %	2.71 %	3.64 %	3.20 %	2.37 %	2.13 %	2.92 %	
Pay-fixed interest rate swaps [1]	(580)								4.53
Notional amount		$26,298	$—	$1,527	$5,668	$1,302	$10,185	$7,616	
Weighted-average fixed-rate		1.41 %	— %	1.84 %	1.41 %	1.27 %	1.10 %	1.75 %	
Same-currency basis swaps [2]	(27)								
Notional amount		$68,285	$8,777	$20,878	$11,030	$6,789	$1,180	$19,631	
Foreign exchange basis swaps [1, 3, 4]	(3,856)								
Notional amount		141,437	11,876	28,589	22,167	13,412	11,945	53,448	
Option products [5]	28								
Notional amount [6]		(427)	(442)	—	—	—	—	15	
Foreign exchange contracts [1, 4, 7]	1,965								
Notional amount [6]		(27,586)	(41,205)	5,596	309	2,086	3	5,625	
Futures and forward rate contracts	(2)								
Notional amount [6]		—	—	—	—	—	—	—	
Net ALM contracts	$7,357								

		December 31, 2015 Expected Maturity						
(Dollars in millions, average estimated duration in years)	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	
		3.12 %	3.12 %	3.64 %	3.20 %	2.37 %	2.13 %	3.16 %	

Weighted-average fixed-rate									
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								

(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 June 30, 2016 and December 31, 2015, the notional amount of same-currency basis swaps included $68.3 billion and $75.2 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 $(427) million at June 30, 2016 was comprised of $(442) million in foreign exchange options and $15 million in purchased caps/floors. Option products of $752 million at December 31, 2015 were comprised of $737 million in foreign exchange options and $15 million in purchased caps/floors.

(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 $(27.6) billion at June 30, 2016 was comprised of $21.0 billion in foreign currency-denominated and cross-currency receive-fixed swaps, $(43.6) billion in net foreign currency forward rate contracts, $(6.3) billion in foreign currency-denominated pay-fixed swaps and $1.3 billion in net foreign currency futures contracts. Foreign exchange contracts of $(25.4) billion at December 31, 2015 were 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 foreign currency futures contracts.

Table of Contents

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 $1.5 billion and $1.7 billion, on a pretax basis, at June 30, 2016 and December 31, 2015. 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 June 30, 2016, the pretax net losses are expected to be reclassified into earnings as follows: $515 million, or 35 percent within the next year, 33 percent in years two through five, and 20 percent in years six through ten, with the remaining 12 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 June 30, 2016.

Mortgage Banking Risk Management

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

Interest rate risk and market risk can be substantial in the mortgage business. 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. For the three and six months ended June 30, 2016, we recorded gains in mortgage banking income of $51 million and $182 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, compared to gains of $114 million and $222 million for the same periods in 2015. For more information on MSRs, see Note 17 – Mortgage Servicing Rights to the Consolidated Financial Statements and for more information on mortgage banking income, see Consumer Banking on page 25.

Complex Accounting Estimates

Our significant accounting principles, as described in Note 1 – Summary of Significant Accounting Principles to the Consolidated Financial Statements of the Corporation's 2015 Annual Report on Form 10-K, 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 impacting results for the six months ended June 30, 2016 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

Table of Contents

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.

For additional information, see Complex Accounting Estimates on page 100 of the MD&A of the Corporation's 2015 Annual Report on Form 10-K.

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. For additional information, see Note 14 – Fair Value Measurements and Note 15 – Fair Value Option to the Consolidated Financial Statements, and Complex Accounting Estimates on page 100 of the MD&A of the Corporation's 2015 Annual Report on Form 10-K.

Level 3 Assets and Liabilities

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

Table 64
Recurring Level 3 Asset and Liability Summary

	June 30, 2016			December 31, 2015		
(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	$5,025	30.64 %	0.23 %	$5,634	31.13 %	0.26 %
Derivative assets	5,169	31.52	0.24	5,134	28.37	0.24
AFS debt securities	1,410	8.60	0.06	1,432	7.91	0.07
Loans and leases	1,459	8.90	0.07	1,620	8.95	0.08
Mortgage servicing rights	2,269	13.84	0.10	3,087	17.06	0.14
All other Level 3 assets at fair value	1,066	6.50	0.05	1,191	6.58	0.05
Total Level 3 assets at fair value [1]	$16,398	100.00 %	0.75 %	$18,098	100.00 %	0.84 %
	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	$5,817	69.91 %	0.30 %	$5,575	74.50 %	0.30 %
Long-term debt	2,156	25.91	0.11	1,513	20.22	0.08
All other Level 3 liabilities at fair value	348	4.18	0.02	395	5.28	0.02
Total Level 3 liabilities at fair value [1]	$8,321	100.00 %	0.43 %	$7,483	100.00 %	0.40 %

[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

Table of Contents

information on the significant transfers into and out of Level 3 during the three and six months ended June 30, 2016, see Note 14 – Fair Value Measurements to the Consolidated Financial Statements.

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 of the Corporation's 2015 Annual Report on Form 10-K, as well as Complex Accounting Estimates on page 100 of the MD&A of the Corporation's 2015 Annual Report on Form 10-K. 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.

2016 Annual Goodwill Impairment Testing

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 book capital, tangible 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.

During the three months ended June 30, 2016, we completed our annual goodwill impairment test as of June 30, 2016 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, 2016 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. Under the income approach, we updated our assumptions to reflect the current market environment. The discount rates used in the June 30, 2016 annual goodwill impairment test ranged from 8.9 percent to 12.7 percent depending on the relative risk of a reporting unit. Cumulative average growth rates developed by management for revenues and expenses in each reporting unit ranged from negative 3.2 percent to positive 5.9 percent.

The Corporation's market capitalization remained below our recorded book value during the first six months of 2016. 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, 2016. We do not believe that our current market capitalization reflects the aggregate fair value of our individual reporting units with assigned goodwill as our market capitalization does not include consideration of individual

Table of Contents

reporting unit control premiums. Additionally, while the impact of recent regulatory changes has been considered in the reporting units' forecasts and valuations, overall regulatory and market uncertainties persist that we believe further impact the Corporation's stock price.

Effective April 1, 2016, the Corporation realigned its business segments. As part of the realignment, the Corporation completed a review of all consumer real estate-secured lending and servicing activities within LAS, Consumer Banking, GWIM and All Other with a view to strategically align the business activities and loans into core and non-core categories, with core loans reflected on the balance sheet of the appropriate business segment and non-core loans on the balance sheet of All Other. There was no goodwill in LAS. Following the segment realignment, the Corporation combined the Card Services, Consumer Vehicle Lending and Home Loans reporting units within the Consumer Banking segment into a single Consumer Lending reporting unit, effective June 30, 2016. This combination of reporting units triggered a test for goodwill impairment, which was performed both immediately before and after the combination of reporting units. We performed this analysis in conjunction with our annual impairment test as of June 30, 2016.

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.

Table 65 shows goodwill assigned to the individual reporting units and the fair value as a percentage of the carrying value as of our June 30, 2016 annual goodwill impairment test.

Table 65
Goodwill by Reporting Unit

(Dollars in millions)	June 30, 2016 Estimated Fair Value as a Percent of Allocated Carrying Value	Goodwill
Consumer Banking		
Deposits	147.9%	$ 18,414
Consumer Lending [1]	147.5	11,709
Global Wealth & Investment Management		
U.S. Trust	158.0	2,917
Merrill Lynch Global Wealth Management	223.2	6,764
Global Banking		
Global Commercial Banking	140.9	16,146
Global Corporate and Investment Banking	146.9	6,231
Business Banking	147.0	1,546
Global Markets	113.3	5,197
All Other [2]	193.6	775

(1) As of June 30, 2016, prior to the combination of Card Services, Consumer Vehicle Lending, and Home Loans reporting units into a single Consumer Lending reporting unit, the fair value as a percentage of carrying value for Card Services and Consumer Vehicle Lending was 246.5 percent and 128.1 percent, with Home Loans having no goodwill.

(2) Reflects the goodwill and fair value as a percent of allocated carrying value assigned to the U.K. Card business within All Other. The total amount of goodwill in All Other was $820 million at June 30, 2016.

In estimating the fair value of the reporting units in step one of the annual goodwill impairment analysis, the fair values can be sensitive to changes in the projected cash flows and assumptions. In some instances, minor changes in the assumptions could impact whether the fair value of a reporting unit is greater than its carrying value. Furthermore, a prolonged decrease or increase in a particular assumption could eventually lead to the fair value of a reporting unit being less than its carrying value. The U.K. Referendum introduced additional complexities and variables in estimating the fair values of the reporting units and we considered these impacts on market data utilized in the analysis through the test date noting a slight adverse impact reflective of market uncertainty. Future impacts of the U.K. Referendum and continued regulatory pressures could have an adverse impact on reporting unit valuations, which we will continue to monitor.

Also, under step two of the annual goodwill impairment analysis, which was not required for any of our reporting units at June 30, 2016, changes in the estimated fair values of the individual assets and liabilities may result in a different amount of implied goodwill, and ultimately the amount of goodwill impairment, if any.

Table of Contents

Item 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

See Market Risk Management on page 101 in the MD&A and the sections referenced therein for Quantitative and Qualitative Disclosures about Market Risk.

Item 4. CONTROLS AND PROCEDURES

Disclosure Controls and Procedures

As of the end of the period covered by this report, the Corporation's management, including the Chief Executive Officer and Chief Financial Officer, conducted an evaluation of the effectiveness and design of the Corporation's disclosure controls and procedures (as that term is defined in Rule 13a-15(e) of the Securities Exchange Act of 1934). Based upon that evaluation, the Corporation's Chief Executive Officer and Chief Financial Officer concluded that the Corporation's disclosure controls and procedures were effective, as of the end of the period covered by this report, in recording, processing, summarizing and reporting information required to be disclosed by the Corporation in reports that it files or submits under the Exchange Act, within the time periods specified in the Securities and Exchange Commission's rules and forms.

Changes in Internal Control Over Financial Reporting

There have been no changes in the Corporation's internal control over financial reporting (as defined in Rule 13a-15(f) of the Exchange Act) during the three months ended June 30, 2016, that have materially affected, or are reasonably likely to materially affect, the Corporation's internal control over financial reporting.

Table of Contents

Part I. FINANCIAL INFORMATION
Item 1. FINANCIAL STATEMENTS
Bank of America Corporation and Subsidiaries
Consolidated Statement of Income

	Three Months Ended June 30		Six Months Ended June 30	
(Dollars in millions, except per share information)	2016	2015	2016	2015
Interest income				
Loans and leases	$8,219	$ 7,951	$16,479	$ 15,947
Debt securities	1,355	3,070	2,559	4,957
Federal funds sold and securities borrowed or purchased under agreements to resell	260	268	536	499
Trading account assets	1,075	1,074	2,254	2,157
Other interest income	759	742	1,535	1,468
Total interest income	11,668	13,105	23,363	25,028
Interest expense				
Deposits	245	216	470	436
Short-term borrowings	625	686	1,239	1,271
Trading account liabilities	242	335	534	729
Long-term debt	1,343	1,407	2,736	2,720
Total interest expense	2,455	2,644	4,979	5,156
Net interest income	9,213	10,461	18,384	19,872
Noninterest income				
Card income	1,464	1,477	2,894	2,871
Service charges	1,871	1,857	3,708	3,621
Investment and brokerage services	3,201	3,387	6,383	6,765
Investment banking income	1,408	1,526	2,561	3,013
Trading account profits	2,018	1,647	3,680	3,894
Mortgage banking income	312	1,001	745	1,695
Gains on sales of debt securities	267	168	493	436
Other income	644	432	1,062	703
Total noninterest income	11,185	11,495	21,526	22,998
Total revenue, net of interest expense	20,398	21,956	39,910	42,870
Provision for credit losses	976	780	1,973	1,545
Noninterest expense				
Personnel	7,722	7,890	16,574	17,504
Occupancy	1,036	1,027	2,064	2,054
Equipment	451	500	914	1,012
Marketing	414	445	833	885
Professional fees	472	494	897	915
Amortization of intangibles	186	212	373	425
Data processing	717	715	1,555	1,567
Telecommunications	189	202	362	373
Other general operating	2,306	2,473	4,737	5,050
Total noninterest expense	13,493	13,958	28,309	29,785

Income before income taxes	5,929	7,218	9,628	11,540
Income tax expense	1,697	2,084	2,716	3,309
Net income	$4,232	$ 5,134	$6,912	$ 8,231
Preferred stock dividends	361	330	818	712
Net income applicable to common shareholders	$3,871	$ 4,804	$6,094	$ 7,519
Per common share information				
Earnings	$0.38	$ 0.46	$0.59	$ 0.72
Diluted earnings	0.36	0.43	0.56	0.68
Dividends paid	0.05	0.05	0.10	0.10
Average common shares issued and outstanding (in thousands)	10,253,577	10,488,137	10,296,652	10,503,379
Average diluted common shares issued and outstanding (in thousands)	11,059,167	11,238,060	11,079,939	11,252,417

See accompanying Notes to Consolidated Financial Statements.

Table of Contents

Bank of America Corporation and Subsidiaries
Consolidated Statement of Comprehensive Income

	Three Months Ended June 30		Six Months Ended June 30	
(Dollars in millions)	2016	2015	2016	2015
Net income	$4,232	$5,134	$6,912	$8,231
Other comprehensive income (loss), net-of-tax:				
Net change in debt and marketable equity securities	1,177	(2,537)	4,068	(1,201)
Net change in debit valuation adjustments	(13)	186	114	446
Net change in derivatives	126	246	150	289
Employee benefit plan adjustments	13	25	23	50
Net change in foreign currency translation adjustments	(21)	43	(9)	(8)
Other comprehensive income (loss)	1,282	(2,037)	4,346	(424)
Comprehensive income	$5,514	$3,097	$11,258	$7,807

See accompanying Notes to Consolidated Financial Statements.

Table of Contents

Bank of America Corporation and Subsidiaries
Consolidated Balance Sheet

(Dollars in millions)	June 30 2016	December 31 2015
Assets		
Cash and due from banks	$29,408	$31,265
Interest-bearing deposits with the Federal Reserve, non-U.S. central banks and other banks	141,799	128,088
Cash and cash equivalents	171,207	159,353
Time deposits placed and other short-term investments	7,558	7,744
Federal funds sold and securities borrowed or purchased under agreements to resell (includes $53,008 and $55,143 measured at fair value)	213,737	192,482
Trading account assets (includes $102,881 and $107,776 pledged as collateral)	175,365	176,527
Derivative assets	55,264	49,990
Debt securities:		
Carried at fair value (includes $30,571 and $29,810 pledged as collateral)	309,670	322,380
Held-to-maturity, at cost (fair value – $104,375 and $84,046; $8,647 and $9,074 pledged as collateral)	102,279	84,625
Total debt securities	411,949	407,005
Loans and leases (includes $8,660 and $6,938 measured at fair value and $32,082 and $37,767 pledged as collateral)	903,153	896,983
Allowance for loan and lease losses	(11,837)	(12,234)
Loans and leases, net of allowance	891,316	884,749
Premises and equipment, net	9,150	9,485
Mortgage servicing rights (includes $2,269 and $3,087 measured at fair value)	2,269	3,087
Goodwill	69,744	69,761
Intangible assets	3,352	3,768
Loans held-for-sale (includes $5,112 and $4,818 measured at fair value)	8,848	7,453
Customer and other receivables	58,150	58,312
Other assets (includes $13,885 and $14,320 measured at fair value)	108,700	114,600
Total assets	$2,186,609	$2,144,316
Assets of consolidated variable interest entities included in total assets above (isolated to settle the liabilities of the variable interest entities)		
Trading account assets	$5,940	$6,344
Loans and leases	60,384	72,946
Allowance for loan and lease losses	(1,128)	(1,320)
Loans and leases, net of allowance	59,256	71,626
Loans held-for-sale	256	284
All other assets	1,455	1,530
Total assets of consolidated variable interest entities	$66,907	$79,784

See accompanying Notes to Consolidated Financial Statements.

Table of Contents

Bank of America Corporation and Subsidiaries
Consolidated Balance Sheet (continued)

(Dollars in millions)	June 30 2016	December 31 2015
Liabilities		
Deposits in U.S. offices:		
Noninterest-bearing	$424,918	$422,237
Interest-bearing (includes $1,019 and $1,116 measured at fair value)	714,607	703,761
Deposits in non-U.S. offices:		
Noninterest-bearing	11,252	9,916
Interest-bearing	65,314	61,345
Total deposits	1,216,091	1,197,259
Federal funds purchased and securities loaned or sold under agreements to repurchase (includes $24,542 and $24,574 measured at fair value)	178,062	174,291
Trading account liabilities	74,282	66,963
Derivative liabilities	47,561	38,450
Short-term borrowings (includes $1,860 and $1,325 measured at fair value)	33,051	28,098
Accrued expenses and other liabilities (includes $13,312 and $13,899 measured at fair value and $750 and $646 of reserve for unfunded lending commitments)	140,876	146,286
Long-term debt (includes $31,449 and $30,097 measured at fair value)	229,617	236,764
Total liabilities	1,919,540	1,888,111
Commitments and contingencies (Note 6 – Securitizations and Other Variable Interest Entities, Note 7 – Representations and Warranties Obligations and Corporate Guarantees and Note 10 – Commitments and Contingencies)		
Shareholders' equity		
Preferred stock, $0.01 par value; authorized – 100,000,000 shares; issued and outstanding – 3,887,790 and 3,767,790 shares	25,220	22,273
Common stock and additional paid-in capital, $0.01 par value; authorized – 12,800,000,000 shares; issued and outstanding – 10,216,780,615 and 10,380,265,063 shares	149,554	151,042
Retained earnings	93,623	88,564
Accumulated other comprehensive income (loss)	(1,328)	(5,674)
Total shareholders' equity	267,069	256,205
Total liabilities and shareholders' equity	$2,186,609	$2,144,316
Liabilities of consolidated variable interest entities included in total liabilities above		
Short-term borrowings	$639	$681
Long-term debt (includes $10,744 and $11,304 of non-recourse debt)	11,463	14,073
All other liabilities (includes $32 and $20 of non-recourse liabilities)	35	21
Total liabilities of consolidated variable interest entities	$12,137	$14,775

See accompanying Notes to Consolidated Financial Statements.

Table of Contents

Bank of America Corporation and Subsidiaries
Consolidated Statement of Changes in Shareholders' Equity

(Dollars in millions, shares in thousands)	Preferred Stock	Common Stock and Additional Paid-in Capital Shares	Amount	Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Total Shareholders' Equity
Balance, December 31, 2014	$ 19,309	10,516,542	$ 153,458	$ 75,024	$ (4,320)	$ 243,471
Cumulative adjustment for accounting change related to debit valuation adjustments				1,226	(1,226)	—
Net income				8,231		8,231
Net change in debt and marketable equity securities					(1,201)	(1,201)
Net change in debit valuation adjustments					446	446
Net change in derivatives					289	289
Employee benefit plan adjustments					50	50
Net change in foreign currency translation adjustments					(8)	(8)
Dividends paid:						
Common				(1,051)		(1,051)
Preferred				(712)		(712)
Issuance of preferred stock	2,964					2,964
Common stock issued under employee plans and related tax effects		3,947	(45)			(45)
Common stock repurchased		(48,652)	(775)			(775)
Balance, June 30, 2015	$ 22,273	10,471,837	$ 152,638	$ 82,718	$ (5,970)	$ 251,659
Balance, December 31, 2015	$ 22,273	10,380,265	$ 151,042	$ 88,564	$ (5,674)	$ 256,205
Net income				6,912		6,912
Net change in debt and marketable equity securities					4,068	4,068
Net change in debit valuation adjustments					114	114
Net change in derivatives					150	150
Employee benefit plan adjustments					23	23
Net change in foreign currency translation adjustments					(9)	(9)
Dividends paid:						
Common				(1,035)		(1,035)
Preferred				(818)		(818)
Issuance of preferred stock	2,947					2,947
Common stock issued under employee plans and related tax effects		5,021	895			895
Common stock repurchased		(168,505)	(2,383)			(2,383)
Balance, June 30, 2016	$ 25,220	10,216,781	$ 149,554	$ 93,623	$ (1,328)	$ 267,069

See accompanying Notes to Consolidated Financial Statements.

Table of Contents

Bank of America Corporation and Subsidiaries
Consolidated Statement of Cash Flows

	Six Months Ended June 30	
(Dollars in millions)	2016	2015
Operating activities		
Net income	$6,912	$8,231
Adjustments to reconcile net income to net cash provided by (used in) operating activities:		
Provision for credit losses	1,973	1,545
Gains on sales of debt securities	(493)	(436)
Realized debit valuation adjustments on structured liabilities	12	510
Depreciation and amortization of premises and equipment	755	786
Amortization of intangibles	373	425
Net amortization of premium/discount on debt securities	3,656	475
Deferred income taxes	2,218	1,399
Stock-based compensation	962	27
Loans held-for-sale:		
Originations and purchases	(13,400)	(19,432)
Proceeds from sales and paydowns of loans originally classified as held-for-sale	12,046	20,394
Net change in:		
Trading and derivative instruments	16,277	(1,284)
Other assets	335	(4,661)
Accrued expenses and other liabilities	(5,380)	(10,203)
Other operating activities, net	(110)	(863)
Net cash provided by (used in) operating activities	26,136	(3,087)
Investing activities		
Net change in:		
Time deposits placed and other short-term investments	186	(486)
Federal funds sold and securities borrowed or purchased under agreements to resell	(21,255)	(8,080)
Debt securities carried at fair value:		
Proceeds from sales	40,772	40,872
Proceeds from paydowns and maturities	48,117	37,294
Purchases	(83,361)	(81,273)
Held-to-maturity debt securities:		
Proceeds from paydowns and maturities	7,239	6,927
Purchases	(13,694)	(7,173)
Loans and leases:		
Proceeds from sales	11,391	11,662
Purchases	(7,384)	(5,807)
Other changes in loans and leases, net	(13,211)	(21,627)
Other investing activities, net	710	(294)
Net cash used in investing activities	(30,490)	(27,985)
Financing activities		
Net change in:		
Deposits	18,832	30,624
Federal funds purchased and securities loaned or sold under agreements to repurchase	3,771	11,747
Short-term borrowings	4,953	8,731
Long-term debt:		
Proceeds from issuance	15,783	25,661

Retirement of long-term debt	(28,050)	(20,842)
Proceeds from issuance of preferred stock	2,947	2,964
Common stock repurchased	(2,383)	(775)
Cash dividends paid	(1,853)	(1,763)
Excess tax benefits on share-based payments	7	16
Other financing activities, net	(42)	(21)
Net cash provided by financing activities	13,965	56,342
Effect of exchange rate changes on cash and cash equivalents	2,243	(345)
Net increase in cash and cash equivalents	11,854	24,925
Cash and cash equivalents at January 1	159,353	138,589
Cash and cash equivalents at June 30	$171,207	$163,514

See accompanying Notes to Consolidated Financial Statements.

Table of Contents

Bank of America Corporation and Subsidiaries
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 and a financial holding company, provides a diverse range of financial services and products throughout the U.S. and in certain international markets. The term "the Corporation" as used herein may refer to Bank of America Corporation individually, Bank of America Corporation and its subsidiaries, or certain of Bank of America Corporation's subsidiaries or affiliates.

Principles of Consolidation and Basis of Presentation

The Consolidated Financial Statements include the accounts of the Corporation and its majority-owned subsidiaries, and those variable interest entities (VIEs) where the Corporation is the primary beneficiary. Intercompany accounts and transactions have been eliminated. Results of operations of acquired companies are included from the dates of acquisition and for VIEs, from the dates that the Corporation became the primary beneficiary. Assets held in an agency or fiduciary capacity are not included in the Consolidated Financial Statements. The Corporation accounts for investments in companies for which it owns a voting interest and for which it has the ability to exercise significant influence over operating and financing decisions using the equity method of accounting. These investments are included in other assets. Equity method investments are subject to impairment testing and the Corporation's proportionate share of income or loss is included in other income.

In the Annual Report on Form 10-K for the year ended December 31, 2015, the Corporation reported its results of operations through five business segments: Consumer Banking, Global Wealth & Investment Management (GWIM), Global Banking, Global Markets and Legacy Assets & Servicing (LAS), with the remaining operations recorded in All Other. Effective April 1, 2016, to align the segments with how the Corporation now manages the businesses, the Corporation changed its basis of presentation to eliminate the LAS segment, and following such change, the Corporation reports its results of operations through the following four business segments: Consumer Banking, GWIM, Global Banking and Global Markets, with the remaining operations recorded in All Other. Consumer real estate loans, including loans previously held in or serviced by LAS, have been designated as either core or non-core based on criteria described in Note 4 – Outstanding Loans and Leases and Note 18 – Business Segment Information. Following the realignment, core loans owned by the Corporation, which include all loans originated after the realignment, are held in the Consumer Banking and GWIM segments. Non-core loans owned by the Corporation, which are principally run-off portfolios, as well as loans held for asset and liability management (ALM) activities are held in All Other. Mortgage servicing rights (MSRs) pertaining to core and non-core loans serviced for others are held in Consumer Banking and All Other, respectively. Prior periods have been reclassified to conform to current period presentation.

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.

These unaudited Consolidated Financial Statements should be read in conjunction with the audited Consolidated Financial Statements of the Corporation's 2015 Annual Report on Form 10-K. The nature of the Corporation's business is such that the results of any interim period are not necessarily indicative of results for a full year. In the opinion of management, all adjustments, which consist of normal recurring adjustments necessary for a fair statement of the interim period results have been made. The Corporation evaluates subsequent events through the date of filing with the Securities and Exchange Commission (SEC). Certain prior-period amounts have been reclassified to conform

to current period presentation.

Beginning in the first quarter of 2016, the Corporation classifies certain leases in other assets. Previously these leases were classified in loans and leases. Prior periods have been reclassified to conform to current period presentation.

In the Consolidated Statement of Cash Flows for the six months ended June 30, 2015, 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 $9.3 billion increase in net cash provided by operating activities, offset by a $9.3 billion increase in net cash used in investing activities when compared to the Consolidated Statement of Cash Flows in the Form 10-Q for the quarterly period ended June 30, 2015.

Table of Contents

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.

New Accounting Pronouncements

In June 2016, the Financial Accounting Standards Board (FASB) issued new accounting guidance that will require the earlier recognition of credit losses on loans and other financial instruments based on an expected loss model, replacing the incurred loss model that is currently in use. Under the new guidance, an entity will measure all expected credit losses for financial instruments held at the reporting date based on historical experience, current conditions and reasonable and supportable forecasts. The expected loss model will apply to loans and leases, unfunded lending commitments, held-to-maturity (HTM) debt securities and other debt instruments measured at amortized cost. The impairment model for available-for-sale (AFS) debt securities will require the recognition of credit losses through a valuation allowance when fair value is less than amortized cost, regardless of whether the impairment is considered to be other-than-temporary. The new guidance is effective on January 1, 2020, with early adoption permitted on January 1, 2019. The Corporation is in the process of evaluating the impact of the provisions of this new accounting guidance, which will increase the allowance for credit losses with a resulting negative adjustment to retained earnings.

In March 2016, the FASB issued new accounting guidance that simplifies certain aspects of the accounting for share-based payment transactions, including income tax consequences, classification of awards as either equity or liabilities, and classification on the statement of cash flows. The new guidance is effective on January 1, 2017, with early adoption permitted. The Corporation does not expect the provisions of this new accounting guidance to have a material impact on its consolidated financial position or results of operations.

In February 2016, the FASB issued new accounting guidance that requires substantially all leases to be recorded as assets and liabilities on the balance sheet. This new accounting guidance is effective on January 1, 2019, with early adoption permitted. Upon adoption, the Corporation will record a right of use asset and a lease payment obligation associated with arrangements previously accounted for as operating leases. The Corporation is in the process of evaluating the impact of the provisions of this new accounting guidance on its consolidated financial position, but does not expect the new accounting guidance to have a material impact on its consolidated financial position or results of operations.

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. In 2015, 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 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. This new accounting guidance was effective on January 1, 2016, and only affected the Corporation's disclosures. For additional disclosures under this new guidance, see Note 6 –

Securitizations and Other Variable Interest Entities.

In August 2014, the FASB issued new accounting guidance that provides a measurement alternative for entities that consolidate a collateralized financing entity (CFE). The new guidance allows an entity to measure both the financial assets and financial liabilities of a CFE using the fair value of either the financial assets or financial liabilities, whichever is more observable. This alternative is available for CFEs where the financial assets and financial liabilities are carried at fair value and changes in fair value are reported in earnings. This new accounting guidance was effective on January 1, 2016, and did not have a material impact on the Corporation's consolidated financial position or results of operations. For additional disclosures under this new guidance, see Note 6 – Securitizations and Other Variable Interest Entities and Note 14 – Fair Value Measurements.

In May 2014, the FASB issued new accounting guidance to clarify the principles for recognizing revenue from contracts with customers. This new accounting guidance, which does not apply to financial instruments, is effective on January 1, 2018. The Corporation does not expect the provisions of this new accounting guidance to have a material impact on its consolidated financial position or results of operations.

Table of Contents

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 to the Consolidated Financial Statements of the Corporation's 2015 Annual Report on Form 10-K. The following tables present derivative instruments included on the Consolidated Balance Sheet in derivative assets and liabilities at June 30, 2016 and December 31, 2015. 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.

	June 30, 2016						
		Gross Derivative Assets			Gross Derivative Liabilities		
(Dollars in billions)	Contract/ Notional [1]	Trading and Other Risk Management Derivatives	Qualifying Accounting Hedges	Total	Trading and Other Risk Management Derivatives	Qualifying Accounting Hedges	Total
Interest rate contracts							
Swaps	$21,417.8	$595.1	$ 10.9	$606.0	$595.2	$ 1.1	$596.3
Futures and forwards	7,906.9	2.5	—	2.5	2.6	—	2.6
Written options	1,332.3	—	—	—	76.9	—	76.9
Purchased options	1,376.2	78.6	—	78.6	—	—	—
Foreign exchange contracts							
Swaps	2,103.4	59.3	2.0	61.3	62.4	3.6	66.0
Spot, futures and forwards	4,662.9	73.4	1.8	75.2	71.6	1.3	72.9
Written options	436.7	—	—	—	10.8	—	10.8
Purchased options	416.4	10.7	—	10.7	—	—	—
Equity contracts							
Swaps	186.0	3.5	—	3.5	3.9	—	3.9
Futures and forwards	84.8	2.1	—	2.1	1.1	—	1.1
Written options	460.7	—	—	—	23.6	—	23.6
Purchased options	416.1	25.7	—	25.7	—	—	—
Commodity contracts							
Swaps	49.8	3.1	—	3.1	5.5	—	5.5
Futures and forwards	55.6	3.5	—	3.5	0.5	—	0.5
Written options	38.5	—	—	—	3.2	—	3.2
Purchased options	38.9	3.3	—	3.3	—	—	—
Credit derivatives							
Purchased credit derivatives:							
Credit default swaps	856.6	11.9	—	11.9	11.9	—	11.9
Total return swaps/other	37.4	0.2	—	0.2	2.0	—	2.0
Written credit derivatives:							
Credit default swaps	844.0	12.3	—	12.3	10.9	—	10.9

Total return swaps/other	41.5	1.3	—	1.3	0.4	—	0.4
Gross derivative assets/liabilities		$886.5	$ 14.7	$901.2	$882.5	$ 6.0	$888.5
Less: Legally enforceable master netting agreements				(795.2)			(795.2)
Less: Cash collateral received/paid				(50.7)			(45.7)
Total derivative assets/liabilities				$55.3			$47.6

(1) Represents the total contract/notional amount of derivative assets and liabilities outstanding.

Table of Contents

	December 31, 2015						
		Gross Derivative Assets			Gross Derivative Liabilities		
(Dollars in billions)	Contract/ Notional [1]	Trading and Other Risk Management Derivatives	Qualifying Accounting Hedges	Total	Trading and Other Risk Management Derivatives	Qualifying Accounting Hedges	Total
Interest rate contracts							
Swaps	$21,706.8	$439.6	$ 7.4	$447.0	$440.8	$ 1.2	$442.0
Futures and forwards	7,259.7	1.1	—	1.1	1.3	—	1.3
Written options	1,322.4	—	—	—	57.6	—	57.6
Purchased options	1,403.3	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	4,104.4	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	74.0	2.1	—	2.1	1.2	—	1.2
Written options	352.8	—	—	—	21.1	—	21.1
Purchased options	325.4	23.8	—	23.8	—	—	—
Commodity contracts [2]							
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 commodity 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 June 30, 2016 and December 31, 2015 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. Over-the-counter (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

Table of Contents

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 9 – Federal Funds Sold or Purchased, Securities Financing Agreements and Short-term Borrowings.

Offsetting of Derivatives

(Dollars in billions)	June 30, 2016		December 31, 2015	
	Derivative Assets	Derivative Liabilities	Derivative Assets	Derivative Liabilities
Interest rate contracts				
Over-the-counter	$391.3	$ 380.5	$309.3	$ 297.2
Exchange-traded	0.1	—	—	—
Over-the-counter cleared	293.6	292.9	197.0	201.7
Foreign exchange contracts				
Over-the-counter	141.7	144.6	103.2	107.5
Over-the-counter cleared	0.2	0.2	0.1	0.1
Equity contracts				
Over-the-counter	15.8	13.9	16.6	14.0
Exchange-traded	12.7	11.7	10.0	9.2
Commodity contracts				
Over-the-counter	4.8	5.9	7.3	8.9
Exchange-traded [(1)]	1.7	1.6	1.8	1.8
Over-the-counter cleared	—	—	0.1	0.1
Credit derivatives				
Over-the-counter	19.9	19.6	24.6	22.9
Over-the-counter cleared	5.1	5.2	6.5	6.4
Total gross derivative assets/liabilities, before netting				
Over-the-counter	573.5	564.5	461.0	450.5
Exchange-traded [(1)]	14.5	13.3	11.8	11.0
Over-the-counter cleared	298.9	298.3	203.7	208.3
Less: Legally enforceable master netting agreements and cash collateral received/paid				
Over-the-counter	(536.8)	(531.9)	(426.6)	(425.7)
Exchange-traded [(1)]	(10.8)	(10.8)	(8.7)	(8.7)
Over-the-counter cleared	(298.3)	(298.2)	(203.3)	(208.2)
Derivative assets/liabilities, after netting	41.0	35.2	37.9	27.2
Other gross derivative assets/liabilities	14.3	12.4	12.1	11.3
Total derivative assets/liabilities	55.3	47.6	50.0	38.5

Less: Financial instruments collateral [2]	(14.9)	(14.1)	(13.9)	(6.5)
Total net derivative assets/liabilities	$40.4	$ 33.5	$36.1	$ 32.0

(1) The notional amount for certain commodity 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.

Table of Contents

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 17 – 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.

Table of Contents

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 the three and six months ended June 30, 2016 and 2015, 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)	Three Months Ended June 30			Six Months Ended June 30		
	2016			2016		
(Dollars in millions)	Derivative	Hedged Item	Hedge Ineffectiveness	Derivative	Hedged Item	Hedge Ineffectiveness
Interest rate risk on long-term debt [1]	$1,263	$(1,380)	$ (117)	$3,924	$(4,234)	$ (310)
Interest rate and foreign currency risk on long-term debt [1]	(495)	487	(8)	344	(359)	(15)
Interest rate risk on available-for-sale securities [2]	(215)	198	(17)	(366)	330	(36)
Price risk on commodity inventory [3]	(8)	8	—	(6)	6	—
Total	$545	$(687)	$ (142)	$3,896	$(4,257)	$ (361)
	2015			2015		
Interest rate risk on long-term debt [1]	$(2,293)	$2,041	$ (252)	$(1,197)	$749	$ (448)
Interest rate and foreign currency risk on long-term debt [1]	388	(402)	(14)	(1,256)	1,186	(70)
Interest rate risk on available-for-sale securities [2]	2	(3)	(1)	45	(48)	(3)
Price risk on commodity inventory [3]	2	(2)	—	13	(9)	4
Total	$(1,901)	$1,634	$ (267)	$(2,395)	$1,878	$ (517)

[1] Amounts are recorded in interest expense on long-term debt and in other income.

[2] Amounts are recorded in interest income on debt securities.

[3] Amounts relating to commodity inventory are recorded in trading account profits.

Table of Contents

Cash Flow and Net Investment Hedges

The table below summarizes certain information related to cash flow hedges and net investment hedges for the three and six months ended June 30, 2016 and 2015. Of the $927 million net loss (after-tax) on derivatives in accumulated OCI at June 30, 2016, $322 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)	Three Months Ended June 30 2016 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]	Six Months Ended June 30 2016 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]
Cash flow hedges						
Interest rate risk on variable-rate portfolios	$19	$ (164)	$ —	$58	$ (328)	$ 6
Price risk on restricted stock awards [2]	(1)	(19)	—	(199)	(53)	—
Total	$18	$ (183)	$ —	$(141)	$ (381)	$ 6
Net investment hedges						
Foreign exchange risk	$592	$ 1	$ (23)	$(41)	$ 1	$ (166)
	2015			2015		
Cash flow hedges						
Interest rate risk on variable-rate portfolios	$(19)	$ (259)	$ —	$5	$ (514)	$ (1)
Price risk on restricted stock awards [2]	181	28	—	(29)	27	—
Total	$162	$ (231)	$ —	$(24)	$ (487)	$ (1)
Net investment hedges						
Foreign exchange risk	$(992)	$ 84	$ 11	$990	$ 84	$ (87)

(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.

Table of Contents

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 the three and six months ended June 30, 2016 and 2015. These gains (losses) are largely offset by the income or expense that is recorded on the hedged item.

Other Risk Management Derivatives

Gains (Losses)	Three Months Ended June 30		Six Months Ended June 30	
(Dollars in millions)	2016	2015	2016	2015
Interest rate risk on mortgage banking income [1]	$279	$(390)	$825	$(94)
Credit risk on loans [2]	(31)	(31)	(96)	(58)
Interest rate and foreign currency risk on ALM activities [3]	(824)	585	(1,708)	266
Price risk on restricted stock awards [4]	(27)	226	(768)	(244)
Other	14	(20)	40	(7)

(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, interest rate lock commitments (IRLCs) and mortgage loans held-for-sale (LHFS), 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 $177 million and $329 million for the three and six months ended June 30, 2016 compared to $167 million and $427 million for the same periods in 2015.

(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 June 30, 2016 and December 31, 2015, the Corporation transferred $7.2 billion and $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 $7.2 billion and $7.9 billion at the transfer dates. At June 30, 2016 and December 31, 2015, the fair value of these securities was $7.0 billion and $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 $44 million and $24 million and a liability of $35 million and $29 million were recorded at June 30, 2016 and December 31, 2015, and are included in credit derivatives in the derivative instruments table on page 122. 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,

Table of Contents

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 the three and six months ended June 30, 2016 and 2015. 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 debit valuation and funding valuation adjustment (DVA/FVA) gains (losses). Global Markets results in Note 18 – Business Segment Information are presented on a fully taxable-equivalent (FTE) basis. The table below is not presented on an FTE basis.

Sales and Trading Revenue

	Three Months Ended June 30				Six Months Ended June 30			
	2016				2016			
(Dollars in millions)	Trading Account Profits	Net Interest Income	Other [1]	Total	Trading Account Profits	Net Interest Income	Other [1]	Total
Interest rate risk	$426	$ 335	$74	$835	$924	$759	$125	$1,808
Foreign exchange risk	344	(2)	(36)	306	684	(3)	(72)	609
Equity risk	585	(19)	510	1,076	1,017	(19)	1,107	2,105
Credit risk	419	645	118	1,182	621	1,271	257	2,149
Other risk	98	(11)	9	96	221	(26)	25	220
Total sales and trading revenue	$1,872	$ 948	$675	$3,495	$3,467	$1,982	$1,442	$6,891
	2015				2015			
Interest rate risk	$344	$ 305	$(108)	$541	$864	$590	$(377)	$1,077
Foreign exchange risk	295	(1)	(31)	263	742	(2)	(62)	678
Equity risk	667	(37)	542	1,172	1,237	(24)	1,091	2,304
Credit risk	297	590	123	1,010	741	1,161	307	2,209
Other risk	100	(17)	2	85	257	(40)	29	246
Total sales and trading revenue	$1,703	$ 840	$528	$3,071	$3,841	$1,685	$988	$6,514

(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 $517 million and $1.1 billion for the three and six months ended June 30, 2016 and $550 million and $1.1 billion for the same periods in 2015.

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 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.

Table of Contents

Credit Derivative Instruments

(Dollars in millions)	Less than One Year	One to Three Years	Three to Five Years	Over Five Years	Total
	June 30, 2016 Carrying Value				
Credit default swaps:					
Investment grade	$24	$139	$1,019	$832	$2,014
Non-investment grade	846	2,087	1,927	4,022	8,882
Total	870	2,226	2,946	4,854	10,896
Total return swaps/other:					
Investment grade	8	—	—	—	8
Non-investment grade	360	31	3	3	397
Total	368	31	3	3	405
Total credit derivatives	$1,238	$2,257	$2,949	$4,857	$11,301
Credit-related notes:					
Investment grade	$—	$112	$588	$1,614	$2,314
Non-investment grade	89	57	72	1,074	1,292
Total credit-related notes	$89	$169	$660	$2,688	$3,606
	Maximum Payout/Notional				
Credit default swaps:					
Investment grade	$160,451	$223,978	$155,750	$22,013	$562,192
Non-investment grade	96,893	110,174	56,060	18,684	281,811
Total	257,344	334,152	211,810	40,697	844,003
Total return swaps/other:					
Investment grade	10,634	—	—	—	10,634
Non-investment grade	24,622	5,264	749	237	30,872
Total	35,256	5,264	749	237	41,506
Total credit derivatives	$292,600	$339,416	$212,559	$40,934	$885,509
	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

Table of Contents

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 $7.6 billion and $647.6 billion at June 30, 2016, and $8.2 billion and $706.0 billion at December 31, 2015.

Credit-related notes in the table on page 130 include investments in securities issued by collateralized debt obligation (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 122, 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 June 30, 2016 and December 31, 2015, the Corporation held cash and securities collateral of $90.2 billion and $78.9 billion, and posted cash and securities collateral of $72.8 billion and $62.7 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 June 30, 2016, 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 $3.3 billion, including $1.8 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 June 30, 2016, the current liability recorded for these derivative contracts was $50 million.

Table of Contents

The table below presents the amount of additional collateral that would have been contractually required by derivative contracts and other trading agreements at June 30, 2016 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

	June 30, 2016	
(Dollars in millions)	One incremental notch	Second incremental notch
Bank of America Corporation	$869	$ 2,141
Bank of America, N.A. and subsidiaries [1]	678	1,695

[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 June 30, 2016 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

	June 30, 2016	
(Dollars in millions)	One incremental notch	Second incremental notch
Derivative liabilities	$1,064	$ 4,114
Collateral posted	724	3,440

Table of Contents

Valuation Adjustments on Derivatives

The Corporation records credit risk valuation adjustments on derivatives in order to properly reflect the credit quality of the counterparties and its own credit quality. The Corporation calculates valuation adjustments on derivatives based on a modeled expected exposure that incorporates current market risk factors. The exposure also takes into consideration credit mitigants such as enforceable master netting agreements and collateral. CDS spread data is used to estimate the default probabilities and severities that are applied to the exposures. Where no observable credit default data is available for counterparties, the Corporation uses proxies and other market data to estimate default probabilities and severity.

Valuation adjustments on derivatives are affected by changes in market spreads, non-credit related market factors such as interest rate and currency changes that affect the expected exposure, and other factors like changes in collateral arrangements and partial payments. Credit spreads and non-credit factors can move independently. For example, for an interest rate swap, changes in interest rates may increase the expected exposure, which would increase the counterparty credit valuation adjustment (CVA). Independently, counterparty credit spreads may tighten, which would result in an offsetting decrease to CVA.

The Corporation enters into risk management activities to offset market driven exposures. The Corporation often hedges the counterparty spread risk in CVA with CDS. The Corporation hedges other market risks in CVA, FVA and DVA primarily with currency swaps and interest rate products. 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 the three and six months ended June 30, 2016 and 2015. 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 net derivative assets reduce the cumulative FVA thereby increasing the derivative assets balance.

Valuation Adjustments on Derivatives

Gains (Losses)	Three Months Ended June 30				Six Months Ended June 30			
	2016		2015		2016		2015	
(Dollars in millions)	Gross	Net	Gross	Net	Gross	Net	Gross	Net
Derivative assets (CVA) [1]	$(26)	$33	$215	$(17)	$(235)	$85	$223	$107
Derivative assets/liabilities (FVA) [1]	23	25	59	59	(33)	(31)	65	65
Derivative liabilities (DVA) [1]	(75)	(141)	(14)	(4)	231	43	9	(50)

(1) At June 30, 2016 and December 31, 2015, cumulative CVA reduced the derivative assets balance by $1.6 billion and $1.4 billion, cumulative FVA reduced the net derivative assets balance by $514 million and $481 million, and cumulative DVA reduced the derivative liabilities balance by $981 million and $750 million, respectively.

Table of Contents

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 June 30, 2016 and December 31, 2015.

Debt Securities and Available-for-Sale Marketable Equity Securities

	June 30, 2016			
(Dollars in millions)	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Available-for-sale debt securities				
Mortgage-backed securities:				
Agency	$203,680	$ 5,021	$ (13)	$208,688
Agency-collateralized mortgage obligations	9,451	314	(5)	9,760
Commercial	11,083	319	(5)	11,397
Non-agency residential [1]	1,963	208	(68)	2,103
Total mortgage-backed securities	226,177	5,862	(91)	231,948
U.S. Treasury and agency securities	25,792	351	—	26,143
Non-U.S. securities	6,044	21	(7)	6,058
Other taxable securities, substantially all asset-backed securities	9,800	23	(49)	9,774
Total taxable securities	267,813	6,257	(147)	273,923
Tax-exempt securities	15,281	112	(31)	15,362
Total available-for-sale debt securities	283,094	6,369	(178)	289,285
Other debt securities carried at fair value	20,527	93	(235)	20,385
Total debt securities carried at fair value [2]	303,621	6,462	(413)	309,670
Held-to-maturity debt securities, substantially all U.S. agency mortgage-backed securities	102,279	2,097	(1)	104,375
Total debt securities	$405,900	$ 8,559	$ (414)	$414,045
Available-for-sale marketable equity securities [3]	$325	$ 46	$ (34)	$337
	December 31, 2015			
Available-for-sale debt securities				
Mortgage-backed securities:				
Agency	$229,847	$ 788	$ (1,688)	$228,947
Agency-collateralized mortgage obligations	10,930	126	(71)	10,985
Commercial	7,176	50	(61)	7,165
Non-agency residential [1]	3,031	218	(70)	3,179
Total mortgage-backed securities	250,984	1,182	(1,890)	250,276
U.S. Treasury and agency securities	25,075	211	(9)	25,277
Non-U.S. securities	5,743	27	(3)	5,767
Other taxable securities, substantially all asset-backed securities	10,481	53	(89)	10,445
Total taxable securities	292,283	1,473	(1,991)	291,765
Tax-exempt securities	13,978	63	(33)	14,008
Total available-for-sale debt securities	306,261	1,536	(2,024)	305,773
Other debt securities carried at fair value	16,678	103	(174)	16,607
Total debt securities carried at fair value [2]	322,939	1,639	(2,198)	322,380
Held-to-maturity debt securities, substantially all U.S. agency mortgage-backed securities	84,625	271	(850)	84,046

Total debt securities	$407,564	$ 1,910	$ (3,048)	$406,426
Available-for-sale marketable equity securities [3]	$326	$ 99	$ —	$425

(1) At June 30, 2016 and December 31, 2015, the underlying collateral type included approximately 56 percent and 71 percent prime, 24 percent and 15 percent Alt-A, and 20 percent and 14 percent subprime.

(2) The Corporation had debt securities from Fannie Mae (FNMA) and Freddie Mac (FHLMC) that each exceeded 10 percent of shareholders' equity, with an amortized cost of $146.7 billion and $52.0 billion, and a fair value of $150.4 billion and $53.3 billion at June 30, 2016. Debt securities from FNMA and FHLMC that exceeded 10 percent of shareholders' equity had an amortized cost of $146.2 billion and $53.4 billion, and a fair value of $145.5 billion and $53.2 billion at December 31, 2015.

(3) Classified in other assets on the Consolidated Balance Sheet.

Table of Contents

At June 30, 2016, the accumulated net unrealized gain on AFS debt securities included in accumulated OCI was $3.8 billion, net of the related income tax expense of $2.4 billion. At June 30, 2016 and December 31, 2015, the Corporation had nonperforming AFS debt securities of $129 million and $188 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 the three and six months ended June 30, 2016, the Corporation recorded unrealized mark-to-market net gains of $23 million and net losses of $72 million, and realized net losses of $34 million and $37 million, compared to unrealized mark-to-market net losses of $359 million and $170 million, and realized net losses of $17 million and $13 million, for the same periods in 2015. These amounts exclude hedge results.

Other Debt Securities Carried at Fair Value

(Dollars in millions)	June 30 2016	December 31 2015
Mortgage-backed securities:		
Agency-collateralized mortgage obligations	$7	$ 7
Non-agency residential	3,244	3,490
Total mortgage-backed securities	3,251	3,497
Non-U.S. securities [1]	16,885	12,843
Other taxable securities, substantially all asset-backed securities	249	267
Total	$20,385	$ 16,607

[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 the three and six months ended June 30, 2016 and 2015 are presented in the table below.

Gains and Losses on Sales of AFS Debt Securities

	Three Months Ended June 30		Six Months Ended June 30	
(Dollars in millions)	2016	2015	2016	2015
Gross gains	$271	$170	$508	$445
Gross losses	(4)	(2)	(15)	(9)
Net gains on sales of AFS debt securities	$267	$168	$493	$436
Income tax expense attributable to realized net gains on sales of AFS debt securities	$101	$64	$187	$166

Table of Contents

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 June 30, 2016 and December 31, 2015.

Temporarily Impaired and Other-than-temporarily Impaired AFS Debt Securities

	June 30, 2016					
	Less than Twelve Months		Twelve Months or Longer		Total	
(Dollars in millions)	Fair Value	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses
Temporarily impaired AFS debt securities						
Mortgage-backed securities:						
Agency	$43	$ (1)	$1,277	$ (12)	$1,320	$ (13)
Agency-collateralized mortgage obligations	—	—	526	(5)	526	(5)
Commercial	297	(5)	—	—	297	(5)
Non-agency residential	104	(4)	545	(23)	649	(27)
Total mortgage-backed securities	444	(10)	2,348	(40)	2,792	(50)
Non-U.S. securities	1,015	(5)	135	(2)	1,150	(7)
Other taxable securities, substantially all asset-backed securities	2,142	(14)	3,348	(35)	5,490	(49)
Total taxable securities	3,601	(29)	5,831	(77)	9,432	(106)
Tax-exempt securities	2,039	(7)	1,902	(24)	3,941	(31)
Total temporarily impaired AFS debt securities	5,640	(36)	7,733	(101)	13,373	(137)
Other-than-temporarily impaired AFS debt securities (1)						
Non-agency residential mortgage-backed securities	227	(12)	382	(29)	609	(41)
Total temporarily impaired and other-than-temporarily impaired AFS debt securities	$5,867	$ (48)	$8,115	$ (130)	$13,982	$ (178)

	December 31, 2015					
Temporarily impaired AFS debt securities						
Mortgage-backed securities:						
Agency	$131,511	$ (1,245)	$14,895	$ (443)	$146,406	$ (1,688)
Agency-collateralized mortgage obligations	1,271	(9)	1,637	(62)	2,908	(71)
Commercial	4,066	(61)	—	—	4,066	(61)
Non-agency residential	553	(5)	723	(32)	1,276	(37)
Total mortgage-backed securities	137,401	(1,320)	17,255	(537)	154,656	(1,857)
U.S. Treasury and agency securities	1,172	(5)	190	(4)	1,362	(9)
Non-U.S. securities	—	—	134	(3)	134	(3)
Other taxable securities, substantially all asset-backed securities	5,178	(72)	792	(17)	5,970	(89)
Total taxable securities	143,751	(1,397)	18,371	(561)	162,122	(1,958)
Tax-exempt securities	4,400	(12)	1,877	(21)	6,277	(33)
Total temporarily impaired AFS debt securities	148,151	(1,409)	20,248	(582)	168,399	(1,991)
Other-than-temporarily impaired AFS debt securities (1)						
Non-agency residential mortgage-backed securities	481	(19)	98	(14)	579	(33)
	$148,632	$ (1,428)	$20,346	$ (596)	$168,978	$ (2,024)

Total temporarily impaired and
other-than-temporarily impaired AFS debt securities

(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 other-than-temporary impairment (OTTI) losses on AFS debt securities for the three and six months ended June 30, 2016 and 2015 as presented in the Net Credit-related Impairment Losses Recognized in Earnings table. Substantially all OTTI losses in the three and six months ended June 30, 2016 and 2015 consisted of credit losses on non-agency residential mortgage-backed securities (RMBS) and were recorded in other income in the Consolidated Statement of Income. 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, accordingly, are recorded

Table of Contents

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

	Three Months Ended June 30		Six Months Ended June 30	
(Dollars in millions)	2016	2015	2016	2015
Total OTTI losses	$(15)	$(11)	$(31)	$(82)
Less: non-credit portion of total OTTI losses recognized in OCI	10	6	19	7
Net credit-related impairment losses recognized in earnings	$(5)	$(5)	$(12)	$(75)

The table below presents a rollforward of the credit losses recognized in earnings for the three and six months ended June 30, 2016 and 2015 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

	Three Months Ended June 30		Six Months Ended June 30	
(Dollars in millions)	2016	2015	2016	2015
Balance, beginning of period	$269	$256	$266	$200
Additions for credit losses recognized on AFS debt securities that had no previous impairment losses	1	2	2	49
Additions for credit losses recognized on AFS debt securities that had previously incurred impairment losses	4	3	10	26
Reductions for AFS debt securities matured, sold or intended to be sold	(28)	—	(32)	(14)
Balance, June 30	$246	$261	$246	$261

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 June 30, 2016.

Significant Assumptions

	Range [1]	
Weighted-average	10th	90th

			Percentile[2]		Percentile[2]	
Annual prepayment speed	12.7	%	1.9	%	27.3	%
Loss severity	31.3		15.5		29.1	
Life default rate	20.5		0.6		78.3	

(1) Represents the range of inputs/assumptions based upon the underlying collateral.

(2) The value of a variable below which the indicated percentile of observations will fall.

Annual constant prepayment speed and loss severity rates are projected considering collateral characteristics such as loan-to-value (LTV), creditworthiness of borrowers as measured using Fair Isaac Corporation (FICO) scores, and geographic concentrations. The weighted-average severity by collateral type was 26.0 percent for prime, 27.6 percent for Alt-A and 38.9 percent for subprime at June 30, 2016. Additionally, default rates are projected by considering collateral characteristics including, but not limited to, LTV, FICO score and geographic concentration. Weighted-average life default rates by collateral type were 15.3 percent for prime, 23.3 percent for Alt-A and 23.2 percent for subprime at June 30, 2016.

Table of Contents

The expected maturity distribution and yields of the Corporation's debt securities carried at fair value and HTM debt securities at June 30, 2016 are summarized in the table below. Actual maturities may differ from the contractual or expected maturities since borrowers may have the right to prepay obligations with or without prepayment penalties.

Maturities of Debt Securities Carried at Fair Value and Held-to-maturity Debt Securities

	June 30, 2016									
	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	$45	4.41%	$180,446	2.24%	$23,189	2.67%	$—	—	$203,680	2.29%
Agency-collateralized mortgage obligations	97	1.24	8,475	2.47	884	2.72	—	—	9,456	2.48
Commercial	87	6.02	1,138	2.04	9,858	2.36	—	—	11,083	2.36
Non-agency residential	178	5.66	741	5.63	840	5.64	3,588	8.48%	5,347	7.55
Total mortgage-backed securities	407	4.54	190,800	2.26	34,771	2.66	3,588	8.48	229,566	2.42
U.S. Treasury and agency securities	501	0.36	24,396	1.26	895	3.39	—	—	25,792	1.32
Non-U.S. securities	20,813	0.95	2,041	2.14	66	2.06	—	—	22,920	1.06
Other taxable securities, substantially all asset-backed securities	2,225	1.39	4,930	1.63	2,203	2.87	704	4.18	10,062	2.03
Total taxable securities	23,946	1.04	222,167	2.14	37,935	2.68	4,292	7.78	288,340	2.20
Tax-exempt securities	1,540	0.76	5,840	1.01	5,993	1.50	1,908	1.15	15,281	1.20
Total amortized cost of debt securities carried at fair value	$25,486	1.02	$228,007	2.11	$43,928	2.52	$6,200	5.74	$303,621	2.15
Amortized cost of HTM debt securities [2]	$—	—	$82,803	2.06	$19,380	2.67	$96	3.49	$102,279	2.18
Debt securities carried at fair value										
Mortgage-backed securities:										
Agency	$46		$184,891		$23,751		$—		$208,688	
Agency-collateralized mortgage obligations	98		8,743		926		—		9,767	
Commercial	87		1,169		10,141		—		11,397	
Non-agency residential	222		720		922		3,483		5,347	
Total mortgage-backed securities	453		195,523		35,740		3,483		235,199	
U.S. Treasury and agency securities	502		24,699		942		—		26,143	
Non-U.S. securities	20,824		2,053		66		—		22,943	
Other taxable securities, substantially all asset-backed securities	2,226		4,856		2,254		687		10,023	
Total taxable securities	24,005		227,131		39,002		4,170		294,308	
Tax-exempt securities	1,540		5,849		6,080		1,893		15,362	
	$25,545		$232,980		$45,082		$6,063		$309,670	

Total debt securities carried at fair value					
Fair value of HTM debt securities [2]	$—	$84,451	$19,829	$95	$104,375

(1) Average yield is computed using the effective yield of each security at the end of the period, weighted based on the amortized cost of each security. The effective yield considers the contractual coupon, amortization of premiums and accretion of discounts, and excludes 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 at both June 30, 2016 and December 31, 2015. For additional information, see Note 10 – Commitments and Contingencies.

The Corporation holds investments in affordable housing partnerships that construct, own and operate real estate projects that qualify for low income housing tax credits. For additional information, see Note 6 – Securitizations and Other Variable Interest Entities.

Table of Contents

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 June 30, 2016 and December 31, 2015. The classes of financing receivables are residential mortgage and home equity within the Consumer Real Estate portfolio segment; U.S. credit card, non-U.S. credit card, direct/indirect consumer and other consumer within the Credit Card and Other Consumer portfolio segment; and U.S. commercial, commercial real estate, commercial lease financing, non-U.S. commercial and U.S. small business commercial within the Commercial portfolio segment.

	June 30, 2016							
(Dollars in millions)	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	$1,093	$329	$1,314	$2,736	$143,364			$146,100
Home equity	190	104	474	768	51,709			52,477
Non-core portfolio								
Residential mortgage [5]	1,452	804	6,444	8,700	20,036	$11,107		39,843
Home equity	278	147	936	1,361	13,628	4,121		19,110
Credit card and other consumer								
U.S. credit card	416	279	693	1,388	86,715			88,103
Non-U.S. credit card	34	26	69	129	9,251			9,380
Direct/Indirect consumer [6]	197	65	26	288	92,458			92,746
Other consumer [7]	20	4	3	27	2,257			2,284
Total consumer	3,680	1,758	9,959	15,397	419,418	15,228		450,043
Consumer loans accounted for under the fair value option [8]							$ 1,844	1,844
Total consumer loans and leases	3,680	1,758	9,959	15,397	419,418	15,228	1,844	451,887
Commercial								
U.S. commercial	290	102	263	655	262,812			263,467
Commercial real estate [9]	27	9	53	89	57,523			57,612
Commercial lease financing	28	32	31	91	21,112			21,203
Non-U.S. commercial	52	4	1	57	88,991			89,048
U.S. small business commercial	50	38	78	166	12,954			13,120
Total commercial	447	185	426	1,058	443,392			444,450
Commercial loans accounted for under the fair value option [8]							6,816	6,816
Total commercial loans and leases	447	185	426	1,058	443,392		6,816	451,266

Total loans and leases [10]	$4,127	$1,943	$10,385	$16,455	$862,810	$15,228	$8,660	$903,153
Percentage of outstandings	0.46 %	0.22 %	1.14 %	1.82 %	95.53 %	1.69 %	0.96 %	100.00 %

(1) Consumer real estate loans 30-59 days past due includes fully-insured loans of $1.1 billion and nonperforming loans of $284 million. Consumer real estate loans 60-89 days past due includes fully-insured loans of $691 million and nonperforming loans of $245 million.

(2) Consumer real estate includes fully-insured loans of $5.7 billion.

(3) Consumer real estate includes $2.7 billion and direct/indirect consumer includes $26 million of nonperforming loans.

(4) Purchased credit-impaired (PCI) loan amounts are shown gross of the valuation allowance.

(5) Total outstandings includes pay option loans of $2.1 billion. The Corporation no longer originates this product.

(6) Total outstandings includes auto and specialty lending loans of $47.0 billion, unsecured consumer lending loans of $696 million, U.S. securities-based lending loans of $40.1 billion, non-U.S. consumer loans of $3.4 billion, student loans of $531 million and other consumer loans of $1.1 billion.

(7) Total outstandings includes consumer finance loans of $512 million, consumer leases of $1.6 billion and consumer overdrafts of $191 million.

(8) Consumer loans accounted for under the fair value option were residential mortgage loans of $1.5 billion and home equity loans of $354 million. Commercial loans accounted for under the fair value option were U.S. commercial loans of $2.7 billion and non-U.S. commercial loans of $4.1 billion. For additional information, see Note 14 – Fair Value Measurements and Note 15 – Fair Value Option.

(9) Total outstandings includes U.S. commercial real estate loans of $54.3 billion and non-U.S. commercial real estate loans of $3.3 billion.

(10) The Corporation pledged $148.0 billion of loans to secure potential borrowing capacity with the Federal Reserve Bank and Federal Home Loan Banks. This amount is not included in the parenthetical disclosure of loans and leases pledged as collateral on the Consolidated Balance Sheet as there were no related outstanding borrowings.

Table of Contents

	December 31, 2015							
(Dollars in millions)	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 [10]	$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 14 – Fair Value Measurements and Note 15 – 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.

(10) The Corporation pledged $149.4 billion of loans to secure potential borrowing capacity with the Federal Reserve Bank and Federal Home Loan Banks. This amount is not included in the parenthetical disclosure of loans and leases pledged as collateral on the Consolidated Balance Sheet as there were no related outstanding borrowings.

Following the realignment of its business segments effective April 1, 2016, the Corporation now 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 troubled debt restructuring (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.

Table of Contents

The Corporation has entered into long-term credit protection agreements with FNMA and FHLMC on loans totaling $5.1 billion and $3.7 billion at June 30, 2016 and December 31, 2015, 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 June 30, 2016 and December 31, 2015, $449 million and $484 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 June 30, 2016, nonperforming loans discharged in Chapter 7 bankruptcy with no change in repayment terms were $682 million of which $402 million were current on their contractual payments, while $245 million were 90 days or more past due. Of the contractually current nonperforming loans, approximately 82 percent were discharged in Chapter 7 bankruptcy more than 12 months ago, and approximately 67 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 the three and six months ended June 30, 2016, the Corporation sold nonperforming and other delinquent consumer real estate loans with a carrying value of $417 million and $1.4 billion, including $150 million and $324 million of PCI loans, compared to $1.0 billion and $1.9 billion, including $401 million and $987 million of PCI loans, for the same periods in 2015. The Corporation recorded net charge-offs of $5 million and $45 million related to these sales for the three and six months ended June 30, 2016 compared to net recoveries of $27 million and $67 million for the same periods in 2015. Gains related to these sales of $13 million and $44 million were recorded in other income in the Consolidated Statement of Income for the three and six months ended June 30, 2016 compared to gains of $40 million and $75 million for the same periods in 2015.

Table of Contents

The table below presents the Corporation's nonperforming loans and leases including nonperforming TDRs, and loans accruing past due 90 days or more at June 30, 2016 and December 31, 2015. 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 to the Consolidated Financial Statements of the Corporation's 2015 Annual Report on Form 10-K.

Credit Quality

(Dollars in millions)	Nonperforming Loans and Leases		Accruing Past Due 90 Days or More	
	June 30 2016	December 31 2015	June 30 2016	December 31 2015
Consumer real estate				
Core portfolio				
Residential mortgage [1]	$1,492	$ 1,825	$455	$ 382
Home equity	937	974	—	—
Non-core portfolio				
Residential mortgage [1]	2,100	2,978	5,204	6,768
Home equity	2,148	2,363	—	—
Credit card and other consumer				
U.S. credit card	n/a	n/a	693	789
Non-U.S. credit card	n/a	n/a	69	76
Direct/Indirect consumer	27	24	26	39
Other consumer	1	1	2	3
Total consumer	6,705	8,165	6,449	8,057
Commercial				
U.S. commercial	1,349	867	55	113
Commercial real estate	84	93	6	3
Commercial lease financing	13	12	29	15
Non-U.S. commercial	144	158	1	1
U.S. small business commercial	69	82	61	61
Total commercial	1,659	1,212	152	193
Total loans and leases	$8,364	$ 9,377	$6,601	$ 8,250

(1) Residential mortgage loans in the core and non-core portfolios accruing past due 90 days or more are fully-insured loans. At June 30, 2016 and December 31, 2015, residential mortgage includes $3.3 billion and $4.3 billion of loans on which interest has been curtailed by the Federal Housing Administration (FHA), and therefore are no longer accruing interest, although principal is still insured, and $2.4 billion and $2.9 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 to the Consolidated Financial Statements of the Corporation's 2015 Annual Report on Form 10-K. 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.

Table of Contents

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 June 30, 2016 and December 31, 2015.

Consumer Real Estate – Credit Quality Indicators[1]

	June 30, 2016					
(Dollars in millions)	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	$117,311	$ 14,990	$ 8,087	$ 49,186	$ 8,178	$ 1,821
Greater than 90 percent but less than or equal to 100 percent	4,036	1,859	1,215	1,629	1,925	741
Greater than 100 percent	2,394	2,767	1,805	1,662	4,886	1,559
Fully-insured loans[5]	22,359	9,120	—	—	—	—
Total consumer real estate	$146,100	$ 28,736	$ 11,107	$ 52,477	$ 14,989	$ 4,121
Refreshed FICO score						
Less than 620	$ 2,789	$ 3,716	$ 3,177	$ 1,276	$ 3,040	$ 617
Greater than or equal to 620 and less than 680	5,278	3,164	2,437	3,044	3,501	735
Greater than or equal to 680 and less than 740	22,372	4,932	3,103	11,042	3,332	1,210
Greater than or equal to 740	93,302	7,804	2,390	37,115	5,116	1,559
Fully-insured loans[5]	22,359	9,120	—	—	—	—
Total consumer real estate	$146,100	$ 28,736	$ 11,107	$ 52,477	$ 14,989	$ 4,121

(1) Excludes $1.8 billion of loans accounted for under the fair value option.

(2) Excludes PCI loans.

(3) Includes $1.8 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

	June 30, 2016			
(Dollars in millions)	U.S. Credit Card	Non-U.S. Credit Card	Direct/Indirect Consumer	Other Consumer[1]
Refreshed FICO score				
Less than 620	$ 3,940	$ —	$ 1,315	$ 200
Greater than or equal to 620 and less than 680	11,562	—	1,855	213
Greater than or equal to 680 and less than 740	33,592	—	11,818	364
Greater than or equal to 740	39,009	—	32,730	1,312
Other internal credit metrics[2, 3, 4]	—	9,380	45,028	195
Total credit card and other consumer	$ 88,103	$ 9,380	$ 92,746	$ 2,284

(1) At June 30, 2016, 22 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 $43.4 billion of securities-based lending which is overcollateralized and therefore has minimal credit risk and $534 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 June 30, 2016, 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)

	June 30, 2016				
(Dollars in millions)	U.S. Commercial	Commercial Real Estate	Commercial Lease Financing	Non-U.S. Commercial	U.S. Small Business Commercial (2)
Risk ratings					
Pass rated	$252,353	$ 57,170	$ 20,371	$ 85,609	$ 488
Reservable criticized	11,114	442	832	3,439	83
Refreshed FICO score (3)					
Less than 620					184
Greater than or equal to 620 and less than 680					561
Greater than or equal to 680 and less than 740					1,736
Greater than or equal to 740					3,328
Other internal credit metrics (3, 4)					6,740
Total commercial	$263,467	$ 57,612	$ 21,203	$ 89,048	$ 13,120

(1) Excludes $6.8 billion of loans accounted for under the fair value option.

(2) U.S. small business commercial includes $669 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 June 30, 2016, 99 percent of the balances where internal credit metrics are used was current or less than 30 days past due.

(3) Refreshed FICO score and other internal credit metrics are applicable only to the U.S. small business commercial portfolio.

(4) Other internal credit metrics may include delinquency status, application scores, geography or other factors.

Table of Contents

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) At December 31, 2015, 27 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.

Table of Contents

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 157. For additional information, see Note 1 – Summary of Significant Accounting Principles to the Consolidated Financial Statements of the Corporation's 2015 Annual Report on Form 10-K.

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 $1.6 billion were included in TDRs at June 30, 2016, of which $682 million were classified as nonperforming and $631 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.

145

Table of Contents

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 June 30, 2016 and December 31, 2015, 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 $416 million and $444 million at June 30, 2016 and December 31, 2015. The carrying value of consumer real estate loans, including fully-insured and PCI loans, for which formal foreclosure proceedings were in process as of June 30, 2016 was $4.7 billion. During the three and six months ended June 30, 2016, the Corporation reclassified $392 million and $808 million of consumer real estate loans to foreclosed properties or, for properties acquired upon foreclosure of certain government-guaranteed loans (principally FHA-insured loans), to other assets. This compared to reclassifications of $474 million and $1.1 billion for the same periods in 2015. 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 June 30, 2016 and December 31, 2015, and the average carrying value and interest income recognized for the three and six months ended June 30, 2016 and 2015 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

	June 30, 2016			December 31, 2015		
(Dollars in millions)	Unpaid Principal Balance	Carrying Value	Related Allowance	Unpaid Principal Balance	Carrying Value	Related Allowance
With no recorded allowance						
Residential mortgage	$12,619	$ 9,929	$—	$14,888	$11,901	$ —
Home equity	3,691	1,921	—	3,545	1,775	—
With an allowance recorded						
Residential mortgage	$5,281	$ 5,157	$296	$6,624	$6,471	$ 399
Home equity	939	835	146	1,047	911	235
Total						
Residential mortgage	$17,900	$ 15,086	$296	$21,512	$18,372	$ 399
Home equity	4,630	2,756	146	4,592	2,686	235

	Three Months Ended June 30				Six Months Ended June 30			
	2016		2015		2016		2015	
	Average Carrying Value	Interest Income Recognized	Average Carrying Value	Interest Income Recognized	Average Carrying Value	Interest Income Recognized	Average Carrying Value	Interest Income Recognized

		(1)		(1)		(1)		(1)
With no recorded allowance								
Residential mortgage	$10,345	$ 100	$14,401	$ 105	$10,925	$194	$14,897	$ 213
Home equity	1,870	17	1,805	20	1,843	30	1,748	45
With an allowance recorded								
Residential mortgage	$5,387	$ 46	$7,706	$ 61	$5,737	$97	$7,646	$ 125
Home equity	873	5	744	5	882	11	729	12
Total								
Residential mortgage	$15,732	$ 146	$22,107	$ 166	$16,662	$291	$22,543	$ 338
Home equity	2,743	22	2,549	25	2,725	41	2,477	57

(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.

Table of Contents

The table below presents the June 30, 2016 and 2015 unpaid principal balance, carrying value, and average pre- and post-modification interest rates on consumer real estate loans that were modified in TDRs during the three and six months ended June 30, 2016 and 2015, 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 the Three Months Ended June 30, 2016 and 2015 [1]

	June 30, 2016				Three Months Ended June 30, 2016
(Dollars in millions)	Unpaid Principal Balance	Carrying Value	Pre-Modification Interest Rate	Post-Modification Interest Rate [2]	Net Charge-offs [3]
Residential mortgage	$437	$ 405	4.68 %	4.42 %	$ 3
Home equity	250	200	3.81	3.27	16
Total	$687	$ 605	4.36	4.00	$ 19

	June 30, 2015				Three Months Ended June 30, 2015
Residential mortgage	$1,409	$ 1,294	4.87 %	4.71 %	$ 25
Home equity	348	285	3.49	3.36	19
Total	$1,757	$ 1,579	4.60	4.44	$ 44

Consumer Real Estate – TDRs Entered into During the Six Months Ended June 30, 2016 and 2015 [1]

	June 30, 2016				Six Months Ended June 30, 2016
Residential mortgage	$854	$ 785	4.72 %	4.45 %	$ 5
Home equity	460	361	3.63	3.10	26
Total	$1,314	$ 1,146	4.34	3.98	$ 31

	June 30, 2015				Six Months Ended June 30, 2015
Residential mortgage	$2,760	$ 2,479	4.98 %	4.64 %	$ 42
Home equity	579	447	3.72	3.36	30
Total	$3,339	$ 2,926	4.76	4.42	$ 72

(1) During the three and six months ended June 30, 2016, the Corporation forgave principal of $1 million and $11 million related to residential mortgage loans in connection with TDRs compared to $102 million and $261 million for the same periods in 2015.

(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 June 30, 2016 and 2015 due to sales and other dispositions.

Table of Contents

The table below presents the June 30, 2016 and 2015 carrying value for consumer real estate loans that were modified in a TDR during the three and six months ended June 30, 2016 and 2015 by type of modification.

Consumer Real Estate – Modification Programs

	TDRs Entered into During the Three Months Ended June 30, 2016		
(Dollars in millions)	Residential Mortgage	Home Equity	Total Carrying Value
Modifications under government programs			
Contractual interest rate reduction	$23	$ 12	$ 35
Principal and/or interest forbearance	—	4	4
Other modifications [1]	8	—	8
Total modifications under government programs	31	16	47
Modifications under proprietary programs			
Contractual interest rate reduction	14	2	16
Capitalization of past due amounts	5	—	5
Principal and/or interest forbearance	2	1	3
Other modifications [1]	9	17	26
Total modifications under proprietary programs	30	20	50
Trial modifications	300	145	445
Loans discharged in Chapter 7 bankruptcy [2]	44	19	63
Total modifications	$405	$ 200	$ 605

	TDRs Entered into During the Three Months Ended June 30, 2015		
Modifications under government programs			
Contractual interest rate reduction	$95	$ 3	$ 98
Principal and/or interest forbearance	—	2	2
Other modifications [1]	11	—	11
Total modifications under government programs	106	5	111
Modifications under proprietary programs			
Contractual interest rate reduction	38	1	39
Capitalization of past due amounts	19	1	20
Principal and/or interest forbearance	18	1	19
Other modifications [1]	14	1	15
Total modifications under proprietary programs	89	4	93
Trial modifications	997	230	1,227
Loans discharged in Chapter 7 bankruptcy [2]	102	46	148
Total modifications	$1,294	$ 285	$ 1,579

[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.

Table of Contents

Consumer Real Estate – Modification Programs

(Dollars in millions)	TDRs Entered into During the Six Months Ended June 30, 2016 Residential Mortgage	Home Equity	Total Carrying Value
Modifications under government programs			
Contractual interest rate reduction	$66	$ 18	$ 84
Principal and/or interest forbearance	—	6	6
Other modifications [1]	19	1	20
Total modifications under government programs	85	25	110
Modifications under proprietary programs			
Contractual interest rate reduction	32	28	60
Capitalization of past due amounts	14	3	17
Principal and/or interest forbearance	6	16	22
Other modifications [1]	11	20	31
Total modifications under proprietary programs	63	67	130
Trial modifications	540	230	770
Loans discharged in Chapter 7 bankruptcy [2]	97	39	136
Total modifications	$785	$ 361	$ 1,146

	TDRs Entered into During the Six Months Ended June 30, 2015		
Modifications under government programs			
Contractual interest rate reduction	$266	$ 15	$ 281
Principal and/or interest forbearance	2	5	7
Other modifications [1]	23	1	24
Total modifications under government programs	291	21	312
Modifications under proprietary programs			
Contractual interest rate reduction	113	6	119
Capitalization of past due amounts	50	3	53
Principal and/or interest forbearance	75	9	84
Other modifications [1]	18	26	44
Total modifications under proprietary programs	256	44	300
Trial modifications	1,734	298	2,032
Loans discharged in Chapter 7 bankruptcy [2]	198	84	282
Total modifications	$2,479	$ 447	$ 2,926

[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.

Table of Contents

The table below presents the carrying value of consumer real estate loans that entered into payment default during the three and six months ended June 30, 2016 and 2015 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
	Three Months Ended June 30, 2016		
Modifications under government programs	$85	$ 1	$ 86
Modifications under proprietary programs	35	5	40
Loans discharged in Chapter 7 bankruptcy [1]	31	6	37
Trial modifications	184	29	213
Total modifications	$335	$ 41	$ 376
	Three Months Ended June 30, 2015		
Modifications under government programs	$99	$ 1	$ 100
Modifications under proprietary programs	38	6	44
Loans discharged in Chapter 7 bankruptcy [1]	61	10	71
Trial modifications [2]	468	27	495
Total modifications	$666	$ 44	$ 710
	Six Months Ended June 30, 2016		
Modifications under government programs	$178	$ 1	$ 179
Modifications under proprietary programs	78	27	105
Loans discharged in Chapter 7 bankruptcy [1]	71	11	82
Trial modifications	421	66	487
Total modifications	$748	$ 105	$ 853
	Six Months Ended June 30, 2015		
Modifications under government programs	$206	$ 2	$ 208
Modifications under proprietary programs	78	18	96
Loans discharged in Chapter 7 bankruptcy [1]	132	20	152
Trial modifications [2]	2,236	51	2,287
Total modifications	$2,652	$ 91	$ 2,743

[1] Includes loans discharged in Chapter 7 bankruptcy with no change in repayment terms that are classified as TDRs.

[2] Includes $116 million and $1.5 billion for the three and six months ended June 30, 2015 of trial modification offers made in connection with the August 2014 U.S. Department of Justice settlement to which the customer did not respond.

Credit Card and Other Consumer

Impaired loans within the Credit Card and Other Consumer portfolio segment consist entirely of loans that have been modified in TDRs (the 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

Table of Contents

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 June 30, 2016 and December 31, 2015, and the average carrying value and interest income recognized for the three and six months ended June 30, 2016 and 2015 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

	June 30, 2016			December 31, 2015		
(Dollars in millions)	Unpaid Principal Balance	Carrying Value [1]	Related Allowance	Unpaid Principal Balance	Carrying Value [1]	Related Allowance
With no recorded allowance						
Direct/Indirect consumer	$49	$ 21	$—	$50	$21	$ —
With an allowance recorded						
U.S. credit card	$526	$ 535	$126	$598	$611	$ 176
Non-U.S. credit card	91	107	62	109	126	70
Direct/Indirect consumer	7	9	1	17	21	4
Total						
U.S. credit card	$526	$ 535	$126	$598	$611	$ 176
Non-U.S. credit card	91	107	62	109	126	70
Direct/Indirect consumer	56	30	1	67	42	4

	Three Months Ended June 30				Six Months Ended June 30			
	2016		2015		2016		2015	
	Average Carrying Value	Interest Income Recognized [2]	Average Carrying Value	Interest Income Recognized [2]	Average Carrying Value	Interest Income Recognized [2]	Average Carrying Value	Interest Income Recognized [2]
With no recorded allowance								
Direct/Indirect consumer	$21	$ —	$24	$ —	$21	$—	$24	$ —
With an allowance recorded								
U.S. credit card	$568	$ 8	$776	$ 11	$587	$17	$812	$ 24
Non-U.S. credit card	116	1	150	1	119	2	154	2
Direct/Indirect consumer	11	—	57	1	15	—	69	2
Total								
U.S. credit card	$568	$ 8	$776	$ 11	$587	$17	$812	$ 24

Non-U.S. credit card	116	1	150	1	119	2	154	2
Direct/Indirect consumer	32	—	81	1	36	—	93	2

(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.

Table of Contents

The table below provides information on the Corporation's primary modification programs for the renegotiated TDR portfolio at June 30, 2016 and December 31, 2015.

Credit Card and Other Consumer – Renegotiated TDRs by Program Type

(Dollars in millions)	Internal Programs		External Programs		Other [1]		Total		Percent of Balances Current or Less Than 30 Days Past Due	
	June 30 2016	December 31 2015	June 30 2016	December 31 2015	June 30 2016	December 31 2015	June 30 2016	December 31 2015	June 30 2016	December 31 2015
U.S. credit card	$258	$ 313	$275	$ 296	$2	$ 2	$535	$ 611	89.76%	88.74 %
Non-U.S. credit card	15	21	8	10	84	95	107	126	43.86	44.25
Direct/Indirect consumer	5	11	3	7	22	24	30	42	93.10	89.12
Total renegotiated TDRs	$278	$ 345	$286	$ 313	$108	$ 121	$672	$ 779	82.54	81.55

[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 June 30, 2016 and 2015 unpaid principal balance, carrying value and average pre- and post-modification interest rates of loans that were modified in TDRs during the three and six months ended June 30, 2016 and 2015, and net charge-offs recorded during the period in which the modification occurred.

Credit Card and Other Consumer – Renegotiated TDRs Entered into During the Three Months Ended June 30, 2016 and 2015

	June 30, 2016				Three Months Ended June 30, 2016
(Dollars in millions)	Unpaid Principal Balance	Carrying Value [1]	Pre-Modification Interest Rate	Post-Modification Interest Rate	Net Charge-offs
U.S. credit card	$44	$ 47	17.57 %	5.41 %	$ 3
Non-U.S. credit card	30	36	24.01	0.35	7
Direct/Indirect consumer	7	4	4.52	4.34	3
Total	$81	$ 87	19.54	3.30	$ 13

	June 30, 2015				Three Months Ended June 30, 2015
U.S. credit card	$61	$ 66	16.96 %	4.90 %	$ 6
Non-U.S. credit card	36	42	24.19	0.34	10
Direct/Indirect consumer	7	5	6.03	5.05	2
Total	$104	$ 113	19.19	3.22	$ 18

Credit Card and Other Consumer – Renegotiated TDRs Entered into During the Six Months Ended June 30, 2016 and 2015

	June 30, 2016

							Six Months Ended June 30, 2016
U.S. credit card	$87	$ 93	17.47	%	5.47	%	$ 4
Non-U.S. credit card	53	62	23.80		0.37		8
Direct/Indirect consumer	12	7	4.50		4.29		5
Total	$152	$ 162	19.30		3.47		$ 17

	June 30, 2015						Six Months Ended June 30, 2015
U.S. credit card	$123	$ 133	16.98	%	5.01	%	$ 8
Non-U.S. credit card	67	79	24.08		0.33		12
Direct/Indirect consumer	12	7	6.59		5.41		5
Total	$202	$ 219	19.17		3.35		$ 25

(1) Includes accrued interest and fees.

Table of Contents

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 the three and six months ended June 30, 2016 and 2015.

Credit Card and Other Consumer – Renegotiated TDRs Entered into During the Period by Program Type

(Dollars in millions)	Internal Programs	External Programs	Other [1]	Total
	Three Months Ended June 30, 2016			
U.S. credit card	$26	$ 21	$ —	$47
Non-U.S. credit card	1	1	34	36
Direct/Indirect consumer	—	—	4	4
Total renegotiated TDRs	$27	$ 22	$ 38	$87
	Three Months Ended June 30, 2015			
U.S. credit card	$43	$ 23	$ —	$66
Non-U.S. credit card	1	1	40	42
Direct/Indirect consumer	1	—	4	5
Total renegotiated TDRs	$45	$ 24	$ 44	$113
	Six Months Ended June 30, 2016			
U.S. credit card	$50	$ 43	$ —	$93
Non-U.S. credit card	1	2	59	62
Direct/Indirect consumer	—	—	7	7
Total renegotiated TDRs	$51	$ 45	$ 66	$162
	Six Months Ended June 30, 2015			
U.S. credit card	$88	$ 45	$ —	$133
Non-U.S. credit card	2	3	74	79
Direct/Indirect consumer	1	—	6	7
Total renegotiated TDRs	$91	$ 48	$ 80	$219

[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, 89 percent of new non-U.S. credit card TDRs and 14 percent of new direct/indirect consumer TDRs may be in payment default within 12 months after modification. Loans that entered into payment default during the three and six months ended June 30, 2016 that had been modified in a TDR during the preceding 12 months were $7 million and $16 million for U.S. credit card, $30 million and $64 million for non-U.S. credit card, and $1 million and $2 million for direct/indirect consumer. During the three and six months ended June 30, 2015, loans that entered into payment default that had been modified in a TDR during the preceding 12 months were $10 million and $22 million for U.S. credit card, $39 million and $80 million for non-U.S. credit card, and $1 million and $2 million for direct/indirect consumer.

153

Table of Contents

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 June 30, 2016 and December 31, 2015, remaining commitments to lend additional funds to debtors whose terms have been modified in a commercial loan TDR were immaterial. Commercial foreclosed properties totaled $19 million and $15 million at June 30, 2016 and December 31, 2015.

Table of Contents

The table below provides the unpaid principal balance, carrying value and related allowance at June 30, 2016 and December 31, 2015, and the average carrying value and interest income recognized for the three and six months ended June 30, 2016 and 2015 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)	June 30, 2016			December 31, 2015		
	Unpaid Principal Balance	Carrying Value	Related Allowance	Unpaid Principal Balance	Carrying Value	Related Allowance
With no recorded allowance						
U.S. commercial	$779	$ 771	$—	$566	$541	$ —
Commercial real estate	53	53	—	82	77	—
Non-U.S. commercial	29	29	—	4	4	—
With an allowance recorded						
U.S. commercial	$2,147	$ 1,731	$167	$1,350	$1,157	$ 115
Commercial real estate	289	102	11	328	107	11
Commercial lease financing	5	3	—	—	—	—
Non-U.S. commercial	493	329	31	531	381	56
U.S. small business commercial [1]	96	84	29	105	101	35
Total						
U.S. commercial	$2,926	$ 2,502	$167	$1,916	$1,698	$ 115
Commercial real estate	342	155	11	410	184	11
Commercial lease financing	5	3	—	—	—	—
Non-U.S. commercial	522	358	31	535	385	56
U.S. small business commercial [1]	96	84	29	105	101	35

	Three Months Ended June 30				Six Months Ended June 30			
	2016		2015		2016		2015	
	Average Carrying Value	Interest Income Recognized [2]	Average Carrying Value	Interest Income Recognized [2]	Average Carrying Value	Interest Income Recognized [2]	Average Carrying Value	Interest Income Recognized [2]
With no recorded allowance								
U.S. commercial	$656	$ 3	$710	$ 5	$619	$5	$669	$ 8
Commercial real estate	65	—	83	—	71	—	77	1
Non-U.S. commercial	17	—	34	1	11	—	19	1
With an allowance recorded								
U.S. commercial	$1,646	$ 16	$904	$ 12	$1,544	$30	$862	$ 25
Commercial real estate	96	1	232	2	100	2	282	5
Commercial lease financing	1	—	—	—	1	—	—	—
Non-U.S. commercial	349	3	118	—	359	6	92	1
U.S. small business commercial [1]	92	—	108	—	97	—	114	—
Total								
U.S. commercial	$2,302	$ 19	$1,614	$ 17	$2,163	$35	$1,531	$ 33
Commercial real estate	161	1	315	2	171	2	359	6
Commercial lease financing	1	—	—	—	1	—	—	—

Non-U.S. commercial	366	3	152	1	370	6	111	2
U.S. small business commercial [1]	92	—	108	—	97	—	114	—

[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.

Table of Contents

The table below presents the June 30, 2016 and 2015 unpaid principal balance and carrying value of commercial loans that were modified as TDRs during the three and six months ended June 30, 2016 and 2015, 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 the Three Months Ended June 30, 2016 and 2015

	June 30, 2016		Three Months Ended June 30, 2016
(Dollars in millions)	Unpaid Principal Balance	Carrying Value	Net Charge-offs
U.S. commercial	$873	$ 849	$ 24
Commercial real estate	12	12	—
Commercial leasing	5	2	2
Non-U.S. commercial	115	99	12
U.S. small business commercial [1]	2	2	—
Total	$1,007	$ 964	$ 38

	June 30, 2015		Three Months Ended June 30, 2015
U.S. commercial	$602	$ 583	$ 3
Commercial real estate	4	4	—
Non-U.S. commercial	59	59	—
U.S. small business commercial [1]	1	1	—
Total	$666	$ 647	$ 3

Commercial – TDRs Entered into During the Six Months Ended June 30, 2016 and 2015

	June 30, 2016		Six Months Ended June 30, 2016
U.S. commercial	$1,341	$ 1,299	$ 29
Commercial real estate	22	22	1
Commercial leasing	5	2	2
Non-U.S. commercial	287	207	48
U.S. small business commercial [1]	3	3	—
Total	$1,658	$ 1,533	$ 80

	June 30, 2015		Six Months Ended June 30, 2015
U.S. commercial	$794	$ 773	$ 6
Commercial real estate	28	28	—

Non-U.S. commercial	66	66	—
U.S. small business commercial [1]	3	4	—
Total	$891	$ 871	$ 6

[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 $90 million and $132 million for U.S. commercial and $17 million and $28 million for commercial real estate at June 30, 2016 and 2015.

Table of Contents

Purchased Credit-impaired Loans

The table below 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 in the three and six months ended June 30, 2016 were primarily due to an increase in the expected principal and interest cash flows due to lower default estimates.

Rollforward of Accretable Yield

(Dollars in millions)	Three Months Ended June 30, 2016	Six Months Ended June 30, 2016
Accretable yield, beginning of period	$4,250	$4,569
Accretion	(185)	(377)
Disposals/transfers	(124)	(235)
Reclassifications from nonaccretable difference	101	85
Accretable yield, June 30, 2016	$4,042	$4,042

During the three and six months ended June 30, 2016, the Corporation sold PCI loans with a carrying value of $150 million and $324 million, which excludes the related allowance of $19 million and $39 million. During the three and six months ended June 30, 2015, the Corporation sold PCI loans with a carrying value of $401 million and $987 million, which excludes the related allowance of $65 million and $175 million. For more information on PCI loans, see Note 1 – Summary of Significant Accounting Principles to the Consolidated Financial Statements of the Corporation's 2015 Annual Report on Form 10-K, 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 $8.8 billion and $7.5 billion at June 30, 2016 and December 31, 2015. Cash and non-cash proceeds from sales and paydowns of loans originally classified as LHFS were $12.8 billion and $21.4 billion for the six months ended June 30, 2016 and 2015. Cash used for originations and purchases of LHFS totaled $13.4 billion and $19.4 billion for the six months ended June 30, 2016 and 2015.

Table of Contents

NOTE 5 – Allowance for Credit Losses

The table below summarizes the changes in the allowance for credit losses by portfolio segment for the three and six months ended June 30, 2016 and 2015.

(Dollars in millions)	Consumer Real Estate	Credit Card and Other Consumer	Commercial	Total Allowance
	Three Months Ended June 30, 2016			
Allowance for loan and lease losses, April 1	$3,456	$ 3,302	$ 5,311	$ 12,069
Loans and leases charged off	(304)	(884)	(190)	(1,378)
Recoveries of loans and leases previously charged off	144	195	54	393
Net charge-offs	(160)	(689)	(136)	(985)
Write-offs of PCI loans	(82)	—	—	(82)
Provision for loan and lease losses	(5)	738	219	952
Other [1]	—	(17)	(100)	(117)
Allowance for loan and lease losses, June 30	3,209	3,334	5,294	11,837
Reserve for unfunded lending commitments, April 1	—	—	627	627
Provision for unfunded lending commitments	—	—	24	24
Other [1]	—	—	99	99
Reserve for unfunded lending commitments, June 30	—	—	750	750
Allowance for credit losses, June 30	$3,209	$ 3,334	$ 6,044	$ 12,587
	Three Months Ended June 30, 2015			
Allowance for loan and lease losses, April 1	$5,250	$ 3,929	$ 4,497	$ 13,676
Loans and leases charged off	(533)	(896)	(124)	(1,553)
Recoveries of loans and leases previously charged off	205	204	76	485
Net charge-offs	(328)	(692)	(48)	(1,068)
Write-offs of PCI loans	(290)	—	—	(290)
Provision for loan and lease losses	108	445	176	729
Other [1]	1	20	—	21
Allowance for loan and lease losses, June 30	4,741	3,702	4,625	13,068
Reserve for unfunded lending commitments, April 1	—	—	537	537
Provision for unfunded lending commitments	—	—	51	51
Reserve for unfunded lending commitments, June 30	—	—	588	588
Allowance for credit losses, June 30	$4,741	$ 3,702	$ 5,213	$ 13,656
	Six Months Ended June 30, 2016			
Allowance for loan and lease losses, January 1	$3,914	$ 3,471	$ 4,849	$ 12,234
Loans and leases charged off	(682)	(1,796)	(396)	(2,874)
Recoveries of loans and leases previously charged off	319	393	109	821
Net charge-offs	(363)	(1,403)	(287)	(2,053)
Write-offs of PCI loans	(187)	—	—	(187)
Provision for loan and lease losses	(155)	1,290	833	1,968
Other [1]	—	(24)	(101)	(125)
Allowance for loan and lease losses, June 30	3,209	3,334	5,294	11,837
Reserve for unfunded lending commitments, January 1	—	—	646	646
Provision for unfunded lending commitments	—	—	5	5

Other [1]	—	—	99	99
Reserve for unfunded lending commitments, June 30	—	—	750	750
Allowance for credit losses, June 30	$3,209	$ 3,334	$ 6,044	$ 12,587
	Six Months Ended June 30, 2015			
Allowance for loan and lease losses, January 1	$5,935	$ 4,047	$ 4,437	$ 14,419
Loans and leases charged off	(1,085)	(1,860)	(253)	(3,198)
Recoveries of loans and leases previously charged off	388	420	128	936
Net charge-offs	(697)	(1,440)	(125)	(2,262)
Write-offs of PCI loans	(578)	—	—	(578)
Provision for loan and lease losses	80	1,092	313	1,485
Other [1]	1	3	—	4
Allowance for loan and lease losses, June 30	4,741	3,702	4,625	13,068
Reserve for unfunded lending commitments, January 1	—	—	528	528
Provision for unfunded lending commitments	—	—	60	60
Reserve for unfunded lending commitments, June 30	—	—	588	588
Allowance for credit losses, June 30	$4,741	$ 3,702	$ 5,213	$ 13,656

(1) Primarily represents the net impact of portfolio sales, consolidations and deconsolidations, foreign currency translation adjustments and certain other reclassifications.

Table of Contents

During the three and six months ended June 30, 2016, for the PCI loan portfolio, the Corporation recorded a provision benefit of $12 million and $89 million compared to a provision expense of $78 million and $28 million for the same periods in 2015. Write-offs in the PCI loan portfolio totaled $82 million and $187 million during the three and six months ended June 30, 2016 compared to $290 million and $578 million for the same periods in 2015. Write-offs included $19 million and $39 million associated with the sale of PCI loans during the three and six months ended June 30, 2016 compared to $65 million and $175 million for the same periods in 2015. The valuation allowance associated with the PCI loan portfolio was $528 million and $804 million at June 30, 2016 and December 31, 2015.

The table below presents the allowance and the carrying value of outstanding loans and leases by portfolio segment at June 30, 2016 and December 31, 2015.

Allowance and Carrying Value by Portfolio Segment

	June 30, 2016			
(Dollars in millions)	Consumer Real Estate	Credit Card and Other Consumer	Commercial	Total
Impaired loans and troubled debt restructurings [1]				
Allowance for loan and lease losses [2]	$442	$189	$ 238	$869
Carrying value [3]	17,842	672	3,102	21,616
Allowance as a percentage of carrying value	2.48 %	28.13 %	7.67 %	4.02 %
Loans collectively evaluated for impairment				
Allowance for loan and lease losses	$2,239	$3,145	$ 5,056	$10,440
Carrying value [3, 4]	224,460	191,841	441,348	857,649
Allowance as a percentage of carrying value [4]	1.00 %	1.64 %	1.15 %	1.22 %
Purchased credit-impaired loans				
Valuation allowance	$528	n/a	n/a	$528
Carrying value gross of valuation allowance	15,228	n/a	n/a	15,228
Valuation allowance as a percentage of carrying value	3.47 %	n/a	n/a	3.47 %
Total				
Allowance for loan and lease losses	$3,209	$3,334	$ 5,294	$11,837
Carrying value [3, 4]	257,530	192,513	444,450	894,493
Allowance as a percentage of carrying value [4]	1.25 %	1.73 %	1.19 %	1.32 %
	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	%

(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 $29 million and $35 million related to impaired U.S. small business commercial at June 30, 2016 and December 31, 2015.

(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 $8.7 billion and $6.9 billion at June 30, 2016 and December 31, 2015.

n/a = not applicable

Table of Contents

NOTE 6 – Securitizations and Other Variable Interest Entities

The Corporation utilizes VIEs in the ordinary course of business to support its own and its customers' financing and investing needs. The Corporation routinely securitizes loans and debt securities using VIEs as a source of funding for the Corporation and as a means of transferring the economic risk of the loans or debt securities to third parties. The assets are transferred into a trust or other securitization vehicle such that the assets are legally isolated from the creditors of the Corporation and are not available to satisfy its obligations. These assets can only be used to settle obligations of the trust or other securitization vehicle. The Corporation also administers, structures or invests in other VIEs including CDOs, investment vehicles and other entities. For more information on the Corporation's utilization of VIEs, see Note 1 – Summary of Significant Accounting Principles and Note 6 – Securitizations and Other Variable Interest Entities to the Consolidated Financial Statements of the Corporation's 2015 Annual Report on Form 10-K.

The tables in this Note present the assets and liabilities of consolidated and unconsolidated VIEs at June 30, 2016 and December 31, 2015, 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 June 30, 2016 and December 31, 2015 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. As a result of new accounting guidance issued by the FASB, which was effective on January 1, 2016, the Corporation identified certain limited partnerships and similar entities that are now considered to be VIEs and are included in the unconsolidated VIE tables in this Note at June 30, 2016. The Corporation had a maximum loss exposure of $4.6 billion related to these VIEs, which had total assets of $12.9 billion.

The Corporation invests in asset-backed securities (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 to the Consolidated Financial Statements of the Corporation's 2015 Annual Report on Form 10-K. The Corporation uses VIEs, such as common trust funds managed within GWIM, to provide investment opportunities for clients. These VIEs, which are generally not consolidated by the Corporation, as applicable, are not included in the tables in this Note.

Except as described below and in Note 6 – Securitizations and Other Variable Interest Entities to the Consolidated Financial Statements of the Corporation's 2015 Annual Report on Form 10-K, the Corporation did not provide financial support to consolidated or unconsolidated VIEs during the six months ended June 30, 2016 or the year ended December 31, 2015 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.

Table of Contents

The table below summarizes select information related to first-lien mortgage securitizations for the three and six months ended June 30, 2016 and 2015.

First-lien Mortgage Securitizations

	Three Months Ended June 30			
	Residential Mortgage			
	Agency		Commercial Mortgage	
(Dollars in millions)	2016	2015	2016	2015
Cash proceeds from new securitizations [1]	$4,375	$5,619	$732	$2,732
Gain (loss) on securitizations [2]	70	184	(6)	39

	Six Months Ended June 30			
	2016	2015	2016	2015
Cash proceeds from new securitizations [1]	$11,449	$12,953	$1,979	$4,888
Gain (loss) on securitizations [2]	233	357	(9)	32

(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 $92 million and $200 million, net of hedges, during the three and six months ended June 30, 2016 compared to $262 million and $431 million for the same periods in 2015, 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 $1.0 billion and $1.9 billion in connection with first-lien mortgage securitizations for the three and six months ended June 30, 2016 compared to $7.3 billion and $13.0 billion for the same periods in 2015. 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 the three and six months ended June 30, 2016 and 2015, 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 $292 million and $588 million during the three and six months ended June 30, 2016 compared to $353 million and $741 million for the same periods in 2015. Servicing advances on consumer mortgage loans, including securitizations where the Corporation has continuing involvement, were $7.0 billion and $7.8 billion at June 30, 2016 and December 31, 2015. 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 the three and six months ended June 30, 2016, $645 million and $1.4 billion of loans were repurchased from first-lien securitization trusts primarily as a result of loan delinquencies or to perform modifications compared to $775 million and $1.9 billion for the same periods in 2015. The majority of these loans repurchased were FHA-insured mortgages collateralizing GNMA securities. For more information on MSRs, see Note 17 – Mortgage Servicing Rights.

During the three and six months ended June 30, 2016, the Corporation deconsolidated agency residential mortgage securitization vehicles with total assets of $42 million and $2.8 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 $1 million and $114 million were recorded in other income in the Consolidated Statement of Income.

161

Table of Contents

The table below summarizes select information related to first-lien mortgage securitization trusts in which the Corporation held a variable interest at June 30, 2016 and December 31, 2015.

First-lien Mortgage VIEs

	Residential Mortgage									
			Non-agency							
	Agency		Prime		Subprime		Alt-A		Commercial Mortgage	
(Dollars in millions)	June 30 2016	December 31 2015	June 30 2016	December 31 2015	June 30 2016	December 31 2015	June 30 2016	December 31 2015	June 30 2016	December 31 2015
Unconsolidated VIEs										
Maximum loss exposure [1]	$25,595	$28,188	$854	$1,027	$2,681	$2,905	$564	$622	$327	$326
On-balance sheet assets										
Senior securities held [2]:										
Trading account assets	$1,137	$1,297	$21	$42	$67	$94	$107	$99	$29	$59
Debt securities carried at fair value	20,476	24,369	517	613	2,288	2,479	313	340	—	—
Held-to-maturity securities	3,968	2,507	—	—	—	—	—	—	38	37
Subordinate securities held [2]:										
Trading account assets	—	—	1	1	40	37	1	2	32	22
Debt securities carried at fair value	—	—	9	12	2	3	26	28	54	54
Held-to-maturity securities	—	—	—	—	—	—	—	—	13	13
Residual interests held	—	—	—	—	6	—	—	—	27	48
All other assets [3]	14	15	33	40	—	—	117	153	—	—
Total retained positions	$25,595	$28,188	$581	$708	$2,403	$2,613	$564	$622	$193	$233
Principal balance outstanding [4]	$296,116	$313,613	$14,548	$16,087	$25,329	$27,854	$37,861	$40,848	$26,205	$34,243
Consolidated VIEs										
Maximum loss exposure [1]	$21,246	$26,878	$52	$65	$181	$232	$—	$—	$—	$—
On-balance sheet assets										
Trading account assets	$402	$1,101	$—	$—	$—	$188	$—	$—	$—	$—
Loans and leases [5]	20,386	25,328	83	111	608	675	—	—	—	—
All other assets	459	449	3	—	45	54	—	—	—	—

Total assets	$21,247	$26,878	$86	$111	$653	$917	$—	$—	$—	$—
On-balance sheet liabilities										
Long-term debt	$1	$—	$34	$46	$623	$840	$—	$—	$—	$—
All other liabilities	3	1	—	—	—	—	—	—	—	—
Total liabilities	$4	$1	$34	$46	$623	$840	$—	$—	$—	$—

(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 17 – Mortgage Servicing Rights.

(2) As a holder of these securities, the Corporation receives scheduled principal and interest payments. During the three and six months ended June 30, 2016 and 2015, 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 $214 million and $222 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 $214 million and $222 million, representing the principal amount that would be payable to the securitization vehicles if the Corporation was to exercise the repurchase option, at June 30, 2016 and December 31, 2015.

(4) Principal balance outstanding includes loans the Corporation transferred with which it has continuing involvement, which may include servicing the loans.

(5) Balance at June 30, 2016 includes $691 million from consolidated collateralized financing entities that were measured using the fair value of the financial liabilities of those entities as the measurement basis.

Table of Contents

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 June 30, 2016 and December 31, 2015.

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	
(Dollars in millions)	June 30 2016	December 31 2015	June 30 2016	December 31 2015	June 30 2016	December 31 2015	June 30 2016	December 31 2015	June 30 2016	December 31 2015
Unconsolidated VIEs										
Maximum loss exposure	$3,585	$ 3,988	$—	$ —	$11,460	$ 13,043	$1,508	$ 1,572	$ 50	$ 63
On-balance sheet assets										
Senior securities held [4, 5]:										
Trading account assets	$—	$ —	$—	$ —	$1,496	$ 1,248	$11	$ 2	$—	$ —
Debt securities carried at fair value	51	57	—	—	2,835	4,341	—	—	50	53
Held-to-maturity securities	—	—	—	—	7,008	7,367	—	—	—	—
Subordinate securities held [4, 5]:										
Trading account assets	—	—	—	—	51	17	—	—	—	—
Debt securities carried at fair value	—	—	—	—	70	70	—	—	—	—
All other assets	—	—	—	—	—	—	—	—	—	10
Total retained positions	$51	$ 57	$—	$ —	$11,460	$ 13,043	$11	$ 2	$ 50	$ 63
Total assets of VIEs [6]	$5,325	$ 5,883	$—	$ —	$36,190	$ 35,362	$2,286	$ 2,518	$ 184	$ 314
Consolidated VIEs										
Maximum loss exposure	$176	$ 231	$25,708	$ 32,678	$224	$ 354	$1,860	$ 1,973	$—	$ —
On-balance sheet assets										
Trading account assets	$—	$ —	$—	$ —	$616	$ 771	$1,862	$ 1,984	$—	$ —
Loans and leases	284	321	35,587	43,194	—	—	—	—	—	—
Allowance for loan and lease losses	(17)	(18)	(1,101)	(1,293)	—	—	—	—	—	—
All other assets	8	20	287	342	—	—	18	1	—	—
Total assets	$275	$ 323	$34,773	$ 42,243	$616	$ 771	$1,880	$ 1,985	$—	$ —
On-balance sheet liabilities										
Short-term borrowings	$—	$ —	$—	$ —	$—	$ —	$639	$ 681	$—	$ —
Long-term debt	140	183	9,044	9,550	392	417	12	12	—	—
All other liabilities	—	—	21	15	—	—	8	—	—	—
Total liabilities	$140	$ 183	$9,065	$ 9,565	$392	$ 417	$659	$ 693	$—	$ —

[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 June 30, 2016 and December 31, 2015, loans and leases in the consolidated credit card trust included $17.9 billion and $24.7 billion of seller's interest.

(3) At June 30, 2016 and December 31, 2015, 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 the three and six months ended June 30, 2016 and 2015, 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 the Corporation 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 the three and six months ended June 30, 2016 and 2015, and all of the home equity trusts that hold revolving home equity lines of credit 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 the 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

Table of Contents

they draw on their lines of credit. At June 30, 2016 and December 31, 2015, home equity loan securitizations in rapid amortization for which the Corporation has a subordinate funding obligation, including both consolidated and unconsolidated trusts, had $3.6 billion and $4.0 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 $5 million and $7 million at June 30, 2016 and December 31, 2015, as well as performance of the loans, the amount of subsequent draws and the timing of related cash flows.

Credit Card Securitizations

The Corporation securitizes originated and purchased credit card loans. The Corporation's continuing involvement with the securitization trust includes servicing the receivables, retaining an undivided interest (seller's interest) in the receivables, and holding certain retained interests including 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.

For both the three and six months ended June 30, 2016, $750 million of new senior debt securities were issued to third-party investors from the credit card securitization trust compared to $1.2 billion and $2.3 billion for the same periods in 2015.

The Corporation held subordinate securities issued by the credit card securitization trust with a notional principal amount of $7.5 billion at both June 30, 2016 and December 31, 2015. 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 $121 million of these subordinate securities issued for both the three and six months ended June 30, 2016 compared to $194 million and $371 million for the same periods in 2015.

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 $8.1 billion and $14.7 billion of securities during the three and six months ended June 30, 2016 compared to $6.9 billion and $13.0 billion for the same periods in 2015. There were no resecuritizations of AFS debt securities during the three and six months ended June 30, 2016 and 2015. Other securities transferred into resecuritization vehicles during the three and six months ended June 30, 2016 and 2015 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 $1.1 billion and $2.2 billion during the three and six months ended June 30, 2016 compared to $973 million and $1.6 billion for the same periods in 2015. 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 $1.5 billion and $1.6 billion at June 30, 2016 and December 31, 2015. The weighted-average remaining life of bonds held in the trusts at June 30, 2016 was 6.9 years. There were no material write-downs or downgrades of assets or issuers during the three and six months ended June 30, 2016 and 2015.

Automobile and Other Securitization Trusts

The Corporation transfers automobile and other loans into securitization trusts, typically to improve liquidity or manage credit risk. At June 30, 2016 and December 31, 2015, the Corporation serviced assets or otherwise had continuing involvement with automobile and other securitization trusts with outstanding balances of $184 million and $314 million, including trusts collateralized by other loans of $184 million and $189 million, and automobile loans of $0 and $125 million.

Table of Contents

Other Variable Interest Entities

The table below summarizes select information related to other VIEs in which the Corporation held a variable interest at June 30, 2016 and December 31, 2015.

Other VIEs

	June 30, 2016			December 31, 2015		
(Dollars in millions)	Consolidated	Unconsolidated	Total	Consolidated	Unconsolidated	Total
Maximum loss exposure	$6,876	$ 17,244	$24,120	$6,295	$ 12,916	$19,211
On-balance sheet assets						
Trading account assets	$3,060	$ 466	$3,526	$2,300	$ 366	$2,666
Debt securities carried at fair value	—	101	101	—	126	126
Loans and leases	3,436	3,331	6,767	3,317	3,389	6,706
Allowance for loan and lease losses	(10)	(28)	(38)	(9)	(23)	(32)
Loans held-for-sale	256	631	887	284	1,025	1,309
All other assets	635	11,143	11,778	664	6,925	7,589
Total	$7,377	$ 15,644	$23,021	$6,556	$ 11,808	$18,364
On-balance sheet liabilities						
Long-term debt [1]	$1,217	$ —	$1,217	$3,025	$ —	$3,025
All other liabilities	3	2,595	2,598	5	2,697	2,702
Total	$1,220	$ 2,595	$3,815	$3,030	$ 2,697	$5,727
Total assets of VIEs	$7,377	$ 63,585	$70,962	$6,556	$ 49,190	$55,746

(1) Includes $719 million and $2.8 billion of long-term debt at June 30, 2016 and December 31, 2015 issued by other consolidated VIEs, which has recourse to the general credit of the Corporation.

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 $4.2 billion and $3.9 billion at June 30, 2016 and December 31, 2015, 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 $693 million and $691 million at June 30, 2016 and December 31, 2015, 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 $780 million and $543 million at June 30, 2016 and December 31, 2015. This exposure is calculated on a gross basis and does not reflect any benefit from insurance purchased from third parties.

At June 30, 2016, the Corporation had $179 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 10 – Commitments and Contingencies.

Table of Contents

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 June 30, 2016 and December 31, 2015, the Corporation's consolidated investment vehicles had total assets of $727 million and $397 million. The Corporation also held investments in unconsolidated vehicles with total assets of $18.3 billion and $14.7 billion at June 30, 2016 and December 31, 2015. The Corporation's maximum loss exposure associated with both consolidated and unconsolidated investment vehicles totaled $5.7 billion and $5.1 billion at June 30, 2016 and December 31, 2015 comprised primarily of on-balance sheet assets less non-recourse liabilities.

In prior periods, 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 $150 million, including a funded balance of $99 million and $122 million at June 30, 2016 and December 31, 2015, 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 $2.7 billion and $2.8 billion at June 30, 2016 and December 31, 2015. The trusts hold long-lived equipment such as rail cars, power generation and distribution equipment, and commercial aircraft. The Corporation structures the trusts and holds a significant residual interest. The net investment represents the Corporation's maximum loss exposure to the trusts in the unlikely event that the leveraged lease investments become worthless. Debt issued by the leveraged lease trusts is non-recourse to the Corporation.

Tax Credit Vehicles

The Corporation holds investments in unconsolidated limited partnerships and similar entities that construct, own and operate affordable housing, wind and solar projects. An unrelated third party is typically the general partner or managing member and has control over the significant activities of the vehicle. The Corporation earns a return primarily through the receipt of tax credits allocated to the projects. The maximum loss exposure included in the table above was $10.7 billion at June 30, 2016 which includes the impact of the adoption of the new accounting guidance on determining whether limited partnerships and similar entities are VIEs. The maximum loss exposure included in the table above was $6.5 billion at December 31, 2015 which primarily relates to affordable housing. The Corporation's risk of loss is generally mitigated by policies requiring that the project qualify for the expected tax credits prior to making its investment.

The Corporation's investments in affordable housing partnerships, which are reported in other assets on the Consolidated Balance Sheet, totaled $6.9 billion and $7.1 billion, including unfunded commitments to provide capital contributions of $2.2 billion and $2.4 billion at June 30, 2016 and December 31, 2015. The unfunded commitments are expected to be paid over the next five years. The Corporation recognized tax credits and other tax benefits from investments in affordable housing partnerships of $289 million and $482 million, and reported pretax losses in other noninterest income of $198 million and $396 million for the three and six months ended June 30, 2016. For the same periods in 2015, the Corporation recognized tax credits and other benefits of $271 million and $488 million, and pretax losses of $175 million and $355 million. Tax credits are recognized as part of the Corporation's annual effective tax rate, used to determine tax expense in a given quarter. This has resulted in the recognition in the six months ended June 30, 2016 of less than 50 percent of the expected tax benefits for the full year 2016. The Corporation may from time to time be asked to invest additional amounts to support a troubled affordable housing project. Such additional

investments have not been and are not expected to be significant.

Table of Contents

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 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 investors, guarantors, insurers or other parties (collectively, repurchases).

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 and Estimated Range of Possible Loss 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.

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, certain of which have been for significant amounts, in lieu of a loan-by-loan review process, including settlements with the GSEs, four monoline insurers and Bank of New York Mellon (BNY Mellon), as trustee for certain securitization trusts. 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.

Unresolved Repurchase Claims

Unresolved representations and warranties repurchase claims represent the notional amount of repurchase claims made by counterparties, typically the outstanding principal balance or the unpaid principal balance at the time of default. In the case of first-lien mortgages, the claim amount is often significantly greater than the expected loss amount due to the benefit of collateral and, in some cases, mortgage insurance (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.

The Corporation does not include duplicate claims in the amounts disclosed.

Table of Contents

The table below presents unresolved repurchase claims at June 30, 2016 and December 31, 2015. 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 to the Consolidated Financial Statements of the Corporation's 2015 Annual Report on Form 10-K.

Unresolved Repurchase Claims by Counterparty, net of duplicate claims

(Dollars in millions)	June 30 2016	December 31 2015
By counterparty		
Private-label securitization trustees, whole-loan investors, including third-party securitization sponsors and other [(1)]	$16,720	$ 16,748
Monolines	1,591	1,599
GSEs	8	17
Total unresolved repurchase claims by counterparty, net of duplicate claims	$18,319	$ 18,364

(1) Includes $11.9 billion of claims based on individual file reviews and $4.8 billion of claims submitted without individual file reviews at both June 30, 2016 and December 31, 2015.

During the three and six months ended June 30, 2016, the Corporation received $542 million and $594 million in new repurchase claims, including $439 million and $440 million that are deemed time-barred. During the three and six months ended June 30, 2016, $528 million and $639 million in claims were resolved, including $476 million and $477 million that are deemed time-barred. 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 $1.3 billion and $1.4 billion at June 30, 2016 and December 31, 2015.

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

Experience with Government-sponsored Enterprises and Monoline Insurers

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 June 30, 2016, the notional amount of unresolved repurchase claims submitted by the GSEs for loans originated prior to 2009 was $7 million.

For a description of the Corporation's experience with monoline insurers, see Note 7 – Representations and Warranties Obligations and Corporate Guarantees and Note 12 – Commitments and Contingencies to the Consolidated Financial Statements of the Corporation's 2015 Annual Report on Form 10-K.

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.

Table of Contents

At both June 30, 2016 and December 31, 2015, for loans originated between 2004 and 2008, 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. The notional amount of unresolved repurchase claims at both June 30, 2016 and December 31, 2015 included $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 notional amount of outstanding unresolved repurchase claims remained relatively unchanged for the six months ended June 30, 2016 compared to December 31, 2015. Outstanding repurchase claims remained 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. For time-barred claims, the counterparty is informed that the claim is denied on the basis of the statute of limitations and the claim is treated as resolved. For timely claims, if the Corporation, after review, does not believe a claim is valid, it will deny the claim and generally indicate a reason for the denial. If the counterparty agrees with the Corporation's denial of the claim, the counterparty may rescind the claim. If 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 is denied and the Corporation does not hear from the counterparty for six months, the Corporation views the claim as inactive; however, such claims remain in the outstanding claims balance until resolution. 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 outstanding 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.

Liability for Representations and Warranties and Corporate Guarantees and Estimated Range of Possible Loss

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 June 30, 2016 considers, among other things, the repurchase experience implied in the settlement with BNY Mellon. Since the securitization trusts that were included in the settlement with BNY Mellon differ from other securitization trusts where the possibility of timely claims exists, 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

	Three Months Ended June 30		Six Months Ended June 30	
(Dollars in millions)	2016	2015	2016	2015
Liability for representations and warranties and corporate guarantees, beginning of period	$2,812	$11,992	$11,326	$12,081
Additions for new sales	1	2	2	3
Net reductions	(107)	(233)	(8,664)	(407)

Provision (benefit)	17	(205)	59	(121)
Liability for representations and warranties and corporate guarantees, June 30 [1]	$2,723	$11,556	$2,723	$11,556

[1] In February 2016, the Corporation made an $8.5 billion cash payment as part of the settlement with BNY Mellon.

The representations and warranties liability represents the Corporation's best estimate of probable incurred losses as of June 30, 2016. However, it is reasonably possible that future representations and warranties losses may occur in excess of the amounts recorded for these exposures.

Table of Contents

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 June 30, 2016. 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, 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 settlement with BNY Mellon 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.

For more information on the settlement with BNY Mellon, see Note 7 – Representations and Warranties Obligations and Corporate Guarantees to the Consolidated Financial Statements of the Corporation's 2015 Annual Report on Form 10-K.

Table of Contents

NOTE 8 – Goodwill and Intangible Assets

Goodwill

The table below presents goodwill balances by business segment and All Other at June 30, 2016 and December 31, 2015. The reporting units utilized for goodwill impairment testing are the operating segments or one level below. For additional information, see Note 8 – Goodwill and Intangible Assets to the Consolidated Financial Statements of the Corporation's 2015 Annual Report on Form 10-K.

Goodwill

(Dollars in millions)	June 30 2016	December 31 2015
Consumer Banking	$30,123	$ 30,123
Global Wealth & Investment Management	9,681	9,698
Global Banking	23,923	23,923
Global Markets	5,197	5,197
All Other	820	820
Total goodwill	$69,744	$ 69,761

Effective April 1, 2016, the Corporation realigned its business segments. As part of the realignment, the Corporation completed a review of all consumer real estate-secured lending and servicing activities within LAS, Consumer Banking, GWIM and All Other with a view to strategically align the business activities and loans into core and non-core categories, with core loans reflected on the balance sheet of the appropriate business segment and non-core on the balance sheet of All Other. There was no goodwill in LAS at December 31, 2015 and therefore, this realignment had no impact on the allocation of goodwill to the Corporation's reporting units.

During the three months ended June 30, 2016, the Corporation completed its annual goodwill impairment test as of June 30, 2016 for all applicable reporting units. Following the realignment, the Corporation combined the Card Services, Consumer Vehicle Lending and Home Loans reporting units within the Consumer Banking segment into a single Consumer Lending reporting unit, effective June 30, 2016. This combination of reporting units triggered a test for goodwill impairment, which was performed both immediately before and after the combination of reporting units. The Corporation performed this analysis in conjunction with its annual impairment test as of June 30, 2016. Based on the results of the annual goodwill impairment test, the Corporation determined there was no impairment. For more information regarding annual goodwill impairment testing, see Note 8 – Goodwill and Intangible Assets to the Consolidated Financial Statements of the Corporation's 2015 Annual Report on Form 10-K.

Intangible Assets

The table below presents the gross and net carrying values and accumulated amortization for intangible assets at June 30, 2016 and December 31, 2015.

Intangible Assets [1, 2]

(Dollars in millions)	June 30, 2016 Gross Carrying Value	Accumulated Amortization	Net Carrying Value	December 31, 2015 Gross Carrying Value	Accumulated Amortization	Net Carrying Value
Purchased credit card and affinity relationships	$6,905	$ 6,167	$ 738	$7,006	$ 6,111	$ 895
Core deposit and other intangibles [3]	3,838	1,994	1,844	3,922	1,986	1,936
Customer relationships	3,887	3,117	770	3,927	2,990	937

Total intangible assets	$14,630	$ 11,278	$ 3,352	$14,855	$ 11,087	$ 3,768

(1) Excludes fully amortized intangible assets.

(2) At June 30, 2016 and December 31, 2015, 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.

Table of Contents

The table below presents intangible asset amortization expense for the three and six months ended June 30, 2016 and 2015.

Amortization Expense

	Three Months Ended June 30		Six Months Ended June 30	
(Dollars in millions)	2016	2015	2016	2015
Purchased credit card and affinity relationships	$74	$89	$148	$178
Core deposit and other intangibles	29	36	59	73
Customer relationships	83	87	166	174
Total amortization expense	$186	$212	$373	$425

The table below presents estimated future intangible asset amortization expense as of June 30, 2016.

Estimated Future Amortization Expense

(Dollars in millions)	Remainder of 2016	2017	2018	2019	2020	2021
Purchased credit card and affinity relationships	$ 149	$236	$176	$117	$ 57	$ 3
Core deposit and other intangibles	54	95	82	1	—	—
Customer relationships	159	309	302	—	—	—
Total estimated future amortization expense	$ 362	$640	$560	$118	$ 57	$ 3

Table of Contents

NOTE 9 – 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 15 – Fair Value Option.

	Three Months Ended June 30				Six Months Ended June 30			
	Amount		Rate		Amount		Rate	
(Dollars in millions)	2016	2015	2016	2015	2016	2015	2016	2015
Average during period								
Federal funds sold and securities borrowed or purchased under agreements to resell	$223,005	$214,326	0.47%	0.50%	$216,094	$214,130	0.50%	0.47%
Federal funds purchased and securities loaned or sold under agreements to repurchase	$184,392	$219,946	1.03%	1.03%	$187,844	$217,348	1.03%	0.97%
Short-term borrowings	31,460	32,142	1.95	1.49	31,077	30,785	1.77	1.48
Total	$215,852	$252,088	1.17	1.09	$218,921	$248,133	1.14	1.03
Maximum month-end balance during period								
Federal funds sold and securities borrowed or purchased under agreements to resell	$225,015	$224,701			$225,015	$226,502		
Federal funds purchased and securities loaned or sold under agreements to repurchase	$182,776	$227,753			$196,631	$227,753		
Short-term borrowings	33,051	39,903			33,051	39,903		

	June 30, 2016		December 31, 2015	
	Amount	Rate	Amount	Rate
Period-end				
Federal funds sold and securities borrowed or purchased under agreements to resell	$213,737	0.60 %	$192,482	0.44 %
Federal funds purchased and securities loaned or sold under agreements to repurchase	$178,062	1.00 %	$174,291	0.82 %
Short-term borrowings	33,051	2.03	28,098	1.61
Total	$211,113	1.15	$202,389	0.92

Table of Contents

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 June 30, 2016 and December 31, 2015. 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

	June 30, 2016				
(Dollars in millions)	Gross Assets/Liabilities	Amounts Offset	Net Balance Sheet Amount	Financial Instruments	Net Assets/Liabilities
Securities borrowed or purchased under agreements to resell [1]	$345,379	$(131,642)	$213,737	$(163,091)	$ 50,646
Securities loaned or sold under agreements to repurchase	$309,691	$(131,642)	$178,049	$(149,338)	$ 28,711
Other	12,956	—	12,956	(12,956)	—
Total	$322,647	$(131,642)	$191,005	$(162,294)	$ 28,711
	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

(1) Excludes repurchase activity of $10.1 billion and $9.3 billion reported in loans and leases on the Consolidated Balance Sheet at June 30, 2016 and December 31, 2015.

Table of Contents

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 June 30, 2016 and December 31, 2015, the Corporation had no outstanding repurchase-to-maturity transactions.

Remaining Contractual Maturity

	June 30, 2016				
(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	$126,298	$84,943	$44,351	$31,804	$287,396
Securities loaned	17,203	1,277	1,838	1,977	22,295
Other	12,956	—	—	—	12,956
Total	$156,457	$86,220	$46,189	$33,781	$322,647
	December 31, 2015				
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

	June 30, 2016			
(Dollars in millions)	Securities Sold Under Agreements to Repurchase	Securities Loaned	Other	Total
U.S. government and agency securities	$162,644	$—	$60	$162,704
Corporate securities, trading loans and other	10,154	1,749	488	12,391
Equity securities	20,218	11,218	12,351	43,787
Non-U.S. sovereign debt	84,505	9,328	57	93,890
Mortgage trading loans and ABS	9,875	—	—	9,875
Total	$287,396	$22,295	$12,956	$322,647
	December 31, 2015			
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.

Table of Contents

NOTE 10 – 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. For more information on commitments and contingencies, see Note 12 – Commitments and Contingencies to the Consolidated Financial Statements of the Corporation's 2015 Annual Report on Form 10-K.

Credit Extension Commitments

The Corporation enters 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 its customers. The table below includes the notional amount of unfunded legally binding lending commitments net of amounts distributed (e.g., syndicated or participated) to other financial institutions of $13.9 billion and $14.3 billion at June 30, 2016 and December 31, 2015. At June 30, 2016, the carrying value of these commitments, excluding commitments accounted for under the fair value option, was $767 million, including deferred revenue of $17 million and a reserve for unfunded lending commitments of $750 million. At December 31, 2015, the comparable amounts were $664 million, $18 million and $646 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 $8.1 billion and $10.9 billion at June 30, 2016 and December 31, 2015 that are accounted for under the fair value option. However, the table below excludes cumulative net fair value of $347 million and $658 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 15 – Fair Value Option.

Credit Extension Commitments

	June 30, 2016				
(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
Notional amount of credit extension commitments					
Loan commitments	$78,341	$122,261	$149,771	$24,486	$374,859
Home equity lines of credit	7,978	14,789	3,495	22,561	48,823
Standby letters of credit and financial guarantees [1]	20,022	10,908	3,645	1,075	35,650
Letters of credit	1,836	102	126	39	2,103
Legally binding commitments	108,177	148,060	157,037	48,161	461,435
Credit card lines [2]	376,457	—	—	—	376,457
Total credit extension commitments	$484,634	$148,060	$157,037	$48,161	$837,892
	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

(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 $26.8 billion and $8.6 billion at June 30, 2016, and $25.5 billion and $8.4 billion at December 31, 2015. Amounts in the table include consumer SBLCs of $278 million and $164 million at June 30, 2016 and December 31, 2015.

(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.

Table of Contents

Other Commitments

At June 30, 2016 and December 31, 2015, the Corporation had commitments to purchase loans (e.g., residential mortgage and commercial real estate) of $1.4 billion and $729 million, which upon settlement will be included in loans or LHFS.

At June 30, 2016 and December 31, 2015, the Corporation had commitments to purchase commodities, primarily liquefied natural gas of $2.1 billion and $1.9 billion, which upon settlement will be included in trading account assets.

At June 30, 2016 and December 31, 2015, the Corporation had commitments to enter into resale and forward-dated resale and securities borrowing agreements of $62.1 billion and $88.6 billion, and commitments to enter into forward-dated repurchase and securities lending agreements of $43.1 billion and $53.7 billion. These commitments expire within the next 12 months.

The Corporation has entered into agreements to purchase retail automotive loans from certain auto loan originators. These agreements provide for stated purchase amounts and contain cancellation provisions that allow the Corporation to terminate its commitment to purchase at any time, with a minimum notification period. At June 30, 2016 and December 31, 2015, the Corporation's maximum purchase commitment, was $1.9 billion and $1.2 billion. In addition, the Corporation has a commitment to originate or purchase auto loans and leases from a strategic partner of $3.0 billion over the remainder of 2016, and $4.0 billion in 2017. This commitment expires on December 31, 2017.
The Corporation is a party to operating leases for certain of its premises and equipment. Commitments under these leases are approximately $1.2 billion, $2.2 billion, $1.9 billion, $1.6 billion and $1.4 billion for the remainder of 2016 and the years through 2020, respectively, and $5.2 billion in the aggregate for all years thereafter.

Other Guarantees

Bank-owned Life Insurance Book Value Protection

The Corporation sells products that offer book value protection to insurance carriers who offer group life insurance policies to corporations, primarily banks. 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 June 30, 2016 and December 31, 2015, the notional amount of these guarantees totaled $13.9 billion and $13.8 billion, and the Corporation's maximum exposure related to these guarantees totaled $3.2 billion and $3.1 billion, with estimated maturity dates between 2031 and 2039. The net fair value including the fee receivable associated with these guarantees was $10 million and $12 million at June 30, 2016 and December 31, 2015, and reflects the probability of surrender as well as the multiple structural protection features in the contracts.

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. For the three and six months ended June 30, 2016, the sponsored entities

processed and settled $178.4 billion and $337.8 billion of transactions and recorded losses of $8 million and $14 million. For the three and six months ended June 30, 2015, the sponsored entities processed and settled $171.0 billion and $325.6 billion of transactions and recorded losses of $6 million and $10 million. A significant portion of this activity was processed by a joint venture in which the Corporation holds a 49 percent ownership. At June 30, 2016 and December 31, 2015, the sponsored merchant processing servicers held as collateral $194 million and $181 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 June 30, 2016 and December 31, 2015, the maximum potential exposure for sponsored transactions totaled $272.4 billion and $277.1 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.

Table of Contents

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 $301 million and $371 million with commercial banks and $179 million and $922 million with VIEs at June 30, 2016 and December 31, 2015. 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 $6.1 billion and $6.0 billion at June 30, 2016 and December 31, 2015. 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.

Other Contingencies

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 for PPI claims was $246 million and $360 million at June 30, 2016 and December 31, 2015. The Corporation recorded expense of $13 million for the three and six months ended June 30, 2016 compared to $16 million for the same periods in 2015. 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.

FDIC

Deposits placed at U.S. domiciled banks (U.S. banks) are insured by the FDIC, subject to limits and conditions of applicable law and the FDIC's regulations. Pursuant to the Dodd-Frank Wall Street Reform and Consumer Protection Act (Financial Reform Act), FDIC insurance coverage limits were permanently increased to $250,000 per customer. All insured depository institutions are required to pay assessments to the FDIC in order to fund the Deposit Insurance Fund (DIF).

The FDIC is required to maintain at least a designated minimum ratio of the DIF to insured deposits in the U.S. The Financial Reform Act requires the FDIC to assess insured depository institutions to achieve a DIF ratio of at least 1.35 percent by September 30, 2020. The DIF ratio is currently below the required targets and the FDIC has adopted a restoration plan that may result in increased deposit insurance assessments. In March 2016, the FDIC issued a final rule imposing a surcharge of 4.5 cents per $100 of their assessment base, after making certain adjustments, on insured depository institutions, with total assets of $10 billion or more. The surcharges will begin in the first quarter after the DIF ratio reaches 1.15 percent. As of the July 1, 2016 effectiveness date of the final rule, the DIF ratio of 1.15 percent has not been reached. The FDIC expects the surcharge to be in effect for approximately two years. If the DIF reserve ratio does not reach 1.35 percent by December 31, 2018, the FDIC will impose a shortfall assessment on any bank subject to the surcharge. The Corporation expects the surcharge to increase the deposit insurance assessment by $100 million per quarter. The FDIC has also adopted regulations that establish a long-term target DIF ratio of greater than two percent. Deposit insurance assessment rates are subject to change by the FDIC, and can be impacted by the overall economy, the stability of the banking industry as a whole, and regulations or regulatory interpretations.

Table of Contents

Litigation and Regulatory Matters

The following supplements the disclosure in Note 12 – Commitments and Contingencies to the Consolidated Financial Statements of the Corporation's 2015 Annual Report on Form 10-K and in Note 10 – Commitments and Contingencies to the Consolidated Financial Statements of the Corporation's Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2016 (the prior commitments and contingencies disclosure).

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 matters will be, what the timing of the ultimate resolution of these matters will be, or what the expense, eventual loss, fines or penalties related to each 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 $270 million and $658 million was recognized for the three and six months ended June 30, 2016 compared to $175 million and $545 million for the same periods in 2015.

For a limited number of the matters disclosed in this Note, and in the prior commitments and contingencies disclosure, 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 $1.1 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, or in the prior commitments and contingencies disclosure, 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 and in the prior commitments and contingencies disclosure, 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
On June 24, 2016, in The Segregated Account of Ambac Assurance Corporation and Ambac Assurance Corporation v. Countrywide Home Loans, Inc., the Court of Appeals of Wisconsin, District IV reversed the lower court's dismissal for lack of personal jurisdiction.
Interchange and Related Litigation

On June 30, 2016, the U.S. Court of Appeals for the Second Circuit reversed the district court's approval of the class settlement agreement and remanded the case back to the district court for further proceedings.

Table of Contents

LIBOR, Other Reference Rate and Foreign Exchange (FX) Inquiries and Litigation
On May 23, 2016, the U.S. Court of Appeals for the Second Circuit reversed the district court's dismissal of the antitrust claims.
Mortgage-backed Securities Litigation

Luther Class Action Litigation and Related Actions

Following the filing of stipulations to voluntarily dismiss the appeals filed by certain class members, the U.S. Court of Appeals for the Ninth Circuit dismissed these appeals on May 24, 2016.

Mortgage Repurchase Litigation

U.S. Bank Summonses with Notice

On June 7, 2016, the parties agreed to further extend the deadline for defendants to demand complaints with respect to the FFML 2006-FF18, SURF 2007-BC1 and SURF 2007-BC2 trusts.

O'Donnell Litigation

On May 23, 2016, the Second Circuit reversed the judgment of the District Court and remanded the case with instructions to enter judgment for defendants. On June 27, 2016, the U.S. Government filed a motion for an extension of time to file a petition for rehearing from July 7, 2016 to August 4, 2016.

Pennsylvania Public School Employees' Retirement System

On June 15, 2016, the court preliminarily approved the settlement and scheduled a final approval hearing for November 29, 2016.

U.S. Securities and Exchange Commission Investigations

On June 23, 2016, the SEC announced resolution of its investigations of the Corporation's U.S. broker-dealer subsidiary, Merrill Lynch, Pierce, Fenner & Smith, Inc., regarding compliance with SEC Rule 15c3-3 for $415 million, all of which was previously accrued.

NOTE 11 – Shareholders' Equity

Common Stock

The table below presents the declared quarterly cash dividends on common stock in 2016 and through August 1, 2016.

Declaration Date	Record Date	Payment Date	Dividend Per Share
July 27, 2016	September 2, 2016	September 23, 2016	$0.075
April 27, 2016	June 3, 2016	June 24, 2016	0.05
January 21, 2016	March 4, 2016	March 25, 2016	0.05

On June 29, 2016, the Corporation announced that the Federal Reserve completed its 2016 Comprehensive Capital Analysis and Review (CCAR) and advised that it did not object to the 2016 capital plan. The requested capital actions included a request to repurchase $5.0 billion in common stock over four quarters beginning in the third quarter of 2016, and to increase the quarterly common stock dividend from $0.05 per share to $0.075 per share.

During the three and six months ended June 30, 2016, the Corporation repurchased and retired 55.2 million and 113.2 million shares of common stock in connection with the 2015 CCAR capital plan, which reduced shareholders' equity by $783 million and $1.6 billion. On March 18, 2016, the Corporation announced that the Board of Directors authorized additional repurchases of common stock up to $800 million outside of the scope of the 2015 CCAR capital plan to offset the share count dilution resulting from equity incentive compensation awarded to retirement-eligible employees, to which the Federal Reserve did not object. During the three and six months ended June 30, 2016, the Corporation repurchased and retired 40.8 million and 55.3 million shares of common stock in connection with this additional authorization, which reduced shareholders' equity by $600 million and $800 million.

Table of Contents

During the six months ended June 30, 2016, in connection with employee stock plans, the Corporation issued approximately 9 million shares and repurchased approximately 4 million shares of its common stock to satisfy tax withholding obligations. At June 30, 2016, 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.

The Corporation has certain warrants outstanding and exercisable to purchase 150 million shares of its common stock, expiring on January 16, 2019 and warrants outstanding and exercisable to purchase 122 million shares of its common stock, expiring on October 28, 2018. 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. As a result of the Corporation's second-quarter 2016 dividend of $0.05 per common share, the exercise price of these warrants was adjusted to $13.032. 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.

Table of Contents

Preferred Stock

During the three months ended March 31, 2016 and June 30, 2016, the Corporation declared $457 million and $361 million of cash dividends on preferred stock, or a total of $818 million for the six months ended June 30, 2016.

On April 25, 2016, the Corporation issued 36,000 shares of its 6.000% Non-Cumulative Preferred Stock, Series EE for $900 million. Dividends are paid quarterly commencing on July 25, 2016. Series EE 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.

Restricted Stock Units

During the six months ended June 30, 2016, the Corporation granted 163 million restricted stock unit (RSU) awards to certain employees under the Bank of America Corporation Key Employee Equity Plan. Generally, one-third of the RSUs vest on each of the first three anniversaries of the grant date provided that the employee remains continuously employed with the Corporation during that time. The RSUs are authorized to settle predominantly in shares of common stock of the Corporation, and are expensed ratably over the vesting period, net of estimated forfeitures, for non-retirement eligible employees based on the grant-date fair value of the shares. Certain RSUs will be settled in cash or contain settlement provisions that subject these awards to variable accounting whereby compensation expense is adjusted to fair value based on changes in the fair value of the Corporation's common stock up to the settlement date. Awards granted in prior years were predominantly cash settled. For RSUs granted to employees who are retirement eligible or will become retirement eligible during the vesting period, the RSUs are expensed as of the grant date or ratably over the period from the grant date to the date the employee becomes retirement eligible, net of estimated forfeitures. For additional information, see Note 18 – Stock-based Compensation Plans to the Consolidated Financial Statements of the Corporation's 2015 Annual Report on Form 10-K.

Table of Contents

NOTE 12 – Accumulated Other Comprehensive Income (Loss)

The table below presents the changes in accumulated OCI after-tax for the six months ended June 30, 2016 and 2015.

(Dollars in millions)	Debt Securities	Available-for-sale Marketable Equity Securities	Debit Valuation Adjustments [1]	Derivatives	Employee Benefit Plans	Foreign Currency [2]	Total
Balance, December 31, 2014	$ 1,343	$ 17	n/a	$ (1,661)	$ (3,350)	$ (669)	$ (4,320)
Cumulative adjustment for accounting change	—	—	$ (1,226)	—	—	—	(1,226)
Net change	(1,249)	48	446	289	50	(8)	(424)
Balance, June 30, 2015	$ 94	$ 65	$ (780)	$ (1,372)	$ (3,300)	$ (677)	$ (5,970)
Balance, December 31, 2015	$ (300)	$ 62	$ (611)	$ (1,077)	$ (2,956)	$ (792)	$ (5,674)
Net change	4,121	(53)	114	150	23	(9)	4,346
Balance, June 30, 2016	$ 3,821	$ 9	$ (497)	$ (927)	$ (2,933)	$ (801)	$ (1,328)

(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 the six months ended June 30, 2016 and 2015.

Changes in OCI Components Before- and After-tax

	Six Months Ended June 30					
	2016			2015		
(Dollars in millions)	Before-tax	Tax effect	After-tax	Before-tax	Tax effect	After-tax
Debt securities:						
Net change in unrealized gains (losses)	$ 7,126	$ (2,708)	$ 4,418	$ (1,656)	$ 631	$ (1,025)
Net realized gains reclassified into earnings	(480)	183	(297)	(361)	137	(224)
Net change	6,646	(2,525)	4,121	(2,017)	768	(1,249)
Available-for-sale marketable equity securities:						
Net increase (decrease) in fair value	(87)	34	(53)	77	(29)	48
Net change	(87)	34	(53)	77	(29)	48
Debit valuation adjustments:						
Net increase in fair value	172	(65)	107	210	(80)	130
Net realized losses reclassified into earnings	12	(5)	7	510	(194)	316
Net change	184	(70)	114	720	(274)	446
Derivatives:						
Net decrease in fair value	(141)	53	(88)	(24)	10	(14)
Net realized losses reclassified into earnings	381	(143)	238	487	(184)	303
Net change	240	(90)	150	463	(174)	289
Employee benefit plans:						
Net decrease in fair value	—	—	—	(2)	1	(1)

Net realized losses reclassified into earnings	50	(19)	31	85	(33)	52
Settlements, curtailments and other	—	(8)	(8)	—	(1)	(1)
Net change	50	(27)	23	83	(33)	50
Foreign currency:						
Net decrease in fair value	40	(49)	(9)	167	(174)	(7)
Net realized gains reclassified into earnings	—	—	—	(31)	30	(1)
Net change	40	(49)	(9)	136	(144)	(8)
Total other comprehensive income (loss)	$7,073	$(2,727)	$4,346	$(538)	$114	$(424)

Table of Contents

The table below presents impacts on net income of significant amounts reclassified out of each component of accumulated OCI before- and after-tax for the six months ended June 30, 2016 and 2015. There were no amounts reclassified out of AFS marketable equity securities for the six months ended June 30, 2016 and 2015.

Reclassifications Out of Accumulated OCI

(Dollars in millions)		Six Months Ended June 30	
Accumulated OCI Components	Income Statement Line Item Impacted	2016	2015
Debt securities:			
	Gains on sales of debt securities	$492	$436
	Other loss	(12)	(75)
	Income before income taxes	480	361
	Income tax expense	183	137
	Reclassification to net income	297	224
Debit valuation adjustments:			
	Other loss	(12)	(510)
	Loss before income taxes	(12)	(510)
	Income tax benefit	(5)	(194)
	Reclassification to net income	(7)	(316)
Derivatives:			
Interest rate contracts	Net interest income	(328)	(514)
Equity compensation contracts	Personnel	(53)	27
	Loss before income taxes	(381)	(487)
	Income tax benefit	(143)	(184)
	Reclassification to net income	(238)	(303)
Employee benefit plans:			
Net actuarial losses and prior service costs	Personnel	(50)	(85)
	Loss before income taxes	(50)	(85)
	Income tax benefit	(19)	(33)
	Reclassification to net income	(31)	(52)
Foreign currency:			
	Other income	—	31
	Income before income taxes	—	31
	Income tax expense	—	30
	Reclassification to net income	—	1
Total reclassification adjustments		$21	$(446)

Table of Contents

NOTE 13 – Earnings Per Common Share

The calculation of earnings per common share (EPS) and diluted EPS for the three and six months ended June 30, 2016 and 2015 is presented below. For more information on the calculation of EPS, see Note 1 – Summary of Significant Accounting Principles to the Consolidated Financial Statements of the Corporation's 2015 Annual Report on Form 10-K.

	Three Months Ended June 30		Six Months Ended June 30	
(Dollars in millions, except per share information; shares in thousands)	2016	2015	2016	2015
Earnings per common share				
Net income	$4,232	$ 5,134	$6,912	$ 8,231
Preferred stock dividends	(361)	(330)	(818)	(712)
Net income applicable to common shareholders	$3,871	$ 4,804	$6,094	$ 7,519
Average common shares issued and outstanding	10,253,573	10,488,137	10,296,652	10,503,379
Earnings per common share	$0.38	$ 0.46	$0.59	$ 0.72
Diluted earnings per common share				
Net income applicable to common shareholders	$3,871	$ 4,804	$6,094	$ 7,519
Add preferred stock dividends due to assumed conversions	75	75	150	150
Net income allocated to common shareholders	$3,946	$ 4,879	$6,244	$ 7,669
Average common shares issued and outstanding	10,253,573	10,488,137	10,296,652	10,503,379
Dilutive potential common shares [1]	805,594	749,923	783,287	749,038
Total diluted average common shares issued and outstanding	11,059,167	11,238,060	11,079,939	11,252,417
Diluted earnings per common share	$0.36	$ 0.43	$0.56	$ 0.68

[1] Includes incremental dilutive shares from RSUs, 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 both the three and six months ended June 30, 2016 and 2015, the 700 million average dilutive potential common shares were included in the diluted share count under the "if-converted" method.

For both the three and six months ended June 30, 2016 and 2015, 62 million average dilutive potential common shares associated with the 7.25% Non-Cumulative Perpetual Convertible Preferred Stock, Series L were not included in the diluted share count because the result would have been antidilutive under the "if-converted" method. For the three and six months ended June 30, 2016, average options to purchase 42 million and 48 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 64 million and 68 million for the same periods in 2015. For both the three and six months ended June 30, 2016 and 2015, 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 and average warrants to purchase 150 million shares of common stock were included in the diluted EPS calculation using the treasury stock method.

Table of Contents

NOTE 14 – 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 and Note 20 – Fair Value Measurements to the Consolidated Financial Statements of the Corporation's 2015 Annual Report on Form 10-K. The Corporation accounts for certain financial instruments under the fair value option. For additional information, see Note 15 – 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 the six months ended June 30, 2016, 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.

Table of Contents

Recurring Fair Value

Assets and liabilities carried at fair value on a recurring basis at June 30, 2016 and December 31, 2015, including financial instruments which the Corporation accounts for under the fair value option, are summarized in the following tables.

	June 30, 2016 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	$—	$53,008	$—	$—	$ 53,008
Trading account assets:					
U.S. government and agency securities [2]	36,534	18,477	—	—	55,011
Corporate securities, trading loans and other	260	24,353	2,654	—	27,267
Equity securities	29,210	20,162	455	—	49,827
Non-U.S. sovereign debt	16,883	15,975	630	—	33,488
Mortgage trading loans and ABS	—	8,486	1,286	—	9,772
Total trading account assets [3]	82,887	87,453	5,025	—	175,365
Derivative assets [4]	7,781	888,247	5,169	(845,933)	55,264
AFS debt securities:					
U.S. Treasury and agency securities	24,636	1,507	—	—	26,143
Mortgage-backed securities:					
Agency	—	208,688	—	—	208,688
Agency-collateralized mortgage obligations	—	9,760	—	—	9,760
Non-agency residential	—	1,969	134	—	2,103
Commercial	—	11,397	—	—	11,397
Non-U.S. securities	2,665	3,393	—	—	6,058
Other taxable securities	—	9,057	717	—	9,774
Tax-exempt securities	—	14,803	559	—	15,362
Total AFS debt securities	27,301	260,574	1,410	—	289,285
Other debt securities carried at fair value:					
Mortgage-backed securities:					
Agency-collateralized mortgage obligations	—	7	—	—	7
Non-agency residential	—	3,216	28	—	3,244
Non-U.S. securities	15,629	1,256	—	—	16,885
Other taxable securities	—	249	—	—	249
Total other debt securities carried at fair value	15,629	4,728	28	—	20,385
Loans and leases [5]	—	7,201	1,459	—	8,660
Mortgage servicing rights	—	—	2,269	—	2,269
Loans held-for-sale	—	4,422	690	—	5,112
Other assets	11,676	1,861	348	—	13,885
Total assets	$145,274	$1,307,494	$16,398	$(845,933)	$ 623,233
Liabilities					
Interest-bearing deposits in U.S. offices	$—	$1,019	$—	$—	$ 1,019
Federal funds purchased and securities loaned or sold under agreements to repurchase	—	24,229	313	—	24,542

Trading account liabilities:					
U.S. government and agency securities	15,304	136	—	—	15,440
Equity securities	31,603	3,346	—	—	34,949
Non-U.S. sovereign debt	14,485	1,992	—	—	16,477
Corporate securities and other	262	7,128	26	—	7,416
Total trading account liabilities	61,654	12,602	26	—	74,282
Derivative liabilities [4]	7,776	874,863	5,817	(840,895)	47,561
Short-term borrowings	—	1,860	—	—	1,860
Accrued expenses and other liabilities	11,299	2,004	9	—	13,312
Long-term debt	—	29,293	2,156	—	31,449
Total liabilities	$80,729	$945,870	$8,321	$(840,895)	$ 194,025

(1) Amounts represent the impact of legally enforceable master netting agreements and also cash collateral held or placed with the same counterparties.

(2) Includes $18.3 billion of GSE obligations.

(3) Includes securities with a fair value of $15.6 billion that were segregated in compliance with securities regulations or deposited with clearing organizations. This amount is included in the parenthetical disclosure on the Consolidated Balance Sheet.

(4) During the six months ended June 30, 2016, $974 million of derivative assets and $1.1 billion of derivative liabilities were transferred from Level 1 to Level 2 and $808 million of derivative assets and $819 million of derivative liabilities were transferred from Level 2 to Level 1 based on the inputs used to measure fair value. For further disaggregation of derivative assets and liabilities, see Note 2 – Derivatives.

(5) Includes $691 million from CFEs that were measured using the fair value of the financial liabilities of those entities as the measurement basis.

Table of Contents

	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 [3]	90,745	80,148	5,634	—	176,527
Derivative assets [4]	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
Other taxable securities	—	9,688	757	—	10,445
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 [5]	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 [4]	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 GSE obligations.

(3) Includes securities with a fair value of $16.4 billion that were segregated in compliance with securities regulations or deposited with clearing organizations. This amount is included in the parenthetical disclosure on the Consolidated Balance Sheet.

(4) 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.

(5) 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.

Table of Contents

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 the three and six months ended June 30, 2016 and 2015, including net realized and unrealized gains (losses) included in earnings and accumulated OCI.

Level 3 – Fair Value Measurements[1]

	Three Months Ended June 30, 2016									
(Dollars in millions)	Balance April 1 2016	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 June 30 2016
Trading account assets:										
Corporate securities, trading loans and other	$2,954	$ 11	$ 1	$472	$(246)	$ —	$ (197)	$ 72	$ (413)	$2,654
Equity securities	417	22	—	33	(35)	—	(10)	29	(1)	455
Non-U.S. sovereign debt	572	50	49	—	—	—	(41)	—	—	630
Mortgage trading loans and ABS	1,614	67	—	156	(419)	—	(94)	45	(83)	1,286
Total trading account assets	5,557	150	50	661	(700)	—	(342)	146	(497)	5,025
Net derivative assets [3]	(315)	84	—	110	(444)	—	(123)	(8)	48	(648)
AFS debt securities:										
Non-agency residential MBS	150	—	(2)	61	—	—	(75)	—	—	134
Other taxable securities	739	1	(3)	—	—	—	(20)	—	—	717
Tax-exempt securities	562	—	(3)	—	—	—	—	—	—	559
Total AFS debt securities	1,451	1	(8)	61	—	—	(95)	—	—	1,410
Other debt securities carried at fair value – Non-agency residential MBS	29	(1)	—	—	—	—	—	—	—	28
Loans and leases [4, 5]	1,697	(47)	—	—	—	25	(54)	1	(163)	1,459
Mortgage servicing rights [5]	2,631	(228)	—	—	(1)	72	(205)	—	—	2,269
Loans held-for-sale [4]	660	11	28	—	(17)	—	(18)	26	—	690
Other assets	375	(13)	—	—	—	—	(14)	—	—	348
Federal funds purchased and securities loaned or sold under agreements to repurchase [4]	(345)	32	—	—	—	—	—	—	—	(313)
Trading account liabilities – Corporate securities and other	(28)	1	—	1	—	—	—	—	—	(26)
Accrued expenses and other liabilities	(9)	—	—	—	—	—	—	—	—	(9)
Long-term debt [4]	(1,814)	(79)	(11)	20	—	(154)	77	(359)	164	(2,156)

[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 $5.2 billion and derivative liabilities of $5.8 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.

Significant transfers into Level 3, primarily due to decreased price observability, during the three months ended June 30, 2016 included:

- $146 million of trading account assets

- $359 million 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, during the three months ended June 30, 2016 included:

- $497 million of trading account assets
- $163 million of loans and leases
- $164 million of long-term debt

Table of Contents

Level 3 – Fair Value Measurements[1]

	Three Months Ended June 30, 2015										
(Dollars in millions)	Balance April 1 2015	Gains (Losses) in Earnings	Gains (Losses) in OCI[2]	Gross Purchases	Gross Sales	Issuances	Settlements	Gross Transfers into Level 3	Gross Transfers out of Level 3	Balance June 30 2015
Trading account assets:										
Corporate securities, trading loans and other	$2,760	$ 55	$ —	$338	$(343)	$ —	$ (214)	$ 812	$ (82)	$3,326
Equity securities	340	11	—	16	(2)	—	—	22	(1)	386
Non-U.S. sovereign debt	508	16	12	25	—	—	(66)	—	(27)	468
Mortgage trading loans and ABS	2,106	101	—	490	(378)	—	(161)	1	—	2,159
Total trading account assets	5,714	183	12	869	(723)	—	(441)	835	(110)	6,339
Net derivative assets[3]	(1,081)	610	—	57	(217)	—	196	(14)	98	(351)
AFS debt securities:										
Non-agency residential MBS	402	7	9	41	—	—	(225)	—	—	234
Non-U.S. securities	9	—	—	—	—	—	—	—	—	9
Other taxable securities	690	—	2	6	—	—	(21)	—	—	677
Tax-exempt securities	583	—	2	—	—	—	(1)	—	—	584
Total AFS debt securities	1,684	7	13	47	—	—	(247)	—	—	1,504
Other debt securities carried at fair value – Non-agency residential MBS	—	1	—	33	—	—	—	—	—	34
Loans and leases[4, 5]	1,954	(10)	—	—	(1)	—	(77)	112	(8)	1,970
Mortgage servicing rights[5]	3,394	458	—	—	(312)	204	(223)	—	—	3,521
Loans held-for-sale[4]	543	22	—	85	(13)	12	—	39	(28)	660
Other assets	847	(14)	—	9	(87)	—	(6)	8	(1)	756
Federal funds purchased and securities loaned or sold under agreements to repurchase[4]	—	(14)	—	—	—	(28)	—	(326)	—	(368)
Trading account liabilities – Corporate securities and other	(41)	2	—	31	(49)	—	—	—	—	(57)
Short-term borrowings[4]	(15)	—	—	—	—	—	—	—	15	—
Accrued expenses and other liabilities	(10)	1	—	—	—	—	—	—	—	(9)
Long-term debt[4]	(2,806)	66	—	45	—	(49)	63	(403)	368	(2,716)

(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 $6.5 billion and derivative liabilities of $6.8 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.

Significant transfers into Level 3, primarily due to decreased price observability, during the three months ended June 30, 2015 included:

- $835 million of trading account assets
- $112 million of loans and leases
- $326 million of federal funds purchased and securities loaned or sold under agreements to repurchase

- $403 million 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 the three months ended June 30, 2015 included:

- $110 million of trading account assets, primarily the result of increased market liquidity
- $368 million of long-term debt

Table of Contents

Level 3 – Fair Value Measurements[1]

	Six Months Ended June 30, 2016									
(Dollars in millions)	Balance January 1 2016	Gains (Losses) in Earnings	Gains (Losses) in OCI[2]	Gross Purchases	Sales	Issuances	Settlements	Gross Transfers into Level 3	Gross Transfers out of Level 3	Balance June 30 2016
Trading account assets:										
Corporate securities, trading loans and other	$2,838	$ 61	$ 2	$699	$(393)	$ —	$ (345)	$ 230	$ (438)	$2,654
Equity securities	407	82	—	43	(37)	—	(72)	33	(1)	455
Non-U.S. sovereign debt	521	92	98	3	(1)	—	(83)	—	—	630
Mortgage trading loans and ABS	1,868	95	(2)	350	(823)	—	(167)	76	(111)	1,286
Total trading account assets	5,634	330	98	1,095	(1,254)	—	(667)	339	(550)	5,025
Net derivative assets[3]	(441)	487	—	199	(619)	—	(111)	(124)	(39)	(648)
AFS debt securities:										
Non-agency residential MBS	106	—	3	196	(92)	—	(79)	—	—	134
Other taxable securities	757	2	(6)	—	—	—	(36)	—	—	717
Tax-exempt securities	569	—	(10)	1	—	—	(1)	—	—	559
Total AFS debt securities	1,432	2	(13)	197	(92)	—	(116)	—	—	1,410
Other debt securities carried at fair value – Non-agency residential MBS	30	(2)	—	—	—	—	—	—	—	28
Loans and leases[4, 5]	1,620	(4)	—	69	—	50	(89)	6	(193)	1,459
Mortgage servicing rights[5]	3,087	(608)	—	—	(2)	208	(416)	—	—	2,269
Loans held-for-sale[4]	787	84	55	20	(180)	—	(52)	39	(63)	690
Other assets	374	(38)	—	34	—	—	(24)	2	—	348
Federal funds purchased and securities loaned or sold under agreements to repurchase[4]	(335)	29	—	—	—	(14)	7	—	—	(313)
Trading account liabilities – Corporate securities and other	(21)	2	—	1	(8)	—	—	—	—	(26)
Short-term borrowings[4]	(30)	1	—	—	—	—	29	—	—	—
Accrued expenses and other liabilities	(9)	—	—	—	—	—	—	—	—	(9)
Long-term debt[4]	(1,513)	(170)	(18)	29	—	(323)	133	(545)	251	(2,156)

(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 $5.2 billion and derivative liabilities of $5.8 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.

Significant transfers into Level 3, primarily due to decreased price observability, during the six months ended June 30, 2016 included:

- $339 million of trading account assets
- $124 million of net derivative assets
- $545 million 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, during the six months ended June 30, 2016 included:

- $550 million of trading account assets
- $193 million of loans and leases
- $251 million of long-term debt

Table of Contents

Level 3 – Fair Value Measurements[1]

	Six Months Ended June 30, 2015									
(Dollars in millions)	Balance January 1 2015	Gains (Losses) in Earnings	Gains (Losses) in OCI[2]	Gross Purchases	Sales	Issuances	Settlements	Gross Transfers into Level 3	Gross Transfers out of Level 3	Balance June 30 2015
Trading account assets:										
Corporate securities, trading loans and other	$3,270	$ 34	$ —	$477	$(438)	$ —	$ (649)	$ 983	$ (351)	$3,326
Equity securities	352	14	—	16	(3)	—	(5)	31	(19)	386
Non-U.S. sovereign debt	574	82	(78)	27	—	—	(110)	—	(27)	468
Mortgage trading loans and ABS	2,063	161	—	809	(627)	—	(244)	10	(13)	2,159
Total trading account assets	6,259	291	(78)	1,329	(1,068)	—	(1,008)	1,024	(410)	6,339
Net derivative assets[3]	(920)	566	—	113	(393)	—	221	(60)	122	(351)
AFS debt securities:										
Non-agency residential MBS	279	(12)	7	62	—	—	(234)	132	—	234
Non-U.S. securities	10	—	—	—	—	—	(1)	—	—	9
Other taxable securities	1,667	—	—	6	—	—	(63)	—	(933)	677
Tax-exempt securities	599	—	(1)	—	—	—	(14)	—	—	584
Total AFS debt securities	2,555	(12)	6	68	—	—	(312)	132	(933)	1,504
Other debt securities carried at fair value – Non-agency residential MBS	—	1	—	33	—	—	—	—	—	34
Loans and leases[4, 5]	1,983	5	—	—	(2)	—	(120)	118	(14)	1,970
Mortgage servicing rights[5]	3,530	373	—	—	(312)	383	(453)	—	—	3,521
Loans held-for-sale[4]	173	(48)	—	491	(95)	33	(6)	177	(65)	660
Other assets	911	(4)	—	9	(118)	—	(15)	8	(35)	756
Federal funds purchased and securities loaned or sold under agreements to repurchase[4]	—	(14)	—	—	—	(28)	—	(326)	—	(368)
Trading account liabilities – Corporate securities and other	(36)	3	—	33	(57)	—	—	—	—	(57)
Short-term borrowings[4]	—	5	—	—	—	(21)	1	(4)	19	—
Accrued expenses and other liabilities	(10)	1	—	—	—	—	—	—	—	(9)
Long-term debt[4]	(2,362)	70	—	177	—	(139)	160	(1,116)	494	(2,716)

(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 $6.5 billion and derivative liabilities of $6.8 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.

Significant transfers into Level 3, primarily due to decreased price observability, during the six months ended June 30, 2015 included:

- $1.0 billion of trading account assets
- $132 million of AFS debt securities
- $118 million of loans and leases

- $177 million of LHFS
- $326 million of federal funds purchased and securities loaned or sold under agreements to repurchase
- $1.1 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 the six months ended June 30, 2015 included:

- $410 million of trading account assets, primarily the result of increased market liquidity
- $122 million of net derivative assets
- $933 million of AFS debt securities
- $494 million of long-term debt

Table of Contents

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 the three and six months ended June 30, 2016 and 2015. These amounts include gains (losses) on financial instruments that are accounted for under the fair value option.

Level 3 – Total Realized and Unrealized Gains (Losses) Included in Earnings

	Three Months Ended June 30, 2016			
(Dollars in millions)	Trading Account Profits (Losses)	Mortgage Banking Income (Loss) [1]	Other	Total
Trading account assets:				
Corporate securities, trading loans and other	$11	$ —	$—	$11
Equity securities	22	—	—	22
Non-U.S. sovereign debt	50	—	—	50
Mortgage trading loans and ABS	67	—	—	67
Total trading account assets	150	—	—	150
Net derivative assets	(54)	177	(39)	84
AFS debt securities – Other taxable securities	—	—	1	1
Other debt securities carried at fair value – Non-agency residential MBS	—	—	(1)	(1)
Loans and leases [2]	—	—	(47)	(47)
Mortgage servicing rights	(5)	(223)	—	(228)
Loans held-for-sale [2]	1	—	10	11
Other assets	—	(14)	1	(13)
Federal funds purchased and securities loaned or sold under agreements to repurchase [2]	32	—	—	32
Trading account liabilities – Corporate securities and other	1	—	—	1
Long-term debt [2]	(79)	—	—	(79)
Total	$46	$ (60)	$(75)	$(89)

	Three Months Ended June 30, 2015			
Trading account assets:				
Corporate securities, trading loans and other	$55	$ —	$—	$55
Equity securities	11	—	—	11
Non-U.S. sovereign debt	16	—	—	16
Mortgage trading loans and ABS	101	—	—	101
Total trading account assets	183	—	—	183
Net derivative assets	416	196	(2)	610
AFS debt securities – Non-agency residential MBS	—	—	7	7
Other debt securities carried at fair value – Non-agency residential MBS	—	—	1	1
Loans and leases [2]	(9)	—	(1)	(10)
Mortgage servicing rights	4	454	—	458
Loans held-for-sale [2]	15	—	7	22
Other assets	—	(3)	(11)	(14)
Federal funds purchased and securities loaned or sold under agreements to repurchase [2]	(14)	—	—	(14)
Trading account liabilities – Corporate securities and other	2	—	—	2

Accrued expenses and other liabilities	—	—	1	1
Long-term debt [2]	41	—	25	66
Total	$638	$ 647	$27	$1,312

[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.

Table of Contents

Level 3 – Total Realized and Unrealized Gains (Losses) Included in Earnings

(Dollars in millions)	Six Months Ended June 30, 2016 Trading Account Profits (Losses)	Mortgage Banking Income (Loss) [1]	Other	Total
Trading account assets:				
Corporate securities, trading loans and other	$61	$ —	$ —	$61
Equity securities	82	—	—	82
Non-U.S. sovereign debt	92	—	—	92
Mortgage trading loans and ABS	95	—	—	95
Total trading account assets	330	—	—	330
Net derivative assets	183	328	(24)	487
AFS debt securities – Other taxable securities	—	—	2	2
Other debt securities carried at fair value – Non-agency residential MBS	—	—	(2)	(2)
Loans and leases [2]	8	—	(12)	(4)
Mortgage servicing rights	29	(637)	—	(608)
Loans held-for-sale [2]	11	—	73	84
Other assets	—	(37)	(1)	(38)
Federal funds purchased and securities loaned or sold under agreements to repurchase [2]	29	—	—	29
Trading account liabilities – Corporate securities and other	2	—	—	2
Short-term borrowings [2]	1	—	—	1
Long-term debt [2]	(171)	—	1	(170)
Total	$422	$ (346)	$ 37	$113

	Six Months Ended June 30, 2015			
Trading account assets:				
Corporate securities, trading loans and other	$34	$ —	$ —	$34
Equity securities	14	—	—	14
Non-U.S. sovereign debt	82	—	—	82
Mortgage trading loans and ABS	161	—	—	161
Total trading account assets	291	—	—	291
Net derivative assets	65	478	23	566
AFS debt securities – Non-agency residential MBS	—	—	(12)	(12)
Other debt securities carried at fair value – Non-agency residential MBS	—	—	1	1
Loans and leases [2]	(6)	—	11	5
Mortgage servicing rights	(11)	384	—	373
Loans held-for-sale [2]	(54)	—	6	(48)
Other assets	—	(24)	20	(4)
Federal funds purchased and securities loaned or sold under agreements to repurchase [2]	(14)	—	—	(14)
Trading account liabilities – Corporate securities and other	3	—	—	3
Short-term borrowings [2]	5	—	—	5
Accrued expenses and other liabilities	—	—	1	1
Long-term debt [2]	99	—	(29)	70
Total	$378	$ 838	$ 21	$1,237

(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.

Table of Contents

The following tables summarize changes in unrealized gains (losses) recorded in earnings during the three and six months ended June 30, 2016 and 2015 for Level 3 assets and liabilities that were still held at June 30, 2016 and 2015. These amounts include changes in fair value on financial instruments 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

	Three Months Ended June 30, 2016			
(Dollars in millions)	Trading Account Profits (Losses)	Mortgage Banking Income (Loss) [1]	Other	Total
Trading account assets:				
Corporate securities, trading loans and other	$(52)	$ —	$—	$(52)
Equity securities	20	—	—	20
Non-U.S. sovereign debt	50	—	—	50
Mortgage trading loans and ABS	41	—	—	41
Total trading account assets	59	—	—	59
Net derivative assets	(75)	65	(39)	(49)
Loans and leases [2]	—	—	(44)	(44)
Mortgage servicing rights	(5)	(277)	—	(282)
Loans held-for-sale [2]	—	—	8	8
Other assets	—	(9)	(2)	(11)
Federal funds purchased and securities loaned or sold under agreements to repurchase [2]	31	—	—	31
Trading account liabilities – Corporate securities and other	1	—	—	1
Long-term debt [2]	(79)	—	—	(79)
Total	$(68)	$ (221)	$(77)	$(366)

	Three Months Ended June 30, 2015			
Trading account assets:				
Corporate securities, trading loans and other	$(7)	$ —	$—	$(7)
Equity securities	7	—	—	7
Non-U.S. sovereign debt	16	—	—	16
Mortgage trading loans and ABS	4	—	—	4
Total trading account assets	20	—	—	20
Net derivative assets	317	52	(2)	367
Loans and leases [2]	(9)	—	(2)	(11)
Mortgage servicing rights	4	373	—	377
Loans held-for-sale [2]	15	—	6	21
Other assets	—	4	23	27
Federal funds purchased and securities loaned or sold under agreements to repurchase [2]	(14)	—	—	(14)
Trading account liabilities – Corporate securities and other	1	—	—	1
Long-term debt [2]	15	—	25	40
Total	$349	$ 429	$50	$828

[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.

195

Table of Contents

Level 3 – Changes in Unrealized Gains (Losses) Relating to Assets and Liabilities Still Held at Reporting Date

(Dollars in millions)	Six Months Ended June 30, 2016 Trading Account Profits (Losses)	Mortgage Banking Income (Loss) [1]	Other	Total
Trading account assets:				
Corporate securities, trading loans and other	$(29)	$ —	$ —	$(29)
Equity securities	21	—	—	21
Non-U.S. sovereign debt	91	—	—	91
Mortgage trading loans and ABS	48	—	—	48
Total trading account assets	131	—	—	131
Net derivative assets	267	65	(24)	308
Loans and leases [2]	—	—	5	5
Mortgage servicing rights	29	(748)	—	(719)
Loans held-for-sale [2]	—	—	88	88
Other assets	—	(27)	(6)	(33)
Federal funds purchased and securities loaned or sold under agreements to repurchase [2]	29	—	—	29
Trading account liabilities – Corporate securities and other	1	—	—	1
Long-term debt [2]	(152)	—	—	(152)
Total	$305	$ (710)	$ 63	$(342)

	Six Months Ended June 30, 2015			
Trading account assets:				
Corporate securities, trading loans and other	$(101)	$ —	$ —	$(101)
Equity securities	9	—	—	9
Non-U.S. sovereign debt	69	—	—	69
Mortgage trading loans and ABS	(26)	—	—	(26)
Total trading account assets	(49)	—	—	(49)
Net derivative assets	19	54	23	96
Loans and leases [2]	(1)	—	23	22
Mortgage servicing rights	(11)	200	—	189
Loans held-for-sale [2]	(38)	—	(1)	(39)
Other assets	—	(12)	77	65
Federal funds purchased and securities loaned or sold under agreements to repurchase [2]	(14)	—	—	(14)
Trading account liabilities – Corporate securities and other	1	—	—	1
Long-term debt [2]	52	—	(29)	23
Total	$(41)	$ 242	$ 93	$294

[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.

Table of Contents

The following tables present information about significant unobservable inputs related to the Corporation's material categories of Level 3 financial assets and liabilities at June 30, 2016 and December 31, 2015.

Quantitative Information about Level 3 Fair Value Measurements at June 30, 2016

(Dollars in millions)

Financial Instrument	Fair Value	Valuation Technique	Significant Unobservable Inputs	Ranges of Inputs	Weighted Average
Loans and Securities [1]					
Instruments backed by residential real estate assets	$1,877		Yield	0% to 25%	6 %
Trading account assets – Mortgage trading loans and ABS	368	Discounted cash flow, Market comparables	Prepayment speed	0% to 38% CPR	14 %
Loans and leases	1,457		Default rate	0% to 10% CDR	4 %
Loans held-for-sale	52		Loss severity	0% to 100%	45 %
Instruments backed by commercial real estate assets	$789		Yield	0% to 25%	12 %
Trading account assets – Corporate securities, trading loans and other	400	Discounted cash flow, Market comparables	Price	$0 to $106	$73
Trading account assets – Mortgage trading loans and ABS	59				
Loans held-for-sale	330				
Commercial loans, debt securities and other	$4,143		Yield	0% to 42%	16 %
Trading account assets – Corporate securities, trading loans and other	2,220		Prepayment speed	5% to 20%	14 %
Trading account assets – Non-U.S. sovereign debt	630	Discounted cash flow, Market comparables	Default rate	3% to 4%	4 %
Trading account assets – Mortgage trading loans and ABS	859		Loss severity	35% to 50%	38 %
AFS debt securities – Other taxable securities	124		Duration	0 to 5 years	3 years
Loans and leases	2		Price	$0 to $227	$68
Loans held-for-sale	308				
Auction rate securities	$1,186	Discounted cash flow, Market comparables	Price	$10 to $100	$93
Trading account assets – Corporate securities, trading loans and other	34				
AFS debt securities – Other taxable securities	593				
	559				

AFS debt securities – Tax-exempt securities						
Structured liabilities						
Long-term debt	$(2,156)		Equity correlation	27% to 98%	70	%
		Discounted cash flow, Market comparables, Industry standard derivative pricing [2]	Long-dated equity volatilities	5% to 101%	28	%
			Yield	10% to 42%	17	%
			Duration	0 to 5 years	2 years	
			Price	$0 to $100	$78	
Net derivative assets						
Credit derivatives	$(96)		Yield	1% to 25%	18	%
		Discounted cash flow, Stochastic recovery correlation model	Upfront points	1 point to 100 points	72 points	
			Credit spreads	17 bps to 993 bps	263 bps	
			Credit correlation	25% to 95%	33	%
			Prepayment speed	7% to 20% CPR	18	%
			Default rate	0% to 4% CDR	3	%
			Loss severity	35%	n/a	
Equity derivatives	$(958)	Industry standard derivative pricing [2]	Equity correlation	27% to 98%	70	%
			Long-dated equity volatilities	5% to 101%	28	%
Commodity derivatives	$8	Discounted cash flow, Industry standard derivative pricing [2]	Natural gas forward price	$1/MMBtu to $7/MMBtu	$4/MMBtu	
			Correlation	66% to 93%	84	%
			Volatilities	22% to 146%	40	%
Interest rate derivatives	$398		Correlation (IR/IR)	15% to 99%	55	%
			Correlation (FX/IR)	-15% to 40%	-7	%
		Industry standard derivative pricing [3]	Illiquid IR and long-dated inflation rates	-21% to 48%	9	%
			Long-dated inflation volatilities	0% to 2%	1	%
Total net derivative assets	$(648)					

(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 187: Trading account assets – Corporate securities, trading loans and other of $2.7 billion, Trading account assets – Non-U.S. sovereign debt of $630 million, Trading account assets – Mortgage trading loans and ABS of $1.3 billion, AFS debt securities – Other taxable securities of $717 million, AFS debt securities – Tax-exempt securities of $559 million, Loans and leases of $1.5 billion and LHFS of $690 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

n/a = not applicable

197

Table of Contents

Quantitative Information about Level 3 Fair Value Measurements at December 31, 2015

(Dollars in millions)

Financial Instrument	Fair Value	Valuation Technique	Significant Unobservable Inputs	Ranges of Inputs	Weighted Average	
Loans and Securities [1]						
Instruments backed by residential real estate assets	$2,017		Yield	0% to 25%	6	%
Trading account assets – Mortgage trading loans and ABS	400	Discounted cash flow, Market comparables	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		Yield	0% to 25%	8	%
Trading account assets – Mortgage trading loans and ABS	162	Discounted cash flow, Market comparables	Price	$0 to $100	$73	
Loans held-for-sale	690					
Commercial loans, debt securities and other	$4,558		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	Discounted cash flow, Market comparables	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		Price	$10 to $100	$94	
Trading account assets – Corporate securities, trading loans and other	335	Discounted cash flow, Market comparables				
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		111 bps	

				0 bps to 447 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		Natural gas forward price	$1/MMBtu to $6/MMBtu	$4/MMBtu	
		Discounted cash flow, Industry standard derivative pricing [2]	Propane forward price	$0/Gallon to $1/Gallon	$1/Gallon	
			Correlation	66% to 93%	84	%
			Volatilities	18% to 125%	39	%
Interest rate derivatives	$502		Correlation (IR/IR)	17% to 99%	48	%
			Correlation (FX/IR)	-15% to 40%	-9	%
		Industry standard derivative pricing [3]	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 188: 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

Table of Contents

In the tables above, instruments backed by residential and commercial real estate assets include RMBS, commercial MBS, whole loans and mortgage CDOs. Commercial loans, debt securities and other include corporate CLOs and CDOs, commercial loans and bonds, and securities backed by non-real estate assets. Structured liabilities primarily include equity-linked notes that are accounted for under the fair value option.

The Corporation uses multiple market approaches in valuing certain of its Level 3 financial instruments. For example, market comparables and discounted cash flows are used together. For a given product, such as corporate debt securities, market comparables may be used to estimate some of the unobservable inputs and then these inputs are incorporated into a discounted cash flow model. Therefore, the balances disclosed encompass both of these techniques.

The level of aggregation and diversity within the products disclosed in the tables 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 17 – 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 instruments backed by commercial real estate assets and 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, 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. For structured liabilities, a significant decrease in duration would result in a significantly higher fair value. For structured liabilities, a significant increase in yield or decrease in price would result in a significant reduction in fair value. A significant decrease in duration may result in a significantly higher fair value.

Table of Contents

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 the three and six months ended June 30, 2016 and 2015.

Assets Measured at Fair Value on a Nonrecurring Basis

(Dollars in millions)	June 30, 2016		Three Months Ended June 30, 2016	Six Months Ended June 30, 2016
	Level 2	Level 3	Gains (Losses)	
Assets				
Loans held-for-sale	$588	$ 49	$(7)	$ (12)
Loans and leases [1]	—	1,128	(183)	(322)
Foreclosed properties [2, 3]	2	119	(28)	(37)
Other assets	142	—	(34)	(47)

	June 30, 2015		Three Months Ended June 30, 2015	Six Months Ended June 30, 2015
Assets				
Loans held-for-sale	$19	$ 26	$(4)	$ (4)
Loans and leases [1]	21	2,076	(371)	(702)
Foreclosed properties [2, 3]	—	188	(38)	(50)
Other assets	70	—	(17)	(17)

(1) Includes $56 million and $86 million of losses on loans that were written down to a collateral value of zero during the three and six months ended June 30, 2016 compared to losses of $106 million and $151 million for the same periods in 2015.

(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 $1.3 billion of properties acquired upon foreclosure of certain government-guaranteed loans (principally FHA-insured loans) as of June 30, 2016 and 2015.

The table below presents information about significant unobservable inputs related to the Corporation's nonrecurring Level 3 financial assets and liabilities at June 30, 2016 and December 31, 2015. 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)	June 30, 2016				
Financial Instrument	Fair Value	Valuation Technique	Significant Unobservable Inputs	Ranges of Inputs	Weighted Average
Loans and leases backed by residential real estate assets	$1,128	Market comparables	OREO discount	8% to 56%	21 %
			Cost to sell	8% to 45%	10 %
	December 31, 2015				
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 %

Table of Contents

NOTE 15 – Fair Value Option

The Corporation elects to account for certain financial instruments under the fair value option. For more information on the primary financial instruments for which the fair value option elections have been made, see Note 21 – Fair Value Option to the Consolidated Financial Statements of the Corporation's 2015 Annual Report on Form 10-K.

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 June 30, 2016 and December 31, 2015.

Fair Value Option Elections

	June 30, 2016			December 31, 2015		
(Dollars in millions)	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	$53,008	$ 52,862	$ 146	$55,143	$ 54,999	$ 144
Loans reported as trading account assets [1]	5,170	10,253	(5,083)	4,995	9,214	(4,219)
Trading inventory – other	7,793	n/a	n/a	8,149	n/a	n/a
Consumer and commercial loans	8,660	8,809	(149)	6,938	7,293	(355)
Loans held-for-sale	5,112	6,363	(1,251)	4,818	6,157	(1,339)
Other assets	282	250	32	275	270	5
Long-term deposits	1,019	881	138	1,116	1,021	95
Federal funds purchased and securities loaned or sold under agreements to repurchase	24,542	24,694	(152)	24,574	24,718	(144)
Short-term borrowings	1,860	1,867	(7)	1,325	1,325	—
Unfunded loan commitments	347	n/a	n/a	658	n/a	n/a
Long-term debt [2]	31,449	31,724	(275)	30,097	30,593	(496)

(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 $30.4 billion and $29.0 billion, and contractual principal outstanding of $30.6 billion and $29.4 billion at June 30, 2016 compared to December 31, 2015.

n/a = not applicable

Table of Contents

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 the three and six months ended June 30, 2016 and 2015.

Gains (Losses) Relating to Assets and Liabilities Accounted for Under the Fair Value Option

	Three Months Ended June 30, 2016			
(Dollars in millions)	Trading Account Profits (Losses)	Mortgage Banking Income (Loss)	Other Income (Loss)	Total
Federal funds sold and securities borrowed or purchased under agreements to resell	$(9)	$ —	$—	$(9)
Loans reported as trading account assets	14	—	—	14
Trading inventory – other[1]	(243)	—	—	(243)
Consumer and commercial loans	15	—	(31)	(16)
Loans held-for-sale [2]	5	145	20	170
Other assets	—	—	(5)	(5)
Long-term deposits	(2)	—	(8)	(10)
Federal funds purchased and securities loaned or sold under agreements to repurchase	11	—	—	11
Unfunded loan commitments	—	—	163	163
Long-term debt [3, 4]	(574)	—	(23)	(597)
Total	$(783)	$ 145	$116	$(522)

	Three Months Ended June 30, 2015			
Federal funds sold and securities borrowed or purchased under agreements to resell	$(24)	$ —	$—	$(24)
Loans reported as trading account assets	33	—	—	33
Trading inventory – other[1]	188	—	—	188
Consumer and commercial loans	(6)	—	16	10
Loans held-for-sale [2]	26	107	25	158
Other assets	—	—	(1)	(1)
Long-term deposits	4	—	26	30
Federal funds purchased and securities loaned or sold under agreements to repurchase	(6)	—	—	(6)
Unfunded loan commitments	—	—	(63)	(63)
Long-term debt [3, 4]	337	—	(195)	142
Total	$552	$ 107	$(192)	$467

(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. For more information on the adoption of new accounting guidance relating to DVA on structured liabilities, see Note 1 – Summary of Significant Accounting Principles.

(4) For the cumulative impact of changes in the Corporation's own credit spreads and the amount recognized in OCI, see Note 12 – Accumulated Other Comprehensive Income (Loss). For more information on how the Corporation's own credit spread is determined, see Note 20 – Fair Value Measurements to the Consolidated Financial Statements of the Corporation's 2015 Annual Report on Form 10-K.

202

Table of Contents

Gains (Losses) Relating to Assets and Liabilities Accounted for Under the Fair Value Option

(Dollars in millions)	Trading Account Profits (Losses)	Mortgage Banking Income (Loss)	Other Income (Loss)	Total
	Six Months Ended June 30, 2016			
Federal funds sold and securities borrowed or purchased under agreements to resell	$(1)	$ —	$—	$(1)
Loans reported as trading account assets	126	—	—	126
Trading inventory – other[1]	(356)	—	—	(356)
Consumer and commercial loans	34	—	(21)	13
Loans held-for-sale [2]	5	314	55	374
Other assets	—	—	(3)	(3)
Long-term deposits	(11)	—	(30)	(41)
Federal funds purchased and securities loaned or sold under agreements to repurchase	3	—	—	3
Unfunded loan commitments	—	—	311	311
Long-term debt [3, 4]	(580)	—	(53)	(633)
Total	$(780)	$ 314	$259	$(207)
	Six Months Ended June 30, 2015			
Federal funds sold and securities borrowed or purchased under agreements to resell	$(88)	$ —	$—	$(88)
Loans reported as trading account assets	(68)	—	—	(68)
Trading inventory – other[1]	174	—	—	174
Consumer and commercial loans	29	—	(67)	(38)
Loans held-for-sale [2]	(21)	372	88	439
Other assets	—	—	7	7
Long-term deposits	—	—	21	21
Federal funds purchased and securities loaned or sold under agreements to repurchase	48	—	—	48
Unfunded loan commitments	—	—	55	55
Short-term borrowings	(1)	—	—	(1)
Long-term debt [3, 4]	590	—	(550)	40
Total	$663	$ 372	$(446)	$589

(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. For more information on the adoption of new accounting guidance relating to DVA on structured liabilities, see Note 1 – Summary of Significant Accounting Principles.

(4) For the cumulative impact of changes in the Corporation's own credit spreads and the amount recognized in OCI, see Note 12 – Accumulated Other Comprehensive Income (Loss). For more information on how the Corporation's own credit spread is determined, see Note 20 – Fair Value Measurements to the Consolidated Financial Statements of the Corporation's 2015 Annual Report on Form 10-K.

Gains (Losses) Related to Borrower-specific Credit Risk for Assets Accounted for Under the Fair Value Option

	Three Months	Six Months

	Ended June 30		Ended June 30	
(Dollars in millions)	2016	2015	2016	2015
Loans reported as trading account assets	$(4)	$ 22	$5	$30
Consumer and commercial loans	(29)	16	(39)	(12)
Loans held-for-sale	5	11	4	50

Table of Contents

NOTE 16 – Fair Value of Financial Instruments

Financial instruments are classified within the fair value hierarchy using the methodologies described in Note 14 – Fair Value Measurements. The following disclosures include financial instruments where only a portion of the ending balance at June 30, 2016 and December 31, 2015 was carried at fair value on the Consolidated Balance Sheet. For more information on these financial instruments and their valuation methodologies, see Note 20 – Fair Value Measurements and Note 22 – Fair Value of Financial Instruments to the Consolidated Financial Statements of the Corporation's 2015 Annual Report on Form 10-K.

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 June 30, 2016 and December 31, 2015 are presented in the table below.

Fair Value of Financial Instruments

	June 30, 2016				December 31, 2015			
		Fair Value				Fair Value		
(Dollars in millions)	Carrying Value	Level 2	Level 3	Total	Carrying Value	Level 2	Level 3	Total
Financial assets								
Loans	$870,258	$72,247	$817,493	$889,740	$863,561	$70,223	$805,371	$875,594
Loans held-for-sale	8,848	7,763	1,085	8,848	7,453	5,347	2,106	7,453
Financial liabilities								
Deposits	$1,216,091	$1,216,457	$—	$1,216,457	$1,197,259	$1,197,577	$—	$1,197,577
Long-term debt	229,617	230,430	2,156	232,586	236,764	239,596	1,513	241,109

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 $1.1 billion and $5.7 billion at June 30, 2016, and $1.3 billion and $6.3 billion at December 31, 2015. 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 10 – Commitments and Contingencies.

Table of Contents

NOTE 17 – 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 the three and six months ended June 30, 2016 and 2015.

Rollforward of Mortgage Servicing Rights

	Three Months Ended June 30		Six Months Ended June 30	
(Dollars in millions)	2016	2015	2016	2015
Balance, beginning of period	$2,631	$3,394	$3,087	$3,530
Additions	72	204	208	383
Sales	(1)	(312)	(2)	(312)
Amortization of expected cash flows [1]	(205)	(223)	(416)	(453)
Impact of changes in interest rates and other market factors [2]	(243)	468	(619)	292
Model and other cash flow assumption changes [3]	15	(10)	11	81
Balance, June 30 [4]	$2,269	$3,521	$2,269	$3,521
Mortgage loans serviced for investors (in billions)	$371	$425	$371	$425

(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) At June 30, 2016, includes $1.8 billion of U.S. and $481 million of non-U.S. consumer MSR balances compared to $3.2 billion and $320 million at June 30, 2015.

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.

Table of Contents

Significant economic assumptions in estimating the fair value of MSRs at June 30, 2016 and December 31, 2015 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

	June 30, 2016		December 31, 2015	
	Fixed	Adjustable	Fixed	Adjustable
Weighted-average OAS	4.88%	7.85 %	4.62%	7.61 %
Weighted-average life, in years	3.38	3.05	4.46	3.43

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

	June 30, 2016		
	Change in Weighted-average Lives		
(Dollars in millions)	Fixed	Adjustable	Change in Fair Value
Prepayment rates			
Impact of 10% decrease	0.29 years	0.23 years	$ 175
Impact of 20% decrease	0.63	0.49	377
Impact of 10% increase	(0.25)	(0.20)	(152)
Impact of 20% increase	(0.47)	(0.38)	(286)
OAS level			
Impact of 100 bps decrease			$ 79
Impact of 200 bps decrease			165
Impact of 100 bps increase			(74)
Impact of 200 bps increase			(142)

Table of Contents

NOTE 18 – Business Segment Information

Effective April 1, 2016, to align the segments with how the Corporation now manages its businesses, the Corporation changed its basis of presentation, and following such change, reports its results of operations through the following four business segments: Consumer Banking, GWIM, Global Banking and Global Markets, with the remaining operations recorded in All Other. For more information on the business segments and All Other, see Note 24 – Business Segment Information to the Consolidated Financial Statements of the Corporation's 2015 Annual Report on Form 10-K. For more information on the Corporation’s segment realignment, see Note 1 – Summary of Significant Accounting Principles.

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. Beginning in 2016, this allocation excludes any adjustments to the accumulated premium or discount amortization of MBS that are made as a result of a change in the estimated lives of these securities.

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.

Table of Contents

The table below presents net income (loss) and the components thereto (with net interest income on an FTE basis) for the three and six months ended June 30, 2016 and 2015, and total assets at June 30, 2016 and 2015 for each business segment, as well as All Other.

Results for Business Segments and All Other
At and for the Three Months Ended June 30

	Total Corporation [1]		Consumer Banking	
(Dollars in millions)	2016	2015	2016	2015
Net interest income (FTE basis)	$9,436	$10,684	$5,276	$5,043
Noninterest income	11,185	11,495	2,588	2,714
Total revenue, net of interest expense (FTE basis)	20,621	22,179	7,864	7,757
Provision for credit losses	976	780	726	470
Noninterest expense	13,493	13,958	4,416	4,637
Income before income taxes (FTE basis)	6,152	7,441	2,722	2,650
Income tax expense (FTE basis)	1,920	2,307	1,004	988
Net income	$4,232	$5,134	$1,718	$1,662
Period-end total assets	$2,186,609	$2,149,034	$668,470	$621,883

	Global Wealth & Investment Management		Global Banking	
	2016	2015	2016	2015
Net interest income (FTE basis)	$1,434	$1,352	$2,421	$2,170
Noninterest income	3,022	3,215	2,269	2,066
Total revenue, net of interest expense (FTE basis)	4,456	4,567	4,690	4,236
Provision for credit losses	14	15	203	177
Noninterest expense	3,288	3,485	2,126	2,086
Income before income taxes (FTE basis)	1,154	1,067	2,361	1,973
Income tax expense (FTE basis)	432	398	870	737
Net income	$722	$669	$1,491	$1,236
Period-end total assets	$286,846	$267,099	$393,380	$367,052

	Global Markets		All Other	
	2016	2015	2016	2015
Net interest income (FTE basis)	$1,093	$988	$(788)	$1,131
Noninterest income	3,220	2,962	86	538
Total revenue, net of interest expense (FTE basis)	4,313	3,950	(702)	1,669
Provision for credit losses	(5)	6	38	112
Noninterest expense	2,582	2,748	1,081	1,002
Income (loss) before income taxes (FTE basis)	1,736	1,196	(1,821)	555
Income tax expense (benefit) (FTE basis)	620	410	(1,006)	(226)
Net income (loss)	$1,116	$786	$(815)	$781
Period-end total assets	$577,428	$578,052	$260,485	$314,948

[1] There were no material intersegment revenues.

Table of Contents

Results of Business Segments and All Other
At and for the Six Months Ended June 30

	Total Corporation [1]		Consumer Banking	
(Dollars in millions)	2016	2015	2016	2015
Net interest income (FTE basis)	$18,822	$20,310	$10,548	$10,046
Noninterest income	21,526	22,998	5,117	5,426
Total revenue, net of interest expense (FTE basis)	40,348	43,308	15,665	15,472
Provision for credit losses	1,973	1,545	1,257	1,139
Noninterest expense	28,309	29,785	8,954	9,369
Income before income taxes (FTE basis)	10,066	11,978	5,454	4,964
Income tax expense (FTE basis)	3,154	3,747	2,007	1,846
Net income	$6,912	$8,231	$3,447	$3,118
Period-end total assets	$2,186,609	$2,149,034	$668,470	$621,883

	Global Wealth & Investment Management		Global Banking	
	2016	2015	2016	2015
Net interest income (FTE basis)	$2,922	$2,695	$4,902	$4,371
Noninterest income	5,978	6,382	4,178	4,251
Total revenue, net of interest expense (FTE basis)	8,900	9,077	9,080	8,622
Provision for credit losses	39	38	756	273
Noninterest expense	6,563	6,974	4,297	4,235
Income before income taxes (FTE basis)	2,298	2,065	4,027	4,114
Income tax expense (FTE basis)	852	768	1,482	1,531
Net income	$1,446	$1,297	$2,545	$2,583
Period-end total assets	$286,846	$267,099	$393,380	$367,052

	Global Markets		All Other	
	2016	2015	2016	2015
Net interest income (FTE basis)	$2,273	$1,961	$(1,823)	$1,237
Noninterest income	5,987	6,180	266	759
Total revenue, net of interest expense (FTE basis)	8,260	8,141	(1,557)	1,996
Provision for credit losses	4	27	(83)	68
Noninterest expense	5,032	5,909	3,463	3,298
Income (loss) before income taxes (FTE basis)	3,224	2,205	(4,937)	(1,370)
Income tax expense (benefit) (FTE basis)	1,138	755	(2,325)	(1,153)
Net income (loss)	$2,086	$1,450	$(2,612)	$(217)
Period-end total assets	$577,428	$578,052	$260,485	$314,948

[1] There were no material intersegment revenues.

Table of Contents

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

	Three Months Ended June 30		Six Months Ended June 30	
(Dollars in millions)	2016	2015	2016	2015
Segments' total revenue, net of interest expense (FTE basis)	$21,323	$20,510	$41,905	$41,312
Adjustments:				
ALM activities	(886)	976	(2,137)	727
Liquidating businesses and other	184	693	580	1,269
FTE basis adjustment	(223)	(223)	(438)	(438)
Consolidated revenue, net of interest expense	$20,398	$21,956	$39,910	$42,870
Segments' total net income	$5,047	$4,353	$9,524	$8,448
Adjustments, net-of-taxes:				
ALM activities	(668)	468	(1,550)	167
Liquidating businesses and other	(147)	313	(1,062)	(384)
Consolidated net income	$4,232	$5,134	$6,912	$8,231

	June 30	
	2016	2015
Segments' total assets	$1,926,124	$1,834,086
Adjustments:		
ALM activities, including securities portfolio	623,051	614,053
Equity investments	4,137	4,655
Liquidating businesses and other	125,331	153,551
Elimination of segment asset allocations to match liabilities	(492,034)	(457,311)
Consolidated total assets	$2,186,609	$2,149,034

Table of Contents

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.

Banking Book – All on- and off-balance sheet financial instruments of the Corporation except for those positions that are held for trading purposes.

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.

211

Table of Contents

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.

Market-related Adjustments – Include adjustments to premium amortization or discount accretion on debt securities when a decrease in long-term rates shortens (or an increase extends) the estimated lives of mortgage-related debt securities. Also included in market-related adjustments is hedge ineffectiveness that impacts net interest income.

Matched Book – Repurchase and resale agreements or securities borrowed and loaned transactions where the overall asset and liability position is similar in size and/or maturity. Generally, these are entered into to accommodate customers where the Corporation earns the interest rate spread.

Mortgage Servicing 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.

Table of Contents

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.

Table of Contents

Acronyms

ABS	Asset-backed securities
AFS	Available-for-sale
ALM	Asset and liability management
AUM	Assets under management
AVM	Automated valuation model
BANA	Bank of America, National Association
BHC	Bank holding company
bps	basis points
CCAR	Comprehensive Capital Analysis and Review
CCF	Credit conversion factor
CDO	Collateralized debt obligation
CDS	Credit default swap
CFE	Collateralized financing entity
CLO	Collateralized loan obligation
CLTV	Combined loan-to-value
CRA	Community Reinvestment Act
CVA	Credit valuation adjustment
DoJ	U.S. Department of Justice
DPC	Derivative product company
DVA	Debit valuation adjustment
EAD	Exposure at default
EMV	Europay, Mastercard and Visa
EPS	Earnings per common share
ERC	Enterprise Risk Committee
FASB	Financial Accounting Standards Board
FCA	Financial Conduct Authority
FDIC	Federal Deposit Insurance Corporation
FHA	Federal Housing Administration
FHLB	Federal Home Loan Bank
FHLMC	Freddie Mac
FICC	Fixed-income, currencies and commodities
FICO	Fair Isaac Corporation (credit score)
FNMA	Fannie Mae
FOMC	Federal Open Market Committee
FTE	Fully taxable-equivalent
FVA	Funding valuation adjustment
GAAP	Accounting principles generally accepted in the United States of America
GELS	Global Excess Liquidity Sources
GNMA	Government National Mortgage Association
GPI	Global Principal Investments
GSE	Government-sponsored enterprise
G-SIB	Global systemically important bank
GWIM	Global Wealth & Investment Management
HELOC	Home equity line of credit
HQLA	High Quality Liquid Assets

HTM	Held-to-maturity
ICAAP	Internal Capital Adequacy Assessment Process
IMM	Internal models methodology
IRLC	Interest rate lock commitment
ISDA	International Swaps and Derivatives Association, Inc.
LAS	Legacy Assets & Servicing
LCR	Liquidity Coverage Ratio
LGD	Loss-given default
LHFS	Loans held-for-sale
LIBOR	London InterBank Offered Rate
LTV	Loan-to-value
MBS	Mortgage-backed securities
MD&A	Management's Discussion and Analysis of Financial Condition and Results of Operations
MI	Mortgage insurance
MLGWM	Merrill Lynch Global Wealth Management
MLI	Merrill Lynch International
MLPCC	Merrill Lynch Professional Clearing Corp
MLPF&S	Merrill Lynch, Pierce, Fenner & Smith, Inc.
MRC	Management Risk Committee
MSA	Metropolitan Statistical Area
MSR	Mortgage servicing right
NPR	Notice of proposed rulemaking
NSFR	Net Stable Funding Ratio
OAS	Option-adjusted spread
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
RMBS	Residential mortgage-backed securities
RSU	Restricted stock unit
SBLC	Standby letter of credit
SCCL	Single-Counterparty Credit Limits
SEC	Securities and Exchange Commission
SFA	Supervisory Formula Approach
SLR	Supplementary leverage ratio
SSFA	Simplified Supervisory Formula Approach
TDR	Troubled debt restructuring
TLAC	Total loss-absorbing capacity
VA	U.S. Department of Veterans Affairs
VaR	Value-at-Risk
VIE	Variable interest entity

Table of Contents

Part II. OTHER INFORMATION

Item 1. Legal Proceedings

See Litigation and Regulatory Matters in Note 10 – Commitments and Contingencies to the Consolidated Financial Statements, which is incorporated by reference in this Item 1, for litigation and regulatory disclosure that supplements the disclosure in Note 12 – Commitments and Contingencies to the Consolidated Financial Statements of the Corporation's 2015 Annual Report on Form 10-K.

Item 1A. Risk Factors

The United Kingdom (U.K.) Referendum, and the potential exit of the U.K. from the European Union, could adversely affect us.

We conduct business in Europe primarily through our U.K. subsidiaries. For the year ended December 31, 2015, our operations in Europe, Middle East and Africa, including the U.K., represented approximately seven percent of our total revenue, net of interest expense. A referendum was held in the U.K. on June 23, 2016, which resulted in a majority vote in favor of exiting the European Union (EU). The vote increased global economic and market uncertainty and volatility, and resulted in significant declines in the value of the British Pound. Market volatility has since reduced but the Pound has continued to show weakness. The timing of the U.K.'s formal commencement of the exit process is uncertain. Once the exit process begins, negotiations to agree on the terms of the exit are expected to be a multi-year process. During this transition period, the ultimate impact of the U.K.'s exit from the EU may remain unclear and economic and market volatility may continue to occur. If uncertainty resulting from the U.K.'s potential exit from the EU negatively impacts economic conditions, financial markets and consumer confidence, our business, results of operations, financial position and/or operational model could be adversely affected.

In addition, if the terms of the exit limit the ability of our U.K. entities to conduct business in the EU or otherwise result in a significant increase in economic barriers between the U.K. and the EU, these changes could impose additional costs on us, and could adversely impact our business, financial condition and operational model.

There are no other material changes from the risk factors set forth under Part 1, Item 1A. Risk Factors of the Corporation's 2015 Annual Report on Form 10-K.

Table of Contents

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

The table below presents share repurchase activity for the three months ended June 30, 2016. The primary source of funds for cash distributions by the Corporation to its shareholders is dividends received from its banking subsidiaries. Each of the banking subsidiaries is subject to various regulatory policies and requirements relating to the payment of dividends, including requirements to maintain capital above regulatory minimums. All of the Corporation's preferred stock outstanding has preference over the Corporation's common stock with respect to the payment of dividends.

(Dollars in millions, except per share information; shares in thousands)	Common Shares Repurchased [1]	Weighted-Average Per Share Price	Shares Purchased as Part of Publicly Announced Programs	Remaining Buyback Authority Amounts [2]
April 1 - 30, 2016	40,842	$ 14.69	40,832	$ 826
May 1 - 31, 2016	51,211	14.25	51,211	96
June 1 - 30, 2016	3,922	13.52	3,921	43
Three Months Ended June 30, 2016	95,975	14.41		

(1) Includes shares of the Corporation's common stock acquired by the Corporation in connection with satisfaction of tax withholding obligations on vested restricted stock or restricted stock units and certain forfeitures and terminations of employment-related awards under equity incentive plans.

(2) On March 11, 2015, the Board of Directors authorized the repurchase of up to $4.0 billion of the Corporation's common stock through open market purchases or privately negotiated transactions, including Rule 10b5-1 plans, during the period from April 1, 2015 through June 30, 2016. On March 18, 2016, the Board of Directors authorized additional repurchases of common stock up to $800 million in addition to the March 11, 2015 resolution to offset the share count dilution resulting from equity incentive compensation awarded to retirement-eligible employees. Amounts shown in this column reflect the aggregate repurchase authority amounts considering the timing and effect of both authorizations. For additional information, see Capital Management – CCAR and Capital Planning on page 48 and Note 11 – Shareholders' Equity to the Consolidated Financial Statements.

The Corporation did not have any unregistered sales of its equity securities during the three months ended June 30, 2016.

Table of Contents

Item 6. Exhibits

Exhibit 3(a)	Amended and Restated Certificate of Incorporation of the Corporation, as in effect on the date hereof, incorporated by reference to Exhibit 3(a) of the Corporation's Quarterly Report on Form 10-Q (File No. 1-6523) for the quarterly period ended March 31, 2016 filed on May 2, 2016
Exhibit 3(b)	Amended and Restated Bylaws of the Corporation, as in effect on the date hereof, incorporated by reference to Exhibit 3.1 of the Corporation's Current Report on Form 8-K (File No. 1-6523) filed on March 20, 2015
Exhibit 10	Second Amendment to Aircraft Time Sharing Agreement dated June 8, 2016 between Bank of America, N.A. and Brian T. Moynihan (1)
Exhibit 11	Earnings Per Share Computation – included in Note 13 – Earnings Per Common Share to the Consolidated Financial Statements (1)
Exhibit 12	Ratio of Earnings to Fixed Charges (1) Ratio of Earnings to Fixed Charges and Preferred Dividends (1)
Exhibit 31(a)	Certification of the Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 (1)
Exhibit 31(b)	Certification of the Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 (1)
Exhibit 32(a)	Certification of the Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (1)
Exhibit 32(b)	Certification of the Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (1)
Exhibit 101.INS	XBRL Instance Document (1)
Exhibit 101.SCH	XBRL Taxonomy Extension Schema Document (1)
Exhibit 101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document (1)
Exhibit 101.LAB	XBRL Taxonomy Extension Label Linkbase Document (1)
Exhibit 101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document (1)
Exhibit 101.DEF	XBRL Taxonomy Extension Definitions Linkbase Document (1)

(1) Filed herewith

Table of Contents

SIGNATURE

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

Bank of America Corporation
Registrant

Date: August 1, 2016

/s/ Rudolf A. Bless
Rudolf A. Bless
Chief Accounting Officer

Table of Contents

Bank of America Corporation
Form 10-Q
Index to Exhibits

Exhibit	Description
Exhibit 3(a)	Amended and Restated Certificate of Incorporation of the Corporation, as in effect on the date hereof, incorporated by reference to Exhibit 3(a) of the Corporation's Quarterly Report on Form 10-Q (File No. 1-6523) for the quarterly period ended March 31, 2016 filed on May 2, 2016
Exhibit 3(b)	Amended and Restated Bylaws of the Corporation, as in effect on the date hereof, incorporated by reference to Exhibit 3.1 of the Corporation's Current Report on Form 8-K (File No. 1-6523) filed on March 20, 2015
Exhibit 10	Second Amendment to Aircraft Time Sharing Agreement dated June 8, 2016 between Bank of America, N.A. and Brian T. Moynihan (1)
Exhibit 11	Earnings Per Share Computation – included in Note 13 – Earnings Per Common Share to the Consolidated Financial Statements (1)
Exhibit 12	Ratio of Earnings to Fixed Charges (1) Ratio of Earnings to Fixed Charges and Preferred Dividends (1)
Exhibit 31(a)	Certification of the Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 (1)
Exhibit 31(b)	Certification of the Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 (1)
Exhibit 32(a)	Certification of the Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (1)
Exhibit 32(b)	Certification of the Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (1)
Exhibit 101.INS	XBRL Instance Document (1)
Exhibit 101.SCH	XBRL Taxonomy Extension Schema Document (1)
Exhibit 101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document (1)
Exhibit 101.LAB	XBRL Taxonomy Extension Label Linkbase Document (1)
Exhibit 101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document (1)
Exhibit 101.DEF	XBRL Taxonomy Extension Definitions Linkbase Document (1)

(1) Filed herewith

219