# UNITED STATES SECURITIES AND EXCHANGE COMMISSION <br> Washington, D.C. 20549 <br> FORM 10-Q 

Q QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE
ACT OF 1934
For the quarterly period ended June 30, 2017
OR

## TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 <br> For the transition period from <br> $\qquad$ to <br> $\qquad$ Commission File No. 1-13300 <br> CAPITAL ONE FINANCIAL CORPORATION

## (Exact name of registrant as specified in its charter)

Delaware
(State or Other Jurisdiction of Incorporation or Organization)
1680 Capital One Drive,
McLean, Virginia (Address of Principal Executive Offices)

54-1719854
(I.R.S. Employer Identification No.)

22102
(Zip Code)

Registrant's telephone number, including area code: (703) 720-1000
(Former name, former address and former fiscal year, if changed since last report)
(Not applicable)
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 $\mathbb{N}$

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate website, 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 $\boldsymbol{\boxtimes}$ No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

| Large accelerated filer | 囚 | Accelerated filer |  |
| :--- | :--- | :--- | :--- |
| Non-accelerated filer | $\square$ | (Do not check if a smaller reporting company) | Smaller reporting company |
|  |  |  | Emerging growth company |

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Indicate by check mark whether the registrant is a Shell Company (as defined in Rule $12 \mathrm{~b}-2$ of the Exchange Act) Yes $\square$ No 区
As of June 30, 2017, there were 483,692,646 shares of the registrant's Common Stock outstanding.

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## PART I-FINANCIAL INFORMATION

## Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations ("MD\&A")

This discussion contains forward-looking statements that are based upon management's current expectations and are subject to significant uncertainties and changes in circumstances. Please review "MD\&A-Forward-Looking Statements" for more information on the forward-looking statements in this Quarterly Report on Form 10-Q ("this Report"). Our actual results may differ materially from those included in these forward-looking statements due to a variety of factors including, but not limited to, those described in "Part II—Item 1A. Risk Factors" in this Report and in "Part I—Item 1A. Risk Factors" in our 2016 Annual Report on Form 10-K ("2016 Form 10-K"). Unless otherwise specified, references to notes to our consolidated financial statements refer to the notes to our unaudited consolidated financial statements as of June 30, 2017 included in this Report.

Management monitors a variety of key indicators to evaluate our business results and financial condition. The following MD\&A is provided as a supplement to, and should be read in conjunction with, our consolidated financial statements and related notes in this Report and the more detailed information contained in our 2016 Form 10-K.

## INTRODUCTION

We are a diversified financial services holding company with banking and non-banking subsidiaries. Capital One Financial Corporation and its subsidiaries (the "Company") offer a broad array of financial products and services to consumers, small businesses and commercial clients through branches, the internet and other distribution channels. As of June 30, 2017, our principal subsidiaries included:

- Capital One Bank (USA), National Association ("COBNA"), which offers credit and debit card products, other lending products and deposit products; and
- Capital One, National Association ("CONA"), which offers a broad spectrum of banking products and financial services to consumers, small businesses and commercial clients.

The Company is hereafter collectively referred to as "we," "us" or "our." COBNA and CONA are collectively referred to as the "Banks." Certain business terms used in this document are defined in the "MD\&A-Glossary and Acronyms" and should be read in conjunction with the consolidated financial statements included in this Report.

Our consolidated total net revenues are derived primarily from lending to consumer and commercial customers net of funding costs associated with interest on deposits, short-term borrowings and long-term debt. We also earn non-interest income which primarily consists of interchange income net of rewards expenses and service charges and other customer-related fees. Our expenses primarily consist of the provision for credit losses, operating expenses, marketing expenses and income taxes.

Our principal operations are organized for management reporting purposes into three major business segments, which are defined based on the products and services provided or the type of customer served: Credit Card, Consumer Banking and Commercial Banking. The operations of acquired businesses have been integrated into our existing business segments. Certain activities that are not part of a segment, such as management of our corporate investment portfolio and asset/liability management by our centralized Corporate Treasury group, are included in the Other category.

- Credit Card: Consists of our domestic consumer and small business card lending, and international card businesses in Canada and the United Kingdom ("U.K.").
- Consumer Banking: Consists of our branch-based lending and deposit gathering activities for consumers and small businesses, national deposit gathering, auto lending and consumer home loan lending and servicing activities.
- Commercial Banking: Consists of our lending, deposit gathering and servicing activities provided to commercial real estate and commercial and industrial customers. Our commercial and industrial customers typically include companies with annual revenues between $\$ 10$ million and $\$ 1$ billion.


## Recent Acquisitions and Dispositions

We regularly explore and evaluate opportunities to acquire financial services and financial assets, including credit card and other loan portfolios, and enter into strategic partnerships as part of our growth strategy. We also explore opportunities to acquire digital companies and related assets to improve our information technology infrastructure and to deliver on our digital strategy. We also regularly consider the potential disposition of certain of our assets, branches, partnership agreements or lines of business. We may issue equity or debt in connection with acquisitions, including public offerings, to fund such acquisitions.

On October 3, 2016, we announced that we entered into a 10-year program agreement (the "Program Agreement") to become the exclusive issuing partner of co-branded credit cards to Cabela's customers. In connection with this credit card program, we entered into a definitive agreement under which we would acquire the credit card operations from Cabela's, including approximately $\$ 5.2$ billion in credit card receivables and other assets and approximately $\$ 5.0$ billion in associated funding liabilities from Cabela's wholly-owned subsidiary, World's Foremost Bank ("WFB"). This transaction was subject to the satisfaction of customary closing conditions, including receipt of various regulatory approvals and the approval of the stockholders of Cabela's. On January 28, 2017, Capital One withdrew its Bank Merger Act ("BMA") application from the OCC, as we did not expect to receive regulatory approval of any BMA application for this transaction prior to October 3, 2017. This is the date when any of the parties involved in the agreement could terminate the agreement.

On April 17, 2017, we entered into agreements with Synovus Bank, a subsidiary of Synovus Financial Corp. ("Synovus") and Cabela's under which Synovus will acquire certain assets and assume certain liabilities of WFB, including WFB's deposits. Immediately following the completion of this acquisition, Synovus will sell WFB's credit card assets and related liabilities to Capital One. Synovus will retain WFB's deposits. Capital One is not required to file any regulatory applications to complete this acquisition from Synovus. These transactions are subject to customary closing conditions, including approval by Synovus's primary banking regulators. The closing of these transactions is also subject to the closing of the Agreement and Plan of Merger between Cabela's and Bass Pro Group, LLC, entered into on October 3, 2016. We expect these transactions will close after all closing conditions have been satisfied. These agreements may be terminated by any of the parties if all closing conditions have not been satisfied by October 3, 2017. Upon closing of the acquisition of the credit card assets and related liabilities from Synovus, Capital One will become the exclusive issuing partner of co-branded credit cards to Cabela's customers under the Program Agreement.

We had no significant acquisitions or dispositions in the first six months of 2017.

## SUMMARY OF SELECTED FINANCIAL DATA

The following table presents selected consolidated financial data and performance from our results of operations for the second quarter and first six months of 2017 and 2016 and selected comparative balance sheet data as of June 30,2017 and December 31, 2016. We also provide selected key metrics we use in evaluating our performance including certain metrics that are computed using non-GAAP measures. We believe these non-GAAP metrics provide useful insight to investors and users of our financial information in assessing the results of the Company.

Table 1: Consolidated Financial Highlights

| (Dollars in millions, except per share data and as noted) | Three Months Ended June 30, |  |  |  |  | Six Months Ended June 30, |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2017 |  | 2016 |  | Change | 2017 |  | 2016 |  | Change |
| Income statement |  |  |  |  |  |  |  |  |  |  |
| Net interest income | \$ | 5,473 | \$ | 5,093 | 7\% | \$ | 10,947 | \$ | 10,149 | 8\% |
| Non-interest income |  | 1,231 |  | 1,161 | 6 |  | 2,292 |  | 2,325 | (1) |
| Total net revenue |  | 6,704 |  | 6,254 | 7 |  | 13,239 |  | 12,474 | 6 |
| Provision for credit losses |  | 1,800 |  | 1,592 | 13 |  | 3,792 |  | 3,119 | 22 |
| Non-interest expense: |  |  |  |  |  |  |  |  |  |  |
| Marketing |  | 435 |  | 415 | 5 |  | 831 |  | 843 | (1) |
| Amortization of intangibles |  | 61 |  | 95 | (36) |  | 123 |  | 196 | (37) |
| Operating expenses |  | 2,918 |  | 2,785 | 5 |  | 5,894 |  | 5,479 | 8 |
| Total non-interest expense |  | 3,414 |  | 3,295 | 4 |  | 6,848 |  | 6,518 | 5 |
| Income from continuing operations before income taxes |  | 1,490 |  | 1,367 | 9 |  | 2,599 |  | 2,837 | (8) |
| Income tax provision |  | 443 |  | 424 | 4 |  | 757 |  | 876 | (14) |
| Income from continuing operations, net of tax |  | 1,047 |  | 943 | 11 |  | 1,842 |  | 1,961 | (6) |
| Income (loss) from discontinued operations, net of tax |  | (11) |  | (1) | ** |  | 4 |  | (6) | ** |
| Net income |  | 1,036 |  | 942 | 10 |  | 1,846 |  | 1,955 | (6) |
| Dividends and undistributed earnings allocated to participating securities |  | (8) |  | (6) | 33 |  | (13) |  | (12) | 8 |
| Preferred stock dividends |  | (80) |  | (65) | 23 |  | (133) |  | (102) | 30 |
| Net income available to common stockholders | \$ | 948 | \$ | 871 | 9 | \$ | 1,700 | \$ | 1,841 | (8) |
| Common share statistics |  |  |  |  |  |  |  |  |  |  |
| Basic earnings per common share: |  |  |  |  |  |  |  |  |  |  |
| Net income from continuing operations | \$ | 1.98 | \$ | 1.70 | 16\% | \$ | 3.51 | \$ | 3.57 | (2)\% |
| Income (loss) from discontinued operations |  | (0.02) |  | - | ** |  | 0.01 |  | (0.01) | ** |
| Net income per basic common share | \$ | 1.96 | \$ | 1.70 | 15 | \$ | 3.52 | \$ | 3.56 | (1) |
| Diluted earnings per common share: |  |  |  |  |  |  |  |  |  |  |
| Net income from continuing operations | \$ | 1.96 | \$ | 1.69 | 16 | \$ | 3.48 | \$ | 3.53 | (1) |
| Income (loss) from discontinued operations |  | (0.02) |  | - | ** |  | 0.01 |  | (0.01) | ** |
| Net income per diluted common share | \$ | 1.94 | \$ | 1.69 | 15 | \$ | 3.49 | \$ | 3.52 | (1) |
| Weighted-average common shares outstanding (in millions): |  |  |  |  |  |  |  |  |  |  |
| Basic |  | 484.0 |  | 511.7 | (5)\% |  | 483.1 |  | 517.6 | (7)\% |
| Diluted |  | 488.1 |  | 516.5 | (5) |  | 487.7 |  | 522.3 | (7) |
| Common shares outstanding (period-end, in millions) |  | 483.7 |  | 505.9 | (4) |  | 483.7 |  | 505.9 | (4) |
| Dividends paid per common share | \$ | 0.40 | \$ | 0.40 | - | \$ | 0.80 | \$ | 0.80 | - |
| Tangible book value per common share (period-end) ${ }^{(1)}$ |  | 60.94 |  | 57.84 | 5 |  | 60.94 |  | 57.84 | 5 |
| Balance sheet (average balances) |  |  |  |  |  |  |  |  |  |  |
| Loans held for investment |  | 242,241 |  | 230,379 | 5\% |  | 241,875 |  | 228,557 | 6\% |
| Interest-earning assets |  | 318,078 |  | 302,764 | 5 |  | 318,215 |  | 301,106 | 6 |
| Total assets |  | 349,891 |  | 334,479 | 5 |  | 350,761 |  | 333,197 | 5 |
| Interest-bearing deposits |  | 214,412 |  | 195,641 | 10 |  | 213,696 |  | 194,883 | 10 |
| Total deposits |  | 240,550 |  | 221,146 | 9 |  | 239,555 |  | 220,163 | 9 |
| Borrowings |  | 48,838 |  | 54,359 | (10) |  | 51,085 |  | 54,060 | (6) |
| Common equity |  | 44,645 |  | 45,640 | (2) |  | 44,241 |  | 45,711 | (3) |
| Total stockholders' equity |  | 49,005 |  | 48,934 | - |  | 48,602 |  | 49,007 | (1) |



[^0](7) Return on average tangible common equity is a non-GAAP measure calculated based on annualized (i) income from continuing operations, net of tax; (ii) less dividends and undistributed earnings allocated to participating securities; (iii) less preferred stock dividends, for the period, divided by average TCE. Our calculation of return on average TCE may not be comparable to similarly-titled measures reported by other companies. See "MD\&A-Table AReconciliation of Non-GAAP Measures and Calculation of Regulatory Capital Measures" for additional information on non-GAAP measures.
(8) Equity-to-assets ratio is calculated based on average stockholders' equity for the period divided by average total assets for the period.
${ }^{(9)}$ Non-interest expense as a percentage of average loans held for investment is calculated based on annualized non-interest expense for the period divided by average loans held for investment for the period.
${ }^{(10)}$ Efficiency ratio is calculated based on non-interest expense for the period divided by total net revenue for the period.
(11) Net charge-off rate is calculated based on annualized net charge-offs for the period divided by average loans held for investment for the period.
${ }^{(12)}$ Capital ratios are calculated based on the Basel III Standardized Approach framework, subject to applicable transition provision. See "MD\&A-Capital Management" for additional information.
(13) Tangible common equity ratio is a non-GAAP measure calculated based on TCE divided by tangible assets. See "MD\&A—Table A—Reconciliation of NonGAAP Measures and Calculation of Regulatory Capital Measures" for the calculation of this measure and reconciliation to the comparative U.S. GAAP measure.
** Change is not meaningful.

## EXECUTIVE SUMMARY AND BUSINESS OUTLOOK

## Financial Highlights

We reported net income of $\$ 1.0$ billion ( $\$ 1.94$ per diluted common share) on total net revenue of $\$ 6.7$ billion and net income of $\$ 1.8$ billion ( $\$ 3.49$ per diluted common share) on total net revenue of $\$ 13.2$ billion for the second quarter and first six months of 2017, respectively. In comparison, we reported net income of $\$ 942$ million ( $\$ 1.69$ per diluted common share) on total net revenue of $\$ 6.3$ billion and net income of $\$ 2.0$ billion ( $\$ 3.52$ per diluted common share) on total net revenue of $\$ 12.5$ billion for the second quarter and first six months of 2016 , respectively.

Our common equity Tier 1 capital ratio as calculated under the Basel III Standardized Approach, including transition provisions, was $10.7 \%$ and $10.1 \%$ as of June 30, 2017 and December 31, 2016, respectively. See "MD\&A-Capital Management" below for additional information.

On June 29, 2016, we announced that our Board of Directors authorized the repurchase of up to $\$ 2.5$ billion in shares of our common stock ("2016 Stock Repurchase Program") from the third quarter of 2016 through the end of the second quarter of 2017. Through the end of the second quarter of 2017, we repurchased approximately $\$ 2.2$ billion of common stock as part of the 2016 Stock Repurchase Program. Additionally, on June 28, 2017, we announced that our Board of Directors authorized the repurchase of up to $\$ 1.85$ billion of shares of our common stock ("2017 Stock Repurchase Program") from the third quarter of 2017 through the end of the second quarter of 2018. See "MD\&A-Capital Management" below for additional information.

Below are additional highlights of our performance in the second quarter and first six months of 2017. These highlights are generally based on a comparison between the results of the second quarter and first six months of 2017 and 2016, except as otherwise noted. The changes in our financial condition and credit performance are generally based on our financial condition and credit performance as of June 30, 2017 compared to our financial condition and credit performance as of December 31, 2016. We provide a more detailed discussion of our financial performance in the sections following this "Executive Summary and Business Outlook."

## Total Company Performance

- Earnings: Our net income increased by $\$ 94$ million to $\$ 1.0$ billion in the second quarter of 2017 primarily driven by:
- higher interest income due to growth in our auto and domestic credit card loan portfolios, as well as higher yields as a result of higher interest rates; and
- higher non-interest income primarily attributable to higher net interchange fees driven by higher purchase volume.

These increases were partially offset by:

- higher provision for credit losses primarily driven by higher charge-offs, partially offset by smaller allowance builds in our domestic credit card and commercial loan portfolios;
- higher interest expense due to higher interest rates and growth in our interest-bearing liabilities; and
- higher operating expenses associated with loan growth, as well as continued investments in technology and infrastructure.

Our net income decreased by $\$ 109$ million to $\$ 1.8$ billion in the first six months of 2017 primarily due to:

- higher provision for credit losses primarily driven by higher charge-offs;
- higher operating expenses associated with loan growth, as well as continued investments in technology and infrastructure; and
- higher interest expense due to higher interest rates and growth in our interest-bearing liabilities.

These higher expenses were partially offset by higher interest income due to growth in our auto and domestic credit card loan portfolios, as well as higher yields as a result of higher interest rates.

- Loans Held for Investment:
- Period-end loans held for investment decreased by $\$ 1.3$ billion to $\$ 244.3$ billion as of June 30, 2017 from December 31, 2016 primarily due to expected seasonal paydowns in our domestic credit card loan portfolio and run-off of our acquired home loan portfolio, partially offset by growth in our auto, domestic credit card and commercial loan portfolios.
- Average loans held for investment increased by $\$ 11.9$ billion to $\$ 242.2$ billion in the second quarter of 2017 compared to the second quarter of 2016 , and increased by $\$ 13.3$ billion to $\$ 241.9$ billion in the first six months of 2017 compared to the first six months of 2016, primarily driven by growth in our auto, domestic credit card and commercial loan portfolios, partially offset by run-off of our acquired home loan portfolio.
- Net Charge-Off and Delinquency Metrics: Our net charge-off rate increased by 66 basis points to $2.67 \%$ in the second quarter of 2017 compared to the second quarter of 2016, and increased by 55 basis points to $2.59 \%$ in the first six months of 2017 compared to the first six months of 2016, primarily due to growth and seasoning of recent domestic credit card loan originations, as well as higher losses in our auto loan portfolio due to recent growth and declines in used car auction prices, as well as changes in our charge-off practices for the treatment of certain loans within our consumer banking loan portfolio.

Our $30+$ day delinquency rate decreased by 28 basis points to $2.99 \%$ as of June 30, 2017 from December 31, 2016 primarily due to seasonally lower delinquency inventories.

We provide additional information on our credit quality metrics below under "MD\&A-Business Segment Financial Performance" and "MD\&A - Credit Risk Profile."

- Allowance for Loan and Lease Losses: Our allowance for loan and lease losses increased by $\$ 667$ million to $\$ 7.2$ billion as of June 30, 2017 from December 31, 2016, and the allowance coverage ratio increased by 28 basis points to $2.93 \%$ as of June 30, 2017 from December 31, 2016. The increases were primarily driven by:
- an allowance build in our domestic credit card loan portfolio primarily due to increasing loss expectations on recent vintages and portfolio seasoning; and
- an allowance build in our auto loan portfolio due to higher losses associated with growth.


## Business Outlook

We discuss below our current expectations regarding our total company performance and the performance of each of our business segments over the near-term based on market conditions, the regulatory environment and our business strategies as of the time we filed this Report. The statements contained in this section are based on our current expectations regarding our outlook for our financial results and business strategies. Our expectations take into account, and should be read in conjunction with, our expectations regarding economic trends and analysis of our business as discussed in "Part I—Item 1. Business" and "MD\&A" in our 2016 Form 10-K. Certain statements are forward-looking statements within the meaning of the Private Securities Litigation Reform Act of
1995. Actual results could differ materially from those in our forward-looking statements. Except as otherwise disclosed, forwardlooking statements do not reflect:

- any change in current dividend or repurchase strategies;
- the effect of any acquisitions, divestitures or similar transactions that have not been previously disclosed; or
- any changes in laws, regulations or regulatory interpretations, in each case after the date as of which such statements are made.

See "MD\&A-Forward-Looking Statements" in this Report for more information on the forward-looking statements included in this Report and "Part I—Item 1A. Risk Factors" in our 2016 Form 10-K for factors that could materially influence our results.

## Total Company Expectations

All expectations herein exclude any potential impacts of the anticipated Cabela's acquisition, which is subject to regulatory approval.
We expect annual efficiency ratio for 2017 , excluding adjusting items, will be in the $51 \%$ s, plus or minus a reasonable margin of volatility.

We expect to deliver earnings per share growth, excluding adjusting items, between $7 \%$ and $11 \%$ in 2017 , assuming no substantial change in the broader credit and economic cycles.

We believe our actions have created a well-positioned balance sheet with strong capital and liquidity. We believe that we are currently at the destination capital ratios appropriate for our current balance sheet mix. On June 28, 2017, we announced that our Board of Directors authorized the repurchase of up to $\$ 1.85$ billion of shares of our common stock from the third quarter of 2017 through the end of the second quarter of 2018 as part of the 2017 Stock Repurchase Program. The timing and exact amount of any common stock repurchases will depend on various factors, including market conditions, opportunities for growth and utilizing Rule 10b5-1 programs, and may be suspended at any time. See "MD\&A-Capital Management-Dividend Policy and Stock Purchases" for more information.

## Business Segment Expectations

Credit Card: In our Domestic Card business, we expect the full-year 2017 charge-off rate will be in the high $4 \%$ s to around $5 \%$, with quarterly variability. We continue to expect the impacts of the upward pressure on charge-offs as new loan balances in our front book season and become a larger proportion of our overall portfolio relative to the older and highly seasoned back book, will moderate in the second half of 2017, with a small impact beyond 2017.

Consumer Banking: In our Consumer Banking business, we expect that the charge-off rate in our auto finance business will increase gradually and the growth we have experienced in that business will moderate. Beginning in the third quarter of 2017 and continuing into 2018, we expect changes in our charge-off practices for certain loans to increase annualized Auto charge-off rates by 15 to 20 basis points, after which the effect begins to reverse over time.

Commercial Banking: In our Commercial Banking business, we expect credit pressures will continue to be focused in our oil field service and taxi medallion lending portfolios.

## CONSOLIDATED RESULTS OF OPERATIONS

The section below provides a comparative discussion of our consolidated financial performance for the second quarter and first six months of 2017 and 2016. We provide a discussion of our business segment results in the following section, "MD\&A—Business Segment Financial Performance." You should read this section together with our "MD\&A-Executive Summary and Business Outlook," where we discuss trends and other factors that we expect will affect our future results of operations.

## Net Interest Income

Net interest income represents the difference between the interest income, including certain fees, earned on our interest-earning assets and the interest expense on our interest-bearing liabilities. Interest-earning assets include loans, investment securities and other interest-earning assets, while our interest-bearing liabilities include interest-bearing deposits, securitized debt obligations,
senior and subordinated notes, and other borrowings. Generally, we include in interest income any past due fees on loans that we deem collectible. Our net interest margin, based on our consolidated results, represents the difference between the yield on our interest-earning assets and the cost of our interest-bearing liabilities, including the notional impact of non-interest-bearing funding. We expect net interest income and our net interest margin to fluctuate based on changes in interest rates and changes in the amount and composition of our interest-earning assets and interest-bearing liabilities.

Table 2 below presents, for each major category of our interest-earning assets and interest-bearing liabilities, the average outstanding balance, interest income earned or interest expense incurred, and average yield for the second quarter and first six months of 2017 and 2016.

## Table 2: Average Balances, Net Interest Income and Net Interest Margin

| (Dollars in millions) | Three Months Ended June 30, |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2017 |  |  |  | 2016 |  |  |  |
|  | Average Balance | Interest Income/ Expense |  | Average Yield/ Rate | Average Balance | Interest Income/ Expense |  | Average Yield/ Rate |
| Assets: |  |  |  |  |  |  |  |  |
| Interest-earning assets: |  |  |  |  |  |  |  |  |
| Loans: ${ }^{(1)}$ |  |  |  |  |  |  |  |  |
| Credit card | \$ 100,043 | \$ | 3,787 | 15.14\% | \$ 94,374 | \$ | 3,420 | 14.50\% |
| Consumer banking | 74,644 |  | 1,223 | 6.55 | 71,170 |  | 1,116 | 6.27 |
| Commercial banking ${ }^{(2)}$ | 68,220 |  | 647 | 3.79 | 65,872 |  | 567 | 3.44 |
| Other ${ }^{(3)}$ | 60 |  | 12 | 80.00 | 80 |  | 45 | 225.00 |
| Total loans, including loans held for sale | 242,967 |  | 5,669 | 9.33 | 231,496 |  | 5,148 | 8.90 |
| Investment securities | 68,857 |  | 433 | 2.52 | 65,754 |  | 405 | 2.46 |
| Cash equivalents and other interest-earning assets | 6,254 |  | 26 | 1.66 | 5,514 |  | 18 | 1.31 |
| Total interest-earning assets | 318,078 |  | 6,128 | 7.71 | 302,764 |  | 5,571 | 7.36 |
| Cash and due from banks | 3,314 |  |  |  | 3,129 |  |  |  |
| Allowance for loan and lease losses | $(6,982)$ |  |  |  | $(5,425)$ |  |  |  |
| Premises and equipment, net | 3,855 |  |  |  | 3,645 |  |  |  |
| Other assets | 31,626 |  |  |  | 30,366 |  |  |  |
| Total assets | \$ 349,891 |  |  |  | \$ 334,479 |  |  |  |
| Liabilities and stockholders' equity: |  |  |  |  |  |  |  |  |
| Interest-bearing liabilities: ${ }^{(3)}$ |  |  |  |  |  |  |  |  |
| Deposits | \$ 214,412 | \$ | 382 | 0.71\% | \$ 195,641 | \$ | 292 | 0.60\% |
| Securitized debt obligations | 18,400 |  | 82 | 1.78 | 15,226 |  | 47 | 1.23 |
| Senior and subordinated notes | 27,821 |  | 179 | 2.57 | 21,717 |  | 111 | 2.04 |
| Other borrowings and liabilities | 3,656 |  | 12 | 1.31 | 18,255 |  | 28 | 0.61 |
| Total interest-bearing liabilities | 264,289 |  | 655 | 0.99 | 250,839 |  | 478 | 0.76 |
| Non-interest-bearing deposits | 26,138 |  |  |  | 25,505 |  |  |  |
| Other liabilities | 10,459 |  |  |  | 9,201 |  |  |  |
| Total liabilities | 300,886 |  |  |  | 285,545 |  |  |  |
| Stockholders' equity | 49,005 |  |  |  | 48,934 |  |  |  |
| Total liabilities and stockholders' equity | \$ 349,891 |  |  |  | \$ 334,479 |  |  |  |
| Net interest income/spread |  | \$ | 5,473 | 6.72 |  | \$ | 5,093 | 6.60 |
| Impact of non-interest-bearing funding |  |  |  | 0.16 |  |  |  | 0.13 |
| Net interest margin |  |  |  | 6.88\% |  |  |  | 6.73\% |


|  |  |  | Six Months Ended June 30, |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |

[^1]Net interest income increased by $\$ 380$ million to $\$ 5.5$ billion in the second quarter of 2017 compared to the second quarter of 2016 and increased by $\$ 798$ million to $\$ 10.9$ billion in the first six months of 2017 compared to the first six months of 2016 . Net interest margin increased by 15 basis points to $6.88 \%$ in the second quarter of 2017 compared to the second quarter of 2016 and increased by 14 basis points to $6.88 \%$ in the first six months of 2017 compared to the first six months of 2016. These increases were primarily driven by:

- growth in our auto and domestic credit card loan portfolios; and
- higher yields as a result of higher interest rates.

These increases were partially offset by:

- higher interest expense due to higher interest rates and growth in our interest-bearing liabilities; and
- one less day in the first six months of 2017.

Table 3 displays the change in our net interest income between periods and the extent to which the variance is attributable to:

- changes in the volume of our interest-earning assets and interest-bearing liabilities; or
- changes in the interest rates related to these assets and liabilities.

Table 3: Rate/Volume Analysis of Net Interest Income ${ }^{(1)}$

| (Dollars in millions) | Three Months Ended June 30, |  |  |  |  |  | Six Months Ended June 30, |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2017 vs. 2016 |  |  |  |  |  | 2017 vs. 2016 |  |  |  |  |  |
|  | TotalVariance |  | Volume |  | Rate |  | Total Variance |  | Volume |  | Rate |  |
| Interest income: |  |  |  |  |  |  |  |  |  |  |  |  |
| Loans: |  |  |  |  |  |  |  |  |  |  |  |  |
| Credit card | \$ | 367 | \$ | 210 | \$ | 157 | \$ | 764 | \$ | 509 | \$ | 255 |
| Consumer banking |  | 107 |  | 56 |  | 51 |  | 209 |  | 104 |  | 105 |
| Commercial banking ${ }^{(2)}$ |  | 80 |  | 21 |  | 59 |  | 155 |  | 53 |  | 102 |
| Other |  | (33) |  | (9) |  | (24) |  | (66) |  | (23) |  | (43) |
| Total loans, including loans held for sale |  | 521 |  | 278 |  | 243 |  | 1,062 |  | 643 |  | 419 |
| Investment securities |  | 28 |  | 19 |  | 9 |  | 29 |  | 39 |  | (10) |
| Cash equivalents and other interest-earning assets |  | 8 |  | 3 |  | 5 |  | 19 |  | 5 |  | 14 |
| Total interest income |  | 557 |  | 300 |  | 257 |  | 1,110 |  | 687 |  | 423 |
| Interest expense: |  |  |  |  |  |  |  |  |  |  |  |  |
| Deposits |  | 90 |  | 29 |  | 61 |  | 160 |  | 59 |  | 101 |
| Securitized debt obligations |  | 35 |  | 11 |  | 24 |  | 56 |  | 17 |  | 39 |
| Senior and subordinated notes |  | 68 |  | 35 |  | 33 |  | 111 |  | 49 |  | 62 |
| Other borrowings and liabilities |  | (16) |  | (22) |  | 6 |  | (15) |  | (29) |  | 14 |
| Total interest expense |  | 177 |  | 53 |  | 124 |  | 312 |  | 96 |  | 216 |
| Net interest income | \$ | 380 | \$ | 247 | \$ | 133 | \$ | 798 | \$ | 591 | \$ | 207 |

[^2]
## Non-Interest Income

Non-interest income primarily consists of interchange fees net of rewards expense, service charges and other customer-related fees and other non-interest income. Other non-interest income includes the pre-tax net benefit (provision) for mortgage representation and warranty losses related to continuing operations, gains and losses on free-standing derivatives not accounted for in hedge accounting relationships and hedge ineffectiveness.

Table 4 displays the components of non-interest income for the second quarter and first six months of 2017 and 2016.
Table 4: Non-Interest Income

| (Dollars in millions) | Three Months Ended June 30, |  |  |  | Six Months Ended June 30, |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2017 |  | $2016{ }^{(1)}$ |  | 2017 |  | $2016{ }^{(1)}$ |  |
| Interchange fees, net | \$ | 676 | \$ | 621 | \$ | 1,246 | \$ | 1,225 |
| Service charges and other customer-related fees |  | 418 |  | 393 |  | 789 |  | 816 |
| Net securities gains (losses) |  | (4) |  | - |  | (4) |  | (8) |
| Other non-interest income: |  |  |  |  |  |  |  |  |
| Benefit for mortgage representation and warranty losses ${ }^{(2)}$ |  | - |  | 1 |  | 25 |  | 2 |
| Net fair value gains on free-standing derivatives |  | 23 |  | 22 |  | 40 |  | 52 |
| Other |  | 118 |  | 124 |  | 196 |  | 238 |
| Total other non-interest income |  | 141 |  | 147 |  | 261 |  | 292 |
| Total non-interest income | \$ | 1,231 | \$ | 1,161 | \$ | 2,292 | \$ | 2,325 |

(1) We made certain non-interest income reclassifications in the fourth quarter of 2016 to conform to the current period presentation. The primary net effects of the reclassifications compared to previously reported results were (i) an increase to Service charges and other customer-related fees of $\$ 22$ million and $\$ 41$ million for the three and six months ended June 30, 2016, respectively; and (ii) a decrease to Other non-interest income of $\$ 29$ million and $\$ 56$ million for the three and six months ended June 30, 2016, respectively. We have also consolidated the Non-interest income presentation of Other-than-temporary impairment ("OTTI") with net realized gains or losses from investment securities into a new Net securities gains (losses) line. See Note $1-$ Summary of Significant Accounting Policies in our 2016 Form 10-K for additional information.
(2) Represents the benefit for mortgage representation and warranty losses recorded in continuing operations.

Non-interest income increased by $\$ 70$ million to $\$ 1.2$ billion in the second quarter of 2017 compared to the second quarter of 2016 primarily due to an increase in gross interchange fees driven by higher purchase volume. This increase was partially offset by higher rewards expense due to higher purchase volume and the continued expansion of our rewards franchise, net of the impact of updated rewards cost estimates.

Non-interest income decreased by $\$ 33$ million to $\$ 2.3$ billion in the first six months of 2017 compared to the first six months of 2016 primarily driven by:

- lower service charges and other customer-related fees primarily due to the exit of our legacy payment protection products in our Domestic Card business during the first quarter of 2016; and
- higher rewards expense due to higher purchase volume and the continued expansion of our rewards franchise, net of the impact of updated rewards cost estimates.

These decreases were partially offset by an increase in gross interchange fees driven by higher purchase volume.

## Provision for Credit Losses

Our provision for credit losses in each period is driven by net charge-offs, changes to the allowance for loan and lease losses and changes to the reserve for unfunded lending commitments. We recorded a provision for credit losses of $\$ 1.8$ billion and $\$ 3.8$ billion in the second quarter and first six months of 2017, respectively, compared to $\$ 1.6$ billion and $\$ 3.1$ billion in the second quarter and first six months of 2016, respectively. The provision for credit losses as a percentage of net interest income was $32.9 \%$ and $34.6 \%$ in the second quarter and first six months of 2017, respectively, compared to $31.3 \%$ and $30.7 \%$ in the second quarter and first six months of 2016, respectively.

Our provision for credit losses increased by $\$ 208$ million in the second quarter of 2017 compared to the second quarter of 2016 primarily driven by:

- higher charge-offs in our domestic credit card loan portfolio due to growth and portfolio seasoning;
- higher charge-offs in our auto loan portfolio due to recent growth and declines in used car auction prices; and
- higher charge-offs in our commercial loan portfolio as a result of continued adverse industry conditions impacting certain segments of our oil and gas lending portfolio and our taxi medallion lending portfolio.

These increases were partially offset by smaller allowance builds in our domestic credit card and commercial loan portfolios.
Our provision for credit losses increased by $\$ 673$ million in the first six months of 2017 compared to the first six months of 2016 primarily driven by:

- higher charge-offs in our domestic credit card loan portfolio due to growth and portfolio seasoning;
- a larger allowance build in our domestic credit card loan portfolio due to increasing loss expectations on recent vintages and portfolio seasoning; and
- higher charge-offs in our auto loan portfolio due to recent growth and declines in used car auction prices.

These increases were partially offset by an allowance release in our Commercial Banking business in the first six months of 2017 compared to a build in the first six months of 2016, primarily reflecting charge-offs in our taxi medallion lending portfolio and certain segments of our oil and gas lending portfolio.

We provide additional information on the provision for credit losses and changes in the allowance for loan and lease losses within "MD\&A-Credit Risk Profile," "Note 4-Loans" and "Note 5-Allowance for Loan and Lease Losses and Reserve for Unfunded Lending Commitments." For information on the allowance methodology for each of our loan categories, see "Note 1-Summary of Significant Accounting Policies" in our 2016 Form 10-K.

## Non-Interest Expense

Non-interest expense consists of operating expenses related to continuing operations, such as salaries and associate benefits, occupancy and equipment costs, professional services, communications and data processing expenses and other non-interest expenses, as well as marketing costs and amortization of intangibles.

Table 5 displays the components of non-interest expense for the second quarter and first six months of 2017 and 2016.
Table 5: Non-Interest Expense

| (Dollars in millions) | Three Months Ended June 30, |  |  |  | Six Months Ended June 30, |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2017 |  | $2016{ }^{(1)}$ |  | 2017 |  | $2016{ }^{(1)}$ |  |
| Salaries and associate benefits | \$ | 1,383 | \$ | 1,279 | \$ | 2,854 | \$ | 2,549 |
| Occupancy and equipment |  | 474 |  | 465 |  | 945 |  | 923 |
| Marketing |  | 435 |  | 415 |  | 831 |  | 843 |
| Professional services |  | 279 |  | 264 |  | 526 |  | 505 |
| Communications and data processing |  | 289 |  | 302 |  | 577 |  | 582 |
| Amortization of intangibles |  | 61 |  | 95 |  | 123 |  | 196 |
| Other non-interest expense: |  |  |  |  |  |  |  |  |
| Collections |  | 88 |  | 77 |  | 173 |  | 158 |
| Fraud losses |  | 78 |  | 89 |  | 156 |  | 179 |
| Bankcard, regulatory and other fee assessments |  | 146 |  | 129 |  | 282 |  | 236 |
| Other |  | 181 |  | 180 |  | 381 |  | 347 |
| Total other non-interest expense |  | 493 |  | 475 |  | 992 |  | 920 |
| Total non-interest expense | \$ | 3,414 | \$ | 3,295 | \$ | 6,848 | \$ | 6,518 |

${ }^{(1)}$ We made certain non-interest expense reclassifications in the fourth quarter of 2016 to conform to the current period presentation. The net effects of the reclassifications for the three and six months ended June 30, 2016 compared to previously reported results were increases to Communications and data processing expense of $\$ 40$ million and $\$ 77$ million, respectively, with corresponding decreases to Professional services. See "Note 1 -Summary of Significant Accounting Policies" in our 2016 Form 10-K for additional information.

Non-interest expense increased by $\$ 119$ million to $\$ 3.4$ billion in the second quarter of 2017 compared to the second quarter of 2016 , and increased by $\$ 330$ million to $\$ 6.8$ billion in the first six months of 2017 compared to the first six months of 2016 primarily due to higher operating expenses associated with loan growth, as well as continued investments in technology and infrastructure, partially offset by lower amortization of intangibles.

## Income (Loss) from Discontinued Operations, Net of Tax

Income (loss) from discontinued operations consists of results from the discontinued mortgage origination operations of our wholesale mortgage banking unit, GreenPoint Mortgage Funding, Inc. ("GreenPoint") and the discontinued manufactured housing operations of GreenPoint Credit, LLC, a subsidiary of GreenPoint, both of which were acquired as part of the North Fork Bancorporation, Inc. ("North Fork") acquisition in December 2006. Loss from discontinued operations, net of tax, was $\$ 11$ million in the second quarter of 2017, compared to a loss of $\$ 1$ million in the second quarter of 2016. Income from discontinued operations, net of tax, was $\$ 4$ million in the first six months of 2017 , compared to a loss of $\$ 6$ million in the first six months of 2016.

We recorded a provision related to our mortgage representation and warranty reserve, net of tax, of $\$ 2$ million ( $\$ 6$ million before tax) in the second quarter of 2017 primarily driven by settlement activities. We recorded a release, net of tax, of $\$ 40$ million ( $\$ 61$ million before tax) in the first six months of 2017 primarily as a result of favorable legal developments, partially offset by a pretax charge of $\$ 42$ million to record a liability related to our contingent obligation to exercise certain mandatory clean-up calls associated with manufactured housing securitizations undertaken by GreenPoint Credit, LLC.

We provide additional information on the discontinued operations in "Note 2-Discontinued Operations" and on the net benefit (provision) for mortgage representation and warranty losses and the related reserve for representation and warranty claims in "MD\&A-Consolidated Balance Sheets Analysis-Mortgage Representation and Warranty Reserve" and "Note 14Commitments, Contingencies, Guarantees and Others."

## Income Taxes

We recorded income tax provisions of $\$ 443$ million ( $29.7 \%$ effective income tax rate) and $\$ 757$ million ( $29.1 \%$ effective income tax rate) in the second quarter and first six months of 2017, respectively, compared to $\$ 424$ million ( $31.0 \%$ effective income tax rate) and $\$ 876$ million ( $30.9 \%$ effective income tax rate) in the second quarter and first six months of 2016, respectively. Our effective tax rate on income from continuing operations varies between periods due, in part, to fluctuations in our pre-tax earnings, which affects the relative tax benefit of tax-exempt income, tax credits and other permanent tax items.

The decrease in our effective income tax rate in the second quarter of 2017 from the second quarter of 2016 was primarily due to increases in the relative benefit of tax exempt income and tax credits, partially offset by reduced benefits associated with foreign earnings.

The decrease in our effective income tax rate in the first six months of 2017 from the first six months of 2016 was primarily due to:

- increases in the relative benefit of tax exempt income and tax credits; and
- increased discrete tax benefits recorded in the first six months of 2017.

These decreases were partially offset by reduced benefits associated with foreign earnings.
We provide additional information on items affecting our income taxes and effective tax rate under "Note 16-Income Taxes" in our 2016 Form 10-K.

## CONSOLIDATED BALANCE SHEETS ANALYSIS

Total assets decreased by $\$ 6.4$ billion to $\$ 350.6$ billion as of June 30, 2017 from December 31, 2016 primarily due to:

- a decrease in cash, cash equivalents and restricted cash for securitization investors, partially offset by an increase in investment securities due to purchases outpacing paydowns; and
- a decrease in loans held for investment primarily due to expected seasonal paydowns in our domestic credit card loan portfolio and run-off of our acquired home loan portfolio, partially offset by growth in our auto, domestic credit card and commercial loan portfolios.

Total liabilities decreased by $\$ 8.1$ billion to $\$ 301.5$ billion as of June 30, 2017 from December 31, 2016 primarily driven by:

- a decrease in other debt primarily attributable to a decrease in our FHLB advances outstanding, partially offset by an increase in our senior and subordinated notes.

Stockholders' equity increased by $\$ 1.6$ billion to $\$ 49.1$ billion as of June 30, 2017 from December 31, 2016 primarily due to:

- our net income of $\$ 1.8$ billion in the first six months of 2017 .

This increase was partially offset by:

- $\quad \$ 526$ million of dividend payments to our common and preferred stockholders; and
- $\quad \$ 219$ million of treasury stock purchases.

The following is a discussion of material changes in the major components of our assets and liabilities during the first six months of 2017. Period-end balance sheet amounts may vary from average balance sheet amounts due to liquidity and balance sheet management activities that are intended to ensure the adequacy of capital while managing the liquidity requirements of the Company and our customers and our market risk exposure in accordance with our risk appetite.

## Investment Securities

Our investment portfolio consists primarily of the following: U.S. Treasury securities; U.S. government-sponsored enterprise or agency ("Agency") and non-agency residential mortgage-backed securities ("RMBS"); Agency and non-agency commercial mortgage-backed securities ("CMBS"); other asset-backed securities ("ABS"); and other securities. The carrying value of our investments in U.S. Treasury and Agency securities represented $91 \%$ of our total investment securities as of both June 30, 2017 and December 31, 2016.

The fair value of our available for sale securities portfolio was $\$ 41.1$ billion as of June 30, 2017, an increase of $\$ 383$ million from December 31, 2016. The increase in fair value was primarily due to a decline in interest rates. The fair value of our held to maturity securities portfolio was $\$ 28.4$ billion as of June 30, 2017, an increase of $\$ 2.2$ billion from December 31, 2016. The increase in the fair value was primarily driven by purchases outpacing paydowns.

Gross unrealized gains on our available for sale securities portfolio increased to $\$ 647$ million as of June 30,2017 compared to $\$ 539$ million as of December 31, 2016, and gross unrealized losses on this portfolio decreased to $\$ 360$ million as of June 30, 2017 compared to $\$ 535$ million as of December 31, 2016, both of which were primarily due to declines in interest rates. Of the $\$ 360$ million gross unrealized losses as of June 30, 2017, $\$ 107$ million was related to securities that had been in a loss position for 12 months or longer.

Table 6 presents the amortized cost, carrying value and fair value for the major categories of our investment securities portfolio as of June 30, 2017 and December 31, 2016.

## Table 6: Investment Securities

| (Dollars in millions) | June 30, 2017 |  |  | December 31, 2016 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Amortized Cost | Fair Value |  | $\underset{\text { Cost }}{\text { Amortized }}$ |  | Fair Value |  |
| Investment securities available for sale: |  |  |  |  |  |  |  |
| U.S. Treasury securities | \$ 5,218 | \$ | 5,215 | \$ | 5,103 | \$ | 5,065 |
| RMBS: |  |  |  |  |  |  |  |
| Agency ${ }^{(1)}$ | 26,693 |  | 26,511 |  | 26,830 |  | 26,527 |
| Non-agency | 2,163 |  | 2,617 |  | 2,349 |  | 2,722 |
| Total RMBS | 28,856 |  | 29,128 |  | 29,179 |  | 29,249 |
| CMBS: |  |  |  |  |  |  |  |
| Agency ${ }^{(1)}$ | 3,136 |  | 3,124 |  | 3,335 |  | 3,304 |
| Non-agency | 1,777 |  | 1,802 |  | 1,676 |  | 1,684 |
| Total CMBS | 4,913 |  | 4,926 |  | 5,011 |  | 4,988 |
| Other $\mathrm{ABS}^{(2)}$ | 626 |  | 627 |  | 714 |  | 714 |
| Other securities ${ }^{(3)}$ | 1,220 |  | 1,224 |  | 726 |  | 721 |
| Total investment securities available for sale | \$ 40,833 | \$ | 41,120 | \$ | 40,733 | \$ | 40,737 |
| (Dollars in millions) | $\begin{gathered} \text { Carrying } \\ \text { Value } \end{gathered}$ |  | Fair Value |  | $\begin{aligned} & \text { arrying } \\ & \text { Value } \end{aligned}$ |  | Fair Value |
| Investment securities held to maturity: |  |  |  |  |  |  |  |
| U.S. Treasury securities | \$ 199 | \$ | 199 | \$ | 199 | \$ | 199 |
| Agency RMBS | 23,910 |  | 24,537 |  | 22,125 |  | 22,573 |
| Agency CMBS | 3,611 |  | 3,687 |  | 3,388 |  | 3,424 |
| Total investment securities held to maturity | \$ 27,720 | \$ | 28,423 | \$ | 25,712 | \$ | 26,196 |

[^3]
## Credit Ratings

Our portfolio of investment securities continues to be concentrated in securities that generally have high credit ratings and low credit risk, such as securities issued and guaranteed by the U.S. Treasury and Agencies. As of June 30, 2017 and December 31, 2016, approximately $96 \%$ and $95 \%$ of our total investment securities portfolio was rated AA+ or its equivalent, or better, respectively, while approximately $4 \%$ was below investment grade as of both June 30, 2017 and December 31, 2016. We categorize the credit ratings of our investment securities based on the lower of credit ratings as issued by Standard \& Poor's Ratings Services ("S\&P") and Moody's Investors Service ("Moody's").

Table 7 provides information on the credit ratings of our non-agency RMBS, non-agency CMBS, other ABS and other securities in our portfolio as of June 30, 2017 and December 31, 2016.

Table 7: Non-Agency Investment Securities Credit Ratings

| (Dollars in millions) | June 30, 2017 |  |  |  | December 31, 2016 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Fair Value | AAA | Other Investment Grade | $\begin{gathered} \text { Below } \\ \text { Investment } \\ \text { Grade }^{(1)} \end{gathered}$ | Fair Value | AAA | Other Investment Grade | BelowInvestment <br> Grade(1) |
| Non-agency RMBS | \$2,617 | - | 3\% | 97\% | \$2,722 | - | 3\% | 97\% |
| Non-agency CMBS | 1,802 | 100\% | - | - | 1,684 | 100\% | - | - |
| Other ABS | 627 | 99 | 1 | - | 714 | 99 | 1 | - |
| Other securities | 1,224 | 79 | 13 | 8 | 721 | 62 | 25 | 13 |

${ }^{(1)}$ Includes investment securities that were not rated.
For additional information on our investment securities, see "Note 3-Investment Securities."

## Loans Held for Investment

Total loans held for investment ("HFI") consists of both unsecuritized loans and loans held in our consolidated trusts. Table 8 summarizes the carrying value of our portfolio of loans held for investment by portfolio segment, net of the allowance for loan and lease losses, as of June 30, 2017 and December 31, 2016.

Table 8: Loans Held for Investment

| (Dollars in millions) | June 30, 2017 |  |  |  |  | December 31, 2016 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Loans | Allowance |  | Net Loans |  | Loans | Allowance |  | Net Loans |
| Credit Card | \$ 101,590 | \$ | 5,210 | \$ | 96,380 | \$ 105,552 | \$ | 4,606 | \$ 100,946 |
| Consumer Banking | 74,973 |  | 1,199 |  | 73,774 | 73,054 |  | 1,102 | 71,952 |
| Commercial Banking | 67,672 |  | 758 |  | 66,914 | 66,916 |  | 793 | 66,123 |
| Other | 67 |  | 3 |  | 64 | 64 |  | 2 | 62 |
| Total | \$ 244,302 | \$ | 7,170 |  | 37,132 | \$ 245,586 | \$ | 6,503 | \$ 239,083 |

Loans held for investment decreased by $\$ 1.3$ billion to $\$ 244.3$ billion as of June 30, 2017 from December 31, 2016 primarily due to expected seasonal paydowns in our domestic credit card loan portfolio and run-off of our acquired home loan portfolio, partially offset by growth in our auto, domestic credit card and commercial loan portfolios.

We provide additional information on the composition of our loan portfolio and credit quality below in "MD\&A—Credit Risk Profile," "MD\&A—Consolidated Results of Operations" and "Note 4-Loans."

## Deposits

Our deposits represent our largest source of funding for our operations and provide a consistent source of low-cost funds. Total deposits were substantially flat at $\$ 239.8$ billion as of June 30 , 2017. We provide information on the composition of our deposits, average outstanding balances, interest expense and yield in "MD\&A—Liquidity Risk Profile."

## Securitized Debt Obligations

Securitized debt obligations decreased to $\$ 18.4$ billion as of June 30, 2017 from $\$ 18.8$ billion as of December 31, 2016, as debt maturities exceeded issuances during the first six months of 2017. We provide additional information on our borrowings in "MD\&A —Liquidity Risk Profile" and in "Note 8—Deposits and Borrowings."

## Other Debt

Other debt, which consists primarily of federal funds purchased and securities loaned or sold under agreements to repurchase, senior and subordinated notes, and Federal Home Loan Banks ("FHLB") advances, totaled $\$ 31.6$ billion as of June 30, 2017, of which $\$ 30.6$ billion represented long-term debt and the remainder represented short-term borrowings. Other debt totaled $\$ 41.6$ billion as of December 31, 2016, of which $\$ 40.6$ billion represented long-term debt and the remainder represented short-term borrowings.

The decrease in other debt of $\$ 10.0$ billion in the first six months of 2017 was primarily attributable to a decrease in our FHLB advances outstanding, partially offset by an increase in our senior and subordinated notes. We provide additional information on our borrowings in "MD\&A—Liquidity Risk Profile" and in "Note 8-Deposits and Borrowings."

## Mortgage Representation and Warranty Reserve

We acquired three subsidiaries that originated residential mortgage loans and sold these loans to various purchasers, including purchasers who created securitization trusts. These subsidiaries are Capital One Home Loans, LLC, which was acquired in February 2005; GreenPoint, which was acquired in December 2006 as part of the North Fork acquisition; and Chevy Chase Bank, F.S.B. ("CCB"), which was acquired in February 2009 and subsequently merged into CONA.

We have established representation and warranty reserves for losses associated with the mortgage loans sold by each subsidiary that we consider to be both probable and reasonably estimable, including both litigation and non-litigation liabilities. These reserves are reported on our consolidated balance sheets as a component of other liabilities. The reserve setting process relies heavily on estimates, which are inherently uncertain, and requires judgment. We evaluate these estimates on a quarterly basis. We build our representation and warranty reserves through the provision for mortgage representation and warranty losses, which we report in our consolidated statements of income as a component of non-interest income for loans originated and sold by CCB and Capital One Home Loans, LLC and as a component of discontinued operations for loans originated and sold by GreenPoint. The aggregate reserve for all three entities decreased to $\$ 521$ million as of June 30, 2017 compared to $\$ 630$ million as of December 31, 2016 primarily due to favorable legal developments.

As part of our business planning processes, we have considered various outcomes relating to the future representation and warranty liabilities of our subsidiaries that are possible but do not rise to the level of being both probable and reasonably estimable outcomes justifying an incremental reserve under applicable accounting standards. Our current best estimate of reasonably possible future losses from representation and warranty claims beyond what was in our reserve as of June 30, 2017 is approximately $\$ 1.3$ billion, a decrease from our estimate of $\$ 1.5$ billion as of December 31, 2016.

We provide additional information related to the representation and warranty reserve, including factors that may impact the adequacy of the reserve and the ultimate amount of losses incurred by our subsidiaries, in "Note 14 -Commitments, Contingencies, Guarantees and Others."

## OFF-BALANCE SHEET ARRANGEMENTS

In the ordinary course of business, we engage in certain activities that are not reflected on our consolidated balance sheets, generally referred to as off-balance sheet arrangements. These activities typically involve transactions with unconsolidated variable interest entities ("VIEs") as well as other arrangements, such as letter of credits, loan commitments and guarantees, to meet the financing needs of our customers and support their ongoing operations. We provide additional information regarding these types of activities in the "MD\&A-Liquidity Risk Profile" as well as "Note 6-Variable Interest Entities and Securitizations" and "Note 14 Commitments, Contingencies, Guarantees and Others."

## BUSINESS SEGMENT FINANCIAL PERFORMANCE

Our principal operations are organized into three major business segments, which are defined based on the products and services provided or the type of customer served: Credit Card, Consumer Banking and Commercial Banking. The operations of acquired businesses have been integrated into our existing business segments. Certain activities that are not part of a segment, such as management of our corporate investment portfolio and asset/liability management by our centralized Corporate Treasury group, are included in the Other category.

The results of our individual businesses, which we report on a continuing operations basis, reflect the manner in which management evaluates performance and makes decisions about funding our operations and allocating resources. We provide additional information on the allocation methodologies used to derive our business segment results in "Note 18-Business Segments" in our 2016 Form 10-K.

We refer to the business segment results derived from our internal management accounting and reporting process as our "managed" presentation, which differs in some cases from our reported results prepared based on U.S. GAAP. There is no comprehensive authoritative body of guidance for management accounting equivalent to U.S. GAAP; therefore, the managed presentation of our business segment results may not be comparable to similar information provided by other financial services companies. In addition, our individual business segment results should not be used as a substitute for comparable results determined in accordance with U.S. GAAP.

Below we summarize our business segment results for the second quarter and first six months of 2017 and 2016 and provide a comparative discussion of these results, as well as changes in our financial condition and credit performance metrics as of June 30, 2017 compared to December 31, 2016. We provide a reconciliation of our total business segment results to our reported consolidated results in "Note 13 -Business Segments." Additionally, we provide information on the outlook for each of our business segments as described above in "MD\&A—Executive Summary and Business Outlook."

## Business Segment Financial Performance

Table 9 summarizes our business segment results, which we report based on revenue and income from continuing operations, for the second quarter and first six months of 2017 and 2016. We provide information on the allocation methodologies used to derive our business segment results in "Note 18—Business Segments" in our 2016 Form 10-K. We also provide a reconciliation of our total business segment results to our consolidated U.S. GAAP results in "Note 13-Business Segments" of this Report.

Table 9: Business Segment Results

| (Dollars in millions) | Three Months Ended June 30, |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2017 |  |  |  |  | 2016 |  |  |  |  |  |
|  | Total Net <br> Revenue ${ }^{(1)}$ |  | Net Income ${ }^{(2)}$ |  |  | Total Net Revenue ${ }^{(1)}$ |  |  | Net Income ${ }^{(2)}$ |  |  |
|  | Amount | $\begin{aligned} & \mathbf{\%} \text { of } \\ & \text { Total } \end{aligned}$ | Amount |  | $\begin{aligned} & \mathbf{\%} \text { of } \\ & \text { Total } \end{aligned}$ | Amount |  | $\begin{aligned} & \text { \% of } \\ & \text { Total } \end{aligned}$ | Amount |  | $\begin{aligned} & \text { \% of } \\ & \text { Total } \end{aligned}$ |
| Credit Card | \$ 4,169 | 63\% | \$ | 553 | 53\% | \$ | 3,904 | 62\% | \$ | 484 | 51\% |
| Consumer Banking | 1,761 | 26 |  | 276 | 26 |  | 1,614 | 26 |  | 257 | 27 |
| Commercial Banking ${ }^{(3)}$ | 752 | 11 |  | 146 | 14 |  | 688 | 11 |  | 138 | 15 |
| Other ${ }^{(4)}$ | 22 | - |  | 72 | 7 |  | 48 | 1 |  | 64 | 7 |
| Total | \$ 6,704 | 100\% | \$ | 1,047 | 100\% | \$ | 6,254 | 100\% | \$ | 943 | 100\% |


| (Dollars in millions) | Six Months Ended June 30, |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2017 |  |  |  |  | 2016 |  |  |  |  |
|  | Total Net <br> Revenue ${ }^{(1)}$ |  | Net Income ${ }^{(2)}$ |  |  | Total Net <br> Revenue ${ }^{(1)}$ |  | Net Income ${ }^{(2)}$ |  |  |
|  | Amount | $\begin{aligned} & \% \text { of } \\ & \text { Total } \end{aligned}$ | Amount |  | $\begin{aligned} & \mathbf{\%} \text { of } \\ & \text { Total } \end{aligned}$ | Amount | $\begin{aligned} & \text { \% of } \\ & \text { Total } \end{aligned}$ | Amount |  | $\begin{aligned} & \text { \% of } \\ & \text { Total } \end{aligned}$ |
| Credit Card | \$ 8,253 | 63\% | \$ | 824 | 45\% | \$ 7,784 | 62\% | \$ | 1,093 | 56\% |
| Consumer Banking | 3,473 | 26 |  | 524 | 28 | 3,225 | 26 |  | 506 | 26 |
| Commercial Banking ${ }^{(3)}$ | 1,476 | 11 |  | 359 | 20 | 1,343 | 11 |  | 205 | 10 |
| Other ${ }^{(4)}$ | 37 | - |  | 135 | 7 | 122 | 1 |  | 157 | 8 |
| Total | \$13,239 | 100\% | \$ | 1,842 | 100\% | \$ 12,474 | 100\% | \$ | 1,961 | 100\% |

(1) Total net revenue consists of net interest income and non-interest income.
${ }^{(2)}$ Net income for our business segments and the Other category is based on income (loss) from continuing operations, net of tax.
(3) Some of our tax-related commercial investments generate tax-exempt income or tax credits. Accordingly, we make certain reclassifications within our Commercial Banking business results to present revenues and yields on a taxable-equivalent basis, calculated assuming an effective tax rate approximately equal to our federal statutory tax rate of $35 \%$ with offsetting reclassifications to the Other category.
(4) The Other category includes the residual impact of the allocation of our centralized Corporate Treasury group activities, unallocated corporate expenses that do not directly support the operations of the business segments and other items as described in "Note 18—Business Segments" in our 2016 Form 10-K.

## Credit Card Business

The primary sources of revenue for our Credit Card business are interest income, net interchange income and fees collected from customers. Expenses primarily consist of the provision for credit losses, operating costs and marketing expenses.

Our Credit Card business generated net income from continuing operations of $\$ 553$ million and $\$ 824$ million in the second quarter and first six months of 2017 , respectively, and $\$ 484$ million and $\$ 1.1$ billion in the second quarter and first six months of 2016, respectively.

Table 10 summarizes the financial results of our Credit Card business and displays selected key metrics for the periods indicated.

## Table 10: Credit Card Business Results

| (Dollars in millions, except as noted) | Three Months Ended June 30, |  |  |  |  | Six Months Ended June 30, |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2017 |  | 2016 |  | Change | 2017 |  | 2016 |  | Change |
| Selected income statement data: |  |  |  |  |  |  |  |  |  |  |
| Net interest income | \$ | 3,294 | \$ | 3,045 | 8\% | \$ | 6,640 | \$ | 6,078 | 9\% |
| Non-interest income |  | 875 |  | 859 | 2 |  | 1,613 |  | 1,706 | (5) |
| Total net revenue ${ }^{(1)}$ |  | 4,169 |  | 3,904 | 7 |  | 8,253 |  | 7,784 | 6 |
| Provision for credit losses |  | 1,397 |  | 1,261 | 11 |  | 3,114 |  | 2,332 | 34 |
| Non-interest expense |  | 1,918 |  | 1,883 | 2 |  | 3,847 |  | 3,746 | 3 |
| Income from continuing operations before income taxes |  | 854 |  | 760 | 12 |  | 1,292 |  | 1,706 | (24) |
| Income tax provision |  | 301 |  | 276 | 9 |  | 468 |  | 613 | (24) |
| Income from continuing operations, net of tax | \$ | 553 | \$ | 484 | 14 | \$ | 824 | \$ | 1,093 | (25) |
| Selected performance metrics: |  |  |  |  |  |  |  |  |  |  |
| Average loans held for investment ${ }^{(2)}$ | \$ | 100,043 | \$ | 94,382 | 6 | \$ | 100,603 | \$ | 93,684 | 7 |
| Average yield on loans held for investment ${ }^{(3)}$ |  | 15.14\% |  | 14.49\% | 65bps |  | 15.06\% |  | 14.55\% | 51bps |
| Total net revenue margin ${ }^{(4)}$ |  | 16.67 |  | 16.55 | 12 |  | 16.41 |  | 16.62 | (21) |
| Net charge-offs | \$ | 1,256 | \$ | 949 | 32\% | \$ | 2,527 | \$ | 1,899 | 33\% |
| Net charge-off rate |  | 5.02\% |  | 4.02\% | 100 bps |  | 5.02\% |  | 4.05\% | 97 bps |
| Purchased credit card relationship ("PCCR") intangible amortization | \$ | 44 | \$ | 67 | (34)\% | \$ | 88 | \$ | 137 | (36)\% |
| Purchase volume ${ }^{(5)}$ |  | 83,079 |  | 78,019 | 6 |  | 156,276 |  | 146,208 | 7 |
| (Dollars in millions, except as noted) |  | June 30, 2017 |  | $\begin{aligned} & \text { cember 31, } \\ & 2016 \end{aligned}$ | Change |  |  |  |  |  |
| Selected period-end data: |  |  |  |  |  |  |  |  |  |  |
| Loans held for investment ${ }^{(2)}$ | \$ | 101,590 | \$ | 105,552 | (4)\% |  |  |  |  |  |
| $30+$ day performing delinquency rate |  | 3.60\% |  | 3.91\% | (31)bps |  |  |  |  |  |
| $30+$ day delinquency rate |  | 3.62 |  | 3.94 | (32) |  |  |  |  |  |
| Nonperforming loan rate ${ }^{(6)}$ |  | 0.03 |  | 0.04 | (1) |  |  |  |  |  |
| Allowance for loan and lease losses | \$ | 5,210 | \$ | 4,606 | 13\% |  |  |  |  |  |
| Allowance coverage ratio ${ }^{(7)}$ |  | 5.13\% |  | 4.36\% | 77 bps |  |  |  |  |  |

[^4]Key factors affecting the results of our Credit Card business for the second quarter and first six months of 2017 compared to the second quarter and first six months of 2016, and changes in financial condition and credit performance between June 30, 2017 and December 31, 2016 include the following:

- Net Interest Income: Net interest income increased by $\$ 249$ million to $\$ 3.3$ billion in the second quarter of 2017 and increased by $\$ 562$ million to $\$ 6.6$ billion in the first six months of 2017 primarily driven by loan growth and higher yields as a result of higher interest rates in our Domestic Card business.
- Non-Interest Income: Non-interest income increased by $\$ 16$ million to $\$ 875$ million in the second quarter of 2017 primarily driven by:
- an increase in gross interchange fees driven by higher purchase volume; and
- the absence of a U.K. PPI Reserve build in the second quarter of 2017.

These increases were partially offset by:

- higher rewards expense due to higher purchase volume and the continued expansion of our rewards franchise, net of the impact of updated rewards cost estimates; and
- the absence of a gain recorded in the second quarter of 2016 related to the exchange of our ownership interest in Visa Europe with Visa Inc. as a result of Visa Inc.'s acquisition of Visa Europe.

Non-interest income decreased by $\$ 93$ million to $\$ 1.6$ billion in the first six months of 2017 primarily driven by:

- higher rewards expense due to higher purchase volume and the continued expansion of our rewards franchise, net of the impact of updated rewards cost estimates;
- lower service charges and other customer-related fees primarily due to the exit of our legacy payment protection products in our Domestic Card business during the first quarter of 2016; and
- the absence of a gain recorded in the second quarter of 2016 related to the exchange of our ownership interest in Visa Europe with Visa Inc. as a result of Visa Inc.'s acquisition of Visa Europe.

These decreases were partially offset by an increase in gross interchange fees driven by higher purchase volume.

- Provision for Credit Losses: The provision for credit losses increased by $\$ 136$ million to $\$ 1.4$ billion in the second quarter of 2017 primarily driven by higher charge-offs due to growth and portfolio seasoning, partially offset by a smaller allowance build in our domestic credit card loan portfolio.

The provision for credit losses increased by $\$ 782$ million to $\$ 3.1$ billion in the first six months of 2017 primarily driven by:

- higher charge-offs due to growth and portfolio seasoning; and
- a larger allowance build in our domestic credit card loan portfolio due to increasing loss expectations on recent vintages and portfolio seasoning.
- Non-Interest Expense: Non-interest expense increased by $\$ 35$ million to $\$ 1.9$ billion in the second quarter of 2017 primarily driven by higher operating expenses associated with loan growth, as well as continued investments in technology and infrastructure. This increase was partially offset by:
- continued improvement in efficiency and scale;
- lower amortization of intangibles; and
- lower other non-interest expense primarily driven by the absence of a U.K. PPI Reserve build in the second quarter of 2017.

Non-interest expense increased by $\$ 101$ million to $\$ 3.8$ billion in the first six months of 2017 primarily driven by higher operating expenses associated with loan growth, as well as continued investments in technology and infrastructure. This increase was partially offset by:

- continued improvement in efficiency and scale;
- lower amortization of intangibles; and
- lower marketing expenses.
- Loans Held for Investment: Period-end loans held for investment decreased by $\$ 4.0$ billion to $\$ 101.6$ billion as of June 30, 2017 from December 31, 2016 primarily due to expected seasonal paydowns, partially offset by continued loan growth in our Domestic Card business. Average loans held for investment increased by $\$ 5.7$ billion to $\$ 100.0$ billion in the second quarter of 2017 compared to the second quarter of 2016 and increased by $\$ 6.9$ billion to $\$ 100.6$ billion in the first six months of 2017 compared to the first six months of 2016 primarily due to growth in our domestic credit card loan portfolio.
- Net Charge-Off and Delinquency Metrics: The net charge-off rate increased by 100 basis points to $5.02 \%$ in the second quarter of 2017 compared to the second quarter of 2016 and increased by 97 basis points to $5.02 \%$ in the first six months of 2017 compared to the first six months of 2016 primarily driven by growth and seasoning of recent domestic credit card loan originations, partially offset by loan balance growth in our domestic credit card loan portfolio. The 30+ day delinquency rate decreased by 32 basis points to $3.62 \%$ as of June 30, 2017 from December 31, 2016 primarily due to seasonally lower delinquency inventories, partially offset by seasonally lower loan balances in our domestic credit card loan portfolio.


## Domestic Card Business

Domestic Card generated net income from continuing operations of $\$ 482$ million and $\$ 760$ million in the second quarter and first six months of 2017, respectively, compared to net income from continuing operations of $\$ 463$ million and $\$ 1.0$ billion in the second quarter and first six months of 2016, respectively. In the second quarter and first six months of 2017 and 2016, Domestic Card accounted for greater than $90 \%$ of total net revenue of our Credit Card business.

Table 10.1 summarizes the financial results for Domestic Card and displays selected key metrics for the periods indicated.
Table 10.1: Domestic Card Business Results

| (Dollars in millions, except as noted) | Three Months Ended June 30, |  |  |  |  | Six Months Ended June 30, |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2017 |  | 2016 |  | Change | 2017 |  | 2016 |  | Change |
| Selected income statement data: |  |  |  |  |  |  |  |  |  |  |
| Net interest income | \$ | 3,011 | \$ | 2,769 | 9\% | \$ | 6,104 | \$ | 5,525 | 10\% |
| Non-interest income |  | 802 |  | 792 | 1 |  | 1,501 |  | 1,566 | (4) |
| Total net revenue ${ }^{(1)}$ |  | 3,813 |  | 3,561 | 7 |  | 7,605 |  | 7,091 | 7 |
| Provision for credit losses |  | 1,327 |  | 1,164 | 14 |  | 2,964 |  | 2,136 | 39 |
| Non-interest expense |  | 1,727 |  | 1,669 | 3 |  | 3,444 |  | 3,340 | 3 |
| Income from continuing operations before income taxes |  | 759 |  | 728 | 4 |  | 1,197 |  | 1,615 | (26) |
| Income tax provision |  | 277 |  | 265 | 5 |  | 437 |  | 588 | (26) |
| Income from continuing operations, net of tax | \$ | 482 | \$ | 463 | 4 | \$ | 760 | \$ | 1,027 | (26) |
| Selected performance metrics: |  |  |  |  |  |  |  |  |  |  |
| Average loans held for investment ${ }^{(2)}$ | \$ | 91,769 | \$ | 85,981 | 7 | \$ | 92,398 | \$ | 85,564 | 8 |
| Average yield on loans held for investment ${ }^{(3)}$ |  | 15.07\% |  | 14.40\% | 67bps |  | 15.04\% |  | 14.41\% | 63bps |
| Total net revenue margin ${ }^{(4)}$ |  | 16.62 |  | 16.57 | 5 |  | 16.46 |  | 16.58 | (12) |
| Net charge-offs | \$ | 1,172 | \$ | 874 | 34\% | \$ | 2,368 | \$ | 1,761 | 34\% |
| Net charge-off rate |  | 5.11\% |  | 4.07\% | 104bps |  | 5.12\% |  | 4.12\% | 100bps |
| PCCR intangible amortization | \$ | 44 | \$ | 67 | (34)\% | \$ | 88 | \$ | 137 | (36)\% |
| Purchase volume ${ }^{(5)}$ |  | 75,781 |  | 71,050 | 7 |  | 142,731 |  | 133,667 | 7 |
| (Dollars in millions, except as noted) |  | une 30, 2017 |  | ember 31, $2016$ | Change |  |  |  |  |  |
| Selected period-end data: |  |  |  |  |  |  |  |  |  |  |
| Loans held for investment ${ }^{(2)}$ | \$ | 92,866 | \$ | 97,120 | (4)\% |  |  |  |  |  |
| $30+$ day delinquency rate |  | 3.63\% |  | 3.95\% | (32)bps |  |  |  |  |  |
| Allowance for loan and lease losses | \$ | 4,825 | \$ | 4,229 | 14\% |  |  |  |  |  |
| Allowance coverage ratio ${ }^{(6)}$ |  | 5.20\% |  | 4.35\% | 85bps |  |  |  |  |  |

${ }^{(1)}$ We recognize billed finance charges and fee income on open-ended loans in accordance with the contractual provisions of the credit arrangements and estimate the uncollectible amount on a quarterly basis. The estimated uncollectible amount of billed finance charges and fees is reflected as a reduction in revenue and is not included in our net charge-offs.
(2) Period-end loans held for investment and average loans held for investment include billed finance charges and fees, net of the estimated uncollectible amount.
(3) Average yield on loans held for investment is calculated by dividing annualized interest income for the period by average loans held for investment during the period. Interest income excludes various allocations including funds transfer pricing that assigns certain balance sheet assets, deposits and other liabilities and their related revenue and expenses attributable to each business segment.
${ }^{(4)}$ Total net revenue margin is calculated by dividing annualized total net revenue for the period by average loans held for investment during the period.
${ }^{(5)}$ Purchase volume consists of purchase transactions, net of returns, for the period for loans both classified as held for investment and held for sale. Excludes cash advance and balance transfer transactions.
${ }^{(6)}$ Allowance coverage ratio is calculated by dividing the period-end allowance for loan and lease losses by period-end loans held for investment.
Because our Domestic Card business accounts for the substantial majority of our Credit Card business, the key factors driving the results are similar to the key factors affecting our total Credit Card business. Net income for our Domestic Card business increased in the second quarter of 2017 compared to the second quarter of 2016 primarily driven by higher net interest income resulting from loan growth and higher yields as a result of higher interest rates. This increase was partially offset by:

- higher provision for credit losses; and
- higher operating expenses associated with loan growth, as well as continued investments in technology and infrastructure.

Net income for our Domestic Card business decreased in the first six months of 2017 compared to the first six months of 2016 primarily driven by:

- higher provision for credit losses;
- higher operating expenses associated with loan growth, as well as continued investments in technology and infrastructure; and
- lower non-interest income.

These drivers were partially offset by:

- higher net interest income resulting from loan growth and higher yields as a result of higher interest rate; and
- lower marketing expenses.


## Consumer Banking Business

The primary sources of revenue for our Consumer Banking business are net interest income from loans and deposits and noninterest income from service charges and customer-related fees. Expenses primarily consist of the provision for credit losses, operating costs and marketing expenses.

Our Consumer Banking business generated net income from continuing operations of $\$ 276$ million and $\$ 524$ million in the second quarter and first six months of 2017, respectively, and $\$ 257$ million and $\$ 506$ million in the second quarter and first six months of 2016, respectively.

Table 11 summarizes the financial results of our Consumer Banking business and displays selected key metrics for the periods indicated.

## Table 11: Consumer Banking Business Results

| (Dollars in millions, except as noted) | Three Months Ended June 30, |  |  |  |  | Six Months Ended June 30, |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2017 |  | 2016 |  | Change | 2017 |  | 2016 |  | Change |
| Selected income statement data: |  |  |  |  |  |  |  |  |  |  |
| Net interest income | \$ | 1,578 | \$ | 1,439 | 10\% | \$ | 3,095 | \$ | 2,859 | 8\% |
| Non-interest income |  | 183 |  | 175 | 5 |  | 378 |  | 366 | 3 |
| Total net revenue |  | 1,761 |  | 1,614 | 9 |  | 3,473 |  | 3,225 | 8 |
| Provision for credit losses |  | 268 |  | 204 | 31 |  | 547 |  | 434 | 26 |
| Non-interest expense |  | 1,059 |  | 1,006 | 5 |  | 2,101 |  | 1,996 | 5 |
| Income from continuing operations before income taxes |  | 434 |  | 404 | 7 |  | 825 |  | 795 | 4 |
| Income tax provision |  | 158 |  | 147 | 7 |  | 301 |  | 289 | 4 |
| Income from continuing operations, net of tax | \$ | 276 | \$ | 257 | 7 | \$ | 524 | \$ | 506 | 4 |
| Selected performance metrics: |  |  |  |  |  |  |  |  |  |  |
| Average loans held for investment: ${ }^{(1)}$ |  |  |  |  |  |  |  |  |  |  |
| Auto | \$ | 50,803 | \$ | 43,605 | 17 | \$ | 49,743 | \$ | 42,784 | 16 |
| Home loan |  | 20,203 |  | 23,835 | (15) |  | 20,674 |  | 24,308 | (15) |
| Retail banking |  | 3,463 |  | 3,548 | (2) |  | 3,486 |  | 3,550 | (2) |
| Total consumer banking | \$ | 74,469 | \$ | 70,988 | 5 | \$ | 73,903 | \$ | 70,642 | 5 |
| Average yield on loans held for investment ${ }^{(2)}$ |  | 6.56\% |  | 6.28\% | 28 bps |  | 6.52\% |  | 6.23\% | 29 bps |
| Average deposits | \$ | 186,989 | \$ | 176,808 | 6\% | \$ | 185,471 | \$ | 175,531 | 6\% |
| Average deposits interest rate |  | 0.59\% |  | 0.55\% | 4bps |  | 0.58\% |  | 0.54\% | 4bps |
| Net charge-offs | \$ | 232 | \$ | 146 | 59\% | \$ | 450 | \$ | 329 | 37\% |
| Net charge-off rate |  | 1.25\% |  | 0.83\% | 42bps |  | 1.22\% |  | 0.93\% | 29 bps |
| Net charge-off rate (excluding PCI loans) ${ }^{(3)}$ |  | 1.50 |  | 1.09 | 41 |  | 1.48 |  | 1.24 | 24 |
| Auto loan originations | \$ | 7,453 | \$ | 6,529 | 14\% | \$ | 14,478 | \$ | 12,373 | 17\% |
| (Dollars in millions, except as noted) |  | $\begin{gathered} \text { June 30, } \\ 2017 \\ \hline \end{gathered}$ |  | cember 31, | Change |  |  |  |  |  |
| Selected period-end data: |  |  |  |  |  |  |  |  |  |  |
| Loans held for investment: ${ }^{(1)}$ |  |  |  |  |  |  |  |  |  |  |
| Auto | \$ | 51,765 | \$ | 47,916 | 8\% |  |  |  |  |  |
| Home loan |  | 19,724 |  | 21,584 | (9) |  |  |  |  |  |
| Retail banking |  | 3,484 |  | 3,554 | (2) |  |  |  |  |  |
| Total consumer banking | \$ | 74,973 | \$ | 73,054 | 3 |  |  |  |  |  |
| $30+$ day performing delinquency rate |  | 3.79\% |  | 4.10\% | (31)bps |  |  |  |  |  |
| $30+$ day performing delinquency rate (excluding PCI loans) ${ }^{(3)}$ |  | 4.54 |  | 5.12 | (58) |  |  |  |  |  |
| $30+$ day delinquency rate |  | 4.33 |  | 4.67 | (34) |  |  |  |  |  |
| $30+$ day delinquency rate (excluding PCI loans) ${ }^{(3)}$ |  | 5.18 |  | 5.82 | (64) |  |  |  |  |  |
| Nonperforming loan rate |  | 0.75 |  | 0.72 | 3 |  |  |  |  |  |
| Nonperforming loan rate (excluding PCI loans) ${ }^{(3)}$ |  | 0.90 |  | 0.90 | - |  |  |  |  |  |
| Nonperforming asset rate ${ }^{(4)}$ |  | 0.96 |  | 1.09 | (13) |  |  |  |  |  |
| Nonperforming asset rate (excluding PCI loans) ${ }^{(3)(4)}$ |  | 1.15 |  | 1.36 | (21) |  |  |  |  |  |
| Allowance for loan and lease losses | \$ | 1,199 | \$ | 1,102 | 9\% |  |  |  |  |  |
| Allowance coverage ratio ${ }^{(5)(6)}$ |  | 1.60\% |  | 1.51\% | 9 bps |  |  |  |  |  |
| Deposits | \$ | 186,607 | \$ | 181,917 | 3\% |  |  |  |  |  |
| Loans serviced for others ${ }^{(7)}$ |  | 8,557 |  | 8,258 | 4 |  |  |  |  |  |

[^5](2) Average yield on loans held for investment is calculated by dividing annualized interest income for the period by average loans held for investment during the period. Interest income excludes various allocations including funds transfer pricing that assigns certain balance sheet assets, deposits and other liabilities and their related revenue and expenses attributable to each business segment.
(3) See "MD\&A—Credit Risk Profile" and "Note 1—Summary of Significant Accounting Policies" in our 2016 Form 10-K for additional information on the impact of PCI loans on our credit quality metrics.
(4) Nonperforming assets consist of nonperforming loans, real estate owned ("REO") and other foreclosed assets. The total nonperforming asset rate is calculated based on total nonperforming assets divided by the combined period-end total loans held for investment, REO and other foreclosed assets.
${ }^{(5)}$ Allowance coverage ratio is calculated by dividing the period-end allowance for loan and lease losses by period-end loans held for investment.
${ }^{(6)}$ Excluding the impact of the PCI home loan amounts in footnote 1 above, the allowance coverage ratios for our home loan portfolio and total consumer banking were $0.40 \%$ and $1.87 \%$, respectively, as of June 30,2017 , compared to $0.51 \%$ and $1.83 \%$, respectively, as of December 31,2016 .
(7) Loans serviced for others represents loans serviced for third parties related to our consumer home loan lending business.

Key factors affecting the results of our Consumer Banking business for the second quarter and first six months of 2017 compared to the second quarter and first six months of 2016, and changes in financial condition and credit performance between June 30, 2017 and December 31, 2016 include the following:

- Net Interest Income: Net interest income increased by $\$ 139$ million to $\$ 1.6$ billion in the second quarter of 2017 and increased by $\$ 236$ million to $\$ 3.1$ billion in the first six months of 2017 primarily driven by growth in our auto loan portfolio and higher deposit volumes in our retail banking business.
- Consumer Banking loan yield increased by 28 basis points to $6.6 \%$ and increased by 29 basis points to $6.5 \%$ in the second quarter and first six months of 2017, respectively. The increases were primarily driven by changes in the product mix in Consumer Banking as a result of run-off of our acquired home loan portfolio and growth in our auto loan portfolio, partially offset by margin compression in our auto loan portfolio.
- Average yield on auto loans decreased by 16 basis points to $7.5 \%$ in both the second quarter and first six months of 2017, primarily attributable to margin compression and changes in the product mix in our auto loan portfolio.
- Average yield on our home loan portfolio increased by 46 basis points to $4.3 \%$ and increased by 49 basis points to $4.3 \%$ in the second quarter and first six months of 2017 , respectively, primarily as a result of higher yield on our acquired home loan portfolio.
- Non-Interest Income: Non-interest income was substantially flat at $\$ 183$ million in the second quarter of 2017 and $\$ 378$ million in the first six months of 2017.
- Provision for Credit Losses: The provision for credit losses increased by $\$ 64$ million to $\$ 268$ million in the second quarter of 2017 and increased by $\$ 113$ million to $\$ 547$ million in the first six months of 2017 primarily driven by higher chargeoffs in our auto loan portfolio due to recent growth and declines in used car auction prices.
- Non-Interest Expense: Non-interest expense increased by $\$ 53$ million to $\$ 1.1$ billion in the second quarter of 2017 and increased by $\$ 105$ million to $\$ 2.1$ billion in the first six months of 2017 primarily due to higher operating expenses driven by growth in our auto loan portfolio and continued investment in technology.
- Loans Held for Investment: Period-end loans held for investment increased by $\$ 1.9$ billion to $\$ 75.0$ billion as of June 30, 2017 from December 31, 2016, and average loans held for investment increased by $\$ 3.5$ billion to $\$ 74.5$ billion in the second quarter of 2017 compared to the second quarter of 2016 and increased by $\$ 3.3$ billion to $\$ 73.9$ billion in the first six months of 2017 compared to the first six months of 2016 . These increases were due to growth in our auto loan portfolio, partially offset by run-off of our acquired home loan portfolio.
- Deposits: Period-end deposits increased by $\$ 4.7$ billion to $\$ 186.6$ billion as of June 30, 2017 from December 31, 2016.
- Net Charge-Off and Delinquency Metrics: The net charge-off rate increased by 42 basis points to $1.25 \%$ in the second quarter of 2017 compared to the second quarter of 2016, and increased by 29 basis points to $1.22 \%$ in the first six months of 2017 compared to the first six months of 2016 . The increases were driven by:
- higher losses in our auto loan portfolio due to recent growth and declines in used car auction prices, as well as changes in our charge-off practices for certain loans; and
- a greater portion of auto loans in our total consumer banking loan portfolio, which generally have higher charge-off rates than other products within this portfolio.

The 30+ day delinquency rate decreased by 34 basis points to $4.33 \%$ as of June 30, 2017 from December 31, 2016 primarily attributable to seasonally lower auto delinquency inventories.

## Commercial Banking Business

The primary sources of revenue for our Commercial Banking business are net interest income from loans and deposits and noninterest income from customer fees and other transactions. Because we have some investments that generate tax-exempt income or tax credits, we make certain reclassifications to our Commercial Banking business results to present revenues on a taxableequivalent basis. Expenses primarily consist of the provision for credit losses, operating costs and marketing expenses.

Our Commercial Banking business generated net income from continuing operations of $\$ 146$ million and $\$ 359$ million in the second quarter and first six months of 2017 , respectively, and $\$ 138$ million and $\$ 205$ million in the second quarter and first six months of 2016, respectively.

Table 12 summarizes the financial results of our Commercial Banking business and displays selected key metrics for the periods indicated.

## Table 12: Commercial Banking Business Results

| (Dollars in millions, except as noted) | Three Months Ended June 30, |  |  |  |  | Six Months Ended June 30, |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2017 |  | 2016 |  | Change | 2017 |  | 2016 |  | Change |
| Selected income statement data: |  |  |  |  |  |  |  |  |  |  |
| Net interest income | \$ | 569 | \$ | 559 | 2\% | \$ | 1,135 | \$ | 1,096 | 4\% |
| Non-interest income |  | 183 |  | 129 | 42 |  | 341 |  | 247 | 38 |
| Total net revenue ${ }^{(1)}$ |  | 752 |  | 688 | 9 |  | 1,476 |  | 1,343 | 10 |
| Provision (benefit) for credit losses ${ }^{(2)}$ |  | 140 |  | 128 | 9 |  | 138 |  | 356 | (61) |
| Non-interest expense |  | 381 |  | 343 | 11 |  | 772 |  | 665 | 16 |
| Income from continuing operations before income taxes |  | 231 |  | 217 | 6 |  | 566 |  | 322 | 76 |
| Income tax provision |  | 85 |  | 79 | 8 |  | 207 |  | 117 | 77 |
| Income from continuing operations, net of tax | \$ | 146 | \$ | 138 | 6 | \$ | 359 | \$ | 205 | 75 |
| Selected performance metrics: |  |  |  |  |  |  |  |  |  |  |
| Average loans held for investment: ${ }^{(3)}$ |  |  |  |  |  |  |  |  |  |  |
| Commercial and multifamily real estate | \$ | 27,401 | \$ | 25,661 | 7 | \$ | 26,997 | \$ | 25,338 | 7 |
| Commercial and industrial |  | 39,815 |  | 38,713 | 3 |  | 39,845 |  | 38,237 | 4 |
| Total commercial lending |  | 67,216 |  | 64,374 | 4 |  | 66,842 |  | 63,575 | 5 |
| Small-ticket commercial real estate |  | 453 |  | 564 | (20) |  | 463 |  | 581 | (20) |
| Total commercial banking | \$ | 67,669 | \$ | 64,938 | 4 | \$ | 67,305 | \$ | 64,156 | 5 |
| Average yield on loans held for investment ${ }^{(1)(4)}$ |  | 3.81\% |  | 3.45\% | 36bps |  | 3.73\% |  | 3.42\% | 31 bps |
| Average deposits | \$ | 34,263 | \$ | 33,764 | 1\% | \$ | 34,241 | \$ | 33,920 | 1\% |
| Average deposits interest rate |  | 0.36\% |  | 0.27\% | 9bps |  | 0.34\% |  | 0.27\% | 7bps |
| Net charge-offs | \$ | 136 | \$ | 60 | 127\% | \$ | 159 | \$ | 106 | 50\% |
| Net charge-off rate |  | 0.80\% |  | 0.37\% | 43 bps |  | 0.47\% |  | 0.33\% | 14bps |


| (Dollars in millions, except as noted) | $\begin{gathered} \text { June 30, } \\ 2017 \\ \hline \end{gathered}$ |  | $\begin{gathered} \text { December 31, } \\ 2016 \end{gathered}$ |  | Change |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Selected period-end data: |  |  |  |  |  |
| Loans held for investment: ${ }^{(3)}$ |  |  |  |  |  |
| Commercial and multifamily real estate | \$ | 27,428 | \$ | 26,609 | 3\% |
| Commercial and industrial |  | 39,801 |  | 39,824 | - |
| Total commercial lending |  | 67,229 |  | 66,433 | 1 |
| Small-ticket commercial real estate |  | 443 |  | 483 | (8) |
| Total commercial banking | \$ | 67,672 | \$ | 66,916 | 1 |
| Nonperforming loan rate |  | 1.01\% |  | 1.53\% | (52)bps |
| Nonperforming asset rate ${ }^{(5)}$ |  | 1.04 |  | 1.54 | (50) |
| Allowance for loan and lease losses ${ }^{(2)}$ | \$ | 758 | \$ | 793 | (4)\% |
| Allowance coverage ratio ${ }^{(6)}$ |  | 1.12\% |  | 1.19\% | (7)bps |
| Deposits | \$ | 33,153 | \$ | 33,866 | (2)\% |
| Loans serviced for others ${ }^{(7)}$ |  | 24,484 |  | 22,321 | 10 |

[^6](4) Average yield on loans held for investment is calculated by dividing annualized interest income for the period by average loans held for investment during the period. Interest income excludes various allocations including funds transfer pricing that assigns certain balance sheet assets, deposits and other liabilities and their related revenue and expenses attributable to each business segment.
(5) Nonperforming assets consist of nonperforming loans, real estate owned ("REO") and other foreclosed assets. The total nonperforming asset rate is calculated based on total nonperforming assets divided by the combined period-end total loans held for investment, REO and other foreclosed assets.
${ }^{(6)}$ Allowance coverage ratio is calculated by dividing the period-end allowance for loan and lease losses by period-end loans held for investment.
(7) Loans serviced for others represents loans serviced for third parties related to our multifamily finance business.

Key factors affecting the results of our Commercial Banking business for the second quarter and first six months of 2017 compared to the second quarter and first six months of 2016, and changes in financial condition and credit performance between June 30, 2017 and December 31, 2016 include the following:

- Net Interest Income: Net interest income increased by $\$ 10$ million to $\$ 569$ million in the second quarter of 2017 and increased by $\$ 39$ million to $\$ 1.1$ billion in the first six months of 2017 primarily driven by higher deposit margins as a result of higher interest rates and loan growth.
- Non-Interest Income: Non-interest income increased by $\$ 54$ million to $\$ 183$ million in the second quarter of 2017 and increased by $\$ 94$ million to $\$ 341$ million in the first six months of 2017 primarily driven by increased activity across a broad range of products and services provided to our commercial customers.
- Provision for Credit Losses: The provision for credit losses increased by $\$ 12$ million to $\$ 140$ million in the second quarter of 2017 primarily driven by higher charge-offs as a result of continued adverse industry conditions impacting certain segments of our oil and gas lending portfolio and our taxi medallion lending portfolio, largely offset by a smaller allowance build in the second quarter of 2017.

The provision for credit losses decreased by $\$ 218$ million to $\$ 138$ million in the first six months of 2017 primarily due to an allowance release in the first six months of 2017 compared to a build in the first six months of 2016, primarily driven by charge-offs in our taxi medallion lending portfolio and certain segments of our oil and gas lending portfolio, which continue to be adversely impacted even as overall industry conditions are generally stabilizing.

- Non-Interest Expense: Non-interest expense increased by $\$ 38$ million to $\$ 381$ million in the second quarter of 2017 and increased by $\$ 107$ million to $\$ 772$ million in the first six months of 2017 primarily driven by higher operating expenses associated with loan growth, as well as continued investments in technology and infrastructure.
- Loans Held for Investment: Period-end loans held for investment increased by $\$ 756$ million to $\$ 67.7$ billion as of June 30 , 2017 from December 31, 2016, and average loans held for investment increased by $\$ 2.7$ billion to $\$ 67.7$ billion in the second quarter of 2017 compared to the second quarter of 2016 and increased by $\$ 3.1$ billion to $\$ 67.3$ billion in the first six months of 2017 compared to the first six months of 2016 . These increases were driven by growth across our commercial loan portfolios.
- Deposits: Period-end deposits decreased by $\$ 713$ million to $\$ 33.2$ billion as of June 30, 2017 from December 31, 2016.
- Net Charge-Off and Nonperforming Metrics: The net charge-off rate increased by 43 basis points to $0.80 \%$ in the second quarter of 2017 compared to the second quarter of 2016 and increased by 14 basis points to $0.47 \%$ in the first six months of 2017 compared to the first six months of 2016 driven by higher charge-offs in our oil and gas and taxi medallion lending portfolios. The nonperforming loan rate decreased by 52 basis points to $1.01 \%$ as of June 30, 2017 from December 31, 2016, primarily due to improved credit risk ratings and charge-offs in our oil and gas portfolio.


## Other Category

Other includes unallocated amounts related to our centralized Corporate Treasury group activities, such as management of our corporate investment portfolio, asset/liability management and certain capital management activities. Other also includes:

- foreign exchange-rate fluctuations on foreign currency-denominated balances;
- unallocated corporate expenses that do not directly support the operations of the business segments or for which the business segments are not considered financially accountable in evaluating their performance, such as certain acquisition and restructuring charges;
- a portion of the net benefit (provision) for representation and warranty losses related to continuing operations; and
- offsets related to certain line-item reclassifications.

Table 13 summarizes the financial results of our Other category for the periods indicated.
Table 13: Other Category Results

| (Dollars in millions) | Three Months Ended June 30, |  |  |  |  | Six Months Ended June 30, |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2017 |  | 2016 |  | Change | 2017 |  | 2016 |  | Change |
| Selected income statement data: |  |  |  |  |  |  |  |  |  |  |
| Net interest income | \$ | 32 | \$ | 50 | (36)\% | \$ | 77 | \$ | 116 | (34)\% |
| Non-interest income |  | (10) |  | (2) | ** |  | (40) |  | 6 | ** |
| Total net revenue ${ }^{(1)}$ |  | 22 |  | 48 | (54) |  | 37 |  | 122 | (70) |
| Provision (benefit) for credit losses |  | (5) |  | (1) | ** |  | (7) |  | (3) | 133 |
| Non-interest expense |  | 56 |  | 63 | (11) |  | 128 |  | 111 | 15 |
| Income from continuing operations before income taxes |  | (29) |  | (14) | 107 |  | (84) |  | 14 | ** |
| Income tax provision (benefit) |  | (101) |  | (78) | 29 |  | (219) |  | (143) | 53 |
| Income from continuing operations, net of tax | \$ | 72 | \$ | 64 | 13 | \$ | 135 | \$ | 157 | (14) |

${ }^{(1)}$ Some of our tax-related commercial investments generate tax-exempt income or tax credits. Accordingly, we make certain reclassifications within our Commercial Banking business results to present revenues and yields on a taxable-equivalent basis, calculated assuming an effective tax rate approximately equal to our federal statutory tax rate of $35 \%$ with offsetting reclassifications to the Other category.
** Change is not meaningful.
Net income from continuing operations recorded in the Other category was $\$ 72$ million and $\$ 135$ million in the second quarter and first six months of 2017 , respectively, compared to $\$ 64$ million and $\$ 157$ million in the second quarter and first six months of 2016, respectively.

The increase in the second quarter of 2017 was primarily driven by an increased income tax benefit as a result of increased taxexempt income, tax credits and discrete tax benefits. This increase was partially offset by lower net interest income due to higher offsets from tax credits in our Commercial Banking business.

The decrease in net income in the first six months of 2017 was primarily driven by:

- lower non-interest income primarily due to the absence of rate-driven hedge ineffectiveness gains in the first six months of 2016, as well as offsets from tax credits in our Commercial Banking business;
- lower net interest income primarily driven by higher interest expense due to higher interest rates and growth in our interestbearing liabilities, as well as offsets from tax credits in our Commercial Banking business; and
- higher non-interest expense primarily due to continued investments in technology and infrastructure.

These decreases were partially offset by:

- an increased income tax benefit as a result of lower income before taxes, increased tax-exempt income and tax credits.


## CRITICAL ACCOUNTING POLICIES AND ESTIMATES

The preparation of financial statements in accordance with U.S. GAAP requires management to make a number of judgments, estimates and assumptions that affect the amount of assets, liabilities, income and expenses on the consolidated financial statements. Understanding our accounting policies and the extent to which we use management judgment and estimates in applying these policies is integral to understanding our financial statements. We provide a summary of our significant accounting policies under "Note 1—Summary of Significant Accounting Policies" in our 2016 Form 10-K.

We have identified the following accounting policies as critical because they require significant judgments and assumptions about highly complex and inherently uncertain matters and the use of reasonably different estimates and assumptions could have a material impact on our results of operations or financial condition. These critical accounting policies govern:

- Loan loss reserves
- Asset impairment
- Fair value of financial instruments
- Representation and warranty reserves
- Customer rewards reserve

We evaluate our critical accounting estimates and judgments on an ongoing basis and update them, as necessary, based on changing conditions. Management has discussed our critical accounting policies and estimates with the Audit Committee of the Board of Directors. There have been no changes to our critical accounting policies and estimates since the 2016 Form 10-K.

We provide additional information on our critical accounting policies and estimates under "MD\&A-Critical Accounting Policies and Estimates" in our 2016 Form 10-K.

## ACCOUNTING CHANGES AND DEVELOPMENTS

See "Note 1—Summary of Significant Accounting Policies" for information on accounting standards adopted in 2017, as well as recently issued accounting standards not yet required to be adopted and the expected impact of these changes in accounting standards.

## CAPITAL MANAGEMENT

The level and composition of our capital are determined by multiple factors, including our consolidated regulatory capital requirements and internal risk-based capital assessments such as internal stress testing and economic capital. The level and composition of our capital may also be influenced by rating agency guidelines, subsidiary capital requirements, the business environment, conditions in the financial markets and assessments of potential future losses due to adverse changes in our business and market environments.

## Capital Standards and Prompt Corrective Action

We are subject to capital adequacy standards adopted by the Federal Reserve, Office of the Comptroller of the Currency ("OCC") and Federal Deposit Insurance Corporation ("FDIC") (collectively, the "Federal Banking Agencies"), including the capital rules that implemented the Basel III capital framework ("Basel III Capital Rule") developed by the Basel Committee on Banking Supervision ("Basel Committee"). Moreover, the Banks, as insured depository institutions, are subject to prompt corrective action ("PCA") capital regulations.

In July 2013, the Federal Banking Agencies adopted the Basel III Capital Rule, which, in addition to implementing the Basel III capital framework, also implemented certain Dodd-Frank Act and other capital provisions, and updated the PCA capital framework to reflect the new regulatory capital minimums. The Basel III Capital Rule amended both the Basel I and Basel II Advanced Approaches frameworks, established a new common equity Tier 1 capital requirement and set higher minimum capital ratio requirements. We refer to the amended Basel I framework as the "Basel III Standardized Approach," and the amended Advanced Approaches framework as the "Basel III Advanced Approaches."

At the end of 2012, we met one of the two independent eligibility criteria set by banking regulators for becoming subject to the Advanced Approaches capital rules. As a result, we have undertaken a multi-year process of implementing the Advanced Approaches regime for calculating risk-weighted assets and regulatory capital levels. We entered parallel run under Advanced Approaches on January 1, 2015, during which we are required to calculate capital ratios under both the Basel III Standardized Approach and the Basel III Advanced Approaches, though we continue to use the Standardized Approach for purposes of meeting regulatory capital requirements.

The Basel Committee has proposed, but has not finalized, changes to the Basel III capital framework. There is uncertainty around any final changes that the Basel Committee might adopt, which of those changes thereafter may be adopted in the United States, and how those changes may impact the Basel III Standardized Approach and the Basel III Advanced Approaches.

The Market Risk Rule supplements both the Basel III Standardized Approach and the Basel III Advanced Approaches by requiring institutions subject to the Market Risk Rule to adjust their risk-based capital ratios to reflect the market risk in their trading portfolios. The Market Risk Rule generally applies to institutions with aggregate trading assets and liabilities equal to the lesser of (i) $10 \%$ or more of total assets or (ii) \$1 billion or more. See "MD\&A—Market Risk Profile" below for additional information. We began reporting risk-based capital ratios including market risk-weighted assets for the Company and CONA pursuant to the Market Risk Rule for positions covered by such rule in the third quarter of 2016. This change did not have a material impact on the risk-based capital ratios of these two entities. As of June 30, 2017, COBNA is not subject to the Market Risk Rule.

For additional information about the capital adequacy guidelines we are subject to, see "Part I—Item 1. Business—Supervision and Regulation" in our 2016 Form 10-K.
Table 14 provides a comparison of our regulatory capital ratios under the Basel III Standardized Approach subject to transition provisions, the regulatory minimum capital adequacy ratios and the PCA well-capitalized level for each ratio, where applicable, as of June 30, 2017 and December 31, 2016.

Table 14: Capital Ratios under Basel III ${ }^{(1)(2)}$

|  | June 30, 2017 |  |  | December 31, 2016 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { Capital } \\ & \text { Ratio } \end{aligned}$ | $\begin{gathered} \text { Minimum } \\ \text { Capital } \\ \text { Adequacy } \end{gathered}$ | WellCapitalized | $\begin{aligned} & \text { Capital } \\ & \text { Ratio } \end{aligned}$ | $\begin{aligned} & \text { Minimum } \\ & \text { Capital } \\ & \text { Adequacy } \end{aligned}$ | WellCapitalized |
| Capital One Financial Corp: |  |  |  |  |  |  |
| Common equity Tier 1 capital ${ }^{(3)}$ | 10.7\% | 4.5\% | N/A | 10.1\% | 4.5\% | N/A |
| Tier 1 capital ${ }^{(4)}$ | 12.2 | 6.0 | 6.0\% | 11.6 | 6.0 | 6.0\% |
| Total capital ${ }^{(5)}$ | 14.9 | 8.0 | 10.0 | 14.3 | 8.0 | 10.0 |
| Tier 1 leverage ${ }^{(6)}$ | 10.3 | 4.0 | N/A | 9.9 | 4.0 | N/A |
| Supplementary leverage ${ }^{(7)}$ | 8.9 | N/A | N/A | 8.6 | N/A | N/A |
| Capital One Bank (USA), N.A.: |  |  |  |  |  |  |
| Common equity Tier 1 capital ${ }^{(3)}$ | 13.2\% | 4.5\% | 6.5\% | 12.0\% | 4.5\% | 6.5\% |
| Tier 1 capital ${ }^{(4)}$ | 13.2 | 6.0 | 8.0 | 12.0 | 6.0 | 8.0 |
| Total capital ${ }^{(5)}$ | 16.0 | 8.0 | 10.0 | 14.8 | 8.0 | 10.0 |
| Tier 1 leverage ${ }^{(6)}$ | 11.5 | 4.0 | 5.0 | 10.8 | 4.0 | 5.0 |
| Supplementary leverage ${ }^{(7)}$ | 9.5 | N/A | N/A | 8.9 | N/A | N/A |
| Capital One, N.A.: |  |  |  |  |  |  |
| Common equity Tier 1 capital ${ }^{(3)}$ | 12.1\% | 4.5\% | 6.5\% | 10.6\% | 4.5\% | 6.5\% |
| Tier 1 capital ${ }^{(4)}$ | 12.1 | 6.0 | 8.0 | 10.6 | 6.0 | 8.0 |
| Total capital ${ }^{(5)}$ | 13.3 | 8.0 | 10.0 | 11.8 | 8.0 | 10.0 |
| Tier 1 leverage ${ }^{(6)}$ | 8.9 | 4.0 | 5.0 | 7.7 | 4.0 | 5.0 |
| Supplementary leverage ${ }^{(7)}$ | 7.9 | N/A | N/A | 6.9 | N/A | N/A |

[^7]In addition to the above statutory capital ratios, we also disclose a non-GAAP TCE ratio in "MD\&A—Summary of Selected Financial Data." This capital measure is not necessarily comparable to similarly-titled capital measures reported by other companies. We provide information on the calculation of this ratio in "MD\&A-Table A-Reconciliation of Non-GAAP Measures and Calculation of Regulatory Capital Measures."

The Company exceeded the minimum capital requirements and each of the Banks exceeded the minimum regulatory requirements and were well capitalized under PCA requirements as of both June 30, 2017 and December 31, 2016.

The Basel III Capital Rule requires banks to maintain a capital conservation buffer of $2.5 \%$ above the regulatory minimum ratios composed of common equity Tier 1 capital. The capital conservation buffer is being phased in over a transition period that commenced on January 1, 2016 and will be fully phased in on January 1, 2019. The capital conservation buffer is $1.25 \%$ in 2017.

For banks subject to the Advanced Approaches, including the Company and the Banks, the capital conservation buffer may be supplemented by an incremental countercyclical capital buffer of up to $2.5 \%$ (once fully phased-in) composed of common equity Tier 1 capital and set at the discretion of the Federal Banking Agencies. As of June 30, 2017, the countercyclical capital buffer is zero percent in the United States. A determination to increase the countercyclical capital buffer generally would be effective twelve months after the announcement of such an increase, unless the Federal Banking Agencies set an earlier effective date. The countercyclical capital buffer, if set to an amount greater than zero percent, would be subject to the same transition period as the capital conservation buffer, which commenced on January 1, 2016.

For 2017, the minimum capital requirement plus capital conservation buffer and countercyclical capital buffer for common equity Tier 1 capital, Tier 1 capital and total capital ratios is $5.75 \%, 7.25 \%$ and $9.25 \%$, respectively, for the Company and the Banks. A common equity Tier 1 capital ratio, Tier 1 capital ratio, or total capital ratio below the applicable regulatory minimum ratio plus the applicable capital conservation buffer and the applicable countercyclical buffer (if set to an amount greater than zero percent) might restrict a bank's ability to distribute capital and make discretionary bonus payments. As of June 30, 2017, the Company and each of the Banks are all above the applicable combined thresholds.

Additionally, banks designated as global systemically important banks ("G-SIBs") are subject to an additional regulatory capital surcharge above the combined capital conservation and countercyclical capital buffers established by the Basel III Capital Rule. We are currently not designated as a G-SIB and therefore not subject to this surcharge.

The following table compares our common equity Tier 1 capital and risk-weighted assets as of June 30, 2017, subject to applicable transition provisions, to our estimated fully phased-in common equity Tier 1 capital and risk-weighted assets, as it applies for Advanced Approaches banks such as ourselves that have not yet exited parallel run. Our estimated common equity Tier 1 capital, risk-weighted assets and common equity Tier 1 capital ratio under the fully phased-in Basel III Standardized Approach are nonGAAP financial measures that we believe provide useful information in evaluating compliance with regulatory capital requirements that are not effective yet. They are calculated based on our interpretations, expectations and assumptions of relevant regulations, as well as interpretations provided by our regulators, and are subject to change based on changes to future regulations and interpretations. As we continue to engage with our regulators, there could be further changes to the calculation.

Table 15: Regulatory Capital Reconciliations between Basel III Transition to Fully Phased-in ${ }^{(1)}$

| (Dollars in millions) | June 30, 2017 |  |
| :---: | :---: | :---: |
| Common equity Tier 1 capital under Basel III Standardized Approach | \$ | 30,226 |
| Adjustments related to $\mathrm{AOCI}^{(2)}$ |  | (90) |
| Adjustments related to intangibles ${ }^{(2)}$ |  | (105) |
| Other adjustments ${ }^{(2)}$ |  | (1) |
| Estimated common equity Tier 1 capital under fully phased-in Basel III Standardized Approach | \$ | 30,030 |
| Risk-weighted assets under Basel III Standardized Approach ${ }^{(3)}$ | \$ | 283,231 |
| Adjustments for fully phased-in Basel III Standardized Approach ${ }^{(4)}$ |  | 1,343 |
| Estimated risk-weighted assets under fully phased-in Basel III Standardized Approach | \$ | 284,574 |
| Estimated common equity Tier 1 capital ratio under fully phased-in Basel III Standardized Approach ${ }^{(5)}$ |  | 10.6\% |

[^8](3) Includes credit and market risk-weighted assets.
(4) Adjustments include higher risk weights for items that are included in capital based on the threshold deduction approach, such as mortgage servicing assets and deferred tax assets. The adjustments also include removal of risk weights for items that are deducted from common equity Tier 1 capital.
${ }^{(5)}$ Estimated common equity Tier 1 capital ratio is calculated by dividing estimated common equity Tier 1 capital by estimated risk-weighted assets, which are both calculated under the Basel III Standardized Approach, as it applies when fully phased-in for Advanced Approaches banks that have not yet exited parallel run.

Under the Basel III Capital Rule, when we complete our parallel run for the Advanced Approaches, our minimum risk-based capital requirement will be determined by the greater of our risk-weighted assets under the Basel III Standardized Approach and the Basel III Advanced Approaches. See "Part I—Item 1. Business—Supervision and Regulation" in our 2016 Form 10-K for additional information. Once we exit parallel run, based on clarification of the Basel III Capital Rule from our regulators, any amount by which our expected credit losses exceed eligible credit reserves, as each term is defined under the Basel III Capital Rule, will be deducted from our Basel III Standardized Approach numerator, subject to transition provisions. Inclusive of this impact, based on current capital rules and our business mix, we estimate that our Basel III Advanced Approaches ratios will be lower than our Basel III Standardized Approach ratios. However, there is uncertainty whether this will remain the case in light of potential changes to the United States capital rules.

## Capital Planning and Regulatory Stress Testing

On June 28, 2017, the Federal Reserve completed its 2017 Comprehensive Capital Analysis and Review ("CCAR") and did not object to our proposed capital plan. As a condition to not objecting to the capital plan, the Federal Reserve has required us to submit a revised capital plan by December 28, 2017 to address certain weaknesses it identified in our capital planning process. If the Federal Reserve objects to the resubmitted capital plan, it may restrict subsequent capital distributions. For the description of the regulatory capital planning rules we are subject to, see "Part I—Item 1. Business—Supervision and Regulation" in our 2016 Form 10-K. During the intervening period we are allowed to proceed with the actions in our capital plan. The Board of Directors authorized the repurchase of up to $\$ 1.85$ billion of shares of our common stock from the third quarter of 2017 through the second quarter of 2018, in addition to share repurchases related to employee compensation. The Board of Directors also authorized the quarterly dividend on our common stock of $\$ 0.40$ per share.

## Dividend Policy and Stock Purchases

On July 27, 2017, the Board of Directors of the Company declared a quarterly common stock dividend of $\$ 0.40$ per share. The dividend is payable on August 17, 2017 to stockholders of record at the close of the business on August 7, 2017. The Board of Directors also approved quarterly dividends on the Company's $6.00 \%$ fixed-rate non-cumulative Series B perpetual preferred stock, the Company's $6.25 \%$ fixed-rate non-cumulative Series C perpetual preferred stock, the Company's $6.70 \%$ fixed-rate noncumulative Series D perpetual preferred stock, the Company's $6.20 \%$ fixed-rate non-cumulative Series F perpetual preferred stock, the Company's $5.20 \%$ fixed-rate non-cumulative Series G perpetual preferred stock and the Company's $6.00 \%$ fixed-rate noncumulative Series H perpetual preferred stock. These dividends are payable on September 1, 2017 to stockholders of record at the close of business on August 17, 2017. Based on these declarations, the Company will pay approximately $\$ 195$ million in common equity dividends and approximately $\$ 52$ million in total preferred dividends in the third quarter of 2017. Under the terms of the Company's outstanding preferred stock, the Company's ability to pay dividends on, make distributions with respect to, or to repurchase, redeem or acquire its common stock or any preferred stock ranking on parity with or junior to the preferred stock, is subject to restrictions in the event that the Company does not declare and either pay or set aside a sum sufficient for payment of dividends on the preferred stock for the immediately preceding dividend period.

We paid common stock dividends of $\$ 0.40$ per share in the second quarter of 2017 . The following table summarizes the dividends paid per share on our various preferred stock series in the first six months of 2017.

Table 16: Preferred Stock Dividends Paid Per Share

|  | Description | Issuance Date | Per Annum Dividend Rate | Dividend Frequency | 2017 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Series |  |  |  |  | Q2 |  | Q1 |  |
| Series B | $\begin{gathered} 6.00 \% \\ \text { Non-Cumulative } \end{gathered}$ | August 20, 2012 | 6.00\% | Quarterly | \$ | 15.00 | \$ | 15.00 |
| Series C | $6.25 \%$ <br> Non-Cumulative | June 12, 2014 | 6.25 | Quarterly |  | 15.63 |  | 15.63 |
| Series D | 6.70\% <br> Non-Cumulative | October 31, 2014 | 6.70 | Quarterly |  | 16.75 |  | 16.75 |
| Series E | Fixed-to-Floating Rate NonCumulative | May 14, 2015 | $5.55 \%$ through $5 / 31 / 2020$; $3-\mathrm{mo}$. LIBOR+ 380 bps thereafter | Semi-Annually through 5/31/2020; Quarterly thereafter |  | 27.75 |  | - |
| Series F | $\begin{gathered} 6.20 \% \\ \text { Non-Cumulative } \end{gathered}$ | August 24, 2015 | 6.20 | Quarterly |  | 15.50 |  | 15.50 |
| Series G | $\begin{gathered} 5.20 \% \\ \text { Non-Cumulative } \end{gathered}$ | July 29, 2016 | 5.20 | Quarterly |  | 13.00 |  | 13.00 |
| Series H | 6.00\% <br> Non-Cumulative | November 29, 2016 | 6.00 | Quarterly |  | 15.00 |  | 15.33 |

The declaration and payment of dividends to our stockholders, as well as the amount thereof, are subject to the discretion of our Board of Directors and depend upon our results of operations, financial condition, capital levels, cash requirements, future prospects and other factors deemed relevant by the Board of Directors. As a bank holding company ("BHC"), our ability to pay dividends is largely dependent upon the receipt of dividends or other payments from our subsidiaries. Regulatory restrictions exist that limit the ability of the Banks to transfer funds to our BHC. As of June 30, 2017, funds available for dividend payments from COBNA and CONA were $\$ 3.9$ billion and $\$ 1.5$ billion, respectively. There can be no assurance that we will declare and pay any dividends to stockholders.

Consistent with our 2016 Stock Repurchase Program, our Board of Directors authorized the repurchase of up to $\$ 2.5$ billion of shares of common stock beginning in the third quarter of 2016 through the end of the second quarter of 2017. Through the end of the second quarter of 2017 , we repurchased approximately $\$ 2.2$ billion of shares of common stock as part of the 2016 Stock Repurchase Program.

The timing and exact amount of any future common stock repurchases will depend on various factors, including market conditions, opportunities for growth, our capital position and the amount of retained earnings. Our stock repurchase program does not include specific price targets, may be executed through open market purchases or privately negotiated transactions, including utilizing Rule 10b5-1 programs, and may be suspended at any time. For additional information on dividends and stock repurchases, see "Part I—Item 1. Business—Supervision and Regulation—Dividends, Stock Repurchases and Transfer of Funds" in our 2016 Form 10-K.

## RISK MANAGEMENT

## Risk Framework

We use a risk framework to provide an overall enterprise-wide approach for effectively managing risk. We execute against our risk framework with the "Three Lines of Defense" risk management model to demonstrate and structure the roles, responsibilities and accountabilities in the organization for taking and managing risk.

The "First Line of Defense" is comprised of the business areas that through their day-to-day business activities take risk on our behalf. As the business owner, the first line is responsible for identifying, assessing, managing and controlling that risk. This principle places ultimate accountability for the management of risks and ownership of risk decisions with the CEO and business heads. The "Second Line of Defense" provides oversight of first line risk taking and management, and is primarily comprised of our Risk Management organization. The second line assists in determining risk appetite and the strategies, policies and structures for managing risks. The second line is both an "expert advisor" to the first line and an "effective challenger" of first line risk activities. The "Third Line of Defense" is comprised of our Internal Audit and Credit Review functions. The third line provides
independent and objective assurance to senior management and to the Board of Directors that first and second line risk management and internal control systems and its governance processes are well-designed and working as intended.

The risk framework is also used to guide design of risk programs and performance of risk activity within each risk category and across the entire enterprise.

There are eight elements that comprise the risk framework:

- Establish Governance Processes, Accountabilities and Risk Appetites
- Identify and Assess Risks and Ownership
- Develop and Operate Controls, Monitoring and Mitigation Plans
- Test and Detect Control Gaps and Perform Corrective Action
- Escalate Key Risks and Gaps to Executive Management and, when Appropriate, the Board of Directors
- Calculate and Allocate Capital in Alignment with Risk Management and Measurement Processes (including Stress Testing)
- Support with the Right Culture, Talent and Skills
- Enabled by the Right Data, Infrastructure and Programs

We provide additional discussion of our risk management principles, roles and responsibilities, framework and risk appetite under "MD\&A—Risk Management" in our 2016 Form 10-K.

## CREDIT RISK PROFILE

Our loan portfolio accounts for the substantial majority of our credit risk exposure. Our lending activities are governed under our credit policy and are subject to independent review and approval. Below we provide information about the composition of our loan portfolio, key concentrations and credit performance metrics.

We also engage in certain non-lending activities that may give rise to credit and counterparty settlement risk, including the purchase of securities for our investment securities portfolio, entering into derivative transactions to manage our market risk exposure and to accommodate customers, short-term advances on syndication activity (including bridge financing transactions we have underwritten), certain operational cash balances in other financial institutions, foreign exchange transactions and customer overdrafts. We provide additional information on credit risk related to our investment securities portfolio under "MD\&AConsolidated Balance Sheets Analysis—Investment Securities" and credit risk related to derivative transactions in "Note 9Derivative Instruments and Hedging Activities."

## Loans Held for Investment Portfolio Composition

We provide a variety of lending products. Our primary products include credit cards, auto loans, home loans and commercial lending products. For information on our lending policies and procedures, including our underwriting criteria for our primary loan products, see "MD\&A-Credit Risk Profile" in our 2016 Form 10-K.

Our loan portfolio consists of loans held for investment, including loans held in our consolidated trusts, and loans held for sale. Table 17 presents the composition of our portfolio of loans held for investment, including PCI loans, by portfolio segment as of June 30, 2017 and December 31, 2016. Table 17 and the credit metrics presented in this section exclude loans held for sale, which are carried at lower of cost or fair value and totaled $\$ 777$ million and $\$ 1.0$ billion as of June 30, 2017 and December 31, 2016, respectively.

Table 17: Loans Held for Investment Portfolio Composition

| (Dollars in millions) | June 30, 2017 |  | December 31, 2016 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Loans | $\begin{gathered} \hline \% \text { of } \\ \text { Total } \end{gathered}$ | Loans | $\begin{aligned} & \hline \text { \% of } \\ & \text { Total } \end{aligned}$ |
| Credit Card: |  |  |  |  |
| Domestic credit card | \$ 92,866 | 38.0\% | \$ 97,120 | 39.6\% |
| International card businesses | 8,724 | 3.6 | 8,432 | 3.4 |
| Total credit card | 101,590 | 41.6 | 105,552 | 43.0 |
| Consumer Banking: |  |  |  |  |
| Auto | 51,765 | 21.2 | 47,916 | 19.5 |
| Home loan | 19,724 | 8.1 | 21,584 | 8.8 |
| Retail banking | 3,484 | 1.4 | 3,554 | 1.4 |
| Total consumer banking | 74,973 | 30.7 | 73,054 | 29.7 |
| Commercial Banking: |  |  |  |  |
| Commercial and multifamily real estate | 27,428 | 11.2 | 26,609 | 10.9 |
| Commercial and industrial | 39,801 | 16.3 | 39,824 | 16.2 |
| Total commercial lending | 67,229 | 27.5 | 66,433 | 27.1 |
| Small-ticket commercial real estate | 443 | 0.2 | 483 | 0.2 |
| Total commercial banking | 67,672 | 27.7 | 66,916 | 27.3 |
| Other loans | 67 | - | 64 | - |
| Total loans held for investment | \$244,302 | 100.0\% | \$ 245,586 | 100.0\% |

## Commercial Loans

For purposes of portfolio risk management, we aggregate our commercial loan portfolio according to market segmentation primarily based on standard industry codes. Table 18 summarizes our commercial loans held for investment portfolio by industry classification as of June 30, 2017 and December 31, 2016.

Table 18: Commercial Loans by Industry ${ }^{(1)}$

| (Percentage of portfolio) | $\begin{aligned} & \text { June 30, } \\ & 2017 \end{aligned}$ | $\begin{gathered} \text { December 31, } \\ 2016 \end{gathered}$ |
| :---: | :---: | :---: |
| Real estate | 41\% | 40\% |
| Healthcare | 14 | 14 |
| Finance and insurance | 12 | 13 |
| Business services | 5 | 5 |
| Educational services | 4 | 4 |
| Public administration | 4 | 4 |
| Oil and gas ${ }^{(2)}$ | 4 | 4 |
| Retail trade | 4 | 4 |
| Construction and land | 3 | 3 |
| Transportation ${ }^{(3)}$ | 2 | 2 |
| Other | 7 | 7 |
| Total | 100\% | 100\% |

[^9]
## Purchased Credit-Impaired Loans

Our portfolio of loans includes certain of our consumer and commercial loans acquired in business acquisitions that were recorded at fair value at acquisition and subsequently accounted for using the guidance for accounting for PCI loans and debt securities, which is based upon expected cash flows. These PCI loans totaled $\$ 12.9$ billion as of June 30,2017 compared to $\$ 15.1$ billion as of December 31, 2016. See "MD\&A-Glossary and Acronyms" for the definition of "PCI loans."

The difference between the fair value at acquisition and expected cash flows represents the accretable yield, which is recognized in interest income over the life of the loans. The difference between the contractual payments on the loans and expected cash flows represents the nonaccretable difference, or the amount of principal and interest not considered collectible, which incorporates future expected credit losses over the life of the loans. We regularly update our estimate of expected principal and interest to be collected from these loans and evaluate the results for each accounting pool that was established at acquisition based on loans with common risk characteristics. Probable decreases in expected cash flows would trigger the recognition of an allowance for loan and lease losses through our provision for credit losses. Probable and significant increases in expected cash flows would first reverse any previously recorded allowance for loan and lease losses established subsequent to acquisition, with any remaining increase in expected cash flows recognized prospectively in interest income over the remaining estimated life of the underlying loans. See "Note 1—Summary of Significant Accounting Policies" in our 2016 Form 10-K for additional information on PCI loans that are accounted for based on expected cash flows.

## Home Loans

The majority of our home loan portfolio are PCI loans acquired from the ING Direct and CCB acquisitions, representing $63 \%$ and $67 \%$ of our total home loan portfolio as of June 30, 2017 and December 31, 2016, respectively. See "MD\&A—Glossary and Acronyms" for the definition of "ING Direct acquisition" and "CCB." The expected cash flows for the PCI loans in our home loan portfolio are significantly impacted by future expectations of home prices and interest rates. Decreases in expected cash flows that result from declining conditions, particularly associated with these variables, could result in an increase in the allowance for loan and lease losses and reduction in accretable yield. Charge-offs on these loans are not recorded until the expected credit losses within the nonaccretable difference are depleted. In addition, PCI loans are not classified as delinquent or nonperforming, as we expect to collect our net investment in these loans and the nonaccretable difference is expected to absorb the majority of the losses associated with these loans.

Table 19 presents the break out of our total home loan portfolio by lien priority for PCI loans and remaining loans.
Table 19: Home Loans-Risk Profile by Lien Priority

| (Dollars in millions) | June 30, 2017 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Loans |  | PCI Loans |  | Total Home Loans |  |
|  | Amount | $\begin{aligned} & \mathbf{\%} \text { of } \\ & \text { Total } \end{aligned}$ | Amount | $\begin{aligned} & \text { \% of } \\ & \text { Total } \end{aligned}$ | Amount | $\begin{aligned} & \text { \% of } \\ & \text { Total } \end{aligned}$ |
| Lien type: |  |  |  |  |  |  |
| $1^{\text {st }}$ lien | \$ 6,411 | 32.5\% | \$ 12,102 | 61.4\% | \$ 18,513 | 93.9\% |
| $2^{\text {nd }}$ lien | 965 | 4.9 | 246 | 1.2 | 1,211 | 6.1 |
| Total | \$ 7,376 | 37.4\% | \$ 12,348 | 62.6\% | \$ 19,724 | 100.0\% |
|  | December 31, 2016 |  |  |  |  |  |
|  | Loans |  | PCI Loans |  | Total Home Loans |  |
| (Dollars in millions) | Amount | $\begin{gathered} \hline \% \text { of } \\ \text { Total } \end{gathered}$ | Amount | $\begin{aligned} & \hline \text { \% of } \\ & \text { Total } \end{aligned}$ | Amount | $\begin{aligned} & \hline \% \text { of } \\ & \text { Total } \end{aligned}$ |
| Lien type: |  |  |  |  |  |  |
| $1^{\text {st }}$ lien | \$ 6,182 | 28.7\% | \$ 14,159 | 65.5\% | \$ 20,341 | 94.2\% |
| $2^{\text {nd }}$ lien | 974 | 4.5 | 269 | 1.3 | 1,243 | 5.8 |
| Total | \$ 7,156 | 33.2\% | \$ 14,428 | 66.8\% | \$ 21,584 | 100.0\% |

See "Note 4-Loans" in this Report for additional credit quality information. See "Note 1—Summary of Significant Accounting Policies" in our 2016 Form 10-K and in this Report for information on our accounting policies for PCI loans, delinquent loans, nonperforming loans, net charge-offs and troubled debt restructurings ("TDRs") for each of our loan categories.

Table 20 provides a sensitivity analysis of PCI loans in our home loan portfolio as of June 30, 2017. The analysis reflects a hypothetical decline of $10 \%$ in the home price index and its impact on lifetime future cash flow expectations, accretable yield and allowance for loan and lease losses. Any significant economic events or variables not considered could impact the results that are presented below.
Table 20: Sensitivity Analysis-PCI Home Loans ${ }^{(1)}$

| (Dollars in millions) |  | June 30, <br> 2017, | Estimated Impact <br> Increase (Decrease) |
| :--- | :--- | ---: | :--- |
| Expected cash flows | $\mathbf{1 4 , 8 6 2}$ | $\mathbf{\$}$ | $\mathbf{( 5 3 )}$ |
| Accretable yield | $\mathbf{2 , 5 4 4}$ | $\mathbf{5 3}$ |  |
| Allowance for loan and lease losses | $\mathbf{3 0}$ | $\mathbf{1 0 6}$ |  |

${ }^{(1)}$ Changes in the accretable yield would be recognized in interest income in our consolidated statements of income over the life of the loans. Changes in the allowance for loan and lease losses would be recognized immediately in the provision for credit losses in our consolidated statements of income.

## Credit Risk Measurement

We closely monitor economic conditions and loan performance trends to assess and manage our exposure to credit risk. Key metrics we track in evaluating the credit quality of our loan portfolio include delinquency and nonperforming asset rates, as well as net charge-off rates and our internal risk ratings of larger balance commercial loans. Trends in delinquency rates are a primary indicator of credit risk within our consumer loan portfolios, as changes in delinquency rates provide an early warning of changes in credit losses. The primary indicator of credit risk in our commercial loan portfolios is our internal risk ratings. Because we generally classify loans that have been delinquent for an extended period of time and other loans with significant risk of loss as nonperforming, the level of nonperforming assets represents another indicator of the potential for future credit losses. In addition to delinquency rates, the geographic distribution of our loans provides insight as to the exposure of the portfolio to regional economic conditions.

We underwrite most consumer loans using proprietary models, which are typically based on credit bureau data, including borrower credit scores, along with application information and, where applicable, collateral and deal structure data. We continuously adjust our management of credit lines and collection strategies based on customer behavior and risk profile changes. We also use borrower credit scores for subprime classification, for competitive benchmarking and, in some cases, to drive product segmentation decisions.

The following table provides details on the credit scores of our domestic credit card and auto loans held for investment portfolios as of June 30, 2017, December 31, 2016 and June 30, 2016.

Table 21: Credit Score Distribution

| (Percentage of portfolio) | $\begin{gathered} \text { June 30, } \\ 2017 \end{gathered}$ | $\begin{gathered} \text { December 31, } \\ 2016 \end{gathered}$ | $\begin{gathered} \text { June 30, } \\ 2016 \end{gathered}$ |
| :---: | :---: | :---: | :---: |
| Domestic credit card—Refreshed FICO scores: ${ }^{(1)}$ |  |  |  |
| Greater than 660 | 64\% | 64\% | 65\% |
| 660 or below | 36 | 36 | 35 |
| Total | 100\% | 100\% | 100\% |
| Auto-At origination FICO scores: ${ }^{(2)}$ |  |  |  |
| Greater than 660 | 51\% | 52\% | 51\% |
| 621-660 | 18 | 17 | 17 |
| 620 or below | 31 | 31 | 32 |
| Total | 100\% | 100\% | 100\% |

[^10]We present information in the section below on the credit performance of our loan portfolio, including the key metrics we use in tracking changes in the credit quality of our loan portfolio.

See "Note 4-Loans" in this Report for additional credit quality information. Also, see "Note 1—Summary of Significant Accounting Policies" in our 2016 Form 10-K and in this Report for information on our accounting policies for delinquent and nonperforming loans, net charge-offs and TDRs for each of our loan categories.

## Delinquency Rates

We consider the entire balance of an account to be delinquent if the minimum required payment is not received by the customer's due date, measured at the reporting date. Our 30+ day delinquency metrics include all loans held for investment that are 30 or more days past due, whereas our 30+ day performing delinquency metrics include loans that are 30 or more days past due but are currently classified as performing and accruing interest. The $30+$ day delinquency and $30+$ day performing delinquency metrics are the same for domestic credit card loans, as we continue to classify loans as performing until the account is charged off, typically when the account is 180 days past due. See "Note 1—Summary of Significant Accounting Policies" in our 2016 Form 10-K for information on our policies for classifying loans as nonperforming for each of our loan categories. We provide additional information on our credit quality metrics above under "MD\&A—Business Segment Financial Performance."

Table 22 presents our 30+ day performing delinquency rates and 30+ day delinquency rates of our portfolio of loans held for investment, including PCI loans, by portfolio segment, as of June 30, 2017 and December 31, 2016.

Table 22: 30+ Day Delinquencies

| (Dollars in millions) | June 30, 2017 |  |  |  | December 31, 2016 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 30+ Day Performing Delinquencies |  | 30+ DayDelinquencies |  | $\begin{aligned} & \text { 30+ Day Performing } \\ & \text { Delinauencies } \end{aligned}$ |  | 30+ DayDelinquencies |  |
|  | Amount | Rate ${ }^{(1)}$ | Amount | Rate ${ }^{(1)}$ | Amount | Rate ${ }^{(1)}$ | $\underline{\text { Amount }}$ | Rate ${ }^{(1)}$ |
| Credit Card: |  |  |  |  |  |  |  |  |
| Domestic credit card | \$ 3,373 | 3.63\% | \$ 3,373 | 3.63\% | \$ 3,839 | 3.95\% | \$ 3,839 | 3.95\% |
| International card businesses | 286 | 3.28 | 309 | 3.54 | 283 | 3.36 | 317 | 3.76 |
| Total credit card | 3,659 | 3.60 | 3,682 | 3.62 | 4,122 | 3.91 | 4,156 | 3.94 |
| Consumer Banking: |  |  |  |  |  |  |  |  |
| Auto | 2,795 | 5.40 | 3,032 | 5.86 | 2,931 | 6.12 | 3,154 | 6.58 |
| Home loan ${ }^{(2)}$ | 29 | 0.14 | 173 | 0.87 | 43 | 0.20 | 205 | 0.95 |
| Retail banking | 19 | 0.54 | 40 | 1.16 | 25 | 0.70 | 49 | 1.39 |
| Total consumer banking ${ }^{(2)}$ | 2,843 | 3.79 | 3,245 | 4.33 | 2,999 | 4.10 | 3,408 | 4.67 |
| Commercial Banking: |  |  |  |  |  |  |  |  |
| Commercial and multifamily real estate | 36 | 0.13 | 68 | 0.25 | 20 | 0.07 | 45 | 0.17 |
| Commercial and industrial | 39 | 0.10 | 303 | 0.76 | 36 | 0.09 | 408 | 1.02 |
| Total commercial lending | 75 | 0.11 | 371 | 0.55 | 56 | 0.08 | 453 | 0.68 |
| Small-ticket commercial real estate | 1 | 0.17 | 9 | 2.04 | 6 | 1.31 | 10 | 2.14 |
| Total commercial banking | 76 | 0.11 | 380 | 0.56 | 62 | 0.09 | 463 | 0.69 |
| Other loans | 2 | 3.58 | 8 | 12.95 | 2 | 3.66 | 8 | 12.90 |
| Total | \$ 6,580 | 2.69 | \$ 7,315 | 2.99 | \$ 7,185 | 2.93 | \$ 8,035 | 3.27 |

[^11]Table 23 presents an aging and geography of 30+ day delinquent loans as of June 30, 2017 and December 31, 2016.
Table 23: Aging and Geography of 30+ Day Delinquent Loans

| (Dollars in millions) | June 30, 2017 |  |  | December 31, 2016 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Amount |  | $\begin{gathered} \hline \text { \% of } \\ \text { Total Loans }{ }^{(1)} \end{gathered}$ | Amount |  | $\begin{gathered} \hline \text { \% of } \\ \text { Total Loans }{ }^{(1)} \end{gathered}$ |
| Delinquency status: |  |  |  |  |  |  |
| 30-59 days | \$ | 3,355 | 1.37\% | \$ | 3,466 | 1.41\% |
| 60-89 days |  | 1,659 | 0.68 |  | 1,920 | 0.78 |
| $\geq 90$ days |  | 2,301 | 0.94 |  | 2,649 | 1.08 |
| Total | \$ | 7,315 | 2.99\% | \$ | 8,035 | 3.27\% |
| Geographic region: |  |  |  |  |  |  |
| Domestic | \$ | 7,006 | 2.86\% | \$ | 7,718 | 3.14\% |
| International |  | 309 | 0.13 |  | 317 | 0.13 |
| Total | \$ | 7,315 | 2.99\% | \$ | 8,035 | 3.27\% |
| Total loans held for investment | \$ | 244,302 | 100.00\% | \$ | 245,586 | 100.00\% |

(1) Delinquency rates are calculated by dividing loans in each delinquency status category or geographic region as of the end of the period by the total periodend loans held for investment, including PCI loans.

Table 24 summarizes loans that were $90+$ days delinquent as to interest or principal, and still accruing interest as of June 30, 2017 and December 31, 2016. These loans consist primarily of credit card accounts between 90 days and 179 days past due. As permitted by regulatory guidance issued by the Federal Financial Institutions Examination Council ("FFIEC"), we continue to accrue interest and fees on domestic credit card loans through the date of charge-off, which is typically in the period the account becomes 180 days past due. While domestic credit card loans typically remain on accrual status until the loan is charged off, we reduce the balance of our credit card receivables by the amount of finance charges and fees billed but not expected to be collected and exclude this amount from revenue.

## Table 24: 90+ Day Delinquent Loans Accruing Interest

| (Dollars in millions) | June 30, 2017 |  |  | December 31, 2016 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Amount |  | $\begin{gathered} \hline \text { \% of } \\ \text { Total Loans }{ }^{(1)} \end{gathered}$ | Amount |  | $\begin{gathered} \hline \text { \% of } \\ \text { Total Loans }{ }^{(1)} \end{gathered}$ |
| Loan category: |  |  |  |  |  |  |
| Credit card | \$ | 1,650 | 1.62\% | \$ | 1,936 | 1.83\% |
| Consumer banking |  | - | - |  | - | - |
| Commercial banking |  | - | - |  | - | - |
| Total | \$ | 1,650 | 0.68 | \$ | 1,936 | 0.79 |
| Geographic region: |  |  |  |  |  |  |
| Domestic | \$ | 1,542 | 0.65 | \$ | 1,840 | 0.78 |
| International |  | 108 | 1.23 |  | 96 | 1.14 |
| Total |  | 1,650 | 0.68 | \$ | 1,936 | 0.79 |

[^12]
## Nonperforming Loans and Nonperforming Assets

Nonperforming assets consist of nonperforming loans, foreclosed properties and repossessed assets, and the net realizable value of certain partially charged off auto loans. Nonperforming loans include loans that have been placed on nonaccrual status. See "Note 1—Summary of Significant Accounting Policies" in our 2016 Form 10-K for information on our policies for classifying loans as nonperforming for each of our loan categories.

Table 25 presents comparative information on nonperforming loans, by portfolio segment, and other nonperforming assets as of June 30, 2017 and December 31, 2016. Nonperforming loan rates are calculated based on nonperforming loans for each category divided by period-end total loans held for investment for each respective category. We do not classify loans held for sale as nonperforming, as they are recorded at the lower of cost or fair value. We provide additional information on our credit quality metrics above under "MD\&A—Business Segment Financial Performance."
Table 25: Nonperforming Loans and Other Nonperforming Assets ${ }^{(1)}$

| (Dollars in millions) | June 30, 2017 |  |  | December 31, 2016 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Amount |  | \% of Total Loans HFI | Amount |  | \% of Total <br> Loans HFI |
| Nonperforming loans held for investment: |  |  |  |  |  |  |
| Credit Card: |  |  |  |  |  |  |
| International card businesses | \$ | 32 | 0.37\% | \$ | 42 | 0.50\% |
| Total credit card |  | 32 | 0.03 |  | 42 | 0.04 |
| Consumer Banking: |  |  |  |  |  |  |
| Auto |  | 273 | 0.53 |  | 223 | 0.47 |
| Home loan ${ }^{(2)}$ |  | 259 | 1.31 |  | 273 | 1.26 |
| Retail banking |  | 33 | 0.96 |  | 31 | 0.86 |
| Total consumer banking ${ }^{(2)}$ |  | 565 | 0.75 |  | 527 | 0.72 |
| Commercial Banking: |  |  |  |  |  |  |
| Commercial and multifamily real estate |  | 34 | 0.13 |  | 30 | 0.11 |
| Commercial and industrial |  | 643 | 1.62 |  | 988 | 2.48 |
| Total commercial lending |  | 677 | 1.01 |  | 1,018 | 1.53 |
| Small-ticket commercial real estate |  | 9 | 1.89 |  | 4 | 0.85 |
| Total commercial banking |  | 686 | 1.01 |  | 1,022 | 1.53 |
| Other loans |  | 9 | 14.17 |  | 8 | 13.10 |
| Total nonperforming loans held for investment ${ }^{(3)}$ | \$ | 1,292 | 0.53 | \$ | 1,599 | 0.65 |
| Other nonperforming assets: ${ }^{(4)}$ |  |  |  |  |  |  |
| Foreclosed property | \$ | 69 | 0.03 | \$ | 75 | 0.03 |
| Other assets ${ }^{(5)}$ |  | 113 | 0.04 |  | 205 | 0.08 |
| Total other nonperforming assets |  | 182 | 0.07 |  | 280 | 0.11 |
| Total nonperforming assets | \$ | 1,474 | 0.60 | \$ | 1,879 | 0.76 |

[^13]
## Net Charge-Offs

Net charge-offs consist of the unpaid principal balance of loans held for investment that we determine to be uncollectible, net of recovered amounts. We charge off loans as a reduction to the allowance for loan and lease losses when we determine the loan is uncollectible and record subsequent recoveries of previously charged off amounts as increases to the allowance for loan and lease losses. Uncollectible finance charges and fees are reversed through revenue and certain fraud losses are recorded in other noninterest expense. Generally, costs to recover charged-off loans are recorded as collection expenses and included in our consolidated statements of income as a component of other non-interest expense as incurred. Our charge-off policy for loans varies based on the loan type. See "Note 1—Summary of Significant Accounting Policies" in our 2016 Form 10-K and in this Report for information on our charge-off policy for each of our loan categories.

Table 26 presents our net charge-off amounts and rates, by portfolio segment, in the second quarter and first six months of 2017 and 2016.

Table 26: Net Charge-Offs (Recoveries)

| (Dollars in millions) | Three Months Ended June 30, |  |  |  |  | Six Months Ended June 30, |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2017 |  | 2016 |  |  | 2017 |  |  | 2016 |  |
|  | Amount | Rate ${ }^{(1)}$ |  | mount | Rate ${ }^{(1)}$ |  | mount | Rate ${ }^{(1)}$ | Amount | Rate ${ }^{(1)}$ |
| Credit Card: |  |  |  |  |  |  |  |  |  |  |
| Domestic credit card | \$ 1,172 | 5.11\% | \$ | 874 | 4.07\% | \$ | 2,368 | 5.12\% | \$ 1,761 | 4.12\% |
| International card businesses | 84 | 4.08 |  | 75 | 3.54 |  | 159 | 3.88 | 138 | 3.39 |
| Total credit card | 1,256 | 5.02 |  | 949 | 4.02 |  | 2,527 | 5.02 | 1,899 | 4.05 |
| Consumer Banking: ${ }^{(2)}$ |  |  |  |  |  |  |  |  |  |  |
| Auto | 215 | 1.70 |  | 130 | 1.20 |  | 414 | 1.67 | 298 | 1.39 |
| Home loan ${ }^{(3)}$ | 2 | 0.04 |  | 5 | 0.09 |  | 4 | 0.03 | 8 | 0.07 |
| Retail banking | 15 | 1.71 |  | 11 | 1.26 |  | 32 | 1.81 | 23 | 1.31 |
| Total consumer banking ${ }^{(3)}$ | 232 | 1.25 |  | 146 | 0.83 |  | 450 | 1.22 | 329 | 0.93 |
| Commercial Banking: |  |  |  |  |  |  |  |  |  |  |
| Commercial and multifamily real estate | 2 | 0.03 |  | (1) | (0.02) |  | 2 | 0.02 | (2) | (0.02) |
| Commercial and industrial | 134 | 1.34 |  | 60 | 0.62 |  | 156 | 0.78 | 107 | 0.56 |
| Total commercial lending | 136 | 0.81 |  | 59 | 0.37 |  | 158 | 0.47 | 105 | 0.33 |
| Small-ticket commercial real estate | 0 | (0.22) |  | 1 | 0.33 |  | 1 | 0.43 | 1 | 0.23 |
| Total commercial banking | 136 | 0.80 |  | 60 | 0.37 |  | 159 | 0.47 | 106 | 0.33 |
| Other loans | (6) | (39.95) |  | 0 | (3.06) |  | (8) | (24.27) | (1) | (3.46) |
| Total net charge-offs | \$ 1,618 | 2.67 | \$ | 1,155 | 2.01 | \$ | 3,128 | 2.59 | \$ 2,333 | 2.04 |
| Average loans held for investment | \$242,241 |  |  | 3,379 |  |  | 241,875 |  | \$228,557 |  |

[^14]
## Troubled Debt Restructurings

As part of our loss mitigation efforts, we may provide short-term (three to twelve months) or long-term (greater than twelve months) modifications to a borrower experiencing financial difficulty to improve long-term collectability of the loan and to avoid the need for foreclosure or repossession of collateral.

Table 27 presents our recorded investment of loans modified in TDRs as of June 30, 2017 and December 31, 2016, which excludes loan modifications that do not meet the definition of a TDR, and PCI loans, which we track and report separately.

Table 27: Troubled Debt Restructurings

| (Dollars in millions) | June 30, 2017 |  |  | December 31, 2016 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Amount |  | \% of Total Modifications | Amount |  | \% of Total Modifications |
| Credit card | \$ | 745 | 31.3\% | \$ | 715 | 29.0\% |
| Consumer banking: |  |  |  |  |  |  |
| Auto |  | 483 | 20.2 |  | 523 | 21.2 |
| Home loan |  | 235 | 9.9 |  | 241 | 9.8 |
| Retail banking |  | 36 | 1.5 |  | 43 | 1.7 |
| Total consumer banking |  | 754 | 31.6 |  | 807 | 32.7 |
| Commercial banking |  | 885 | 37.1 |  | 944 | 38.3 |
| Total | \$ | 2,384 | 100.0\% | \$ | 2,466 | 100.0\% |
| Status of TDRs: |  |  |  |  |  |  |
| Performing | \$ | 1,741 | 73.0\% | \$ | 1,631 | 66.1\% |
| Nonperforming |  | 643 | 27.0 |  | 835 | 33.9 |
| Total | \$ | 2,384 | 100.0\% | \$ | 2,466 | 100.0\% |

In the Credit Card business, the majority of our credit card loans modified in TDRs involve reducing the interest rate on the account and placing the customer on a fixed payment plan not exceeding 60 months. The effective interest rate in effect immediately prior to the loan modification is used as the effective interest rate for purposes of measuring impairment using the present value of expected cash flows. If the customer does not comply with the modified payment terms, then the credit card loan agreement may revert to its original payment terms, likely resulting in any loan outstanding reflected in the appropriate delinquency category, and charged off in accordance with our standard charge-off policy.

In the Consumer Banking business, the majority of our loans modified in TDRs receive an extension, an interest rate reduction or principal reduction, or a combination of the three. In addition, TDRs also occur in connection with bankruptcy of the borrower. In certain bankruptcy discharges, the loan is written down to the collateral value and the charged off amount is reported as principal reduction. Their impairment is determined using the present value of expected cash flows or a collateral evaluation for certain auto and home loans where the collateral value is lower than the recorded investment.

In the Commercial Banking business, the majority of loans modified in TDRs receive an extension, with a portion of these loans receiving an interest rate reduction or a gross balance reduction. The impairment on modified commercial loans is generally determined based on the underlying collateral value. We provide additional information on modified loans accounted for as TDRs, including the performance of those loans subsequent to modification, in "Note 4-Loans."

## Impaired Loans

A loan is considered impaired when, based on current information and events, it is probable that we will be unable to collect all amounts due from the borrower in accordance with the original contractual terms of the loan. Generally, we report loans as impaired based on the method for measuring impairment in accordance with applicable accounting guidance. Loans defined as individually impaired include larger balance commercial nonperforming loans and TDRs. Loans held for sale are not reported as impaired, as these loans are recorded at lower of cost or fair value. Impaired loans also exclude PCI loans accounted for based on expected cash flows because this accounting methodology takes into consideration future credit losses expected to be incurred.

Impaired loans, including TDRs, totaled $\$ 2.9$ billion and $\$ 3.2$ billion as of June 30, 2017 and December 31, 2016, respectively. Modified TDR loans accounted for $\$ 2.4$ billion and $\$ 2.5$ billion of impaired loans as of June 30, 2017 and December 31, 2016, respectively. We provide additional information on our impaired loans, including the allowance for loan and lease losses established for these loans, in "Note 4-Loans" and "Note 5-Allowance for Loan and Lease Losses and Reserve for Unfunded Lending Commitments."

## Allowance for Loan and Lease Losses and Reserve for Unfunded Lending Commitments

Our allowance for loan and lease losses represents management's best estimate of incurred loan and lease credit losses inherent to our held for investment portfolio as of each balance sheet date. The allowance for loan and lease losses is increased through the provision for credit losses and reduced by net charge-offs. We provide additional information on the methodologies and key assumptions used in determining our allowance for loan and lease losses under "Note 1—Summary of Significant Accounting Policies" in our 2016 Form 10-K.

Table 28 presents changes in our allowance for loan and lease losses and reserve for unfunded lending commitments for the second quarter and first six months of 2017 and 2016, and details by portfolio segment for the provision for credit losses, charge-offs and recoveries.

Table 28: Allowance for Loan and Lease Losses and Reserve for Unfunded Lending Commitments Activity

| (Dollars in millions) | Three Months Ended June 30, 2017 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Credit Card |  |  |  |  |  | Consumer Banking |  |  |  |  |  |  |  | CommercialBanking |  | Other ${ }^{(1)}$ |  | Total |  |
|  | $\begin{aligned} & \text { Domestic } \\ & \text { Card } \end{aligned}$ |  | International Card Businesses |  | Total Credit Card |  | Auto |  | Home Loan |  | Retail Banking |  | TotalConsumerBanking |  |  |  |  |  |  |  |
| Allowance for loan and lease losses: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Balance as of March 31, 2017 | \$ | 4,670 | \$ | 388 | \$ | 5,058 | \$ | 1,028 | \$ | 60 | \$ | 75 | \$ | 1,163 | \$ | 761 | \$ | 2 | \$ | 6,984 |
| Charge-offs |  | $(1,454)$ |  | (118) |  | $(1,572)$ |  | (369) |  | (3) |  | (18) |  | (390) |  | (140) |  | - |  | $(\mathbf{2 , 1 0 2 )}$ |
| Recoveries |  | 282 |  | 34 |  | 316 |  | 154 |  | 1 |  | 3 |  | 158 |  | 4 |  | 6 |  | 484 |
| Net charge-offs |  | $(1,172)$ |  | (84) |  | $(1,256)$ |  | (215) |  | (2) |  | (15) |  | (232) |  | (136) |  | 6 |  | $(1,618)$ |
| Provision (benefit) for loan and lease losses |  | 1,327 |  | 70 |  | 1,397 |  | 253 |  | 1 |  | 14 |  | 268 |  | 141 |  | (5) |  | 1,801 |
| Allowance build (release) for loan and lease losses |  | 155 |  | (14) |  | 141 |  | 38 |  | (1) |  | (1) |  | 36 |  | 5 |  | 1 |  | 183 |
| Other changes ${ }^{(2)}$ |  | - |  | 11 |  | 11 |  | - |  | - |  | - |  | - |  | (8) |  | - |  | 3 |
| Balance as of June 30, 2017 |  | 4,825 |  | 385 |  | 5,210 |  | 1,066 |  | 59 |  | 74 |  | 1,199 |  | 758 |  | 3 |  | 7,170 |
| Reserve for unfunded lending commitments: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Balance as of March 31, 2017 |  | - |  | - |  | - |  | - |  | - |  | 7 |  | 7 |  | 133 |  | - |  | 140 |
| Provision (benefit) for losses on unfunded lending commitments |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | (1) |  | - |  | (1) |
| Balance as of June 30, 2017 |  | - |  | - |  | - |  | - |  | - |  | 7 |  | 7 |  | 132 |  | - |  | 139 |
| Combined allowance and reserve as of June 30, 2017 | \$ | 4,825 | \$ | 385 | \$ | 5,210 | \$ | 1,066 | \$ | 59 | \$ | 81 | \$ | 1,206 | \$ | 890 | \$ | 3 | \$ | 7,309 |
|  | Six Months Ended June 30, 2017 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Credit Card |  |  |  |  |  | Consumer Banking |  |  |  |  |  |  |  | CommercialBanking |  | Other ${ }^{(1)}$ |  | Total |  |
| (Dollars in millions) |  | omestic Card |  |  |  | $\begin{aligned} & \text { Total } \\ & \text { Credit } \\ & \text { Card } \end{aligned}$ | Auto |  | Home Loan |  | Retail Banking |  | TotalConsumerBanking |  |  |  |  |  |  |  |
| Allowance for loan and lease losses: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Balance as of December 31, 2016 | \$ | 4,229 | \$ | 377 | \$ | 4,606 | \$ | 957 | \$ | 65 | \$ | 80 | \$ | 1,102 | \$ | 793 | \$ | 2 | \$ | 6,503 |
| Charge-offs |  | $(2,938)$ |  | (235) |  | $(3,173)$ |  | (708) |  | (7) |  | (39) |  | (754) |  | (166) |  | - |  | $(4,093)$ |
| Recoveries |  | 570 |  | 76 |  | 646 |  | 294 |  | 3 |  | 7 |  | 304 |  | 7 |  | 8 |  | 965 |
| Net charge-offs |  | $(2,368)$ |  | (159) |  | $(2,527)$ |  | (414) |  | (4) |  | (32) |  | (450) |  | (159) |  | 8 |  | $(3,128)$ |
| Provision (benefit) for loan and lease losses |  | 2,964 |  | 150 |  | 3,114 |  | 523 |  | (2) |  | 26 |  | 547 |  | 135 |  | (7) |  | 3,789 |
| Allowance build (release) for loan and lease losses |  | 596 |  | (9) |  | 587 |  | 109 |  | (6) |  | (6) |  | 97 |  | (24) |  | 1 |  | 661 |
| Other changes ${ }^{(2)}$ |  | - |  | 17 |  | 17 |  | - |  | - |  | - |  | - |  | (11) |  | - |  | 6 |
| Balance as of June 30, 2017 |  | 4,825 |  | 385 |  | 5,210 |  | 1,066 |  | 59 |  | 74 |  | 1,199 |  | 758 |  | 3 |  | 7,170 |
| Reserve for unfunded lending commitments: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Balance as of December 31, 2016 |  | - |  | - |  | - |  | - |  | - |  | 7 |  | 7 |  | 129 |  | - |  | 136 |
| Provision (benefit) for losses on unfunded lending commitments |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | 3 |  | - |  | 3 |
| Balance as of June 30, 2017 |  | - |  | - |  | - |  | - |  | - |  | 7 |  | 7 |  | 132 |  | - |  | 139 |
| Combined allowance and reserve as of June 30, 2017 | \$ | 4,825 | \$ | 385 | \$ | 5,210 | \$ | 1,066 | \$ | 59 | \$ | 81 | \$ | 1,206 | \$ | 890 | \$ | 3 | \$ | 7,309 |


| (Dollars in millions) | Three Months Ended June 30, 2016 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Credit Card |  |  |  |  |  | Consumer Banking |  |  |  |  |  |  |  | Commercial Banking |  | Other ${ }^{(1)}$ |  | Total |  |
|  | Domestic Card |  | $\begin{gathered} \hline \text { International } \\ \text { Card } \\ \text { Businesses } \end{gathered}$ |  |  | $\begin{gathered} \text { Total } \\ \text { Credit } \\ \text { Card } \end{gathered}$ | Auto |  | Home Loan |  | Retail Banking |  | Total Consumer Banking |  |  |  |  |  |  |  |
| Allowance for loan and lease losses: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Balance as of March 31, 2016 | \$ | 3,440 | \$ | 345 |  | 3,785 | \$ | 772 | \$ | 64 | \$ | 78 | \$ | 914 | \$ | 714 | \$ | 3 | \$ | 5,416 |
| Charge-offs |  | $(1,102)$ |  | (113) |  | $(1,215)$ |  | (227) |  | (7) |  | (14) |  | (248) |  | (64) |  | (1) |  | $(1,528)$ |
| Recoveries |  | 228 |  | 38 |  | 266 |  | 97 |  | 2 |  | 3 |  | 102 |  | 4 |  | 1 |  | 373 |
| Net charge-offs |  | (874) |  | (75) |  | (949) |  | (130) |  | (5) |  | (11) |  | (146) |  | (60) |  | - |  | $(1,155)$ |
| Provision (benefit) for loan and lease losses |  | 1,164 |  | 97 |  | 1,261 |  | 191 |  | (1) |  | 14 |  | 204 |  | 185 |  | (1) |  | 1,649 |
| Allowance build (release) for loan and lease losses |  | 290 |  | 22 |  | 312 |  | 61 |  | (6) |  | 3 |  | 58 |  | 125 |  | (1) |  | 494 |
| Other changes ${ }^{(2)}$ |  | - |  | (11) |  | (11) |  | - |  | - |  | - |  | - |  | (18) |  | - |  | (29) |
| Balance as of June 30, 2016 |  | 3,730 |  | 356 |  | 4,086 |  | 833 |  | 58 |  | 81 |  | 972 |  | 821 |  | 2 |  | 5,881 |
| Reserve for unfunded lending commitments: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Balance as of March 31, 2016 |  | - |  | - |  | - |  | - |  | - |  | 8 |  | 8 |  | 218 |  | - |  | 226 |
| Provision (benefit) for losses on unfunded lending commitments |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | (57) |  | - |  | (57) |
| Balance as of June 30, 2016 |  | - |  | - |  | - |  | - |  | - |  | 8 |  | 8 |  | 161 |  | - |  | 169 |
| Combined allowance and reserve as of June 30, 2016 | \$ | 3,730 | \$ | 356 |  | \$ 4,086 | \$ | 833 | \$ | 58 | \$ | 89 | \$ | 980 | \$ | 982 | \$ | 2 | \$ | 6,050 |


| (Dollars in millions) | Six Months Ended June 30, 2016 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Credit Card |  |  |  | Consumer Banking |  |  |  |  |  |  |  | CommercialBanking |  | Other ${ }^{(1)}$ |  | Total |  |
|  | Domestic Card | $\begin{gathered} \text { International } \\ \text { Card } \\ \text { Businesses } \end{gathered}$ |  | $\begin{aligned} & \hline \text { Total } \\ & \text { Credit } \\ & \text { Card } \end{aligned}$ | Auto |  | Home Loan |  | $\begin{aligned} & \text { Retail } \\ & \text { Banking } \end{aligned}$ |  | TotalConsumerBanking |  |  |  |  |  |  |  |
| Allowance for loan and lease losses: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Balance as of December 31, 2015 | \$ 3,355 | \$ | 299 | \$ 3,654 | \$ | 726 | \$ | 70 | \$ | 72 | \$ | 868 | \$ | 604 | \$ | 4 | \$ | 5,130 |
| Charge-offs | $(2,225)$ |  | (212) | $(2,437)$ |  | (496) |  | (12) |  | (31) |  | (539) |  | (112) |  | (2) |  | $(3,090)$ |
| Recoveries | 464 |  | 74 | 538 |  | 198 |  | 4 |  | 8 |  | 210 |  | 6 |  | 3 |  | 757 |
| Net charge-offs | $(1,761)$ |  | (138) | $(1,899)$ |  | (298) |  | (8) |  | (23) |  | (329) |  | (106) |  | 1 |  | $(2,333)$ |
| Provision (benefit) for loan and lease losses | 2,136 |  | 196 | 2,332 |  | 405 |  | (4) |  | 32 |  | 433 |  | 356 |  | (3) |  | 3,118 |
| Allowance build (release) for loan and lease losses | 375 |  | 58 | 433 |  | 107 |  | (12) |  | 9 |  | 104 |  | 250 |  | (2) |  | 785 |
| Other changes ${ }^{(2)}$ | - |  | (1) | (1) |  | - |  | - |  | - |  | - |  | (33) |  | - |  | (34) |
| Balance as of June 30, 2016 | 3,730 |  | 356 | 4,086 |  | 833 |  | 58 |  | 81 |  | 972 |  | 821 |  | 2 |  | 5,881 |

## Reserve for unfunded lending commitments:



Provision (benefit) for losses on


[^15]Table 29 presents the allowance coverage ratios as of June 30, 2017 and December 31, 2016.

## Table 29: Allowance Coverage Ratios

|  | $\begin{gathered} \text { June 30, } \\ 2017 \end{gathered}$ | $\begin{gathered} \text { December 31, } \\ 2016 \end{gathered}$ |
| :---: | :---: | :---: |
| Total allowance coverage ratio ${ }^{(1)}$ | 2.93\% | 2.65\% |
| Allowance coverage ratios by loan category: ${ }^{(1)}$ |  |  |
| Credit card (30+ day delinquent loans) | 141.54 | 110.83 |
| Consumer banking (30+ day delinquent loans) | 36.93 | 32.32 |
| Commercial banking (nonperforming loans) | 110.59 | 77.58 |

${ }^{(1)}$ Allowance coverage ratio is calculated by dividing the period-end allowance for loan and lease losses by period-end loans held for investment within the specified loan category.

Our allowance for loan and lease losses increased by $\$ 667$ million to $\$ 7.2$ billion as of June 30, 2017 from December 31, 2016, and the allowance coverage ratio increased by 28 basis points to $2.93 \%$ as of June 30, 2017 from December 31, 2016. The increases were primarily driven by:

- an allowance build in our domestic credit card loan portfolio primarily due to increasing loss expectations on recent vintages and portfolio seasoning; and
- an allowance build in our auto loan portfolio due to higher losses associated with growth.


## LIQUIDITY RISK PROFILE

We have established liquidity practices that are intended to ensure that we have sufficient asset-based liquidity to cover our funding requirements and maintain adequate reserves to withstand the potential impact of deposit attrition or diminished liquidity in the funding markets. We maintain these reserves in the form of readily-marketable or pledgeable assets that can be used as a source of liquidity, if needed.

Table 30 below presents the composition of our liquidity reserves as of June 30, 2017 and December 31, 2016.

## Table 30: Liquidity Reserves

| (Dollars in millions) | $\begin{gathered} \text { June } 30, \\ 2017 \end{gathered}$ |  | ${ }_{2016} \text { December } 31 \text {, }$ |  |
| :---: | :---: | :---: | :---: | :---: |
| Cash and cash equivalents | \$ | 6,715 | \$ | 9,976 |
| Investment securities available for sale, at fair value |  | 41,120 |  | 40,737 |
| Investment securities held to maturity, at fair value |  | 28,423 |  | 26,196 |
| Total investment securities portfolio ${ }^{(1)(2)}$ |  | 69,543 |  | 66,933 |
| FHLB borrowing capacity secured by loans |  | 20,906 |  | 24,078 |
| Outstanding FHLB advances and letters of credit secured by loans |  | $(2,623)$ |  | $(17,646)$ |
| Investment securities encumbered for Public Funds and others |  | $(9,232)$ |  | $(9,265)$ |
| Total liquidity reserves | \$ | 85,309 | \$ | 74,076 |

${ }^{(1)}$ The weighted-average life of our securities was approximately 6.1 years and 6.0 years as of June 30, 2017 and December 31, 2016, respectively.
${ }^{(2)}$ As part of our liquidity management strategy, we pledge securities to secure borrowings from counterparties and to secure trust and public deposits and other purposes as required or permitted by law. We pledged securities available for sale with a fair value of $\$ 1.6$ billion and $\$ 1.9$ billion as of June 30,2017 and December 31, 2016, respectively. We also pledged securities held to maturity with a carrying value of $\$ 8.2$ billion and $\$ 8.1$ billion as of June 30, 2017 and December 31, 2016, respectively.

Our liquidity reserves increased by $\$ 11.2$ billion to $\$ 85.3$ billion as of June 30, 2017 from December 31, 2016 primarily due to a reduction in our outstanding FHLB advances. See "MD\&A—Risk Management" in our 2016 Form 10-K for additional information on our management of liquidity risk.

We are subject to the Final Liquidity Coverage Ratio Rule ("Final LCR Rule") issued by the Federal Banking Agencies. The Final LCR Rule came into effect in January 2015 and required us to calculate the LCR daily starting July 1, 2016. The minimum LCR standard was phased-in beginning January 1,2015 and is at $100 \%$ as of January 1, 2017. At June 30, 2017, we exceeded the fully phased-in LCR requirement. The calculation and the underlying components are based on our interpretations, expectations and assumptions of relevant regulations, as well as interpretations provided by our regulators, and are subject to change based on changes to future regulations and interpretations. See "Part I—Item 1. Business—Supervision and Regulation" in our 2016 Form 10-K for additional information.

## Borrowing Capacity

We filed a shelf registration statement with the SEC on March 31, 2015, which expires in March 2018. Under this shelf registration, we may periodically offer and sell an indeterminate aggregate amount of senior or subordinated debt securities, preferred stock, depositary shares, common stock, purchase contracts, warrants and units. There is no limit under this shelf registration to the amount or number of such securities that we may offer and sell, subject to market conditions. We also filed a new shelf registration statement with the SEC on January 12, 2016, which expires in January 2019 and allows us to periodically offer and sell up to $\$ 23$ billion of securitized debt obligations from our credit card loan securitization trust.

In addition to our issuance capacity under the shelf registration statements, we also have access to FHLB advances with a maximum borrowing capacity of $\$ 21.7$ billion as of June 30 , 2017, of which $\$ 19.1$ billion was still available to us to borrow as of June 30 , 2017. We pledged loan collateral with an outstanding balance of $\$ 27.1$ billion to secure this borrowing capacity. The ability to draw down funding is based on membership status and the amount is dependent upon the Banks' ability to post collateral. Our FHLB membership is secured by our investment in FHLB stock of $\$ 141$ million and $\$ 760$ million as of June 30, 2017 and December 31, 2016, respectively, which was determined in part based on our outstanding advances. We also have access to the Federal Reserve Discount Window through which we had a borrowing capacity of $\$ 8.9$ billion as of June 30, 2017. Although available, we do not view this borrowing capacity as a primary source of liquidity and did not utilize it for funding during 2016 or the first six months of 2017.

## Funding

The Company's primary source of funding comes from deposits, which provide a stable and relatively low cost of funds. In addition to deposits, the Company raises funding through the issuance of senior and subordinated notes, FHLB advances secured by certain portions of our loan and securities portfolios, the issuance of securitized debt obligations, the issuance of brokered deposits, federal funds purchased and other borrowings. A key objective in our use of these markets is to maintain access to a diversified mix of wholesale funding sources.

## Deposits

Table 31 provides the composition of deposits as of June 30, 2017 and December 31, 2016, as well as a comparison of average balances, interest expense and average deposit interest rates for the three and six months ended June 30, 2017 and 2016.

Table 31: Deposits Composition and Average Deposits Interest Rates

| (Dollars in millions) | $\begin{gathered} \text { June 30, } \\ 2017 \end{gathered}$ |  | $\begin{gathered} \text { December 31, } \\ 2016 \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: |
| Non-interest-bearing deposits | \$ | 25,953 | \$ | 25,502 |
| Interest-bearing checking accounts ${ }^{(1)}$ |  | 45,005 |  | 45,820 |
| Saving deposits ${ }^{(2)}$ |  | 143,680 |  | 145,142 |
| Time deposits less than \$100,000 |  | 20,875 |  | 16,949 |
| Total core deposits |  | 235,513 |  | 233,413 |
| Time deposits of \$100,000 or more |  | 3,821 |  | 2,875 |
| Foreign deposits |  | 429 |  | 480 |
| Total deposits | \$ | 239,763 | \$ | 236,768 |


| (Dollars in millions) | Three Months Ended June 30, |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2017 |  |  |  |  | 2016 |  |  |  |  |
|  | Average Balance |  | Interest <br> Expense |  | Average Deposits Interest Rate | Average Balance |  | Interest Expense |  | Average Deposits Interest Rate |
| Interest-bearing checking accounts ${ }^{(1)}$ | \$ | 45,380 | \$ | 57 | 0.50\% | \$ | 45,786 | \$ | 55 | 0.48\% |
| Saving deposits ${ }^{(2)}$ |  | 144,883 |  | 234 | 0.65 |  | 136,067 |  | 198 | 0.58 |
| Time deposits less than \$100,000 |  | 19,932 |  | 76 | 1.52 |  | 10,640 |  | 30 | 1.13 |
| Total interest-bearing core deposits |  | 210,195 |  | 367 | 0.70 |  | 192,493 |  | 283 | 0.59 |
| Time deposits of \$100,000 or more |  | 3,721 |  | 14 | 1.46 |  | 2,467 |  | 9 | 1.46 |
| Foreign deposits |  | 496 |  | 1 | 0.77 |  | 681 |  | - | - |
| Total interest-bearing deposits | \$ | 214,412 | \$ | 382 | 0.71 | \$ | 195,641 | \$ | 292 | 0.60 |


| (Dollars in millions) | Six Months Ended June 30, |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2017 |  |  |  |  | 2016 |  |  |  |  |
|  | Average Balance |  | Interest Expense |  | Average Deposits Interest Rate | Average Balance |  | Interest Expense |  | Average Deposits Interest Rate |
| Interest-bearing checking accounts ${ }^{(1)}$ | \$ | 45,542 | \$ | 111 | 0.49\% | \$ | 45,882 | \$ | 110 | 0.48\% |
| Saving deposits ${ }^{(2)}$ |  | 145,188 |  | 459 | 0.63 |  | 135,372 |  | 389 | 0.57 |
| Time deposits less than \$100,000 |  | 19,101 |  | 139 | 1.45 |  | 10,597 |  | 59 | 1.12 |
| Total interest-bearing core deposits |  | 209,831 |  | 709 | 0.67 |  | 191,851 |  | 558 | 0.58 |
| Time deposits of \$100,000 or more |  | 3,375 |  | 25 | 1.45 |  | 2,339 |  | 16 | 1.39 |
| Foreign deposits |  | 490 |  | 1 | 0.39 |  | 693 |  | 1 | 0.34 |
| Total interest-bearing deposits | \$ | 213,696 | \$ | 735 | 0.69 | \$ | 194,883 | \$ | 575 | 0.59 |

(1) Includes Negotiable Order of Withdrawal ("NOW") accounts.
(2) Includes Money Market Deposit Accounts ("MMDA").

Our deposits include brokered deposits, which we obtained through third-party intermediaries. Those brokered deposits are reported as interest-bearing checking, saving deposits and time deposits in the above table and totaled $\$ 21.2$ billion and $\$ 22.5$ billion as of June 30, 2017 and December 31, 2016, respectively.

The FDIC limits the acceptance of brokered deposits by well-capitalized insured depository institutions and, with a waiver from the FDIC, by adequately-capitalized institutions. COBNA and CONA were well-capitalized, as defined under the federal banking regulatory guidelines, as of June 30, 2017 and December 31, 2016, respectively. See "Part I—Item 1. Business—Supervision and Regulation" for additional information.

## Short-Term Borrowings and Long-Term Debt

We access the capital markets to meet our funding needs through the issuance of senior and subordinated notes, securitized debt obligations, and federal funds purchased and securities loaned or sold under agreements to repurchase. In addition, we may utilize short-term and long-term FHLB advances secured by our investment securities, residential home loans, multifamily real estate loans, commercial real estate loans and home equity lines of credit. Substantially all of our long-term FHLB advances are structured with either a one-month or a three-month call option at our discretion.

Our short-term borrowings include those borrowings with an original contractual maturity of one year or less and do not include the current portion of long-term debt. The short-term borrowings, which consist of federal funds purchased and securities loaned or sold under agreements to repurchase, decreased by $\$ 34$ million to $\$ 958$ million as of June 30, 2017 from December 31, 2016.

Our long-term debt, which primarily consists of securitized debt obligations, senior and subordinated notes, and long-term FHLB advances, decreased by $\$ 10.5$ billion to $\$ 49.0$ billion as of June 30,2017 from December 31, 2016, primarily attributable to a decrease in our FHLB advances outstanding, partially offset by an increase in our senior and subordinated notes.

## Credit Ratings

Our credit ratings impact our ability to access capital markets and our borrowing costs. Rating agencies base their ratings on numerous factors, including liquidity, capital adequacy, asset quality, quality of earnings and the probability of systemic support. Significant changes in these factors could result in different ratings. Such ratings help to support our cost effective unsecured funding as part of our overall financing programs.

Table 32 provides a summary of the credit ratings for the senior unsecured long-term debt of Capital One Financial Corporation, COBNA and CONA as of June 30, 2017 and December 31, 2016.

Table 32: Senior Unsecured Long-Term Debt Credit Ratings

|  | June 30, 2017 |  |  | December 31, 2016 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Capital One Financial Corporation | COBNA | CONA | Capital One Financial Corporation | COBNA | CONA |
| Moody's | Baa1 | Baa1 | Baa1 | Baal | Baal | Baal |
| S\&P | BBB | BBB+ | BBB+ | BBB | BBB+ | BBB+ |
| Fitch | A- | A- | A- | A- | A- | A- |

As of July 25, 2017, Moody's, S\&P and Fitch Ratings ("Fitch") have us on a stable outlook.

## MARKET RISK PROFILE

Market risk is inherent in the financial instruments associated with our operations and activities, including loans, deposits, securities, short-term borrowings, long-term debt and derivatives. Below we provide additional information about our primary sources of market risk, our market risk management strategies and the measures we use to evaluate our market risk exposure.

## Primary Market Risk Exposures

Our primary source of market risk is interest rate risk. We also have exposure to foreign exchange risk and customer-related trading risk, both of which we believe are minimal after considering the impact of our associated risk management activities discussed below.

## Interest Rate Risk

Interest rate risk, which represents exposure to instruments whose yield or price varies with the volatility of interest rates, is our most significant source of market risk exposure. Banks are inevitably exposed to interest rate risk due to differences in the timing between the maturities or re-pricing of assets and liabilities.

## Foreign Exchange Risk

Foreign exchange risk represents exposure to changes in the values of current holdings and future cash flows denominated in other currencies. Our primary exposure to foreign exchange risk is related to the operations of our international businesses in the U.K. and Canada. The largest foreign exchange exposure arising from these operations is the funding they are provided in the Great British pound ("GBP") and the Canadian dollar ("CAD"), respectively. We also have foreign exchange exposure through our net equity investments in these operations and through the dollar-denominated value of future earnings and cash flows they generate.

Our intercompany funding exposes our consolidated statements of income to foreign exchange transaction risk, while our equity investments in our foreign operations result in translation risk in AOCI and our capital ratios. We manage our transaction risk by entering into forward foreign currency derivative contracts to hedge our exposure to variability in cash flows related to foreign currency-denominated intercompany borrowings. We use foreign currency derivative contracts as net investment hedges to manage our AOCI exposure. We apply hedge accounting to both our intercompany funding hedges and our net investment hedges, with the primary net investments subject to hedging those denominated in GBP.

The intercompany borrowings to our international businesses were 726 million GBP and 786 million GBP as of June 30,2017 and December 31, 2016, respectively, and 6.3 billion CAD and 6.2 billion CAD as of June 30, 2017 and December 31, 2016, respectively. We hedge all the cash flows associated with these borrowings with forward foreign currency derivative contracts.

We measure our total exposure in non-dollar-denominated equity by regularly tracking the value of net equity invested in our foreign operations, the largest of which is in our U.K. and Canadian operations. Our measurement of net equity includes the impact of net investment hedges where applicable. We apply a $30 \%$ U.S. dollar appreciation shock against these net investment exposures, which we believe approximates a significant adverse foreign exchange movement over a one-year time horizon. Our gross equity exposures in our U.K. and Canadian operations were 1.5 billion GBP as of both June 30, 2017 and December 31, 2016, and 970 million CAD and 863 million CAD as of June 30, 2017 and December 31, 2016, respectively.

As a result of our derivative management activities, we believe our net exposure to foreign exchange risk is minimal.

## Customer-Related Trading Risk

We offer various interest rate, foreign exchange rate and commodity derivatives as an accommodation to our customers within our Commercial Banking business and offset the majority of these exposures through derivative transactions with other counterparties. These exposures are measured and monitored on a daily basis. As a result of offsetting our customer exposures with other counterparties, we believe our net exposure to customer-related trading risk is minimal.

We employ value-at-risk ("VaR") as the primary method to both measure and monitor the market risk in our customer-related trading activities. VaR is a statistical-based risk measure used to estimate the potential loss from adverse market movements in a normal market environment. We employ a historical simulation approach using the most recent 500 business days and use a 99 percent confidence level and a holding period of 1 business day. We use internal models to produce a daily VaR measure of the market risk of all customer-related trading exposures.

For further information on our customer-related trading exposures, see "Note 9—Derivative Instruments and Hedging Activities."

## Market Risk Management

We employ several techniques to manage our interest rate and foreign exchange risk, which include, but are not limited to, altering the duration and re-pricing characteristics of our various assets and liabilities through interest rate derivatives and mitigating the foreign exchange exposure of certain non-dollar-denominated equity or transactions through derivatives. Our current market risk management policies include the use of derivatives, which are one of the primary tools we use in managing interest rate and foreign exchange risk. We execute our derivative contracts in both over-the-counter ("OTC") and exchange-traded derivative markets and have exposure to both bilateral and clearinghouse counterparties. Although the majority of our derivatives are interest rate swaps, we also use a variety of other derivative instruments, including caps, floors, options, futures and forward contracts, to manage both our interest rate and foreign currency risk. The outstanding notional amount of our derivative contracts increased to $\$ 166.9$ billion as of June 30, 2017 from $\$ 142.9$ billion as of December 31, 2016 primarily driven by an increase in our hedging activities.

## Market Risk Measurement

We have risk management policies and limits established by our market risk management policies and approved by the Board of Directors. Our objective is to manage our asset and liability risk position and exposure to market risk in accordance with these policies and prescribed limits based on prevailing market conditions and long-term expectations. Because no single measure can reflect all aspects of market risk, we use various industry standard market risk measurement techniques and analysis to measure, assess and manage the impact of changes in interest rates on our net interest income and our economic value of equity and the impact of changes in foreign exchange rates on our non-dollar-denominated earnings and non-dollar equity investments in foreign operations. We provide additional information below in "Economic Value of Equity."

We consider the impact on both net interest income and economic value of equity in measuring and managing our interest rate risk. Due to the increase in interest rates since December 31, 2016, we have incorporated a 100 -basis points decline scenario into our interest rate sensitivity analysis. We use this 100 -basis points decrease as our largest magnitude declining interest rate scenario, since a scenario where interest rates would decline by 200 basis points is unlikely. In scenarios where a 100-basis points decline would result in a rate less than $0 \%$, we assume a rate of $0 \%$. Below we discuss the assumptions used in calculating each of these measures.

## Net Interest Income Sensitivity

This sensitivity measure estimates the impact on our projected 12-month baseline interest rate-sensitive revenue resulting from movements in interest rates. Interest rate-sensitive revenue consists of net interest income and certain components of other noninterest income significantly impacted by movements in interest rates, including changes in the fair value of mortgage servicing rights and free-standing interest rate swaps. Adjusted net interest income consists of net interest income and changes in the fair value of mortgage servicing rights, including related derivative hedging activity, and changes in the fair value of free-standing interest rate swaps. In addition to our existing assets and liabilities, we incorporate expected future business growth assumptions, such as loan and deposit growth and pricing, and plans for projected changes in our funding mix in our baseline forecast. In measuring the sensitivity of interest rate movements on our projected interest rate-sensitive revenue, we assume a hypothetical instantaneous parallel shift in the level of interest rates of +200 basis points, +100 basis points, +50 basis points, -50 basis points and -100 basis points to spot rates, with the lower rate scenario limited to zero as described above. At the current level of interest rates, our net interest income increases in the +50 and +100 basis points scenarios and declines in the +200 basis points scenario. The net interest income decline in the +200 basis points scenario compared with the +100 basis points scenario is mainly due to our assumption that deposit repricing increases more quickly with higher interest rates.

## Economic Value of Equity

Our economic value of equity sensitivity measure estimates the impact on the net present value of our assets and liabilities, including derivative hedging activity, resulting from movements in interest rates. Our economic value of equity sensitivity measures are calculated based on our existing assets and liabilities, including derivatives, and do not incorporate business growth assumptions or projected plans for funding mix changes. In measuring the sensitivity of interest rate movements on our economic value of equity, we assume a hypothetical instantaneous parallel shift in the level of interest rates of +200 basis points, +100 basis points, +50 basis points, -50 basis points and -100 basis points to spot rates, with the lower rate scenario limited to zero as described above.

Calculating our economic value of equity and its sensitivity to interest rates requires projecting cash flows for assets, liabilities and derivative instruments and discounting those cash flows at the appropriate discount rates. Key assumptions in our economic value of equity calculation include projecting rate sensitive prepayments for mortgage securities, loans and other assets, term structure modeling of interest rates, discount spreads, and deposit volume and pricing assumptions.

Our current economic value of equity sensitivity profile demonstrates that our economic value of equity generally decreases as interest rates increase indicating that the economic value of our assets and derivative positions is more sensitive to interest rate changes than our liabilities.

Table 33 shows the estimated percentage impact on our projected baseline net interest income and economic value of equity calculated under the methodology described above as of June 30, 2017 and December 31, 2016. During the second quarter of 2017, we updated our projected commercial deposit attrition assumptions that resulted in longer life of these deposit balances and accounts for most of the decrease in economic value of equity sensitivity from December 31, 2016. Our net interest income sensitivity measures were largely unchanged from this assumption update.

Table 33: Interest Rate Sensitivity Analysis

|  | $\begin{aligned} & \text { June 30, } \\ & 2017 \end{aligned}$ | $\underset{2016}{ }{ }^{\text {December 31, }}$ |
| :---: | :---: | :---: |
| Estimated impact on projected baseline net interest income: |  |  |
| +200 basis points | (0.5)\% | (0.1)\% |
| +100 basis points | 0.2 | 0.5 |
| +50 basis points | 0.2 | 0.4 |
| -50 basis points | (0.5) | (1.0) |
| -100 basis points | (2.3) | N/A |
| Estimated impact on economic value of equity: |  |  |
| +200 basis points | (7.1) | (9.6) |
| +100 basis points | (2.6) | (3.8) |
| +50 basis points | (1.0) | (1.5) |
| -50 basis points | (0.3) | 0.5 |
| -100 basis points | (2.2) | N/A |

In addition to these industry standard measures, we will continue to factor into our internal interest rate risk management decisions the potential impact of alternative interest rate scenarios, such as stressed rate shocks as well as steepening and flattening yield curve scenarios.

## Limitations of Market Risk Measures

The interest rate risk models that we use in deriving these measures incorporate contractual information, internally-developed assumptions and proprietary modeling methodologies, which project borrower and depositor behavior patterns in certain interest rate environments. Other market inputs, such as interest rates, market prices and interest rate volatility, are also critical components of our interest rate risk measures. We regularly evaluate, update and enhance these assumptions, models and analytical tools as we believe appropriate to reflect our best assessment of the market environment and the expected behavior patterns of our existing assets and liabilities.

There are inherent limitations in any methodology used to estimate the exposure to changes in market interest rates. The sensitivity analysis described above contemplates only certain movements in interest rates and is performed at a particular point in time based on the existing balance sheet and, in some cases, expected future business growth and funding mix assumptions. The strategic actions that management may take to manage our balance sheet may differ significantly from our projections, which could cause our actual earnings and economic value of equity sensitivities to differ substantially from the above sensitivity analysis.

## SUPERVISION AND REGULATION

We provide information on our Supervision and Regulation in our 2016 Form 10-K under "Part I—Item 1. Business—Supervision and Regulation."

## FORWARD-LOOKING STATEMENTS

From time to time, we have made and will make forward-looking statements, including those that discuss, among other things, strategies, goals, outlook or other non-historical matters; projections, revenues, income, returns, expenses, capital measures, accruals for claims in litigation and for other claims against us; earnings per share or other financial measures for us; future financial and operating results; our plans, objectives, expectations and intentions; and the assumptions that underlie these matters.

To the extent that any such information is forward-looking, it is intended to fit within the safe harbor for forward-looking information provided by the Private Securities Litigation Reform Act of 1995.

Numerous factors could cause our actual results to differ materially from those described in such forward-looking statements, including, among other things:

- general economic and business conditions in the U.S., the U.K., Canada or our local markets, including conditions affecting employment levels, interest rates, collateral values, consumer income, credit worthiness and confidence, spending and savings that may affect consumer bankruptcies, defaults, charge-offs and deposit activity;
- an increase or decrease in credit losses, including increases due to a worsening of general economic conditions in the credit environment, and the impact of inaccurate estimates or inadequate reserves;
- financial, legal, regulatory, tax or accounting changes or actions, including the impact of the Dodd-Frank Act and the regulations promulgated thereunder, and other regulatory reforms and regulations governing bank capital and liquidity standards, including Basel-related initiatives and potential changes to financial accounting and reporting standards;
- developments, changes or actions relating to any litigation, governmental investigation or regulatory enforcement action or matter involving us;
- the inability to sustain revenue and earnings growth;
- increases or decreases in interest rates;
- our ability to access the capital markets at attractive rates and terms to capitalize and fund our operations and future growth;
- the success of our marketing efforts in attracting and retaining customers;
- increases or decreases in our aggregate loan balances or the number of customers and the growth rate and composition thereof, including increases or decreases resulting from factors such as shifting product mix, amount of actual marketing expenses we incur and attrition of loan balances;
- the level of future repurchase or indemnification requests we may receive, the actual future performance of mortgage loans relating to such requests, the success rates of claimants against us, any developments in litigation and the actual recoveries we may make on any collateral relating to claims against us;
- the amount and rate of deposit growth;
- changes in the reputation of, or expectations regarding, the financial services industry or us with respect to practices, products or financial condition;
- changes in retail distribution strategies and channels, including in the behavior and expectations of our customers;
- any significant disruption in our operations or in the technology platforms on which we rely, including security failures or breaches of our systems or those of our customers, partners, service providers or other third parties;
- our ability to maintain a compliance and technology infrastructure suitable for the nature of our business;
- our ability to develop digital technology that addresses the needs of our customers, including the challenges relating to rapid significant technological changes;
- the effectiveness of our risk management strategies;
- our ability to control costs, including the amount of, and rate of growth in, our expenses as our business develops or changes or as it expands into new market areas;
- our ability to execute on our strategic and operational plans;
- the extensive use of models in our business, including those to aggregate and assess various risk exposures and estimate certain financial values;
- any significant disruption of, or loss of public confidence in, the internet affecting the ability of our customers to access their accounts and conduct banking transactions;
- our ability to recruit and retain talented and experienced personnel;
- changes in the labor and employment markets;
- fraud or misconduct by our customers, employees, business partners or third parties;
- competition from providers of products and services that compete with our businesses;
- increased competition for rewards customers resulting in higher rewards expense, or impairing our ability to attract and retain credit card customers;
- merchants' increasing focus on the fees charged by credit card networks; and
- other risk factors listed from time to time in reports that we file with the SEC.

Any forward-looking statements made by us or on our behalf speak only as of the date they are made or as of the date indicated, and we do not undertake any obligation to update forward-looking statements as a result of new information, future events or otherwise. You should carefully consider the factors discussed above in evaluating these forward-looking statements. For additional information on factors that could materially influence forward-looking statements included in this Report, see the risk factors set forth under "Part I—Item 1A. Risk Factors" in our 2016 Form 10-K.

## SUPPLEMENTAL TABLE

We report certain non-GAAP measures that management uses in assessing its capital adequacy and the level of return generated. These non-GAAP measures are individually identified and calculations are explained in footnotes below the table. These metrics are considered key financial performance measures for the Company. We believe they provide useful insight to investors and users of our financial information in assessing the results of the Company.

The table below provides the details of the calculation of our non-GAAP and regulatory capital measures. While some of our nonGAAP measures are widely used by investors, analysts and bank regulatory agencies to assess the capital position of financial services companies, they may not be comparable to similarly-titled measures reported by other companies.

Table A—Reconciliation of Non-GAAP Measures and Calculation of Regulatory Capital Measures

| (Dollars in millions, except as noted) | June 30, 2017 |  | December 31, 2016 |  |
| :---: | :---: | :---: | :---: | :---: |
| Tangible Common Equity (Period-End) |  |  |  |  |
| Stockholders' equity | \$ | 49,137 | \$ | 47,514 |
| Goodwill and intangible assets ${ }^{(1)}$ |  | $(15,301)$ |  | $(15,420)$ |
| Noncumulative perpetual preferred stock |  | $(4,360)$ |  | $(4,360)$ |
| Tangible common equity | \$ | 29,476 | \$ | 27,734 |
| Tangible Common Equity (Quarterly Average) |  |  |  |  |
| Stockholders' equity | \$ | 49,005 | \$ | 47,972 |
| Goodwill and intangible assets ${ }^{(1)}$ |  | $(15,336)$ |  | $(15,455)$ |
| Noncumulative perpetual preferred stock |  | $(4,360)$ |  | $(4,051)$ |
| Tangible common equity | \$ | 29,309 | \$ | 28,466 |
| Tangible Assets (Period-End) |  |  |  |  |
| Total assets | \$ | 350,593 | \$ | 357,033 |
| Goodwill and intangible assets ${ }^{(1)}$ |  | $(15,301)$ |  | $(15,420)$ |
| Tangible assets | \$ | 335,292 | \$ | 341,613 |
| Tangible Assets (Quarterly Average) |  |  |  |  |
| Total assets | \$ | 349,891 | \$ | 350,225 |
| Goodwill and intangible assets ${ }^{(1)}$ |  | $(15,336)$ |  | $(15,455)$ |
| Tangible assets | \$ | 334,555 | \$ | 334,770 |
| Non-GAAP Ratio |  |  |  |  |
| TCE ${ }^{(2)}$ |  | 8.8\% |  | 8.1\% |
| Capital Ratios ${ }^{(3)}$ |  |  |  |  |
| Common equity Tier 1 capital ${ }^{(4)}$ |  | 10.7\% |  | 10.1\% |
| Tier 1 capital ${ }^{(5)}$ |  | 12.2 |  | 11.6 |
| Total capital ${ }^{(6)}$ |  | 14.9 |  | 14.3 |
| Tier 1 leverage ${ }^{(7)}$ |  | 10.3 |  | 9.9 |
| Supplementary leverage ${ }^{(8)}$ |  | 8.9 |  | 8.6 |
| Regulatory Capital Metrics |  |  |  |  |
| Risk-weighted assets ${ }^{(9)}$ | \$ | 283,231 | \$ | 285,756 |
| Adjusted average assets ${ }^{(7)}$ |  | 335,248 |  | 335,835 |
| Total leverage exposure for supplementary leverage ratio |  | 390,561 |  | 387,921 |


| (Dollars in millions) | June 30, 2017 |  | December 31, 2016 |  |
| :---: | :---: | :---: | :---: | :---: |
| Regulatory Capital Under Basel III Standardized Approach |  |  |  |  |
| Common equity excluding AOCI | \$ | 45,459 | \$ | 44,103 |
| Adjustments: |  |  |  |  |
| $\mathrm{AOCI}^{(10)(11)}$ |  | (593) |  | (674) |
| Goodwill, net of related deferred tax liabilities |  | $(14,299)$ |  | $(14,307)$ |
| Intangible assets, net of related deferred tax liabilities ${ }^{(11)}$ |  | (419) |  | (384) |
| Other |  | 78 |  | 65 |
| Common equity Tier 1 capital |  | 30,226 |  | 28,803 |
| Tier 1 capital instruments |  | 4,360 |  | 4,359 |
| Additional Tier 1 capital adjustments |  | (1) |  | - |
| Tier 1 capital |  | 34,585 |  | 33,162 |
| Tier 2 capital instruments |  | 3,930 |  | 4,047 |
| Qualifying allowance for loan and lease losses |  | 3,586 |  | 3,608 |
| Tier 2 capital |  | 7,516 |  | 7,655 |
| Total capital ${ }^{(12)}$ | \$ | 42,101 | \$ | 40,817 |

(1) Includes impact of related deferred taxes.
(2) TCE ratio is a non-GAAP measure calculated by dividing the period-end TCE by period-end tangible assets.
(3) Ratios as of June 30, 2017 are preliminary. As we continue to validate our data, the calculations are subject to change until we file our June 30 , 2017 Form FR Y-9C-Consolidated Financial Statements for Holding Companies and Call Reports.
(4) Common equity Tier 1 capital ratio is a regulatory capital measure calculated based on common equity Tier 1 capital divided by risk-weighted assets.
(5) Tier 1 capital ratio is a regulatory capital measure calculated based on Tier 1 capital divided by risk-weighted assets.
(6) Total capital ratio is a regulatory capital measure calculated based on total capital divided by risk-weighted assets.
${ }^{(7)}$ Adjusted average assets, for the purpose of calculating our Tier 1 leverage ratio, represent total average assets adjusted for amounts that deducted from Tier 1 capital, predominately goodwill and intangible assets. Tier 1 leverage ratio is a regulatory capital measure calculated based on Tier 1 capital divided by adjusted average assets.
${ }^{(8)}$ Supplementary leverage ratio is a regulatory capital measure calculated based on Tier 1 capital divided by total leverage exposure. See "MD\&A-Capital Management" for additional information.
${ }^{(9)}$ Includes credit and market risk weighted assets.
(10) Amounts presented are net of tax
(11) Amounts based on transition provisions for regulatory capital deductions and adjustments of $60 \%$ for 2016 and $80 \%$ for 2017 .
${ }^{(12)}$ Total capital equals the sum of Tier 1 capital and Tier 2 capital.

2016 Stock Repurchase Program: On June 29, 2016, we announced that our Board of Directors had authorized the repurchase of up to $\$ 2.5$ billion of shares of our common stock from the third quarter of 2016 through the end of the second quarter of 2017.

2017 Stock Repurchase Program: On June 28, 2017, we announced that our Board of Directors had authorized the repurchase of up to $\$ 1.85$ billion of shares of our common stock from the third quarter of 2017 through the end of the second quarter of 2018.

Annual Report: References to our "2016 Form 10-K" or "2016 Annual Report" are to our Annual Report on Form 10-K for the fiscal year ended December 31, 2016.

Banks: Refers to COBNA and CONA.
Basel Committee: The Basel Committee on Banking Supervision.
Basel III Advanced Approaches: The Basel III Advanced Approaches is mandatory for those institutions with consolidated total assets of $\$ 250$ billion or more or consolidated total on-balance sheet foreign exposure of $\$ 10$ billion or more. The Basel III Capital Rule modified the Advanced Approaches version of Basel II to create the Basel III Advanced Approaches.

Basel III Capital Rule: The Federal Baking Agencies issued a rule in July 2013 implementing the Basel III capital framework developed by the Basel Committee as well as certain Dodd-Frank Act and other capital provisions.

Basel III Standardized Approach: The Basel III Capital Rule modified Basel I to create the Basel III Standardized Approach, which requires for Basel III Advanced Approaches banking organizations that have yet to exit parallel run to use the Basel III Standardized Approach to calculate regulatory capital, including capital ratios, subject to transition provisions.
Capital One: Capital One Financial Corporation and its subsidiaries.
Carrying value (with respect to loans): The amount at which a loan is recorded on the consolidated balance sheets. 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 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 PCI loans, carrying value represents the present value of all expected cash flows including interest that has not yet been accrued, discounted at the effective interest rate, including any valuation allowance for impaired loans.

CCB: Chevy Chase Bank, F.S.B., which was acquired by the Company in 2009.
CECL: In June 2016, the FASB issued revised guidance for impairments on financial instruments. The guidance, which becomes effective on January 1, 2020 with early adoption permitted no earlier than January 1, 2019, requires use of a current expected credit loss ("CECL") model that is based on expected rather than incurred losses, with an anticipated result of more timely loss recognition.
COBNA: Capital One Bank (USA), National Association, one of our fully owned subsidiaries, which offers credit and debit card products, other lending products and deposit products.
Common equity Tier 1 capital: Calculated as the sum of common equity, related surplus and retained earnings, and accumulated other comprehensive income net of applicable phase-ins, less goodwill and intangibles net of associated deferred tax liabilities and applicable phase-ins, less other deductions, as defined by regulators.

Company: Capital One Financial Corporation and its subsidiaries.
CONA: Capital One, National Association, one of our fully owned subsidiaries, which offers a broad spectrum of banking products and financial services to consumers, small businesses and commercial clients.

Credit risk: The risk of loss from an obligor's failure to meet the terms of any contract or otherwise fail to perform as agreed.
Derivative: A contract or agreement whose value is derived from changes in interest rates, foreign exchange rates, prices of securities or commodities, credit worthiness for credit default swaps or financial or commodity indices.
Discontinued operations: The operating results of a component of an entity, as defined by Accounting Standards Codification ("ASC") 205, that are removed from continuing operations when that component has been disposed of or it is management's intention to sell the component.

Dodd-Frank Wall Street Reform and Consumer Protection Act ("Dodd-Frank Act"): Regulatory reform legislation signed into law on July 21, 2010. This law broadly affects the financial services industry and contains numerous provisions aimed at strengthening the sound operation of the financial services sector.

Exchange Act: The Securities Exchange Act of 1934.
eXtensible Business Reporting Language ("XBRL"): A language for the electronic communication of business and financial data.

Federal Banking Agencies: The Federal Reserve, Office of the Comptroller of the Currency and Federal Deposit Insurance Corporation.

Federal Reserve: The Board of Governors of the Federal Reserve System.
FICO score: A measure of consumer credit risk provided by credit bureaus, typically produced from statistical modeling software created by FICO (formerly known as "Fair Isaac Corporation") utilizing data collected by the credit bureaus.
Final LCR Rule: In September 2014, the Federal Banking Agencies issued final rules implementing the Basel III Liquidity Coverage Ratio in the United States. The Final LCR Rule applies to institutions with $\$ 250$ billion or more in total consolidated assets or $\$ 10$ billion or more in total consolidated on-balance sheet foreign exposure, and their respective consolidated subsidiary depository institutions with $\$ 10$ billion or more in total consolidated assets. The LCR is calculated by dividing the amount of an institution's high quality, unencumbered liquid assets by its estimated net cash outflow, as defined and calculated in accordance with Final LCR Rule.

Foreign currency derivative contracts: An agreement to exchange contractual amounts of one currency for another currency at one or more future dates.

Foreign exchange contracts: Contracts that provide for the future receipt or delivery of foreign currency at previously agreedupon terms.

GreenPoint: Refers to our wholesale mortgage banking unit, GreenPoint Mortgage Funding, Inc., which was closed in 2007.
GSE or Agency: A government-sponsored enterprise or agency is a financial services corporation created by the United States Congress. Examples of U.S. government agencies include Federal National Mortgage Association ("Fannie Mae"), Federal Home Loan Mortgage Corporation ("Freddie Mac"), Government National Mortgage Association ("Ginnie Mae") and the Federal Home Loan Banks ("FHLB").

HFS acquisition: On December 1, 2015, we acquired the Healthcare Financial Services business of General Electric Capital Corporation, which provides financing to companies in various healthcare sectors, including hospitals, senior housing, medical offices, pharmaceuticals, medical devices and healthcare technology.

Impaired loans: A loan is considered impaired when, based on current information and events, it is probable that we will not be able to collect all amounts due from the borrower in accordance with the original contractual terms of the loan.

Inactive Insured Securitizations: Securitizations as to which the monoline bond insurers have not made repurchase-related requests or loan file requests to one of our subsidiaries.

ING Direct acquisition: On February 17, 2012, we completed the acquisition of substantially all of the ING Direct business in the United States ("ING Direct") from ING Groep N.V., ING Bank N.V., ING Direct N.V. and ING Direct Bancorp.

Insured securitizations: Securitizations supported by bond insurance.
Interest rate sensitivity: The exposure to interest rate movements.
Interest rate swaps: Contracts in which a series of interest rate flows in a single currency are exchanged over a prescribed period. Interest rate swaps are the most common type of derivative contract that we use in our asset/liability management activities.

Investment grade: Represents Moody's long-term rating of Baa3 or better; and/or a Standard \& Poor's or DBRS long-term rating of BBB- or better; or if unrated, an equivalent rating using our internal risk ratings. Instruments that fall below these levels are considered to be non-investment grade.

Investments in qualified affordable housing projects: Capital One invests in private investment funds that make equity investments in multifamily affordable housing properties that provide affordable housing tax credits for these investments. The activities of these entities are financed with a combination of invested equity capital and debt.

Investor entities: Entities that invest in community development entities ("CDE") that provide debt financing to businesses and non-profit entities in low-income and rural communities.

Leverage ratio: Tier 1 capital divided by average assets after certain adjustments, as defined by the regulators.
Liquidity risk: The risk that the Company will not be able to meet its future financial obligations as they come due, or invest in future asset growth because of an inability to obtain funds at a reasonable price within a reasonable time period.

Loan-to-value ("LTV") ratio: The relationship expressed as a percentage, between the principal amount of a loan and the appraised value of the collateral (i.e., residential real estate, autos, etc.) securing the loan.

Managed presentation: A non-GAAP presentation of financial results that includes reclassifications to present revenue on a fully taxable-equivalent basis. Management uses this non-GAAP financial measure at the segment level, because it believes this provides information to enable investors to understand the underlying operational performance and trends of the particular business segment and facilitates a comparison of the business segment with the performance of competitors.

Market risk: The risk that an institution's earnings or the economic value of equity could be adversely impacted by changes in interest rates, foreign exchange rates or other market factors.
Master netting agreement: An agreement between two counterparties that have multiple contracts with each other that provides for the net settlement of all contracts through a single payment in the event of default or termination of any one contract.
Mortgage-backed security ("MBS"): An asset-backed security whose cash flows are backed by the principal and interest payments of a set of mortgage loans.

Mortgage servicing rights ("MSR"): The right to service a mortgage loan when the underlying loan is sold or securitized. Servicing includes collections for principal, interest and escrow payments from borrowers and accounting for and remitting principal and interest payments to investors.

Net interest margin: The result of dividing net interest income by average interest-earning assets.
Nonperforming loans and leases: Loans and leases that have been placed on non-accrual status.
North Fork: North Fork Bancorporation, Inc., which was acquired by the Company in 2006.
Operational risk: The risk of loss, capital impairment, adverse customer experience or reputational impact resulting from failure to comply with policies and procedures, failed internal processes or systems, or from external events.
Option-ARM loans: The option-ARM real estate loan product is an adjustable-rate mortgage loan that initially provides the borrower with the monthly option to make a fully-amortizing, interest-only or minimum fixed payment. After the initial payment option period, usually five years, the recalculated minimum payment represents a fully-amortizing principal and interest payment that would effectively repay the loan by the end of its contractual term.

Other-than-temporary impairment ("OTTI"): An impairment charge taken on a security whose fair value has fallen below the carrying value on the balance sheet and whose value is not expected to recover through the holding period of the security.

Purchased credit-impaired ("PCI") loans: Refers to the loans acquired in a business combination that were recorded at fair value at acquisition and subsequently accounted for based on cash flows expected to be collected in accordance with ASC 310-30, Loans and Debt Securities Acquired with Deteriorated Credit Quality (formerly known as "Statement of Position 03-3, Accounting for Certain Loans or Debt Securities Acquired in a Transfer," commonly referred to as "SOP 03-3"). Acquired loans are considered PCI loans if they have a discount attributable, at least in part, to credit deterioration and they are not specifically scoped out of this guidance. Our PCI loans include a limited portion of commercial loans acquired in the HFS acquisition and the substantial majority of consumer and commercial loans acquired in the ING Direct and Chevy Chase acquisitions.

The excess of cash flows expected to be collected over the estimated fair value of purchased loans represents the accretable yield, which is recognized into interest income over the life of the loans. The difference between total contractual payments on the loans and all expected cash flows represents the nonaccretable difference or the amount of principal and interest not considered collectible, which incorporates future expected credit losses over the life of the loans. Decreases in expected cash flows from credit deterioration subsequent to acquisition will generally result in an impairment charge recognized in our provision for credit losses and an increase in the allowance for loan and lease losses. Charge-offs are not recorded until the expected credit losses within the nonaccretable difference are depleted. PCI loans are not classified as delinquent or nonperforming as we expect to collect our net investment in these loans and the nonaccretable difference will absorb the majority of the losses associated with these loans. In addition, PCI
loans are excluded from impaired loans because the applicable accounting methodology takes into consideration expected future credit losses.

Public Fund deposits: Deposits that are derived from a variety of political subdivisions such as school districts and municipalities.
Purchase volume: Includes purchase transactions, net of returns, for the period for loans both classified as held for investment and held for sale. Excludes cash advance and balance transfer transactions.

Rating agency: An independent agency that assesses the credit quality and likelihood of default of an issue or issuer and assigns a rating to that issue or issuer.

Recorded investment: The amount of the investment in a loan which includes any direct write-down of the investment.
Repurchase agreement: An instrument used to raise short-term funds whereby securities are sold with an agreement for the seller to buy back the securities at a later date.

Restructuring charges: Charges typically from the consolidation or relocation of operations, and reductions in work force.
Return on average assets: Calculated based on income from continuing operations, net of tax, for the period divided by average total assets for the period.
Return on average common equity: Calculated based on the sum of (i) income from continuing operations, net of tax; (ii) less dividends and undistributed earnings allocated to participating securities; (iii) less preferred stock dividends, for the period, divided by average common equity. Our calculation of return on average common equity may not be comparable to similarly-titled measures reported by other companies.

Return on average tangible common equity: A non-GAAP financial measure calculated based on the sum of (i) income from continuing operations, net of tax; (ii) less dividends and undistributed earnings allocated to participating securities; and (iii) less preferred stock dividends, for the period, divided by average tangible common equity. Our calculation of return on average tangible common equity may not be comparable to similarly-titled measures reported by other companies.

Risk-weighted assets: Consist of on- and off-balance sheet assets that are assigned to one of several broad risk categories and weighted by factors representing their risk and potential for default.
Securitized debt obligations: A type of asset-backed security and structured credit product constructed from a portfolio of fixedincome assets.

Small-ticket commercial real estate: Our small-ticket commercial real estate portfolio is predominantly low- or no-documentation loans with balances generally less than $\$ 2$ million. This portfolio was originated on a national basis through a broker network and is in a run-off mode.

Subprime: For purposes of lending in our Credit Card business we generally consider FICO scores of 660 or below, or other equivalent risk scores, to be subprime. For purposes of auto lending in our Consumer Banking business we generally consider FICO scores of 620 or below to be subprime.

Tangible common equity ("TCE"): A non-GAAP financial measure. Common equity less goodwill and intangible assets adjusted for deferred tax liabilities associated with non-tax deductible intangible assets and tax deductible goodwill.

Troubled debt restructuring ("TDR"): A TDR is deemed to occur when the Company modifies the contractual terms of a loan agreement by granting a concession to a borrower that is experiencing financial difficulty.
U.K. PPI Reserve: U.K. payment protection insurance customer refund reserve.
U.S. GAAP: Accounting principles generally accepted in the United States of America. Accounting rules and conventions defining acceptable practices in preparing financial statements in the U.S.

Unfunded commitments: Legally binding agreements to provide a defined level of financing until a specified future date.
Variable interest entity ("VIE"): An entity that (i) lacks enough equity investment at risk to permit the entity to finance its activities without additional financial support from other parties; (ii) has equity owners that lack the right to make significant decisions affecting the entity's operations; and/or (iii) has equity owners that do not have an obligation to absorb or the right to receive the entity's losses or return.

## Acronyms

ABS: Asset-backed security
AFS: Available for sale
AML: Anti-money laundering
AOCI: Accumulated other comprehensive income
ARM: Adjustable rate mortgage
ASC: Accounting Standards Codification
BHC: Bank holding company
BMA: Bank Merger Act
bps: Basis points
CAD: Canadian dollar
CCAR: Comprehensive Capital Analysis and Review
CCP: Central Counterparty Clearinghouse, or Central Clearinghouse
CDE: Community development entities
CECL: Current expected credit loss
CEO: Chief Executive Officer
CIFG: CIFG Assurance North America, Inc. ("U.S. Bank Litigation")
CMBS: Commercial mortgage-backed securities
CME: Chicago Mercantile Exchange
COEP: Capital One (Europe) plc
COF: Capital One Financial Corporation
CVA: Credit valuation adjustment
DVA: Debit valuation adjustment
Fannie Mae: Federal National Mortgage Association
FASB: Financial Accounting Standards Board
FCA: Financial Conduct Authority
FCM: Futures commission merchant
FDIC: Federal Deposit Insurance Corporation
FFIEC: Federal Financial Institutions Examination Council
FHFA: Federal Housing Finance Agency
FHLB: Federal Home Loan Banks
FIRREA: Financial Institutions Reform, Recovery and Enforcement Act
Fitch: Fitch Ratings
FOS: Financial Ombudsman Service
Freddie Mac: Federal Home Loan Mortgage Corporation
FVC: Fair Value Committee
GBP: Great British pound
GDP: Gross domestic product
Ginnie Mae: Government National Mortgage Association
GSE or Agency: Government-sponsored enterprise
HELOCs: Home equity lines of credit
HFI: Held for investment
HFS: Healthcare Financial Services

LCH: London Clearing House, or Clearnet
LCR: Liquidity coverage ratio
LIBOR: London Interbank Offered Rate
MMDA: Money market deposit accounts
Moody's: Moody's Investors Service
MSR: Mortgage servicing rights
NOW: Negotiable order of withdrawal
OCC: Office of the Comptroller of the Currency
OCI: Other comprehensive income
OTC: Over-the-counter
PCA: Prompt corrective action
PCI: Purchased credit-impaired
PCCR: Purchased credit card relationship
PPI: Payment protection insurance
REO: Real estate owned
RMBS: Residential mortgage-backed securities
S\&P: Standard \& Poor's
SEC: U.S. Securities and Exchange Commission
SLR: Supplementary leverage ratio
TARP: Troubled Asset Relief Program
TCE: Tangible common equity
TDR: Troubled debt restructuring
U.K.: United Kingdom
U.S.: United States of America

VAC: Valuations Advisory Committee

## Item 1. Financial Statements and Notes

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## CAPITAL ONE FINANCIAL CORPORATION CONSOLIDATED STATEMENTS OF INCOME (UNAUDITED)

| (Dollars in millions, except per share-related data) | Three Months Ended June 30, |  |  |  | Six Months Ended June 30, |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2017 |  | 2016 |  | 2017 |  | 2016 |  |
| Interest income: |  |  |  |  |  |  |  |  |
| Loans, including loans held for sale | \$ | 5,669 | \$ | 5,148 | \$ | 11,295 | \$ | 10,233 |
| Investment securities |  | 433 |  | 405 |  | 849 |  | 820 |
| Other |  | 26 |  | 18 |  | 54 |  | 35 |
| Total interest income |  | 6,128 |  | 5,571 |  | 12,198 |  | 11,088 |
| Interest expense: |  |  |  |  |  |  |  |  |
| Deposits |  | 382 |  | 292 |  | 735 |  | 575 |
| Securitized debt obligations |  | 82 |  | 47 |  | 151 |  | 95 |
| Senior and subordinated notes |  | 179 |  | 111 |  | 328 |  | 217 |
| Other borrowings |  | 12 |  | 28 |  | 37 |  | 52 |
| Total interest expense |  | 655 |  | 478 |  | 1,251 |  | 939 |
| Net interest income |  | 5,473 |  | 5,093 |  | 10,947 |  | 10,149 |
| Provision for credit losses |  | 1,800 |  | 1,592 |  | 3,792 |  | 3,119 |
| Net interest income after provision for credit losses |  | 3,673 |  | 3,501 |  | 7,155 |  | 7,030 |
| Non-interest income: |  |  |  |  |  |  |  |  |
| Service charges and other customer-related fees |  | 418 |  | 393 |  | 789 |  | 816 |
| Interchange fees, net |  | 676 |  | 621 |  | 1,246 |  | 1,225 |
| Net securities gains (losses) |  | (4) |  | 0 |  | (4) |  | (8) |
| Other |  | 141 |  | 147 |  | 261 |  | 292 |
| Total non-interest income |  | 1,231 |  | 1,161 |  | 2,292 |  | 2,325 |
| Non-interest expense: |  |  |  |  |  |  |  |  |
| Salaries and associate benefits |  | 1,383 |  | 1,279 |  | 2,854 |  | 2,549 |
| Occupancy and equipment |  | 474 |  | 465 |  | 945 |  | 923 |
| Marketing |  | 435 |  | 415 |  | 831 |  | 843 |
| Professional services |  | 279 |  | 264 |  | 526 |  | 505 |
| Communications and data processing |  | 289 |  | 302 |  | 577 |  | 582 |
| Amortization of intangibles |  | 61 |  | 95 |  | 123 |  | 196 |
| Other |  | 493 |  | 475 |  | 992 |  | 920 |
| Total non-interest expense |  | 3,414 |  | 3,295 |  | 6,848 |  | 6,518 |
| Income from continuing operations before income taxes |  | 1,490 |  | 1,367 |  | 2,599 |  | 2,837 |
| Income tax provision |  | 443 |  | 424 |  | 757 |  | 876 |
| Income from continuing operations, net of tax |  | 1,047 |  | 943 |  | 1,842 |  | 1,961 |
| Income (loss) from discontinued operations, net of tax |  | (11) |  | (1) |  | 4 |  | (6) |
| Net income |  | 1,036 |  | 942 |  | 1,846 |  | 1,955 |
| Dividends and undistributed earnings allocated to participating securities |  | (8) |  | (6) |  | (13) |  | (12) |
| Preferred stock dividends |  | (80) |  | (65) |  | (133) |  | (102) |
| Net income available to common stockholders | \$ | 948 | \$ | 871 | \$ | 1,700 | \$ | 1,841 |
| Basic earnings per common share: |  |  |  |  |  |  |  |  |
| Net income from continuing operations | \$ | 1.98 | \$ | 1.70 | \$ | 3.51 | \$ | 3.57 |
| Income (loss) from discontinued operations |  | (0.02) |  | 0.00 |  | 0.01 |  | (0.01) |
| Net income per basic common share | \$ | 1.96 | \$ | 1.70 | \$ | 3.52 | \$ | 3.56 |
| Diluted earnings per common share: |  |  |  |  |  |  |  |  |
| Net income from continuing operations | \$ | 1.96 | \$ | 1.69 | \$ | 3.48 | \$ | 3.53 |
| Income (loss) from discontinued operations |  | (0.02) |  | 0.00 |  | 0.01 |  | (0.01) |
| Net income per diluted common share | \$ | 1.94 | \$ | 1.69 | \$ | 3.49 | \$ | 3.52 |
| Dividends paid per common share | \$ | 0.40 | \$ | 0.40 | \$ | 0.80 | \$ | 0.80 |

See Notes to Consolidated Financial Statements.

| (Dollars in millions) | Three Months Ended June 30, |  |  |  | Six Months Ended June 30, |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2017 |  | 2016 |  | 2017 |  | 2016 |  |
| Net income | \$ | 1,036 | \$ | 942 | \$ | 1,846 | \$ | 1,955 |
| Other comprehensive income (loss), net of tax: |  |  |  |  |  |  |  |  |
| Net unrealized gains (losses) on securities available for sale |  | 149 |  | 136 |  | 185 |  | 323 |
| Net changes in securities held to maturity |  | 23 |  | 25 |  | 46 |  | 46 |
| Net unrealized gains (losses) on cash flow hedges |  | 45 |  | 143 |  | (21) |  | 520 |
| Foreign currency translation adjustments |  | 31 |  | (30) |  | 48 |  | (29) |
| Other |  | 3 |  | 8 |  | 8 |  | (3) |
| Other comprehensive income (loss), net of tax |  | 251 |  | 282 |  | 266 |  | 857 |
| Comprehensive income | \$ | 1,287 | \$ | 1,224 | \$ | 2,112 | \$ | 2,812 |

See Notes to Consolidated Financial Statements.

## CAPITAL ONE FINANCIAL CORPORATION CONSOLIDATED BALANCE SHEETS (UNAUDITED)

| (Dollars in millions, except per share data) | $\begin{gathered} \text { June } 30, \\ 2017 \end{gathered}$ |  | $\begin{gathered} \text { December 31, } \\ 2016 \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: |
| Assets: |  |  |  |  |
| Cash and cash equivalents: |  |  |  |  |
| Cash and due from banks | \$ | 3,352 | \$ | 4,185 |
| Interest-bearing deposits and other short-term investments |  | 3,363 |  | 5,791 |
| Total cash and cash equivalents |  | 6,715 |  | 9,976 |
| Restricted cash for securitization investors |  | 300 |  | 2,517 |
| Securities available for sale, at fair value |  | 41,120 |  | 40,737 |
| Securities held to maturity, at carrying value |  | 27,720 |  | 25,712 |
| Loans held for investment: |  |  |  |  |
| Unsecuritized loans held for investment |  | 214,864 |  | 213,824 |
| Loans held in consolidated trusts |  | 29,438 |  | 31,762 |
| Total loans held for investment |  | 244,302 |  | 245,586 |
| Allowance for loan and lease losses |  | $(7,170)$ |  | $(6,503)$ |
| Net loans held for investment |  | 237,132 |  | 239,083 |
| Loans held for sale, at lower of cost or fair value |  | 777 |  | 1,043 |
| Premises and equipment, net |  | 3,825 |  | 3,675 |
| Interest receivable |  | 1,346 |  | 1,351 |
| Goodwill |  | 14,524 |  | 14,519 |
| Other assets |  | 17,134 |  | 18,420 |
| Total assets | \$ | 350,593 | \$ | 357,033 |
|  |  |  |  |  |
| Liabilities: |  |  |  |  |
| Interest payable | \$ | 376 | \$ | 327 |
| Deposits: |  |  |  |  |
| Non-interest-bearing deposits |  | 25,953 |  | 25,502 |
| Interest-bearing deposits |  | 213,810 |  | 211,266 |
| Total deposits |  | 239,763 |  | 236,768 |
| Securitized debt obligations |  | 18,358 |  | 18,826 |
| Other debt: |  |  |  |  |
| Federal funds purchased and securities loaned or sold under agreements to repurchase |  | 958 |  | 992 |
| Senior and subordinated notes |  | 28,478 |  | 23,431 |
| Other borrowings |  | 2,160 |  | 17,211 |
| Total other debt |  | 31,596 |  | 41,634 |
| Other liabilities |  | 11,363 |  | 11,964 |
| Total liabilities |  | 301,456 |  | 309,519 |
| Commitments, contingencies and guarantees (see Note 14) |  |  |  |  |
| Stockholders' equity: |  |  |  |  |
| Preferred stock (par value $\$ .01$ per share; $50,000,000$ shares authorized; $4,475,000$ shares issued and outstanding as of both June 30, 2017 and December 31, 2016) |  | 0 |  | 0 |
| Common stock (par value $\$ .01$ per share; $1,000,000,000$ shares authorized; $659,656,040$ and $653,736,607$ shares issued as of June 30, 2017 and December 31, 2016, respectively, 483,692,646 and 480,218,547 shares outstanding as of June 30, 2017 and December 31, 2016, respectively) |  | 7 |  | 7 |
| Additional paid-in capital, net |  | 31,413 |  | 31,157 |
| Retained earnings |  | 31,086 |  | 29,766 |
| Accumulated other comprehensive loss |  | (683) |  | (949) |
| Treasury stock, at cost (par value \$. 01 per share; $175,963,394$ and $173,518,060$ shares as of June 30, 2017 and December 31, 2016, respectively) |  | $(12,686)$ |  | $(12,467)$ |
| Total stockholders' equity |  | 49,137 |  | 47,514 |
| Total liabilities and stockholders' equity | \$ | 350,593 | \$ | 357,033 |

See Notes to Consolidated Financial Statements.

## CAPITAL ONE FINANCIAL CORPORATION

 CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY (UNAUDITED)| (Dollars in millions) | Preferred Stock |  |  | Common Stock |  |  | Additional Paid-In Capital |  | Retained <br> Earnings |  | Accumulated Other Comprehensive Income (Loss) |  | Treasury Stock | Total Stockholders' Equity |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Shares | Amount |  | Shares | Amount |  |  |  |  |  |  |  |  |  |  |
| Balance as of December 31, 2016 | 4,475,000 | \$ | 0 | 653,736,607 | \$ | 7 | \$ | 31,157 | \$ | 29,766 | \$ | (949) | \$(12,467) | \$ | 47,514 |
| Comprehensive income (loss) |  |  |  |  |  |  |  |  |  | 1,846 |  | 266 |  |  | 2,112 |
| Dividends-common stock |  |  |  | 32,577 |  | 0 |  | 3 |  | (393) |  |  |  |  | (390) |
| Dividends-preferred stock |  |  |  |  |  |  |  |  |  | (133) |  |  |  |  | (133) |
| Purchases of treasury stock |  |  |  |  |  |  |  |  |  |  |  |  | (219) |  | (219) |
| Issuances of common stock and restricted stock, net of forfeitures |  |  |  | 2,958,569 |  | 0 |  | 79 |  |  |  |  |  |  | 79 |
| Exercises of stock options and warrants |  |  |  | 2,928,287 |  | 0 |  | 81 |  |  |  |  |  |  | 81 |
| Compensation expense for restricted stock awards, restricted stock units and stock options |  |  |  |  |  |  |  | 93 |  |  |  |  |  |  | 93 |
| Balance as of June 30, 2017 | 4,475,000 | \$ | 0 | 659,656,040 | \$ | 7 | \$ | 31,413 | \$ | 31,086 | \$ | (683) | \$(12,686) | \$ | 49,137 | CONSOLIDATED STATEMENTS OF CASH FLOWS (UNAUDITED)


| (Dollars in millions) | Six Months Ended June 30, |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 2017 |  | 2016 |  |
| Operating activities: |  |  |  |  |
| Income from continuing operations, net of tax | \$ | 1,842 | \$ | 1,961 |
| Income (loss) from discontinued operations, net of tax |  | 4 |  | (6) |
| Net income |  | 1,846 |  | 1,955 |
| Adjustments to reconcile net income to net cash provided by operating activities: |  |  |  |  |
| Provision for credit losses |  | 3,792 |  | 3,119 |
| Depreciation and amortization, net |  | 1,131 |  | 1,207 |
| Deferred tax benefit |  | (235) |  | (377) |
| Net (gain) loss on sales of securities available for sale |  | 0 |  | (2) |
| Impairment losses on securities available for sale |  | 4 |  | 10 |
| Gain on sales of loans held for sale |  | (19) |  | (57) |
| Stock plan compensation expense |  | 111 |  | 90 |
| Other |  | 0 |  | (10) |
| Loans held for sale: |  |  |  |  |
| Originations and purchases |  | $(3,834)$ |  | $(3,264)$ |
| Proceeds from sales and paydowns |  | 4,123 |  | 3,133 |
| Changes in operating assets and liabilities: |  |  |  |  |
| Changes in interest receivable |  | 5 |  | (48) |
| Changes in other assets |  | 1,314 |  | 42 |
| Changes in interest payable |  | 49 |  | 2 |
| Changes in other liabilities |  | $(1,264)$ |  | 754 |
| Net change from discontinued operations |  | 0 |  | 14 |
| Net cash from operating activities |  | 7,023 |  | 6,568 |
| Investing activities: |  |  |  |  |
| Securities available for sale: |  |  |  |  |
| Purchases |  | $(6,479)$ |  | $(6,887)$ |
| Proceeds from paydowns and maturities |  | 3,604 |  | 3,737 |
| Proceeds from sales |  | 3,123 |  | 2,699 |
| Securities held to maturity: |  |  |  |  |
| Purchases |  | $(2,893)$ |  | $(1,612)$ |
| Proceeds from paydowns and maturities |  | 1,183 |  | 1,109 |
| Loans: |  |  |  |  |
| Net changes in loans held for investment |  | $(3,019)$ |  | $(8,271)$ |
| Principal recoveries of loans previously charged off |  | 965 |  | 757 |
| Purchases of premises and equipment |  | (483) |  | (324) |
| Net cash from other investing activities |  | (296) |  | (126) |
| Net cash from investing activities |  | $(4,295)$ |  | $(8,918)$ |

See Notes to Consolidated Financial Statements.

## CAPITAL ONE FINANCIAL CORPORATION CONSOLIDATED STATEMENTS OF CASH FLOWS (UNAUDITED)

| (Dollars in millions) |  | Months E |  | e 30, |
| :---: | :---: | :---: | :---: | :---: |
|  | 2017 |  | 2016 |  |
| Financing activities: |  |  |  |  |
| Deposits and borrowings: |  |  |  |  |
| Changes in deposits | \$ | 2,964 | \$ | 3,331 |
| Issuance of securitized debt obligations |  | 2,991 |  | 1,920 |
| Maturities and paydowns of securitized debt obligations |  | $(3,483)$ |  | $(2,044)$ |
| Issuance of senior and subordinated notes and long-term FHLB advances |  | 11,865 |  | 14,950 |
| Maturities and paydowns of senior and subordinated notes and long-term FHLB advances |  | $(21,940)$ |  | $(15,401)$ |
| Changes in other borrowings |  | (21) |  | 18 |
| Common stock: |  |  |  |  |
| Net proceeds from issuances |  | 79 |  | 64 |
| Dividends paid |  | (390) |  | (416) |
| Preferred stock: |  |  |  |  |
| Dividends paid |  | (133) |  | (102) |
| Purchases of treasury stock |  | (219) |  | $(1,599)$ |
| Proceeds from share-based payment activities |  | 81 |  | 3 |
| Net cash from financing activities |  | $(8,206)$ |  | 724 |
| Changes in cash, cash equivalents and restricted cash for securitization investors |  | $(5,478)$ |  | $(1,626)$ |
| Cash, cash equivalents and restricted cash for securitization investors, beginning of the period |  | 12,493 |  | 9,040 |
| Cash, cash equivalents and restricted cash for securitization investors, ending of the period | \$ | 7,015 | \$ | 7,414 |
| Supplemental cash flow information: |  |  |  |  |
| Non-cash item: |  |  |  |  |
| Net transfers from loans held for investment to loans held for sale | \$ | 265 | \$ | 435 |
| Interest paid |  | 1,269 |  | 937 |
| Income tax paid |  | 467 |  | 1,072 |

See Notes to Consolidated Financial Statements.

## CAPITAL ONE FINANCIAL CORPORATION

 NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
## NOTE 1-SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

## The Company

Capital One Financial Corporation, a Delaware Corporation established in 1994 and headquartered in McLean, Virginia, is a diversified financial services holding company with banking and non-banking subsidiaries. Capital One Financial Corporation and its subsidiaries (the "Company") offer a broad array of financial products and services to consumers, small businesses and commercial clients through branches, the internet and other distribution channels. As of June 30, 2017, our principal subsidiaries included:

- Capital One Bank (USA), National Association ("COBNA"), which offers credit and debit card products, other lending products and deposit products; and
- Capital One, National Association ("CONA"), which offers a broad spectrum of banking products and financial services to consumers, small businesses and commercial clients.

The Company is hereafter collectively referred to as "we," "us" or "our." COBNA and CONA are collectively referred to as the "Banks."

We also offer products outside of the United States of America ("U.S.") principally through Capital One (Europe) plc ("COEP"), an indirect subsidiary of COBNA organized and located in the United Kingdom ("U.K."), and through a branch of COBNA in Canada. COEP has authority, among other things, to provide credit card loans. Our branch of COBNA in Canada also has the authority to provide credit card loans.

Our principal operations are currently organized for management reporting purposes into three major business segments, which are defined based on the products and services provided or the type of customer served: Credit Card, Consumer Banking and Commercial Banking. We provide details on our business segments, the integration of recent acquisitions, if any, into our business segments and the allocation methodologies and accounting policies used to derive our business segment results in "Note 13Business Segments."

## Basis of Presentation and Use of Estimates

The accompanying consolidated financial statements have been prepared in accordance with generally accepted accounting principles in the U.S. ("U.S. GAAP"). The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the amounts reported in the consolidated financial statements and in the related disclosures. These estimates are based on information available as of the date of the consolidated financial statements. While management makes its best judgment, actual amounts or results could differ from these estimates. In the opinion of management, all normal, recurring adjustments have been included for a fair statement of this interim financial information. Certain prior period amounts have been reclassified to conform to the current period presentation.

## Principles of Consolidation

The unaudited consolidated financial statements include the accounts of Capital One Financial Corporation and all other entities in which we have a controlling financial interest. We determine whether we have a controlling financial interest in an entity by first evaluating whether the entity is a voting interest entity or a variable interest entity ("VIE"). All significant intercompany account balances and transactions have been eliminated.

## Loans

## Charge-Offs

In the second quarter of 2017, we implemented changes in accounting estimate impacting our charge-off practices for the treatment of certain loans within our consumer banking loan portfolio. This includes changes to the charge-off timing of auto and home loans where the borrower has filed for bankruptcy and the loans have not been reaffirmed, which are now charged off in the period that the loan is 60 days from the bankruptcy notification date.

## CAPITAL ONE FINANCIAL CORPORATION NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

## Newly Adopted Accounting Standards

## Restricted Cash

In November 2016, the Financial Accounting Standards Board ("FASB") issued revised guidance that requires restricted cash and restricted cash equivalents to be included within beginning and ending total cash amounts reported in the consolidated statements of cash flows. Disclosure of the nature of the restrictions on cash balances is required under the guidance. We have elected to early adopt the guidance retrospectively effective as of January 1, 2017. Upon adoption, changes in restricted cash, which had previously been presented as financing activities, are now included within beginning and ending Cash, cash equivalents and restricted cash for securitization investors balances.

The Cash, cash equivalents and restricted cash for securitization investors balances presented in the consolidated statements of cash flows are comprised of the amounts captioned on the consolidated balance sheets as Total cash and cash equivalents and Restricted cash for securitization investors.

## Improvements to Employee Share-Based Accounting

In March 2016, the FASB issued revised guidance for accounting for employee share-based payments. The guidance requires that all excess tax benefits and tax deficiencies that pertain to employee stock-based incentive payments be recognized as income tax expense or benefit in the consolidated statements of income, rather than within additional paid-in capital; and that excess tax benefits be classified as an operating activity rather than financing activity in the consolidated statements of cash flows. The guidance also permits an accounting policy election to either estimate the number of awards that are expected to vest or account for forfeitures when they occur. We adopted the guidance effective in the first quarter of 2017 on a prospective basis related to recognition of excess tax benefits and deficiencies in the consolidated statements of income and presentation of excess tax benefits in the consolidated statements of cash flows. In addition, we made an accounting policy election to account for forfeitures of awards as they occur and applied a modified retrospective transition method. Our adoption of this guidance did not have a material impact to our consolidated financial statements.

## Recently Issued but Not Yet Adopted Accounting Standards

## Premium Amortization on Purchased Callable Debt Securities

In March 2017, the FASB issued revised guidance to shorten the amortization period to the earliest call date for certain purchased callable debt securities held at a premium. There is no change for accounting for securities held at a discount. Under the existing guidance, the premium is generally amortized as an adjustment to interest income over the contractual life of the debt security. We do not expect the adoption of this guidance to have a material impact on our consolidated financial statements. This guidance is effective for us on January 1, 2019, with early adoption permitted, through a modified retrospective method.

## Simplifying the Test for Goodwill Impairment

In January 2017, the FASB issued revised guidance which is intended to reduce the cost and complexity of testing goodwill for impairment by eliminating the second step from the current goodwill impairment test. Under the existing guidance, step one compares an entity's reporting unit's carrying value to its fair value. If the carrying value exceeds fair value, an entity then performs step two, which assigns the fair value across its assets and liabilities, including unrecognized assets and liabilities, following a procedure required in purchase accounting. Under the new guidance, the impairment to a reporting unit's goodwill is determined based on the amount by which the reporting unit's carrying value exceeds its fair value, limited to the amount of goodwill allocated to the reporting unit. This impairment method applies to all reporting units, including those with zero or negative carrying amounts of net assets. The guidance is effective for us on January 1, 2020, with early adoption permitted for interim or annual goodwill impairment tests performed after January 1, 2017. We plan to adopt the standard on its effective date.

## CAPITAL ONE FINANCIAL CORPORATION NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

## Measurement of Credit Losses on Financial Instruments

In June 2016, the FASB issued revised guidance for impairments on financial instruments. The guidance requires an impairment model (known as the current expected credit loss ("CECL") model) that is based on expected rather than incurred losses, with an anticipated result of more timely loss recognition. The CECL model is applicable to financial assets measured at amortized cost, lease receivables and certain off-balance sheet arrangements. The CECL model will replace our current accounting for purchased credit-impaired ("PCl") and impaired loans. The guidance also amends the available for sale ("AFS") debt securities other-thantemporary impairment ("OTTI") model. Credit losses (and subsequent recoveries) on AFS debt securities will be recorded through an allowance approach, rather than the current U.S. GAAP practice of permanent write-downs for credit losses and accreting positive changes through interest income over time. This guidance will be effective for us on January 1, 2020, with early adoption permitted no earlier than January 1, 2019. We are currently assessing the potential impact on our consolidated financial statements; however, due to the significant differences in the revised guidance from existing GAAP, the implementation of this guidance may result in material changes in our accounting for credit losses on financial instruments.

## Leases

In February 2016, the FASB issued revised guidance for leases. The guidance requires lessees to recognize right of use assets and lease liabilities on the balance sheet and disclose key information about leasing arrangements for all leases, with certain practical expedients. This will be effective for us on January 1, 2019, with early adoption permitted. We plan to adopt the standard on the effective date. We are currently assessing the potential impact on our consolidated financial statements; however, we expect our total assets and liabilities on our consolidated balance sheet to increase.

## Recognition and Measurement of Financial Assets and Financial Liabilities

In January 2016, the FASB issued revised guidance for the recognition, measurement, presentation, and disclosure of financial instruments. The main provisions of the guidance include, (i) most equity investments are to be measured at fair value and recorded through net income, except those accounted for under the equity method of accounting, or those that do not have a readily determinable fair value (for which a practical expedient can be elected); (ii) the use of the exit price notion is required when valuing financial instruments for disclosure purposes; (iii) an entity shall present separately in other comprehensive income the portion of the total change in the fair value of a liability under fair value option resulting from a change in the instrument-specific credit risk; (iv) the determination of the need for a valuation allowance on a deferred tax asset related to available-for-sale securities must be made in combination with other deferred tax assets. The guidance eliminates the current classifications of equity securities as trading or available-for-sale and will require separate presentation of financial assets and liabilities by category and form of the financial assets on the face of the consolidated balance sheets or within the accompanying notes. The guidance also eliminates the requirement to disclose the methods and significant assumptions used to estimate fair value of financial instruments measured at amortized cost on the balance sheet. The guidance will be effective January 1, 2018. Early adoption is only permitted for the requirement to present the portion of the total change in fair value attributable to a change in the instrument-specific credit risk in other comprehensive income. We plan on adopting the guidance effective January 1, 2018, and do not expect the guidance to have a material impact on our consolidated financial statements.

## Revenue from Contracts with Customers

In May 2014, the FASB issued revised guidance for the recognition, measurement and disclosure of revenue from contracts with customers. The original guidance has been amended through subsequent accounting standard updates that resulted in technical corrections, improvements, and a one-year deferral of the effective date to January 1, 2018. The guidance, as amended, is applicable to all entities and, once effective, will replace significant portions of existing industry and transaction-specific revenue recognition rules with a more principles-based recognition model. Entities can elect to adopt the guidance either on a full or modified retrospective basis.

Most revenue associated with financial instruments, including interest income, loan origination fees and credit card fees, is outside the scope of the guidance. Gains and losses on investment securities, derivatives and sales of financial instruments are similarly excluded from the scope. Our implementation efforts have included identifying revenues and related costs within the scope of this guidance, reviewing the associated contracts and evaluating the related accounting policies and internal controls to determine if any changes will be required. Efforts to evaluate the effect of this guidance, assess changes in our disclosures required by this guidance and consider the adoption methods are ongoing. We have not identified any material changes in the timing of recognition

## CAPITAL ONE FINANCIAL CORPORATION

 NOTES TO CONSOLIDATED FINANCIAL STATEMENTSof revenues or expenses. We are still evaluating some changes to the income statement classification of certain credit card-related expenses. We plan to adopt this guidance on the effective date.

## CAPITAL ONE FINANCIAL CORPORATION NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

## NOTE 2-DISCONTINUED OPERATIONS

Our discontinued operations consist of the mortgage origination operations of our wholesale mortgage banking unit, GreenPoint Mortgage Funding, Inc. ("GreenPoint") and the manufactured housing operations of GreenPoint Credit, LLC, a subsidiary of GreenPoint, both of which were acquired as part of the North Fork Bancorporation, Inc. ("North Fork") acquisition in December 2006. Although the manufactured housing operations were sold to a third party in 2004 prior to our acquisition of North Fork, we acquired certain retained interests and obligations related to those operations as part of the acquisition. Separately, in the third quarter of 2007 we closed the mortgage origination operations of the wholesale mortgage banking unit. The results of both the wholesale banking unit and the manufactured housing operations have been accounted for as discontinued operations and are reported as income or loss from discontinued operations, net of tax, on the consolidated statements of income. We have no significant continuing involvement in these operations.

The following table summarizes the results from discontinued operations for the three and six months ended June 30, 2017 and 2016:

Table 2.1: Results of Discontinued Operations

| (Dollars in millions) | Three Months Ended June 30, |  |  |  | Six Months Ended June 30, |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2017 |  | 2016 |  | 2017 |  | 2016 |  |
| Income (loss) from discontinued operations before income taxes | \$ | (17) | \$ | (2) | \$ | 7 | \$ | (10) |
| Income tax provision (benefit) |  | (6) |  | (1) |  | 3 |  | (4) |
| Income (loss) from discontinued operations, net of tax | \$ | (11) | \$ | (1) | \$ | 4 | \$ | (6) |

The discontinued mortgage origination operations of our wholesale mortgage banking unit have remaining assets primarily consisting of a deferred tax asset related to the reserve for representations and warranties on loans previously sold to third parties. We also have contingent obligations to exercise certain mandatory clean-up calls associated with securitization transactions undertaken by the discontinued GreenPoint Credit, LLC manufactured housing operations in the event the third-party servicer does not fulfill its obligation to exercise these clean-up calls. See "Note 6-Variable Interest Entities and Securitizations" and "Note 14 -Commitments, Contingencies, Guarantees and Others" for information on the reserve related to our retained interests and obligations associated with GreenPoint Credit, LLC manufactured housing operations and the reserves we have established for our mortgage representation and warranty exposure.

## CAPITAL ONE FINANCIAL CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

## NOTE 3-INVESTMENT SECURITIES

Our investment portfolio consists primarily of the following: U.S. Treasury securities; U.S. government-sponsored enterprise or agency ("Agency") and non-agency residential mortgage-backed securities ("RMBS"); Agency and non-agency commercial mortgage-backed securities ("CMBS"); other asset-backed securities ("ABS"); and other securities. The carrying value of our investments in U.S. Treasury and Agency securities represented $91 \%$ of our total investment securities as of both June 30, 2017 and December 31, 2016.

The table below presents the overview of our investment securities portfolio as of June 30, 2017 and December 31, 2016.

## Table 3.1: Overview of Investment Securities Portfolio

| (Dollars in millions) | June 30, 2017 |  | December 31, 2016 |  |
| :---: | :---: | :---: | :---: | :---: |
| Securities available for sale, at fair value | \$ | 41,120 | \$ | 40,737 |
| Securities held to maturity, at carrying value |  | 27,720 |  | 25,712 |
| Total investment securities | \$ | 68,840 | \$ | 66,449 |

The table below presents the amortized cost, gross unrealized gains and losses, and fair value of securities available for sale as of June 30, 2017 and December 31, 2016.

Table 3.2: Investment Securities Available for Sale

| (Dollars in millions) | June 30, 2017 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | AmortizedCost |  | $\begin{gathered} \text { Gross } \\ \text { Unrealized } \\ \text { Gains } \end{gathered}$ |  | GrossUnrealized <br> Losses${ }^{(1)}$ |  | Fair Value |  |
| Investment securities available for sale: |  |  |  |  |  |  |  |  |
| U.S. Treasury securities | \$ | 5,218 | \$ | 27 | \$ | (30) | \$ | 5,215 |
| RMBS: |  |  |  |  |  |  |  |  |
| Agency ${ }^{(2)}$ |  | 26,693 |  | 110 |  | (292) |  | 26,511 |
| Non-agency |  | 2,163 |  | 458 |  | (4) |  | 2,617 |
| Total RMBS |  | 28,856 |  | 568 |  | (296) |  | 29,128 |
| CMBS: |  |  |  |  |  |  |  |  |
| Agency ${ }^{(2)}$ |  | 3,136 |  | 19 |  | (31) |  | 3,124 |
| Non-agency |  | 1,777 |  | 28 |  | (3) |  | 1,802 |
| Total CMBS |  | 4,913 |  | 47 |  | (34) |  | 4,926 |
| Other $\mathrm{ABS}^{(3)}$ |  | 626 |  | 1 |  | 0 |  | 627 |
| Other securities ${ }^{(4)}$ |  | 1,220 |  | 4 |  | 0 |  | 1,224 |
| Total investment securities available for sale | \$ | 40,833 | \$ | 647 | \$ | (360) | \$ | 41,120 |

## CAPITAL ONE FINANCIAL CORPORATION

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

| (Dollars in millions) | December 31, 2016 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\underset{\text { Cost }}{\text { Amortized }}$ |  | Gross <br> Unrealized <br> Gains |  | GrossUnrealized <br> Losses${ }^{(1)}$ |  | Fair Value |  |
| Investment securities available for sale: |  |  |  |  |  |  |  |  |
| U.S. Treasury securities | \$ | 5,103 | \$ | 11 | \$ | (49) | \$ | 5,065 |
| RMBS: |  |  |  |  |  |  |  |  |
| Agency ${ }^{(2)}$ |  | 26,830 |  | 109 |  | (412) |  | 26,527 |
| Non-agency |  | 2,349 |  | 382 |  | (9) |  | 2,722 |
| Total RMBS |  | 29,179 |  | 491 |  | (421) |  | 29,249 |
| CMBS: |  |  |  |  |  |  |  |  |
| Agency ${ }^{(2)}$ |  | 3,335 |  | 14 |  | (45) |  | 3,304 |
| Non-agency |  | 1,676 |  | 21 |  | (13) |  | 1,684 |
| Total CMBS |  | 5,011 |  | 35 |  | (58) |  | 4,988 |
| Other $\mathrm{ABS}^{(3)}$ |  | 714 |  | 1 |  | (1) |  | 714 |
| Other securities ${ }^{(4)}$ |  | 726 |  | 1 |  | (6) |  | 721 |
| Total investment securities available for sale | \$ | 40,733 | \$ | 539 | \$ | (535) | \$ | 40,737 |

[^16]The table below presents the amortized cost, carrying value, gross unrealized gains and losses, and fair value of securities held to maturity as of June 30, 2017 and December 31, 2016.

Table 3.3: Investment Securities Held to Maturity

| (Dollars in millions) | June 30, 2017 |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Cost |  | $\begin{gathered} \text { Unrealized } \\ \text { Losses Recorded } \\ \text { in AOCI } \end{gathered}$ |  | $\begin{gathered} \text { Carrying } \\ \text { Value } \end{gathered}$ |  | $\begin{gathered} \text { Gross } \\ \text { Unrealized } \\ \text { Gains } \end{gathered}$ |  | $\begin{gathered} \hline \text { Gross } \\ \text { Unrealized } \\ \text { Losses } \end{gathered}$ |  | Fair Value |  |
| U.S. Treasury securities | \$ | 199 | \$ | 0 | \$ | 199 | \$ | 0 | \$ | 0 | \$ | 199 |
| Agency RMBS |  | 24,741 |  | (831) |  | 23,910 |  | 724 |  | (97) |  | 24,537 |
| Agency CMBS |  | 3,696 |  | (85) |  | 3,611 |  | 101 |  | (25) |  | 3,687 |
| Total investment securities held to maturity | \$ | 28,636 | \$ | (916) | \$ | 27,720 | \$ | 825 | \$ | (122) | \$ | 28,423 |
|  | December 31, 2016 |  |  |  |  |  |  |  |  |  |  |  |
| (Dollars in millions) | Amortized Cost |  | Unrealized Losses Recorded in $\mathbf{A O C I}^{(1)}$ |  | $\begin{gathered} \text { Carrying } \\ \text { Value } \end{gathered}$ |  | $\begin{gathered} \text { Gross } \\ \text { Unrealized } \\ \text { Gains } \end{gathered}$ |  | GrossUnrealizedLosses |  | Fair Value |  |
| U.S. Treasury securities | \$ | 199 | \$ | 0 | \$ | 199 | \$ | 0 | \$ | 0 | \$ | 199 |
| Agency RMBS |  | 23,022 |  | (897) |  | 22,125 |  | 606 |  | (158) |  | 22,573 |
| Agency CMBS |  | 3,480 |  | (92) |  | 3,388 |  | 77 |  | (41) |  | 3,424 |
| Total investment securities held to maturity | \$ | 26,701 | \$ | (989) | \$ | 25,712 | \$ | 683 | \$ | (199) | \$ | 26,196 |

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## CAPITAL ONE FINANCIAL CORPORATION

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

## Investment Securities in a Gross Unrealized Loss Position

The table below provides, by major security type, information about our securities available for sale in a gross unrealized loss position and the length of time that individual securities have been in a continuous unrealized loss position as of June 30, 2017 and December 31, 2016.

## Table 3.4: Securities in a Gross Unrealized Loss Position

| (Dollars in millions) | June 30, 2017 |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Less than 12 Months |  |  |  | 12 Months or Longer |  |  |  | Total |  |  |  |
|  | Fair Value |  | Gross <br> Unrealized <br> Losses |  | Fair Value |  | GrossUnrealizedLosses |  | Fair Value |  | Gross <br> Unrealized <br> Losses |  |
| Investment securities available for sale: |  |  |  |  |  |  |  |  |  |  |  |  |
| U.S. Treasury securities | \$ | 1,079 | \$ | (30) | \$ | 0 | \$ | 0 | \$ | 1,079 | \$ | (30) |
| RMBS: |  |  |  |  |  |  |  |  |  |  |  |  |
| Agency |  | 14,491 |  | (211) |  | 4,845 |  | (81) |  | 19,336 |  | (292) |
| Non-agency |  | 12 |  | 0 |  | 49 |  | (4) |  | 61 |  | (4) |
| Total RMBS |  | 14,503 |  | (211) |  | 4,894 |  | (85) |  | 19,397 |  | (296) |
| CMBS: |  |  |  |  |  |  |  |  |  |  |  |  |
| Agency |  | 977 |  | (9) |  | 833 |  | (22) |  | 1,810 |  | (31) |
| Non-agency |  | 374 |  | (3) |  | 61 |  | 0 |  | 435 |  | (3) |
| Total CMBS |  | 1,351 |  | (12) |  | 894 |  | (22) |  | 2,245 |  | (34) |
| Other ABS |  | 113 |  | 0 |  | 17 |  | 0 |  | 130 |  | 0 |
| Other securities |  | 355 |  | 0 |  | 0 |  | 0 |  | 355 |  | 0 |
| Total investment securities available for sale in a gross unrealized loss position | \$ | 17,401 | \$ | (253) | \$ | 5,805 | \$ | (107) | \$ | 23,206 | \$ | (360) |


| (Dollars in millions) | December 31, 2016 |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Less than 12 Months |  |  | 12 Months or Longer |  |  |  | Total |  |  |  |
|  | Fair Value | GrossUnrealizedLosses |  | Fair Value |  | GrossUnrealizedLosses |  | Fair Value |  | GrossUnrealizedLosses |  |
| Investment securities available for sale: |  |  |  |  |  |  |  |  |  |  |  |
| U.S. Treasury securities | \$ 1,060 | \$ | (49) | \$ | 0 | \$ | 0 | \$ | 1,060 | \$ | (49) |
| RMBS: |  |  |  |  |  |  |  |  |  |  |  |
| Agency | 16,899 |  | (329) |  | 4,865 |  | (83) |  | 21,764 |  | (412) |
| Non-agency | 128 |  | (2) |  | 145 |  | (7) |  | 273 |  | (9) |
| Total RMBS | 17,027 |  | (331) |  | 5,010 |  | (90) |  | 22,037 |  | (421) |
| CMBS: |  |  |  |  |  |  |  |  |  |  |  |
| Agency | 1,624 |  | (21) |  | 745 |  | (24) |  | 2,369 |  | (45) |
| Non-agency | 826 |  | (11) |  | 129 |  | (2) |  | 955 |  | (13) |
| Total CMBS | 2,450 |  | (32) |  | 874 |  | (26) |  | 3,324 |  | (58) |
| Other ABS | 187 |  | (1) |  | 21 |  | 0 |  | 208 |  | (1) |
| Other securities | 417 |  | (6) |  | 0 |  | 0 |  | 417 |  | (6) |
| Total investment securities available for sale in a gross unrealized loss position | \$ 21,141 | \$ | (419) | \$ | 5,905 | \$ | (116) | \$ | 27,046 | \$ | (535) |

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As of June 30, 2017, the amortized cost of approximately 750 securities available for sale exceeded their fair value by $\$ 360$ million, of which $\$ 107$ million related to securities that had been in a loss position for 12 months or longer. As of June 30, 2017, our investments in non-agency RMBS and CMBS, other ABS and other securities accounted for $\$ 7$ million, or $2 \%$, of total gross unrealized losses on securities available for sale. As of June 30, 2017, the carrying value of approximately 150 securities classified as held to maturity exceeded their fair value by $\$ 122$ million.

The unrealized losses related to investment securities for which we have not recognized credit impairment were primarily attributable to changes in market interest rates. As discussed in more detail below, we conduct periodic reviews of all investment securities with unrealized losses to assess whether impairment is other-than-temporary.

## Maturities and Yields of Investment Securities

The following tables summarize the remaining scheduled contractual maturities, assuming no prepayments, of our investment securities as of June 30, 2017.

Table 3.5: Contractual Maturities of Securities Available for Sale

| (Dollars in millions) | June 30, 2017 |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Amortized Cost |  | Fair Value |  |
| Due in 1 year or less | \$ | 707 | \$ | 709 |
| Due after 1 year through 5 years |  | 3,159 |  | 3,192 |
| Due after 5 years through 10 years |  | 6,572 |  | 6,584 |
| Due after 10 years ${ }^{(1)}$ |  | 30,395 |  | 30,635 |
| Total | \$ | 40,833 | \$ | 41,120 |

${ }^{(1)}$ Investments with no stated maturities, which consist of equity securities, are included with contractual maturities due after 10 years.
Table 3.6: Contractual Maturities of Securities Held to Maturity

| (Dollars in millions) | June 30, 2017 |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Carrying Value |  | Fair Value |  |
| Due in 1 year or less | \$ | 199 | \$ | 199 |
| Due after 1 year through 5 years |  | 418 |  | 441 |
| Due after 5 years through 10 years |  | 942 |  | 987 |
| Due after 10 years |  | 26,161 |  | 26,796 |
| Total | \$ | 27,720 | \$ | 28,423 |

Because borrowers may have the right to call or prepay certain obligations, the expected maturities of our securities are likely to differ from the scheduled contractual maturities presented above.

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The table below summarizes, by major security type, the expected maturities and weighted-average yields of our investment securities as of June 30, 2017.

Table 3.7: Expected Maturities and Weighted-Average Yields of Securities

| (Dollars in millions) | June 30, 2017 |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Due in <br> 1 Year or Less |  | $\begin{aligned} & \text { Due > } 1 \text { Year } \\ & \text { through } \\ & 5 \text { Years } \end{aligned}$ |  | Due > 5 Years through 10 Years |  | $\begin{gathered} \text { Due > } 10 \\ \text { Years } \end{gathered}$ |  | Total |  |
| Fair value of securities available for sale: |  |  |  |  |  |  |  |  |  |  |
| U.S. Treasury securities | \$ | 102 | \$ | 847 | \$ | 4,266 | \$ | 0 | \$ | 5,215 |
| RMBS: |  |  |  |  |  |  |  |  |  |  |
| Agency |  | 177 |  | 11,743 |  | 14,591 |  | 0 |  | 26,511 |
| Non-agency |  | 18 |  | 1,036 |  | 1,268 |  | 295 |  | 2,617 |
| Total RMBS |  | 195 |  | 12,779 |  | 15,859 |  | 295 |  | 29,128 |
| CMBS: |  |  |  |  |  |  |  |  |  |  |
| Agency |  | 130 |  | 1,544 |  | 1,450 |  | 0 |  | 3,124 |
| Non-agency |  | 179 |  | 1,064 |  | 559 |  | 0 |  | 1,802 |
| Total CMBS |  | 309 |  | 2,608 |  | 2,009 |  | 0 |  | 4,926 |
| Other ABS |  | 348 |  | 272 |  | 7 |  | 0 |  | 627 |
| Other securities |  | 216 |  | 562 |  | 103 |  | 343 |  | 1,224 |
| Total securities available for sale | \$ | 1,170 | \$ | 17,068 | \$ | 22,244 | \$ | 638 | \$ | 41,120 |
| Amortized cost of securities available for sale | \$ | 1,169 | \$ | 16,884 | \$ | 22,186 | \$ | 594 | \$ | 40,833 |
| Weighted-average yield for securities available for sale ${ }^{(1)}$ |  | 1.36\% |  | 2.45\% |  | 2.45\% |  | 4.96\% |  | 2.45\% |
| Carrying value of securities held to maturity: |  |  |  |  |  |  |  |  |  |  |
| U.S. Treasury securities | \$ | 199 | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 199 |
| Agency RMBS |  | 28 |  | 1,608 |  | 17,865 |  | 4,409 |  | 23,910 |
| Agency CMBS |  | 0 |  | 819 |  | 1,743 |  | 1,049 |  | 3,611 |
| Total securities held to maturity | \$ | 227 | \$ | 2,427 | \$ | 19,608 | \$ | 5,458 | \$ | 27,720 |
| Fair value of securities held to maturity | \$ | 225 | \$ | 2,501 | \$ | 20,092 | \$ | 5,605 | \$ | 28,423 |
| Weighted-average yield for securities held to maturity ${ }^{(1)}$ |  | 0.60\% |  | 2.57\% |  | 2.68\% |  | 3.36\% |  | 2.78\% |

${ }^{(1)}$ The weighted-average yield represents the effective yield for the investment securities and is calculated based on the amortized cost of each security.

## Other-Than-Temporary Impairment

We evaluate all securities in an unrealized loss position at least on a quarterly basis, and more often as market conditions require, to assess whether the impairment is other-than-temporary. Our OTTI assessment is based on a discounted cash flow analysis which requires careful use of judgments and assumptions. A number of qualitative and quantitative criteria may be considered in our assessment as applicable, including the size and the nature of the portfolio; historical and projected performance such as prepayment, default and loss severity for the RMBS portfolio; recent credit events specific to the issuer and/or industry to which the issuer belongs; the payment structure of the security; external credit ratings of the issuer and any failure or delay of the issuer to make scheduled interest or principal payments; the value of underlying collateral; our intent and ability to hold the security; and current and projected market and macro-economic conditions.

If we intend to sell a security in an unrealized loss position or it is more likely than not that we will be required to sell the security prior to recovery of its amortized cost basis, the entire difference between the amortized cost basis of the security and its fair value is recognized in earnings. As of June 30, 2017, for any securities with unrealized losses recorded in AOCI, we do not intend to sell, nor believe that we will be required to sell, these securities prior to recovery of their amortized cost.

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For those securities that we do not intend to sell nor expect to be required to sell, an analysis is performed to determine if any of the impairment is due to credit-related factors or whether it is due to other factors, such as interest rates. Credit-related impairment is recognized in earnings, with the remaining unrealized non-credit-related impairment recorded in AOCI. We determine the credit component based on the difference between the security's amortized cost basis and the present value of its expected cash flows, discounted based on the effective yield.

The table below presents a rollforward of the credit-related OTTI recognized in earnings for the three and six months ended June 30,2017 and 2016 on investment securities for which we had no intent to sell.

Table 3.8: Credit Impairment Rollforward

| (Dollars in millions) |  | onths | nd | e 30, |  | ths E | ded |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2017 |  | 2016 |  | 2017 |  | 2016 |  |
| Credit loss component, beginning of period | \$ | 206 | \$ | 204 | \$ | 207 | \$ | 199 |
| Additions: |  |  |  |  |  |  |  |  |
| Initial credit impairment |  | 0 |  | 1 |  | 0 |  | 1 |
| Subsequent credit impairment |  | 1 |  | 1 |  | 1 |  | 7 |
| Total additions |  | 1 |  | 2 |  | 1 |  | 8 |
| Reductions due to payoffs, disposals, transfers and other |  | 0 |  | (2) |  | (1) |  | (3) |
| Credit loss component, end of period | \$ | 207 | \$ | 204 | \$ | 207 | \$ | 204 |

## Realized Gains and Losses on Securities and OTTI Recognized in Earnings

The following table presents the gross realized gains and losses on the sale and redemption of securities available for sale, and the OTTI losses recognized in earnings for the three and six months ended June 30, 2017 and 2016. We also present the proceeds from the sale of securities available for sale for the periods presented. We did not sell any investment securities that are classified as held to maturity.

Table 3.9: Realized Gains and Losses and OTTI Recognized in Earnings

| (Dollars in millions) | Three Months Ended June 30, |  |  |  | Six Months Ended June 30, |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2017 |  | 2016 |  | 2017 |  | 2016 |  |
| Realized gains (losses): |  |  |  |  |  |  |  |  |
| Gross realized gains | \$ | 0 | \$ | 3 | \$ | 5 | \$ | 6 |
| Gross realized losses |  | 0 |  | (1) |  | (5) |  | (4) |
| Net realized gains |  | 0 |  | 2 |  | 0 |  | 2 |
| OTTI recognized in earnings: |  |  |  |  |  |  |  |  |
| Credit-related OTTI |  | (1) |  | (2) |  | (1) |  | (8) |
| Intent-to-sell OTTI |  | (3) |  | 0 |  | (3) |  | (2) |
| Total OTTI recognized in earnings |  | (4) |  | (2) |  | (4) |  | (10) |
| Net securities gains (losses) | \$ | (4) | \$ | 0 | \$ | (4) | \$ | (8) |
| Total proceeds from sales | \$ | 35 | \$ | 776 | \$ | 23 | \$ | 699 |

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## Securities Pledged and Received

As part of our liquidity management strategy, we pledge securities to secure borrowings from counterparties including the Federal Home Loan Banks ("FHLB"). We also pledge securities to secure trust and public deposits and for other purposes as required or permitted by law. We pledged securities available for sale with a fair value of $\$ 1.6$ billion and $\$ 1.9$ billion as of June 30, 2017 and December 31, 2016, respectively. We also pledged securities held to maturity with a carrying value of $\$ 8.2$ billion and $\$ 8.1$ billion as of June 30, 2017 and December 31, 2016, respectively. Of the total securities pledged as collateral, we have encumbered a fair value of $\$ 9.2$ billion and $\$ 9.3$ billion as of June 30, 2017 and December 31, 2016, respectively, primarily related to Public Fund deposits. We accepted pledges of securities with a fair value of $\$ 1$ million and $\$ 16$ million as of June 30, 2017 and December 31, 2016, respectively, primarily related to our derivative transactions.

## Purchased Credit-Impaired Debt Securities

The table below presents the outstanding balance and carrying value of the purchased credit-impaired debt securities as of June 30 , 2017 and December 31, 2016.

Table 3.10: Outstanding Balance and Carrying Value of Acquired Credit-Impaired Debt Securities

| (Dollars in millions) | June 30, 2017 | December 31, 2016 |  |
| :--- | :--- | ---: | :--- |
| Outstanding balance | $\mathbf{\$}$ | $\mathbf{2 , 6 6 9}$ | $\$$ |
| Carrying value | $\mathbf{2 , 2 2 1}$ | 2,279 |  |

## Changes in Accretable Yield of Purchased Credit-Impaired Debt Securities

The following table presents changes in the accretable yield related to the purchased credit-impaired debt securities for the three and six months ended June 30, 2017.

Table 3.11: Changes in the Accretable Yield of Purchased Credit-Impaired Debt Securities

| (Dollars in millions) | Three Months Ended June 30, 2017 |  | Six Months Ended June 30, 2017 |  |
| :---: | :---: | :---: | :---: | :---: |
| Accretable yield, beginning of period | \$ | 1,118 | \$ | 1,173 |
| Accretion recognized in earnings |  | (49) |  | (98) |
| Reduction due to payoffs, disposals, transfers and other |  | 1 |  | (3) |
| Net reclassifications from nonaccretable difference |  | 23 |  | 21 |
| Accretable yield, end of period | \$ | 1,093 | \$ | 1,093 |

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## NOTE 4-LOANS

## Loan Portfolio Composition

Our loan portfolio consists of loans held for investment, including loans held in our consolidated trusts, and loans held for sale, and is divided into three portfolio segments: credit card, consumer banking and commercial banking. Credit card loans consist of domestic and international credit card loans. Consumer banking loans consist of auto, home and retail banking loans. Commercial banking loans consist of commercial and multifamily real estate, commercial and industrial, and small-ticket commercial real estate loans.

Our portfolio of loans held for investment also includes certain consumer and commercial loans acquired through business combinations that were recorded at fair value at acquisition and subsequently accounted for based on cash flows expected to be collected, which are referred to as PCI loans. See "Note 1—Summary of Significant Accounting Policies" in our 2016 Form 10K for additional information on the accounting guidance for these loans.

## Credit Quality

We closely monitor economic conditions and loan performance trends to manage and evaluate our exposure to credit risk. Trends in delinquency rates are an indicator, among other considerations, of credit risk within our loan portfolio. The level of nonperforming loans represents another indicator of the potential for future credit losses. Accordingly, key metrics we track and use in evaluating the credit quality of our loan portfolio include delinquency and nonperforming loan rates, as well as net charge-off rates and our internal risk ratings of larger balance commercial loans.

The table below presents the composition and an aging analysis of our loans held for investment portfolio as of June 30, 2017 and December 31, 2016. The delinquency aging includes all past due loans, both performing and nonperforming.

Table 4.1: Loan Portfolio Composition and Aging Analysis

| (Dollars in millions) | June 30, 2017 |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Current |  | $\begin{gathered} 30-59 \\ \text { Days } \end{gathered}$ | $\begin{aligned} & 60-89 \\ & \text { Days } \end{aligned}$ |  | $\begin{gathered} \geq 90 \\ \text { Days } \end{gathered}$ |  | Total <br> Delinquent <br> Loans |  | PCILoans |  | Total Loans |
| Credit Card: |  |  |  |  |  |  |  |  |  |  |  |  |
| Domestic credit card | \$ 89,493 | \$ | 1,105 | \$ | 726 | \$ | 1,542 | \$ | 3,373 | \$ | 0 | \$ 92,866 |
| International card businesses | 8,415 |  | 121 |  | 67 |  | 121 |  | 309 |  | 0 | 8,724 |
| Total credit card | 97,908 |  | 1,226 |  | 793 |  | 1,663 |  | 3,682 |  | 0 | 101,590 |
| Consumer Banking: |  |  |  |  |  |  |  |  |  |  |  |  |
| Auto | 48,733 |  | 1,984 |  | 833 |  | 215 |  | 3,032 |  | 0 | 51,765 |
| Home loan | 7,203 |  | 34 |  | 13 |  | 126 |  | 173 |  | 12,348 | 19,724 |
| Retail banking | 3,421 |  | 16 |  | 5 |  | 19 |  | 40 |  | 23 | 3,484 |
| Total consumer banking | 59,357 |  | 2,034 |  | 851 |  | 360 |  | 3,245 |  | 12,371 | 74,973 |
| Commercial Banking: |  |  |  |  |  |  |  |  |  |  |  |  |
| Commercial and multifamily real estate | 27,334 |  | 39 |  | 0 |  | 29 |  | 68 |  | 26 | 27,428 |
| Commercial and industrial | 39,000 |  | 51 |  | 14 |  | 238 |  | 303 |  | 498 | 39,801 |
| Total commercial lending | 66,334 |  | 90 |  | 14 |  | 267 |  | 371 |  | 524 | 67,229 |
| Small-ticket commercial real estate | 434 |  | 2 |  | 1 |  | 6 |  | 9 |  | 0 | 443 |
| Total commercial banking | 66,768 |  | 92 |  | 15 |  | 273 |  | 380 |  | 524 | 67,672 |
| Other loans | 59 |  | 3 |  | 0 |  | 5 |  | 8 |  | 0 | 67 |
| Total loans ${ }^{(1)}$ | \$224,092 | \$ | 3,355 | \$ | 1,659 | \$ | 2,301 | \$ | 7,315 |  | 12,895 | \$244,302 |
| \% of Total loans | 91.73\% |  | 1.37\% |  | 0.68\% |  | 0.94\% |  | 2.99\% |  | 5.28\% | 100.00\% |

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| (Dollars in millions) | December 31, 2016 |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Current ${ }^{\text {c/ }}$ ( $\begin{gathered}\text { 30-59 } \\ \text { Days }\end{gathered}$ |  |  | $\begin{aligned} & \text { 60-89 } \\ & \text { Days } \end{aligned}$ |  | $\stackrel{>90}{\text { Days }}$ |  | TotalDelinquentLoans |  | PCI Loans |  | Total Loans |  |
| Credit Card: |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Domestic credit card | \$ 93,279 | \$ | 1,153 | \$ | 846 | \$ | 1,840 | \$ | 3,839 | \$ | 2 |  | 97,120 |
| International card businesses | 8,115 |  | 124 |  | 72 |  | 121 |  | 317 |  | 0 |  | 8,432 |
| Total credit card | 101,394 |  | 1,277 |  | 918 |  | 1,961 |  | 4,156 |  | 2 |  | 105,552 |
| Consumer Banking: |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Auto | 44,762 |  | 2,041 |  | 890 |  | 223 |  | 3,154 |  | 0 |  | 47,916 |
| Home loan | 6,951 |  | 44 |  | 20 |  | 141 |  | 205 |  | 14,428 |  | 21,584 |
| Retail banking | 3,477 |  | 22 |  | 7 |  | 20 |  | 49 |  | 28 |  | 3,554 |
| Total consumer banking | 55,190 |  | 2,107 |  | 917 |  | 384 |  | 3,408 |  | 14,456 |  | 73,054 |
| Commercial Banking: |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Commercial and multifamily real estate | 26,536 |  | 45 |  | 0 |  | 0 |  | 45 |  | 28 |  | 26,609 |
| Commercial and industrial | 38,831 |  | 27 |  | 84 |  | 297 |  | 408 |  | 585 |  | 39,824 |
| Total commercial lending | 65,367 |  | 72 |  | 84 |  | 297 |  | 453 |  | 613 |  | 66,433 |
| Small-ticket commercial real estate | 473 |  | 7 |  | 1 |  | 2 |  | 10 |  | 0 |  | 483 |
| Total commercial banking | 65,840 |  | 79 |  | 85 |  | 299 |  | 463 |  | 613 |  | 66,916 |
| Other loans | 56 |  | 3 |  | 0 |  | 5 |  | 8 |  | 0 |  | 64 |
| Total loans ${ }^{(1)}$ | \$222,480 | \$ | 3,466 | \$ | 1,920 | \$ | 2,649 | \$ | 8,035 | \$ | 15,071 |  | 245,586 |
| \% of Total loans | 90.59\% |  | 1.41\% |  | 0.78\% |  | 1.08\% |  | 3.27\% |  | 6.14\% |  | 100.00\% |

(1) Loans (other than PCI loans) include unearned income, unamortized premiums and discounts, and unamortized deferred fees and costs totaling $\$ 664$ million and $\$ 558$ million as of June 30, 2017 and December 31, 2016, respectively.

We pledge loan collateral at the FHLB to secure borrowing capacity. As of June 30, 2017 and December 31, 2016, we pledged loan collateral of $\$ 27.1$ billion and $\$ 29.3$ billion to secure borrowing capacity of $\$ 21.7$ billion and $\$ 24.9$ billion, respectively.

The following table presents the outstanding balance of loans 90 days or more past due that continue to accrue interest and loans classified as nonperforming as of June 30, 2017 and December 31, 2016.

Table 4.2: 90+ Day Delinquent Loans Accruing Interest and Nonperforming Loans ${ }^{(1)}$

| (Dollars in millions) | June 30, 2017 |  |  |  | December 31, 2016 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \geq 90 \text { Days and } \\ \text { Accruing } \end{gathered}$ |  | NonperformingLoans |  | $\begin{gathered} \geq 90 \text { Days and } \\ \text { Accruing } \end{gathered}$ |  | NonperformingLoans |  |
| Credit Card: |  |  |  |  |  |  |  |  |
| Domestic credit card | \$ | 1,542 |  | N/A | \$ | 1,840 |  | N/A |
| International card businesses |  | 108 | \$ | 32 |  | 96 | \$ | 42 |
| Total credit card |  | 1,650 |  | 32 |  | 1,936 |  | 42 |
| Consumer Banking: |  |  |  |  |  |  |  |  |
| Auto |  | 0 |  | 273 |  | 0 |  | 223 |
| Home loan |  | 0 |  | 259 |  | 0 |  | 273 |
| Retail banking |  | 0 |  | 33 |  | 0 |  | 31 |
| Total consumer banking |  | 0 |  | 565 |  | 0 |  | 527 |

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| (Dollars in millions) | June 30, 2017 |  |  |  | December 31, 2016 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \geq 90 \text { Days and } \\ \text { Accruing } \\ \hline \end{gathered}$ |  | NonperformingLoans |  | $\begin{gathered} \geq 90 \text { Days and } \\ \text { Accruing } \\ \hline \end{gathered}$ |  | NonperformingLoans |  |
| Commercial Banking: |  |  |  |  |  |  |  |  |
| Commercial and multifamily real estate | \$ | 0 | \$ | 34 | \$ | 0 | \$ | 30 |
| Commercial and industrial |  | 0 |  | 643 |  | 0 |  | 988 |
| Total commercial lending |  | 0 |  | 677 |  | 0 |  | 1,018 |
| Small-ticket commercial real estate |  | 0 |  | 9 |  | 0 |  | 4 |
| Total commercial banking |  | 0 |  | 686 |  | 0 |  | 1,022 |
| Other loans |  | 0 |  | 9 |  | 0 |  | 8 |
| Total | \$ | 1,650 | \$ | 1,292 | \$ | 1,936 | \$ | 1,599 |
| \% of Total loans |  | 0.68\% |  | 0.53\% |  | 0.79\% |  | 0.65\% |

[^18]
## Credit Card

Our credit card loan portfolio is highly diversified across millions of accounts and numerous geographies without significant individual exposure. We therefore generally manage credit risk based on portfolios with common risk characteristics. The risk in our credit card loan portfolio correlates to broad economic trends, such as unemployment rates and home values, as well as consumers' financial condition, all of which can have a material effect on credit performance. The primary indicators we assess in monitoring the credit quality and risk of our credit card portfolio are delinquency and charge-off trends, including an analysis of loan migration between delinquency categories over time.

The table below displays the geographic profile of our credit card loan portfolio as of June 30, 2017 and December 31, 2016.

## Table 4.3: Credit Card Risk Profile by Geographic Region

| (Dollars in millions) | June 30, 2017 |  |  | December 31, 2016 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Amount |  | $\begin{gathered} \text { \% of } \\ \text { Total }^{(1)} \end{gathered}$ | Amount |  | $\begin{gathered} \mathbf{\%} \mathbf{o f} \\ \operatorname{Total}^{(1)} \end{gathered}$ |
| Domestic credit card: |  |  |  |  |  |  |
| California | \$ | 10,629 | 10.4\% | \$ | 11,068 | 10.5\% |
| Texas |  | 6,980 | 6.9 |  | 7,227 | 6.8 |
| New York |  | 6,780 | 6.7 |  | 7,090 | 6.7 |
| Florida |  | 6,269 | 6.2 |  | 6,540 | 6.2 |
| Illinois |  | 4,271 | 4.2 |  | 4,492 | 4.3 |
| Pennsylvania |  | 3,822 | 3.8 |  | 4,048 | 3.8 |
| Ohio |  | 3,436 | 3.4 |  | 3,654 | 3.5 |
| New Jersey |  | 3,313 | 3.3 |  | 3,488 | 3.3 |
| Michigan |  | 2,994 | 2.9 |  | 3,164 | 3.0 |
| Other |  | 44,372 | 43.6 |  | 46,349 | 43.9 |
| Total domestic credit card |  | 92,866 | 91.4 |  | 97,120 | 92.0 |
| International card businesses: |  |  |  |  |  |  |
| Canada |  | 5,750 | 5.7 |  | 5,594 | 5.3 |
| United Kingdom |  | 2,974 | 2.9 |  | 2,838 | 2.7 |
| Total international card businesses |  | 8,724 | 8.6 |  | 8,432 | 8.0 |
| Total credit card | \$ | 101,590 | 100.0\% | \$ | 105,552 | $\underline{ }$ |

[^19]The table below presents net charge-offs for the three and six months ended June 30, 2017 and 2016.

## CAPITAL ONE FINANCIAL CORPORATION

 NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
## Table 4.4: Credit Card Net Charge-Offs

| (Dollars in millions) | Three Months Ended June 30, |  |  |  |  | Six Months Ended June 30, |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2017 |  | 2016 |  |  | 2017 |  |  | 2016 |  |  |
|  | Amount | Rate ${ }^{(1)}$ |  | ount | Rate ${ }^{(1)}$ |  | mount | Rate ${ }^{(1)}$ |  | mount | Rate ${ }^{(1)}$ |
| Net charge-offs: ${ }^{(1)}$ |  |  |  |  |  |  |  |  |  |  |  |
| Domestic credit card | \$ 1,172 | 5.11\% | \$ | 874 | 4.07\% | \$ | 2,368 | 5.12\% | \$ | 1,761 | 4.12\% |
| International card businesses | 84 | 4.08 |  | 75 | 3.54 |  | 159 | 3.88 |  | 138 | 3.39 |
| Total credit card | \$ 1,256 | 5.02 | \$ | 949 | 4.02 | \$ | 2,527 | 5.02 | \$ | 1,899 | 4.05 |

${ }^{(1)}$ Net charge-offs consist of the unpaid principal balance that we determine to be uncollectible, net of recovered amounts. The net charge-off rate is calculated by dividing annualized net charge-offs by average balance of loans held for investment for the period for each loan category. Net charge-offs and the net charge-off rate are impacted periodically by fluctuations in recoveries, including loan sales.

## Consumer Banking

Our consumer banking loan portfolio consists of auto, home and retail banking loans. Similar to our credit card loan portfolio, the risk in our consumer banking loan portfolio correlates to broad economic trends, such as unemployment rates, gross domestic product ("GDP") and home values, as well as consumers' financial condition, all of which can have a material effect on credit performance. Delinquency, nonperforming loans and charge-off trends are key indicators we assess in monitoring the credit quality and risk of our consumer banking loan portfolio.

The table below displays the geographic profile of our consumer banking loan portfolio, including PCI loans as of June 30, 2017 and December 31, 2016.

## CAPITAL ONE FINANCIAL CORPORATION

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Table 4.5: Consumer Banking Risk Profile by Geographic Region

| (Dollars in millions) | June 30, 2017 |  | December 31, 2016 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Amount | $\begin{gathered} \% \text { of } \\ \text { Total }^{(1)} \end{gathered}$ | Amount | $\begin{gathered} \boldsymbol{\%} \text { of of } \\ \operatorname{Total}^{(1)} \end{gathered}$ |
| Auto: |  |  |  |  |
| Texas | \$ 6,821 | 9.1\% | \$ 6,304 | 8.6\% |
| California | 5,907 | 7.9 | 5,448 | 7.5 |
| Florida | 4,334 | 5.8 | 3,985 | 5.5 |
| Georgia | 2,657 | 3.5 | 2,506 | 3.4 |
| Louisiana | 2,255 | 3.0 | 2,159 | 3.0 |
| Ohio | 2,188 | 2.9 | 2,017 | 2.8 |
| Illinois | 2,161 | 2.9 | 2,065 | 2.8 |
| Other | 25,442 | 33.9 | 23,432 | 32.0 |
| Total auto | 51,765 | 69.0 | 47,916 | 65.6 |
| Home loan: |  |  |  |  |
| California | 4,398 | 5.9 | 4,993 | 6.8 |
| New York | 2,030 | 2.7 | 2,036 | 2.8 |
| Maryland | 1,325 | 1.8 | 1,409 | 1.9 |
| Virginia | 1,134 | 1.5 | 1,204 | 1.7 |
| Illinois | 1,110 | 1.5 | 1,218 | 1.7 |
| New Jersey | 1,041 | 1.4 | 1,112 | 1.5 |
| Louisiana | 911 | 1.2 | 985 | 1.3 |
| Other | 7,775 | 10.4 | 8,627 | 11.8 |
| Total home loan | 19,724 | 26.4 | 21,584 | 29.5 |
| Retail banking: |  |  |  |  |
| Louisiana | 973 | 1.3 | 1,010 | 1.4 |
| New York | 936 | 1.2 | 941 | 1.3 |
| Texas | 735 | 1.0 | 756 | 1.0 |
| New Jersey | 222 | 0.3 | 238 | 0.3 |
| Maryland | 185 | 0.2 | 190 | 0.3 |
| Virginia | 155 | 0.2 | 156 | 0.2 |
| Other | 278 | 0.4 | 263 | 0.4 |
| Total retail banking | 3,484 | 4.6 | 3,554 | 4.9 |
| Total consumer banking | \$74,973 | 100.0\% | \$ 73,054 | 100.0\% |

${ }^{(1)}$ Percentages by geographic region are calculated based on period-end amounts.
The table below presents nonperforming loans in our consumer banking loan portfolio as of June 30, 2017 and December 31, 2016, as well as net charge-offs for the three and six months ended June 30, 2017 and 2016.

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Table 4.6: Consumer Banking Net Charge-Offs and Nonperforming Loans ${ }^{(1)}$

| (Dollars in millions) | Three Months Ended June 30, |  |  |  |  |  | Six Months Ended June 30, |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2017 |  |  | 2016 |  |  | 2017 |  |  | 2016 |  |  |
|  | Amount |  | Rate ${ }^{(2)}$ | Amount |  | Rate ${ }^{(2)}$ | Amount |  | Rate ${ }^{(2)}$ | Amount |  | Rate ${ }^{(2)}$ |
| Net charge-offs: |  |  |  |  |  |  |  |  |  |  |  |  |
| Auto | \$ | 215 | 1.70\% | \$ | 130 | 1.20\% | \$ | 414 | 1.67\% | \$ | 298 | 1.39\% |
| Home loan ${ }^{(3)}$ |  | 2 | 0.04 |  | 5 | 0.09 |  | 4 | 0.03 |  | 8 | 0.07 |
| Retail banking |  | 15 | 1.71 |  | 11 | 1.26 |  | 32 | 1.81 |  | 23 | 1.31 |
| Total consumer banking ${ }^{(3)}$ | \$ | 232 | 1.25 | \$ | 146 | 0.83 | \$ | 450 | 1.22 | \$ | 329 | 0.93 |


| (Dollars in millions) | June 30, 2017 |  |  | December 31, 2016 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Amount |  | Rate ${ }^{(4)}$ | Amount |  | Rate ${ }^{(4)}$ |
| Nonperforming loans: |  |  |  |  |  |  |
| Auto | \$ | 273 | 0.53\% | \$ | 223 | 0.47\% |
| Home loan ${ }^{(5)}$ |  | 259 | 1.31 |  | 273 | 1.26 |
| Retail banking |  | 33 | 0.96 |  | 31 | 0.86 |
| Total consumer banking ${ }^{(5)}$ | \$ | 565 | 0.75 | \$ | 527 | 0.72 |

${ }^{(1)}$ In the second quarter of 2017, we implemented changes in accounting estimate impacting our charge-off practices for the treatment of certain loans within our consumer banking loan portfolio. The Auto net charge-offs amount includes approximately $\$ 48$ million associated with implementing these changes, with an impact to the net charge-off rate of 38 basis points and 19 basis points for the three and six months ended June 30, 2017, respectively. Excluding this impact, the Auto net charge-off rate in those periods would have been $1.32 \%$ and $1.48 \%$, respectively. The impact to the Consumer Banking net charge-off rate was 26 basis points and 13 basis points for the three and six months ended June 30, 2017, respectively. Excluding this impact, the Consumer Banking net charge-off rate in those periods would have been $0.99 \%$ and $1.09 \%$, respectively. See "Note 1 -Summary of Significant Accounting Policies" in this Report for additional information.
${ }^{(2)}$ The net charge-off rate is calculated by dividing annualized net charge-offs by average balance of loans held for investment for the period for each loan category.
${ }^{(3)}$ Excluding the impact of PCI loans, the net charge-off rates for our home loan and total consumer banking portfolios were $0.10 \%$ and $1.50 \%$, respectively, for the three months ended June 30,2017 , compared to $0.31 \%$ and $1.09 \%$, respectively, for the three months ended June 30,2016 ; and $0.09 \%$ and $1.48 \%$, respectively, for the six months ended June 30 , 2017, compared to $0.24 \%$ and $1.24 \%$, respectively, for the six months ended June 30, 2016.
${ }^{(4)}$ Nonperforming loan rates are calculated based on nonperforming loans for each category divided by period-end total loans held for investment for each respective category.
${ }^{(5)}$ Excluding the impact of PCI loans, the nonperforming loan rates for our home loan and total consumer banking portfolios were $3.50 \%$ and $0.90 \%$, respectively, as of June 30,2017 , compared to $3.81 \%$ and $0.90 \%$, respectively, as of December 31, 2016.

## Home Loan

Our home loan portfolio consists of both first-lien and second-lien residential mortgage loans. In evaluating the credit quality and risk of our home loan portfolio, we monitor a variety of mortgage loan characteristics that may affect the default experience on this loan portfolio, such as vintage, geographic concentrations, lien priority and product type. Certain loan concentrations have experienced higher delinquency rates as a result of the significant decline in home prices after the peak in 2006 and subsequent rise in unemployment. These loan concentrations include loans originated between 2006 and 2008 in an environment of decreasing home sales, broadly declining home prices and more relaxed underwriting standards.

The following table presents the distribution of our home loan portfolio as of June 30, 2017 and December 31, 2016, based on selected key risk characteristics.

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Table 4.7: Home Loan Risk Profile by Vintage, Geography, Lien Priority and Interest Rate Type

| (Dollars in millions) | June 30, 2017 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Loans |  |  | PCI Loans ${ }^{(1)}$ |  |  | Total Home Loans |  |
|  | Amount |  | $\begin{gathered} \hline \% \text { of } \\ \operatorname{Total}^{(2)} \end{gathered}$ | Amount |  | $\begin{gathered} \mathbf{\%} \text { of } \\ \operatorname{Total}^{(2)} \end{gathered}$ | Amount | $\begin{gathered} \hline \% \text { of } \\ \operatorname{Total}^{(2)} \end{gathered}$ |
| Origination year: ${ }^{(3)}$ |  |  |  |  |  |  |  |  |
| < $=2008$ | \$ | 1,895 | 9.6\% |  | \$ 8,410 | 42.6\% | \$ 10,305 | 52.2\% |
| 2009 |  | 70 | 0.4 |  | 907 | 4.6 | 977 | 5.0 |
| 2010 |  | 72 | 0.4 |  | 1,280 | 6.5 | 1,352 | 6.9 |
| 2011 |  | 127 | 0.6 |  | 1,390 | 7.1 | 1,517 | 7.7 |
| 2012 |  | 795 | 4.0 |  | 209 | 1.1 | 1,004 | 5.1 |
| 2013 |  | 418 | 2.1 |  | 51 | 0.3 | 469 | 2.4 |
| 2014 |  | 513 | 2.6 |  | 29 | 0.1 | 542 | 2.7 |
| 2015 |  | 968 | 4.9 |  | 28 | 0.1 | 996 | 5.0 |
| 2016 |  | 1,680 | 8.5 |  | 23 | 0.1 | 1,703 | 8.6 |
| 2017 |  | 838 | 4.3 |  | 21 | 0.1 | 859 | 4.4 |
| Total | \$ | 7,376 | 37.4\% |  | \$ 12,348 | 62.6\% | \$ 19,724 | 100.0\% |
| Geographic concentration: ${ }^{(4)}$ |  |  |  |  |  |  |  |  |
| California | \$ | 992 | 5.0\% |  | \$ 3,406 | 17.3\% | \$ 4,398 | 22.3\% |
| New York |  | 1,412 | 7.2 |  | 618 | 3.1 | 2,030 | 10.3 |
| Maryland |  | 610 | 3.1 |  | 715 | 3.6 | 1,325 | 6.7 |
| Virginia |  | 531 | 2.7 |  | 603 | 3.1 | 1,134 | 5.8 |
| Illinois |  | 136 | 0.7 |  | 974 | 4.9 | 1,110 | 5.6 |
| New Jersey |  | 393 | 2.0 |  | 648 | 3.3 | 1,041 | 5.3 |
| Louisiana |  | 891 | 4.5 |  | 20 | 0.1 | 911 | 4.6 |
| Texas |  | 788 | 4.0 |  | 87 | 0.4 | 875 | 4.4 |
| Florida |  | 169 | 0.8 |  | 661 | 3.4 | 830 | 4.2 |
| Arizona |  | 93 | 0.5 |  | 684 | 3.5 | 777 | 4.0 |
| Other |  | 1,361 | 6.9 |  | 3,932 | 19.9 | 5,293 | 26.8 |
| Total | \$ | 7,376 | 37.4\% |  | \$ 12,348 | 62.6\% | \$ 19,724 | 100.0\% |
| Lien type: |  |  |  |  |  |  |  |  |
| $1^{\text {st }}$ lien | \$ | 6,411 | 32.5\% |  | \$ 12,102 | 61.4\% | \$ 18,513 | 93.9\% |
| $2^{\text {nd }}$ lien |  | 965 | 4.9 |  | 246 | 1.2 | 1,211 | 6.1 |
| Total | \$ | 7,376 | 37.4\% |  | \$ 12,348 | 62.6\% | \$ 19,724 | 100.0\% |
| Interest rate type: |  |  |  |  |  |  |  |  |
| Fixed rate | \$ | 3,645 | 18.5\% |  | \$ 1,700 | 8.6\% | \$ 5,345 | 27.1\% |
| Adjustable rate |  | 3,731 | 18.9 |  | 10,648 | 54.0 | 14,379 | 72.9 |
| Total | \$ | 7,376 | 37.4\% |  | \$ 12,348 | 62.6\% | \$ 19,724 | 100.0\% |

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| (Dollars in millions) | December 31, 2016 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Loans |  |  | PCI Loans ${ }^{(1)}$ |  |  | Total Home Loans |  |
|  | Amount |  | $\begin{gathered} \hline \% \text { of } \\ \operatorname{Total}^{(2)} \end{gathered}$ | Amount |  | $\underset{\substack{\mathbf{o} \text { of } \\ \operatorname{Total}^{(2)}}}{\text { and }}$ | Amount | $\underset{\mathbf{\%} \text { of }}{\operatorname{Total}^{(2)}}$ |
| Origination year: ${ }^{(3)}$ |  |  |  |  |  |  |  |  |
| < $=2008$ | \$ | 2,166 | 10.0\% | \$ | 9,684 | 44.9\% | \$ 11,850 | 54.9\% |
| 2009 |  | 80 | 0.4 |  | 1,088 | 5.0 | 1,168 | 5.4 |
| 2010 |  | 82 | 0.4 |  | 1,562 | 7.2 | 1,644 | 7.6 |
| 2011 |  | 139 | 0.6 |  | 1,683 | 7.8 | 1,822 | 8.4 |
| 2012 |  | 969 | 4.5 |  | 268 | 1.2 | 1,237 | 5.7 |
| 2013 |  | 465 | 2.2 |  | 59 | 0.2 | 524 | 2.4 |
| 2014 |  | 557 | 2.6 |  | 31 | 0.2 | 588 | 2.8 |
| 2015 |  | 1,024 | 4.7 |  | 30 | 0.2 | 1,054 | 4.9 |
| 2016 |  | 1,674 | 7.8 |  | 23 | 0.1 | 1,697 | 7.9 |
| Total | \$ | 7,156 | 33.2\% |  | 14,428 | 66.8\% | \$ 21,584 | 100.0\% |
| Geographic concentration: ${ }^{(4)}$ |  |  |  |  |  |  |  |  |
| California | \$ | 976 | 4.5\% | \$ | 4,017 | 18.6\% | \$ 4,993 | 23.1\% |
| New York |  | 1,343 | 6.2 |  | 693 | 3.2 | 2,036 | 9.4 |
| Maryland |  | 585 | 2.7 |  | 824 | 3.9 | 1,409 | 6.6 |
| Illinois |  | 108 | 0.5 |  | 1,110 | 5.1 | 1,218 | 5.6 |
| Virginia |  | 490 | 2.3 |  | 714 | 3.3 | 1,204 | 5.6 |
| New Jersey |  | 379 | 1.8 |  | 733 | 3.4 | 1,112 | 5.2 |
| Louisiana |  | 962 | 4.5 |  | 23 | 0.1 | 985 | 4.6 |
| Florida |  | 159 | 0.7 |  | 772 | 3.6 | 931 | 4.3 |
| Arizona |  | 89 | 0.4 |  | 799 | 3.7 | 888 | 4.1 |
| Texas |  | 725 | 3.4 |  | 98 | 0.4 | 823 | 3.8 |
| Other |  | 1,340 | 6.2 |  | 4,645 | 21.5 | 5,985 | 27.7 |
| Total | \$ | 7,156 | 33.2\% |  | 14,428 | 66.8\% | \$ 21,584 | 100.0\% |
| Lien type: |  |  |  |  |  |  |  |  |
| $1^{\text {st }}$ lien | \$ | 6,182 | 28.7\% |  | 14,159 | 65.5\% | \$ 20,341 | 94.2\% |
| $2^{\text {nd }}$ lien |  | 974 | 4.5 |  | 269 | 1.3 | 1,243 | 5.8 |
| Total | \$ | 7,156 | 33.2\% |  | 14,428 | 66.8\% | \$ 21,584 | 100.0\% |
| Interest rate type: |  |  |  |  |  |  |  |  |
| Fixed rate | \$ | 3,394 | 15.8\% |  | 1,822 | 8.4\% | \$ 5,216 | 24.2\% |
| Adjustable rate |  | 3,762 | 17.4 |  | 12,606 | 58.4 | 16,368 | 75.8 |
| Total | \$ | 7,156 | 33.2\% |  | 14,428 | 66.8\% | \$ 21,584 | 100.0\% |

[^20]Our recorded investment in home loans that are in process of foreclosure was $\$ 384$ million and $\$ 382$ million as of June 30, 2017 and December 31, 2016, respectively. We commence the foreclosure process on home loans when a borrower becomes at least 120 days delinquent in accordance with Consumer Financial Protection Bureau regulations. Foreclosure procedures and timelines vary according to state laws. As of June 30, 2017 and December 31, 2016, the carrying value of the foreclosed residential real estate properties we hold and report as other assets on our consolidated balance sheets totaled $\$ 48$ million and $\$ 69$ million, respectively.

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## Commercial Banking

We evaluate the credit risk of commercial loans using a dual risk rating system. We assign internal risk ratings to loans based on relevant information about the ability of the borrowers to repay their debt. In determining the risk rating of a particular loan, some of the factors considered are the borrower's current financial condition, historical and projected future credit performance, prospects for support from financially responsible guarantors, the estimated realizable value of any collateral and current economic trends. The scale based on our internal risk rating system is as follows:

- Noncriticized: Loans that have not been designated as criticized, frequently referred to as "pass" loans.
- Criticized performing: Loans in which the financial condition of the obligor is stressed, affecting earnings, cash flows or collateral values. The borrower currently has adequate capacity to meet near-term obligations; however, the stress, left unabated, may result in deterioration of the repayment prospects at some future date.
- Criticized nonperforming: Loans that are not adequately protected by the current net worth and paying capacity of the obligor or the collateral pledged, if any. Loans classified as criticized nonperforming have a well-defined weakness, or weaknesses, which jeopardize the full repayment of the debt. These loans are characterized by the distinct possibility that we will sustain a credit loss if the deficiencies are not corrected and are generally placed on nonaccrual status.

We use our internal risk rating system for regulatory reporting, determining the frequency of credit exposure reviews, and evaluating and determining the allowance for loan and lease losses for commercial loans. Loans of $\$ 1$ million or more that are designated as criticized performing and criticized nonperforming are reviewed quarterly by management to determine if they are appropriately classified/rated and whether any impairment exists. Noncriticized loans greater than $\$ 1$ million are specifically reviewed, at least annually, to determine the appropriate risk rating. In addition, we evaluate the risk rating during the renewal process of any loan or if a loan becomes past due.

The following table presents the geographic distribution and internal risk ratings of our commercial loan portfolio as of June 30, 2017 and December 31, 2016.

Table 4.8: Commercial Banking Risk Profile by Geographic Region and Internal Risk Rating

| (Dollars in millions) | June 30, 2017 |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \hline \text { Commercial } \\ \text { and } \\ \text { Multifamily } \\ \text { Real Estate } \end{gathered}$ |  | $\underset{\text { \% of }}{\text { Total }{ }^{(1)}}$ | $\begin{gathered} \text { Commercial } \\ \text { and } \\ \text { Industrial } \end{gathered}$ |  | $\begin{aligned} & \% \text { of } \\ & \text { Total }^{(1)} \end{aligned}$ | Small-TicketCommercialReal Estate |  | $\begin{aligned} & \% \text { of } \\ & \text { Total }^{(1)} \end{aligned}$ | $\begin{gathered} \text { Total } \\ \text { Commercial } \\ \text { Banking } \\ \hline \end{gathered}$ |  | $\begin{aligned} & \% \text { of } \\ & \text { Total }^{(1)} \end{aligned}$ |
| Geographic concentration: ${ }^{(2)}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Northeast | \$ | 15,636 | 57.0\% | \$ | 8,863 | 22.3\% | \$ | 274 | 61.9\% | \$ | 24,773 | 36.6\% |
| Mid-Atlantic |  | 3,212 | 11.7 |  | 3,896 | 9.8 |  | 16 | 3.6 |  | 7,124 | 10.5 |
| South |  | 3,924 | 14.3 |  | 15,100 | 37.9 |  | 28 | 6.3 |  | 19,052 | 28.2 |
| Other |  | 4,656 | 17.0 |  | 11,942 | 30.0 |  | 125 | 28.2 |  | 16,723 | 24.7 |
| Total | \$ | 27,428 | 100.0\% | \$ | 39,801 | 100.0\% | \$ | 443 | 100.0\% | \$ | 67,672 | 100.0\% |
| Internal risk rating: ${ }^{(3)}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Noncriticized | \$ | 26,930 | 98.2\% | \$ | 36,439 | 91.5\% | \$ | 433 | 97.8\% | S | 63,802 | 94.3\% |
| Criticized performing |  | 438 | 1.6 |  | 2,221 | 5.6 |  | 1 | 0.2 |  | 2,660 | 3.9 |
| Criticized nonperforming |  | 34 | 0.1 |  | 643 | 1.6 |  | 9 | 2.0 |  | 686 | 1.0 |
| PCI loans |  | 26 | 0.1 |  | 498 | 1.3 |  | 0 | 0.0 |  | 524 | 0.8 |
| Total | \$ | 27,428 | 100.0\% | \$ | 39,801 | 100.0\% | \$ | 443 | 100.0\% | \$ | 67,672 | 100.0\% |

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| (Dollars in millions) | December 31, 2016 |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Commercial and Multifamily Real Estate |  | $\begin{gathered} \% \text { of } \\ \text { Total }^{(1)} \end{gathered}$ | $\begin{gathered} \text { Commercial } \\ \text { and } \\ \text { Industrial } \end{gathered}$ |  |  | Small- <br> Ticket <br> Commercial <br> Real Estate |  | $\begin{aligned} & \% \text { of } \\ & \text { Total }^{(1)} \end{aligned}$ | $\begin{gathered} \text { Total } \\ \text { Commercial } \\ \text { Banking } \end{gathered}$ |  | $\begin{aligned} & \% \text { of } \\ & \text { Total }^{(1)} \end{aligned}$ |
| Geographic concentration: ${ }^{(2)}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Northeast | \$ | 15,714 | 59.0\% | \$ | 9,628 | 24.2\% | \$ | 298 | 61.7\% | \$ | 25,640 | 38.3\% |
| Mid-Atlantic |  | 3,024 | 11.4 |  | 3,450 | 8.7 |  | 16 | 3.3 |  | 6,490 | 9.7 |
| South |  | 4,032 | 15.2 |  | 15,193 | 38.1 |  | 34 | 7.0 |  | 19,259 | 28.8 |
| Other |  | 3,839 | 14.4 |  | 11,553 | 29.0 |  | 135 | 28.0 |  | 15,527 | 23.2 |
| Total |  | 26,609 | 100.0\% | \$ | 39,824 | 100.0\% | \$ | 483 | 100.0\% | \$ | 66,916 | 100.0\% |
| Internal risk rating: ${ }^{(3)}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Noncriticized | \$ | 26,309 | 98.9\% | \$ | 36,046 | 90.5\% | \$ | 473 | 97.9\% | \$ | 62,828 | 93.9\% |
| Criticized performing |  | 242 | 0.9 |  | 2,205 | 5.5 |  | 6 | 1.3 |  | 2,453 | 3.7 |
| Criticized nonperforming |  | 30 | 0.1 |  | 988 | 2.5 |  | 4 | 0.8 |  | 1,022 | 1.5 |
| PCI loans |  | 28 | 0.1 |  | 585 | 1.5 |  | 0 | 0.0 |  | 613 | 0.9 |
| Total |  | 26,609 | 100.0\% | \$ | 39,824 | 100.0\% | \$ | 483 | 100.0\% | \$ | 66,916 | 100.0\% |

[^21]
## Impaired Loans

The following table presents information about our impaired loans, excluding PCI loans, which are reported separately as of June 30, 2017, and December 31, 2016, and for the three and six months ended June 30, 2017 and 2016.

Table 4.9: Impaired Loans ${ }^{(1)}$

| (Dollars in millions) | June 30, 2017 |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | With an Allowance |  | WithoutanAllowance |  | TotalRecordedInvestment |  | Related Allowance |  | Net Recorded Investment |  | Unpaid Principal Balance |  |
| Credit Card: |  |  |  |  |  |  |  |  |  |  |  |  |
| Domestic credit card | \$ | 589 | \$ | 0 | \$ | 589 | \$ | 189 | \$ | 400 | \$ | 575 |
| International card businesses |  | 156 |  | 0 |  | 156 |  | 76 |  | 80 |  | 151 |
| Total credit card ${ }^{(2)}$ |  | 745 |  | 0 |  | 745 |  | 265 |  | 480 |  | 726 |
| Consumer Banking: |  |  |  |  |  |  |  |  |  |  |  |  |
| Auto ${ }^{(3)}$ |  | 311 |  | 172 |  | 483 |  | 28 |  | 455 |  | 766 |
| Home loan |  | 235 |  | 114 |  | 349 |  | 18 |  | 331 |  | 444 |
| Retail banking |  | 48 |  | 10 |  | 58 |  | 10 |  | 48 |  | 62 |
| Total consumer banking |  | 594 |  | 296 |  | 890 |  | 56 |  | 834 |  | 1,272 |
| Commercial Banking: |  |  |  |  |  |  |  |  |  |  |  |  |
| Commercial and multifamily real estate |  | 107 |  | 30 |  | 137 |  | 8 |  | 129 |  | 140 |
| Commercial and industrial |  | 928 |  | 192 |  | 1,120 |  | 133 |  | 987 |  | 1,551 |
| Total commercial lending |  | 1,035 |  | 222 |  | 1,257 |  | 141 |  | 1,116 |  | 1,691 |
| Small-ticket commercial real estate |  | 8 |  | 0 |  | 8 |  | 0 |  | 8 |  | 10 |
| Total commercial banking |  | 1,043 |  | 222 |  | 1,265 |  | 141 |  | 1,124 |  | 1,701 |
| Total | \$ | 2,382 | \$ | 518 | \$ | 2,900 | \$ | 462 | \$ | 2,438 | \$ | 3,699 |

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| (Dollars in millions) | December 31, 2016 |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | With an Allowance |  | $\begin{gathered} \hline \text { Without } \\ \text { an } \\ \text { Allowance } \end{gathered}$ |  | TotalRecordedInvestment |  | Related Allowance |  | NetRecordedInvestment |  | Unpaid Principal Balance |  |
| Credit Card: |  |  |  |  |  |  |  |  |  |  |  |  |
| Domestic credit card | \$ | 581 | \$ | 0 | , | 581 | \$ | 174 | \$ | 407 | \$ | 566 |
| International card businesses |  | 134 |  | 0 |  | 134 |  | 65 |  | 69 |  | 129 |
| Total credit card ${ }^{(2)}$ |  | 715 |  | 0 |  | 715 |  | 239 |  | 476 |  | 695 |
| Consumer Banking: |  |  |  |  |  |  |  |  |  |  |  |  |
| Auto ${ }^{(3)}$ |  | 316 |  | 207 |  | 523 |  | 24 |  | 499 |  | 807 |
| Home loan |  | 241 |  | 117 |  | 358 |  | 19 |  | 339 |  | 464 |
| Retail banking |  | 52 |  | 10 |  | 62 |  | 14 |  | 48 |  | 65 |
| Total consumer banking |  | 609 |  | 334 |  | 943 |  | 57 |  | 886 |  | 1,336 |
| Commercial Banking: |  |  |  |  |  |  |  |  |  |  |  |  |
| Commercial and multifamily real estate |  | 83 |  | 29 |  | 112 |  | 7 |  | 105 |  | 112 |
| Commercial and industrial |  | 1,249 |  | 144 |  | 1,393 |  | 162 |  | 1,231 |  | 1,444 |
| Total commercial lending |  | 1,332 |  | 173 |  | 1,505 |  | 169 |  | 1,336 |  | 1,556 |
| Small-ticket commercial real estate |  | 4 |  | 0 |  | 4 |  | 0 |  | 4 |  | 4 |
| Total commercial banking |  | 1,336 |  | 173 |  | 1,509 |  | 169 |  | 1,340 |  | 1,560 |
| Total | \$ | 2,660 | \$ | 507 | \$ | 3,167 | \$ | 465 | \$ | 2,702 | \$ | 3,591 |


| (Dollars in millions) | Three Months Ended June 30, 2017 |  |  |  | Six Months Ended June 30, 2017 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Average Recorded Investment |  | Interest Income Recognized |  | Average Recorded Investment |  | InterestIncomeRecognized |  |
| Credit Card: |  |  |  |  |  |  |  |  |
| Domestic credit card | \$ | 588 | \$ | 16 | \$ | 586 | \$ | 31 |
| International card businesses |  | 152 |  | 2 |  | 146 |  | 5 |
| Total credit card ${ }^{(2)}$ |  | 740 |  | 18 |  | 732 |  | 36 |
| Consumer Banking: |  |  |  |  |  |  |  |  |
| Auto ${ }^{(3)}$ |  | 491 |  | 11 |  | 501 |  | 26 |
| Home loan |  | 342 |  | 1 |  | 346 |  | 2 |
| Retail banking |  | 56 |  | 0 |  | 58 |  | 1 |
| Total consumer banking |  | 889 |  | 12 |  | 905 |  | 29 |
| Commercial Banking: |  |  |  |  |  |  |  |  |
| Commercial and multifamily real estate |  | 125 |  | 1 |  | 121 |  | 2 |
| Commercial and industrial |  | 1,173 |  | 5 |  | 1,246 |  | 8 |
| Total commercial lending |  | 1,298 |  | 6 |  | 1,367 |  | 10 |
| Small-ticket commercial real estate |  | 8 |  | 0 |  | 7 |  | 0 |
| Total commercial banking |  | 1,306 |  | 6 |  | 1,374 |  | 10 |
| Total | \$ | 2,935 | \$ | 36 | \$ | 3,011 | \$ | 75 |

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| (Dollars in millions) | Three Months Ended June 30, 2016 |  |  |  | Six Months Ended June 30, 2016 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Average Recorded Investment |  | $\begin{gathered} \hline \text { Interest } \\ \text { Income } \\ \text { Recognized } \end{gathered}$ |  | Average Recorded Investment |  | Interest Income Recognized |  |
| Credit Card: |  |  |  |  |  |  |  |  |
| Domestic credit card | \$ | 521 | \$ | 14 | \$ | 528 | \$ | 28 |
| International card businesses |  | 135 |  | 2 |  | 132 |  | 5 |
| Total credit card ${ }^{(2)}$ |  | 656 |  | 16 |  | 660 |  | 33 |
| Consumer Banking: |  |  |  |  |  |  |  |  |
| Auto ${ }^{(3)}$ |  | 494 |  | 21 |  | 492 |  | 43 |
| Home loan |  | 364 |  | 1 |  | 364 |  | 2 |
| Retail banking |  | 60 |  | 1 |  | 61 |  | 1 |
| Total consumer banking |  | 918 |  | 23 |  | 917 |  | 46 |
| Commercial Banking: |  |  |  |  |  |  |  |  |
| Commercial and multifamily real estate |  | 128 |  | 1 |  | 113 |  | 2 |
| Commercial and industrial |  | 1,277 |  | 3 |  | 1,116 |  | 5 |
| Total commercial lending |  | 1,405 |  | 4 |  | 1,229 |  | 7 |
| Small-ticket commercial real estate |  | 8 |  | 0 |  | 7 |  | 0 |
| Total commercial banking |  | 1,413 |  | 4 |  | 1,236 |  | 7 |
| Total | \$ | 2,987 | \$ | 43 | \$ | 2,813 | \$ | 86 |

(1) Impaired loans include loans modified in troubled debt restructurings ("TDRs"), all nonperforming commercial loans and nonperforming home loans with a specific impairment. Impaired loans without an allowance generally represent loans that have been charged down to the fair value of the underlying collateral for which we believe no additional losses have been incurred, or where the fair value of the underlying collateral meets or exceeds the loan's amortized cost.
(2) The period-end and average recorded investments of credit card loans include finance charges and fees.
(3) Although certain assets from loan recovery inventory are not reported in our loans held for investment, they are included as impaired loans above since they are reported as TDRs.

The total recorded investment of loans modified in TDRs represents $\$ 2.4$ billion and $\$ 2.5$ billion of the impaired loans presented above as of June 30, 2017 and December 31, 2016, respectively. Consumer TDRs classified as performing totaled $\$ 1.2$ billion and $\$ 1.1$ billion as of June 30, 2017 and December 31, 2016, respectively. Commercial TDRs classified as performing totaled $\$ 580$ million and $\$ 487$ million as of June 30, 2017 and December 31, 2016, respectively. Commitments to lend additional funds on loans modified in TDRs totaled \$280 million and \$208 million as of June 30, 2017 and December 31, 2016, respectively.

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## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As part of our loan modification programs to borrowers experiencing financial difficulty, we may provide multiple concessions to minimize our economic loss and improve long-term loan performance and collectability. The following tables present the major modification types, recorded investment amounts and financial effects of loans modified in TDRs during the three and six months ended June 30, 2017 and 2016.

Table 4.10: Troubled Debt Restructurings

| (Dollars in millions) | $\begin{aligned} & \text { Total Loans } \\ & \text { Modified }^{(1)(2)} \\ & \hline \end{aligned}$ |  | Three Months Ended June 30, 2017 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Reduced Interest Rate |  | Term Extension |  | Balance Reduction |  |  |
|  |  |  | $\begin{gathered} \text { \% of } \\ \text { TDR } \\ \text { Activity }{ }^{(3)(4)} \end{gathered}$ | $\begin{gathered} \text { Average } \\ \text { Rate } \\ \text { Reduction }{ }^{(5)} \end{gathered}$ | $\begin{gathered} \text { \% of } \\ \text { TDR } \\ \text { Activity }^{(4)(6)} \end{gathered}$ | Average Term Extension (Months) ${ }^{(7)}$ | $\begin{gathered} \text { \% of } \\ \text { TDR } \\ \text { Activity }^{(4)(8)} \end{gathered}$ |  |  |
| Credit Card: |  |  |  |  |  |  |  |  |  |
| Domestic credit card | \$ | 87 | 100\% | 14.36\% | 0\% | 0 | 0\% | \$ | 0 |
| International card businesses |  | 39 | 100 | 26.50 | 0 | 0 | 0 |  | 0 |
| Total credit card |  | 126 | 100 | 18.12 | 0 | 0 | 0 |  | 0 |
| Consumer Banking: |  |  |  |  |  |  |  |  |  |
| Auto |  | 61 | 52 | 3.65 | 99 | 7 | 0 |  | 0 |
| Home loan |  | 6 | 47 | 3.14 | 87 | 233 | 5 |  | 0 |
| Retail banking |  | 4 | 18 | 0.10 | 59 | 13 | 0 |  | 0 |
| Total consumer banking |  | 71 | 49 | 3.54 | 96 | 25 | 0 |  | 0 |
| Commercial Banking: |  |  |  |  |  |  |  |  |  |
| Commercial and multifamily real estate |  | 24 | 0 | 0.00 | 10 | 4 | 0 |  | 0 |
| Commercial and industrial |  | 134 | 18 | 2.23 | 47 | 9 | 0 |  | 0 |
| Total commercial lending |  | 158 | 15 | 2.23 | 41 | 9 | 0 |  | 0 |
| Small-ticket commercial real estate |  | 1 | 0 | 0.00 | 0 | 0 | 0 |  | 0 |
| Total commercial banking |  | 159 | 15 | 2.23 | 41 | 9 | 0 |  | 0 |
| Total | \$ | 356 | 52 | 13.35 | 37 | 17 | 0 | \$ | 0 |

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## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

| (Dollars in millions) | Total Loans Modified ${ }^{(1)(2)}$ |  | Six Months Ended June 30, 2017 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Reduced Interest Rate |  | Term Extension |  | Balance Reduction |  |  |
|  |  |  | $\begin{gathered} \text { \% of } \\ \text { TDR }^{(3)(4)} \\ \text { Activity }^{(3)} \end{gathered}$ | Average Rate Reduction ${ }^{(5)}$ | $\begin{gathered} \% \text { of } \\ \text { TDR }^{\text {tivity }}{ }^{(4)(6)} \\ \hline \end{gathered}$ | Average <br> Term <br> Extension <br> (Months) | $\begin{gathered} \text { \% of } \\ \text { TDR } \\ \text { Activity }^{(4)(8)} \end{gathered}$ |  |  |
| Credit Card: |  |  |  |  |  |  |  |  |  |
| Domestic credit card | \$ | 184 | 100\% | 14.09\% | 0\% | 0 | 0\% | \$ | 0 |
| International card businesses |  | 83 | 100 | 26.33 | 0 | 0 | 0 |  | 0 |
| Total credit card |  | 267 | 100 | 17.92 | 0 | 0 | 0 |  | 0 |
| Consumer Banking: |  |  |  |  |  |  |  |  |  |
| Auto |  | 136 | 52 | 3.85 | 93 | 7 | 6 |  | 7 |
| Home loan |  | 14 | 54 | 2.49 | 83 | 227 | 2 |  | 0 |
| Retail banking |  | 6 | 30 | 1.19 | 62 | 11 | 0 |  | 0 |
| Total consumer banking |  | 156 | 51 | 3.66 | 91 | 25 | 5 |  | 7 |
| Commercial Banking: |  |  |  |  |  |  |  |  |  |
| Commercial and multifamily real estate |  | 26 | 8 | 0.02 | 17 | 5 | 0 |  | 0 |
| Commercial and industrial |  | 281 | 9 | 1.23 | 32 | 18 | 0 |  | 0 |
| Total commercial lending |  | 307 | 9 | 1.13 | 31 | 17 | 0 |  | 0 |
| Small-ticket commercial real estate |  | 1 | 0 | 0.00 | 0 | 0 | 0 |  | 0 |
| Total commercial banking |  | 308 | 9 | 1.13 | 31 | 17 | 0 |  | 0 |
| Total | \$ | 731 | 51 | 13.68 | 32 | 22 | 0 | \$ | 7 |


| (Dollars in millions) | $\begin{aligned} & \text { Total Loans } \\ & \text { Modified }^{(1)(2)} \\ & \hline \end{aligned}$ |  | Three Months Ended June 30, 2016 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Reduced Interest Rate |  | Term Extension |  | Balance Reduction |  |  |
|  |  |  | $\begin{gathered} \% \text { of } \\ \text { TDR } \\ \text { Activity }{ }^{(3)(4)} \end{gathered}$ | $\begin{gathered} \text { Average } \\ \text { Rate } \\ \text { Reduction }{ }^{(5)} \end{gathered}$ | $\begin{gathered} \text { \% of } \\ \text { TDR } \\ \text { Activity }^{(4)(6)} \end{gathered}$ | Average Term Extension (Months) ${ }^{(7)}$ | $\begin{gathered} \text { \% of } \\ \text { TDR } \\ \text { Activity }^{(4)(8)} \end{gathered}$ |  |  |
| Credit Card: |  |  |  |  |  |  |  |  |  |
| Domestic credit card | \$ | 62 | 100\% | 12.81\% | 0\% | 0 | 0\% | \$ | 0 |
| International card businesses |  | 33 | 100 | 26.01 | 0 | 0 | 0 |  | 0 |
| Total credit card |  | 95 | 100 | 17.47 | 0 | 0 | 0 |  | 0 |
| Consumer Banking: |  |  |  |  |  |  |  |  |  |
| Auto |  | 77 | 46 | 3.86 | 75 | 7 | 25 |  | 15 |
| Home loan |  | 12 | 52 | 2.29 | 95 | 252 | 2 |  | 0 |
| Retail banking |  | 4 | 47 | 4.10 | 58 | 10 | 35 |  | 1 |
| Total consumer banking |  | 93 | 47 | 3.64 | 77 | 46 | 22 |  | 16 |
| Commercial Banking: |  |  |  |  |  |  |  |  |  |
| Commercial and multifamily real estate |  | 0 | 0 | 0.00 | 0 | 0 | 0 |  | 0 |
| Commercial and industrial |  | 254 | 12 | 0.06 | 64 | 25 | 0 |  | 0 |
| Total commercial lending |  | 254 | 12 | 0.00 | 64 | 25 | 0 |  | 0 |
| Small-ticket commercial real estate |  | 0 | 0 | 0.00 | 0 | 0 | 0 |  | 0 |
| Total commercial banking |  | 254 | 12 | 0.00 | 64 | 25 | 0 |  | 0 |
| Total | \$ | 442 | 38 | 10.82 | 53 | 32 | 5 | \$ | 16 |

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| (Dollars in millions) | Total LoansModified $^{(1)(2)}$ |  | Six Months Ended June 30, 2016 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Reduced Interest Rate |  | Term Extension |  | Balance Reduction |  |  |
|  |  |  | $\begin{gathered} \text { \% of } \\ \text { TDR } \\ \text { Activity }^{(3)(4)} \end{gathered}$ | $\begin{gathered} \text { Average } \\ \text { Rate } \\ \text { Reduction }{ }^{(5)} \end{gathered}$ | $\begin{gathered} \% \text { of } \\ \text { TDRR } \\ \text { Activity }{ }^{(4)(6)} \end{gathered}$ | Average <br> Term <br> Extension <br> (Months) ${ }^{(7)}$ | $\begin{gathered} \% \text { of } \\ \text { TDR } \\ \text { Activity }^{(4)(8)} \end{gathered}$ |  |  |
| Credit Card: |  |  |  |  |  |  |  |  |  |
| Domestic credit card | \$ | 124 | 100\% | 12.83\% | 0\% | 0 | 0\% | \$ | 0 |
| International card businesses |  | 69 | 100 | 25.83 | 0 | 0 | 0 |  | 0 |
| Total credit card |  | 193 | 100 | 17.50 | 0 | 0 | 0 |  | 0 |
| Consumer Banking: |  |  |  |  |  |  |  |  |  |
| Auto |  | 163 | 44 | 3.89 | 74 | 7 | 26 |  | 36 |
| Home loan |  | 25 | 57 | 2.47 | 85 | 250 | 2 |  | 0 |
| Retail banking |  | 7 | 36 | 5.02 | 70 | 10 | 20 |  | 1 |
| Total consumer banking |  | 195 | 45 | 3.69 | 75 | 43 | 22 |  | 37 |
| Commercial Banking: |  |  |  |  |  |  |  |  |  |
| Commercial and multifamily real estate |  | 25 | 0 | 0.00 | 100 | 8 | 0 |  | 0 |
| Commercial and industrial |  | 301 | 10 | 0.05 | 58 | 23 | 0 |  | 0 |
| Total commercial lending |  | 326 | 9 | 0.05 | 62 | 21 | 0 |  | 0 |
| Small-ticket commercial real estate |  | 0 | 0 | 0.00 | 0 | 0 | 0 |  | 0 |
| Total commercial banking |  | 326 | 9 | 0.05 | 61 | 21 | 0 |  | 0 |
| Total | \$ | 714 | 43 | 11.93 | 49 | 30 | 6 | \$ | 37 |

[^22]
## TDR—Subsequent Defaults of Completed TDR Modifications

The following table presents the type, number and recorded investment amount of loans modified in TDRs that experienced a default during the period and had completed a modification event in the twelve months prior to the default. A default occurs if the loan is either 90 days or more delinquent, has been charged off as of the end of the period presented or has been reclassified from accrual to nonaccrual status.

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## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Table 4.11: TDR—Subsequent Defaults

| (Dollars in millions) | Three Months Ended June 30, 2017 |  |  | Six Months Ended June 30, 2017 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of Contracts | Amount |  | Number of Contracts | Amount |  |
| Credit Card: |  |  |  |  |  |  |
| Domestic credit card | 13,222 | \$ | 25 | 26,027 | \$ | 51 |
| International card businesses ${ }^{(1)}$ | 13,761 |  | 27 | 25,186 |  | 43 |
| Total credit card | 26,983 |  | 52 | 51,213 |  | 94 |
| Consumer Banking: |  |  |  |  |  |  |
| Auto | 2,533 |  | 30 | 4,712 |  | 55 |
| Home loan | 8 |  | 3 | 19 |  | 6 |
| Retail banking | 9 |  | 2 | 20 |  | 3 |
| Total consumer banking | 2,550 |  | 35 | 4,751 |  | 64 |
| Commercial Banking: |  |  |  |  |  |  |
| Commercial and multifamily real estate | 0 |  | 0 | 0 |  | 0 |
| Commercial and industrial | 21 |  | 89 | 35 |  | 108 |
| Total commercial lending | 21 |  | 89 | 35 |  | 108 |
| Small-ticket commercial real estate | 1 |  | 0 | 2 |  | 1 |
| Total commercial banking | 22 |  | 89 | 37 |  | 109 |
| Total | 29,555 | \$ | 176 | 56,001 | \$ | 267 |


| (Dollars in millions) | Three Months Ended June 30, 2016 |  |  | Six Months Ended June 30, 2016 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of Contracts | Amount |  | Number of Contracts | Amount |  |
| Credit Card: |  |  |  |  |  |  |
| Domestic credit card | 10,231 | \$ | 16 | 20,825 | \$ | 34 |
| International card businesses ${ }^{(1)}$ | 9,972 |  | 21 | 18,785 |  | 41 |
| Total credit card | 20,203 |  | 37 | 39,610 |  | 75 |
| Consumer Banking: |  |  |  |  |  |  |
| Auto | 2,061 |  | 22 | 3,913 |  | 43 |
| Home loan | 13 |  | 2 | 23 |  | 3 |
| Retail banking | 10 |  | 1 | 25 |  | 3 |
| Total consumer banking | 2,084 |  | 25 | 3,961 |  | 49 |
| Commercial Banking: |  |  |  |  |  |  |
| Commercial and multifamily real estate | 0 |  | 0 | 0 |  | 0 |
| Commercial and industrial | 3 |  | 14 | 20 |  | 37 |
| Total commercial lending | 3 |  | 14 | 20 |  | 37 |
| Small-ticket commercial real estate | 2 |  | 0 | 2 |  | 0 |
| Total commercial banking | 5 |  | 14 | 22 |  | 37 |
| Total | 22,292 | \$ | 76 | 43,593 | \$ | 161 |

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## CAPITAL ONE FINANCIAL CORPORATION

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

## PCI Loans

## Outstanding Balance and Carrying Value of PCI Loans

The table below presents the outstanding balance and the carrying value of PCI loans as of June 30, 2017 and December 31, 2016. The table also displays loans which would have otherwise been considered impaired at acquisition based on our applicable accounting policies. See "Note 1—Summary of Significant Accounting Policies" in our 2016 Form 10-K for information related to our accounting policies for impaired loans.

Table 4.12: PCI Loans

| (Dollars in millions) | June 30, 2017 |  |  |  |  |  | December 31, 2016 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total PCI Loans |  | $\underset{\text { Loans }}{\text { Impaired }}$ |  | Non-ImpairedLoans |  | Total <br> PCI Loans |  | Impaired Loans |  | Non-Impaired Loans |  |
| Outstanding balance | \$ | 14,184 | \$ | 2,930 | \$ | 11,254 | \$ | 16,506 | \$ | 3,272 | \$ | 13,234 |
| Carrying value ${ }^{(1)}$ |  | 12,898 |  | 2,052 |  | 10,846 |  | 15,074 |  | 2,263 |  | 12,811 |

(1) Includes $\$ 31$ million of allowance for loan and lease losses for these loans as of both June 30, 2017 and December 31, 2016. We recorded a $\$ 9$ million release for credit losses for the six months ended June 30, 2016.

## Changes in Accretable Yield

The following table presents changes in the accretable yield on PCI loans:

## Table 4.13: Changes in Accretable Yield on PCI Loans

| (Dollars in millions) | Three Months Ended June 30, 2017 |  |  |  |  |  | Six Months Ended June 30, 2017 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { Total } \\ & \text { PCI Loans } \end{aligned}$ |  | Impaired Loans |  | Non-Impaired Loans |  | $\begin{aligned} & \text { Total } \\ & \text { PCI Loans } \end{aligned}$ |  | Impaired Loans |  | Non-Impaired Loans |  |
| Accretable yield, beginning of period | \$ | 2,903 | \$ | 988 | \$ | 1,915 | \$ | 3,177 | \$ | 1,064 | \$ | 2,113 |
| Accretion recognized in earnings |  | (155) |  | (54) |  | (101) |  | (321) |  | (110) |  | (211) |
| Reclassifications from/(to) nonaccretable differences ${ }^{(1)}$ |  | 2 |  | (6) |  | 8 |  | 8 |  | (10) |  | 18 |
| Changes in accretable yield for non-credit related changes in expected cash flows ${ }^{(2)}$ |  | (59) |  | 64 |  | (123) |  | (173) |  | 48 |  | (221) |
| Accretable yield, end of period | \$ | 2,691 | \$ | 992 | \$ | 1,699 | \$ | 2,691 | \$ | 992 | \$ | 1,699 |

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## CAPITAL ONE FINANCIAL CORPORATION

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

## NOTE 5-ALLOWANCE FOR LOAN AND LEASE LOSSES AND RESERVE FOR UNFUNDED LENDING COMMITMENTS

Our allowance for loan and lease losses represents management's best estimate of incurred loan and lease losses inherent in our loans held for investment portfolio as of each balance sheet date. 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 and binding unfunded loan commitments. The provision for losses on unfunded lending commitments is included in the provision for credit losses in our consolidated statements of income and the related reserve for unfunded lending commitments is included in other liabilities on our consolidated balance sheets. See "Note 1—Summary of Significant Accounting Policies" in our 2016 Form 10K for further discussion on the methodology and policy for determining our allowance for loan and lease losses for each of our loan portfolio segments, as well as information on our reserve for unfunded lending commitments.

## Allowance for Loan and Lease Losses and Reserve for Unfunded Lending Commitments Activity

The table below summarizes changes in the allowance for loan and lease losses and reserve for unfunded lending commitments by portfolio segment for the three and six months ended June 30, 2017 and 2016.

## Table 5.1: Allowance for Loan and Lease Losses and Reserve for Unfunded Lending Commitments Activity

| (Dollars in millions) | Three Months Ended June 30, 2017 |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Credit Card |  | Consumer Banking |  | CommercialBanking |  | Other ${ }^{(1)}$ |  | Total |  |
| Allowance for loan and lease losses: |  |  |  |  |  |  |  |  |  |  |
| Balance as of March 31, 2017 | \$ | 5,058 | \$ | 1,163 | \$ | 761 | \$ | 2 | \$ | 6,984 |
| Charge-offs |  | $(1,572)$ |  | (390) |  | (140) |  | 0 |  | $(2,102)$ |
| Recoveries |  | 316 |  | 158 |  | 4 |  | 6 |  | 484 |
| Net charge-offs |  | $(1,256)$ |  | (232) |  | (136) |  | 6 |  | $(1,618)$ |
| Provision (benefit) for loan and lease losses |  | 1,397 |  | 268 |  | 141 |  | (5) |  | 1,801 |
| Allowance build (release) for loan and lease losses |  | 141 |  | 36 |  | 5 |  | 1 |  | 183 |
| Other changes ${ }^{(2)}$ |  | 11 |  | 0 |  | (8) |  | 0 |  | 3 |
| Balance as of June 30, 2017 |  | 5,210 |  | 1,199 |  | 758 |  | 3 |  | 7,170 |
| Reserve for unfunded lending commitments: |  |  |  |  |  |  |  |  |  |  |
| Balance as of March 31, 2017 |  | 0 |  | 7 |  | 133 |  | 0 |  | 140 |
| Provision (benefit) for losses on unfunded lending commitments |  | 0 |  | 0 |  | (1) |  | 0 |  | (1) |
| Balance as of June 30, 2017 |  | 0 |  | 7 |  | 132 |  | 0 |  | 139 |
| Combined allowance and reserve as of June 30, 2017 | \$ | 5,210 | \$ | 1,206 | \$ | 890 | \$ | 3 | \$ | 7,309 |


| (Dollars in millions) | Six Months Ended June 30, 2017 |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Credit Card |  | $\begin{gathered} \text { Consumer } \\ \text { Banking } \end{gathered}$ |  | CommercialBanking |  | Other ${ }^{(1)}$ |  | Total |  |
| Allowance for loan and lease losses: |  |  |  |  |  |  |  |  |  |  |
| Balance as of December 31, 2016 | \$ | 4,606 | \$ | 1,102 | \$ | 793 | \$ | 2 | \$ | 6,503 |
| Charge-offs |  | $(3,173)$ |  | (754) |  | (166) |  | 0 |  | $(4,093)$ |
| Recoveries |  | 646 |  | 304 |  | 7 |  | 8 |  | 965 |
| Net charge-offs |  | $(2,527)$ |  | (450) |  | (159) |  | 8 |  | $(3,128)$ |
| Provision (benefit) for loan and lease losses |  | 3,114 |  | 547 |  | 135 |  | (7) |  | 3,789 |
| Allowance build (release) for loan and lease losses |  | 587 |  | 97 |  | (24) |  | 1 |  | 661 |
| Other changes ${ }^{(2)}$ |  | 17 |  | 0 |  | (11) |  | 0 |  | 6 |
| Balance as of June 30, 2017 |  | 5,210 |  | 1,199 |  | 758 |  | 3 |  | 7,170 |
| Reserve for unfunded lending commitments: |  |  |  |  |  |  |  |  |  |  |
| Balance as of December 31, 2016 |  | 0 |  | 7 |  | 129 |  | 0 |  | 136 |
| Provision (benefit) for losses on unfunded lending commitments |  | 0 |  | 0 |  | 3 |  | 0 |  | 3 |
| Balance as of June 30, 2017 |  | 0 |  | 7 |  | 132 |  | 0 |  | 139 |
| Combined allowance and reserve as of June 30, 2017 | \$ | 5,210 | \$ | 1,206 | \$ | 890 | \$ | 3 | \$ | 7,309 |

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| (Dollars in millions) | Three Months Ended June 30, 2016 |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Credit Card |  | Consumer Banking |  | Commercial Banking |  | Other ${ }^{(1)}$ |  | Total |  |
| Allowance for loan and lease losses: |  |  |  |  |  |  |  |  |  |  |
| Balance as of March 31, 2016 | \$ | 3,785 | \$ | 914 | \$ | 714 | \$ | 3 | \$ | 5,416 |
| Charge-offs |  | $(1,215)$ |  | (248) |  | (64) |  | (1) |  | $(1,528)$ |
| Recoveries |  | 266 |  | 102 |  | 4 |  | 1 |  | 373 |
| Net charge-offs |  | (949) |  | (146) |  | (60) |  | 0 |  | $(1,155)$ |
| Provision (benefit) for loan and lease losses |  | 1,261 |  | 204 |  | 185 |  | (1) |  | 1,649 |
| Allowance build (release) for loan and lease losses |  | 312 |  | 58 |  | 125 |  | (1) |  | 494 |
| Other changes ${ }^{(2)}$ |  | (11) |  | 0 |  | (18) |  | 0 |  | (29) |
| Balance as of June 30, 2016 |  | 4,086 |  | 972 |  | 821 |  | 2 |  | 5,881 |
| Reserve for unfunded lending commitments: |  |  |  |  |  |  |  |  |  |  |
| Balance as of March 31, 2016 |  | 0 |  | 8 |  | 218 |  | 0 |  | 226 |
| Provision (benefit) for losses on unfunded lending commitments |  | 0 |  | 0 |  | (57) |  | 0 |  | (57) |
| Balance as of June 30, 2016 |  | 0 |  | 8 |  | 161 |  | 0 |  | 169 |
| Combined allowance and reserve as of June 30, 2016 | \$ | 4,086 | \$ | 980 | \$ | 982 | \$ | 2 | \$ | 6,050 |


| (Dollars in millions) | Six Months Ended June 30, 2016 |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Credit Card |  | $\begin{aligned} & \text { Consumer } \\ & \text { Banking } \end{aligned}$ |  | CommercialBanking |  | Other ${ }^{(1)}$ |  | Total |  |
| Allowance for loan and lease losses: |  |  |  |  |  |  |  |  |  |  |
| Balance as of December 31, 2015 | \$ | 3,654 | \$ | 868 | \$ | 604 | \$ | 4 | \$ | 5,130 |
| Charge-offs |  | $(2,437)$ |  | (539) |  | (112) |  | (2) |  | $(3,090)$ |
| Recoveries |  | 538 |  | 210 |  | 6 |  | 3 |  | 757 |
| Net charge-offs |  | $(1,899)$ |  | (329) |  | (106) |  | 1 |  | $(2,333)$ |
| Provision (benefit) for loan and lease losses |  | 2,332 |  | 433 |  | 356 |  | (3) |  | 3,118 |
| Allowance build (release) for loan and lease losses |  | 433 |  | 104 |  | 250 |  | (2) |  | 785 |
| Other changes ${ }^{(2)}$ |  | (1) |  | 0 |  | (33) |  | 0 |  | (34) |
| Balance as of June 30, 2016 |  | 4,086 |  | 972 |  | 821 |  | 2 |  | 5,881 |
| Reserve for unfunded lending commitments: |  |  |  |  |  |  |  |  |  |  |
| Balance as of December 31, 2015 |  | 0 |  | 7 |  | 161 |  | 0 |  | 168 |
| Provision (benefit) for losses on unfunded lending commitments |  | 0 |  | 1 |  | 0 |  | 0 |  | 1 |
| Balance as of June 30, 2016 |  | 0 |  | 8 |  | 161 |  | 0 |  | 169 |
| Combined allowance and reserve as of June 30, 2016 | \$ | 4,086 | \$ | 980 | \$ | 982 | \$ | 2 | \$ | 6,050 |

[^25]
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## Components of Allowance for Loan and Lease Losses by Impairment Methodology

The table below presents the components of our allowance for loan and lease losses by portfolio segment and impairment methodology with the recorded investment of the related loans as of June 30, 2017 and December 31, 2016.

Table 5.2: Components of Allowance for Loan and Lease Losses by Impairment Methodology

| (Dollars in millions) | June 30, 2017 |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { Credit } \\ & \text { Card } \end{aligned}$ |  | ConsumerBanking |  | $\begin{gathered} \text { Commercial } \\ \text { Banking } \end{gathered}$ |  | Other |  | Total |  |
| Allowance for loan and lease losses: |  |  |  |  |  |  |  |  |  |  |
| Collectively evaluated ${ }^{(1)}$ | \$ | 4,945 | \$ | 1,113 | \$ | 616 | \$ | 3 | \$ | 6,677 |
| Asset-specific ${ }^{(2)}$ |  | 265 |  | 56 |  | 141 |  | 0 |  | 462 |
| PCI loans ${ }^{(3)}$ |  | 0 |  | 30 |  | 1 |  | 0 |  | 31 |
| Total allowance for loan and lease losses | \$ | 5,210 | \$ | 1,199 | \$ | 758 | \$ | 3 | \$ | 7,170 |
| Loans held for investment: |  |  |  |  |  |  |  |  |  |  |
| Collectively evaluated ${ }^{(1)}$ |  | 100,845 | \$ | 61,859 | \$ | 65,883 | \$ | 67 |  | 28,654 |
| Asset-specific ${ }^{(2)}$ |  | 745 |  | 743 |  | 1,265 |  | 0 |  | 2,753 |
| PCI loans ${ }^{(3)}$ |  | 0 |  | 12,371 |  | 524 |  | 0 |  | 12,895 |
| Total loans held for investment |  | 101,590 | \$ | 74,973 | \$ | 67,672 | \$ | 67 |  | 44,302 |
| Allowance coverage ratio ${ }^{(4)}$ |  | 5.13\% |  | 1.60\% |  | 1.12\% |  | 4.48\% |  | 2.93\% |
| December 31, 2016 |  |  |  |  |  |  |  |  |  |  |
| (Dollars in millions) |  | Credit Card |  | onsumer Banking |  | mmercial anking |  | her |  | Total |
| Allowance for loan and lease losses: |  |  |  |  |  |  |  |  |  |  |
| Collectively evaluated ${ }^{(1)}$ | \$ | 4,367 | \$ | 1,016 | \$ | 622 | \$ | 2 | \$ | 6,007 |
| Asset-specific ${ }^{(2)}$ |  | 239 |  | 57 |  | 169 |  | 0 |  | 465 |
| PCI loans ${ }^{(3)}$ |  | 0 |  | 29 |  | 2 |  | 0 |  | 31 |
| Total allowance for loan and lease losses | \$ | 4,606 | \$ | 1,102 | \$ | 793 | \$ | 2 | \$ | 6,503 |
| Loans held for investment: |  |  |  |  |  |  |  |  |  |  |
| Collectively evaluated ${ }^{(1)}$ |  | 104,835 | \$ | 57,862 | \$ | 64,794 | \$ | 64 |  | 227,555 |
| Asset-specific ${ }^{(2)}$ |  | 715 |  | 736 |  | 1,509 |  | 0 |  | 2,960 |
| PCI loans ${ }^{(3)}$ |  | 2 |  | 14,456 |  | 613 |  | 0 |  | 15,071 |
| Total loans held for investment |  | 105,552 | \$ | 73,054 | \$ | 66,916 | \$ | 64 |  | 245,586 |
| Allowance coverage ratio ${ }^{(4)}$ |  | 4.36\% |  | 1.51\% |  | 1.19\% |  | 3.13\% |  | 2.65\% |

[^26]We have certain credit card partnership arrangements in which our partner agrees to share a portion of the credit losses associated with the partnership that qualify for net accounting treatment. The expected reimbursements from these partners, which are netted against our allowance for loan and lease losses, result in reductions to reported net charge-offs and provision for credit losses. See

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"Note 1—Summary of Significant Accounting Policies" in our 2016 Form 10-K for further discussion on our card partnership agreements.

The table below summarizes the changes in the estimated reimbursements from these partners for the three and six months ended June 30, 2017 and 2016.

Table 5.3: Summary of Loss Sharing Arrangements Impacts

| (Dollars in millions) | Three Months Ended June 30, |  |  |  | Six Months Ended June 30, |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2017 |  | 2016 |  | 2017 |  | 2016 |  |
| Estimated reimbursements from loss sharing partners: |  |  |  |  |  |  |  |  |
| Balance as of beginning of the period | \$ | 235 | \$ | 197 | \$ | 228 | \$ | 194 |
| Impact to net charge-offs |  | (67) |  | (53) |  | (132) |  | (105) |
| Impact to provision for credit losses |  | 95 |  | 75 |  | 167 |  | 130 |
| Balance as of end of the period | \$ | 263 | \$ | 219 | \$ | 263 | \$ | 219 |

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## NOTE 6-VARIABLE INTEREST ENTITIES AND SECURITIZATIONS

In the normal course of business, we enter into various types of transactions with entities that are considered to be VIEs. Our primary involvement with VIEs has been related to our securitization transactions in which we transferred assets from our balance sheet to securitization trusts. We have primarily securitized credit card and home loans, which have provided a source of funding for us and enabled us to transfer a certain portion of the economic risk of the loans or related debt securities to third parties.

The entity that has a controlling financial interest in a VIE is referred to as the primary beneficiary and is required to consolidate the VIE. The majority of the VIEs in which we are involved have been consolidated in our financial statements.

## Summary of Consolidated and Unconsolidated VIEs

The assets of our consolidated VIEs primarily consist of cash, credit card loan receivables and the related allowance for loan and lease losses, which we report on our consolidated balance sheets under restricted cash, loans held in consolidated trust, and allowance for loan and lease losses, respectively. The assets of a particular VIE are the primary source of funding to settle its obligations. The creditors of the VIEs typically do not have recourse to the general credit of the Company. The liabilities primarily consist of debt securities issued by the VIEs, which we report under securitized debt obligations. For unconsolidated VIEs, we present the carrying amount of assets and liabilities reflected on our consolidated balance sheets and our maximum exposure to loss. Our maximum exposure to loss is estimated based on the unlikely event that all of the assets in the VIEs become worthless and we are required to meet our maximum remaining funding obligations.

The table below presents a summary of certain VIEs in which we had continuing involvement or held a variable interest, aggregated based on VIEs with similar characteristics as of June 30, 2017 and December 31, 2016. We separately present information for consolidated and unconsolidated VIEs.

Table 6.1: Carrying Amount of Consolidated and Unconsolidated VIEs

| (Dollars in millions) | June 30, 2017 |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Consolidated |  |  |  | Unconsolidated |  |  |  |  |  |
|  | Carrying Amount of Assets |  | Carrying Amount of Liabilities |  | Carrying Amount of Assets |  | Carrying Amount of Liabilities |  | $\begin{gathered} \text { Maximum } \\ \text { Exposure to } \\ \text { Loss } \end{gathered}$ |  |
| Securitization-Related VIEs: |  |  |  |  |  |  |  |  |  |  |
| Credit card loan securitizations ${ }^{(1)}$ | \$ | 28,934 | \$ | 18,504 | \$ | 0 | \$ | 0 | \$ | 0 |
| Home loan securitizations ${ }^{(2)}$ |  | 0 |  | 0 |  | 188 |  | 69 |  | 1,143 |
| Total securitization-related VIEs |  | 28,934 |  | 18,504 |  | 188 |  | 69 |  | 1,143 |
| Other VIEs: ${ }^{(3)}$ |  |  |  |  |  |  |  |  |  |  |
| Affordable housing entities |  | 187 |  | 9 |  | 4,158 |  | 1,266 |  | 4,158 |
| Entities that provide capital to low-income and rural communities |  | 1,127 |  | 128 |  | 0 |  | 0 |  | 0 |
| Other |  | 0 |  | 0 |  | 318 |  | 0 |  | 318 |
| Total other VIEs |  | 1,314 |  | 137 |  | 4,476 |  | 1,266 |  | 4,476 |
| Total VIEs | \$ | 30,248 | \$ | 18,641 | \$ | 4,664 | \$ | 1,335 | \$ | 5,619 |

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| (Dollars in millions) | December 31, 2016 |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Consolidated |  |  |  | Unconsolidated |  |  |  |  |  |
|  | Carrying Amount of Assets |  | Carrying Amount of Liabilities |  | Carrying Amount of Assets |  | Carrying Amount of Liabilities |  | $\begin{gathered} \text { Maximum } \\ \text { Exposure to } \\ \text { Loss } \end{gathered}$ |  |
| Securitization-Related VIEs: |  |  |  |  |  |  |  |  |  |  |
| Credit card loan securitizations ${ }^{(1)}$ | \$ | 33,550 | \$ | 19,662 | \$ | 0 | \$ | 0 | \$ | 0 |
| Home loan securitizations ${ }^{(2)}$ |  | 0 |  | 0 |  | 201 |  | 27 |  | 1,276 |
| Total securitization-related VIEs |  | 33,550 |  | 19,662 |  | 201 |  | 27 |  | 1,276 |
| Other VIEs: ${ }^{(3)}$ |  |  |  |  |  |  |  |  |  |  |
| Affordable housing entities |  | 174 |  | 9 |  | 3,862 |  | 1,093 |  | 3,862 |
| Entities that provide capital to low-income and rural communities |  | 927 |  | 127 |  | 0 |  | 0 |  | 0 |
| Other |  | 0 |  | 0 |  | 187 |  | 0 |  | 187 |
| Total other VIEs |  | 1,101 |  | 136 |  | 4,049 |  | 1,093 |  | 4,049 |
| Total VIEs | \$ | 34,651 | \$ | 19,798 | \$ | 4,250 | \$ | 1,120 | \$ | 5,325 |

[^27]
## Securitization-Related VIEs

In a securitization transaction, assets from our balance sheet are transferred to a trust, which generally meets the definition of a VIE. Our primary securitization activity is in the form of credit card securitizations, conducted through securitization trusts which we consolidate. Our continuing involvement in these securitization transactions mainly consists of acting as the primary servicer and holding certain retained interests.

We transfer residential home loans and multifamily commercial loans that we originate to the government-sponsored enterprises ("GSEs") and retain the right to service the transferred loans pursuant to the guidelines set forth by the GSEs. Subsequent to such transfers, these loans are commonly securitized into RMBS or CMBS by the GSEs. We also hold RMBS, CMBS and ABS in our investment portfolio, which represent an interest in the respective securitization trusts employed in the transactions under which those securities were issued. We do not consolidate the securitization trusts employed in these transactions as we do not have the power to direct the activities that most significantly impact the economic performance of these securitization trusts. Our maximum exposure to loss as a result of our involvement with these VIEs is the carrying value of the mortgage servicing rights ("MSRs") and investment securities on our consolidated balance sheets. See "Note 7-Goodwill and Intangible Assets" for information related to our MSRs associated with these residential home loan and multifamily commercial loan securitizations and "Note 3Investment Securities" for more information on the securities held in our investment securities portfolio. We exclude these VIEs from the tables within this note because we do not consider our continuing involvement with these VIEs to be significant; we either invest in securities issued by the VIE and were not involved in the design of the VIE, or no transfers have occurred between the VIE and us. In addition, where we have certain lending arrangements in the normal course of business with entities that could be VIEs, we have also excluded these VIEs from the tables presented in this note. See "Note 4 -Loans" for additional information regarding our lending arrangements in the normal course of business.

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We also may have exposure associated with contractual obligations to repurchase previously transferred loans due to breaches of representations and warranties. See "Note 14 -Commitments, Contingencies, Guarantees and Others" for information related to reserves we have established for our mortgage representation and warranty exposure.

The table below presents our continuing involvement in certain securitization-related VIEs as of June 30, 2017 and December 31, 2016.

## Table 6.2: Continuing Involvement in Securitization-Related VIEs

| (Dollars in millions) | Credit Card |  | Mortgage |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Option- <br> ARM |  | GreenPoint HELOCs |  | GreenPointManufacturedHousing |  |
| June 30, 2017: |  |  |  |  |  |  |  |  |
| Securities held by third-party investors | \$ | 18,358 | \$ | 1,361 | \$ | 47 | \$ | 641 |
| Receivables in the trust |  | 29,438 |  | 1,407 |  | 41 |  | 646 |
| Cash balance of spread or reserve accounts |  | 0 |  | 8 |  | N/A |  | 125 |
| Retained interests |  | Yes |  | Yes |  | Yes |  | Yes |
| Servicing retained |  | Yes |  | Yes ${ }^{(1)}$ |  | No |  | No ${ }^{(2)}$ |
| Amortization event ${ }^{(3)}$ |  | No |  | No |  | No |  | No |
| December 31, 2016: |  |  |  |  |  |  |  |  |
| Securities held by third-party investors | \$ | 18,826 | \$ | 1,499 | \$ | 56 | \$ | 697 |
| Receivables in the trust |  | 31,762 |  | 1,549 |  | 50 |  | 702 |
| Cash balance of spread or reserve accounts |  | 0 |  | 8 |  | N/A |  | 130 |
| Retained interests |  | Yes |  | Yes |  | Yes |  | Yes |
| Servicing retained |  | Yes |  | Yes ${ }^{(1)}$ |  | No |  | No ${ }^{(2)}$ |
| Amortization event ${ }^{(3)}$ |  | No |  | No |  | No |  | No |

${ }^{(1)}$ We continue to service certain option-ARM securitizations.
${ }^{(2)}$ The core servicing activities for the manufactured housing securitizations are completed by a third party.
${ }^{(3)}$ Amortization events vary according to each specific trust agreement but generally are triggered by declines in performance or credit metrics of the underlying assets, such as net charge-off rates or delinquency rates, beyond certain predetermined thresholds. Generally, the occurrence of an amortization event changes the sequencing and amount of trust-related cash flows to the benefit of more senior interest holders.

## Credit Card Securitizations

We hold certain retained interests in our credit card securitizations and continue to service the receivables in these trusts. As of June 30, 2017 and December 31, 2016, we were deemed to be the primary beneficiary, and accordingly, all of these trusts have been consolidated in our financial statements.

## Mortgage Securitizations

## Option-ARM Loans

We had previously securitized option-ARM loans by transferring these loans to securitization trusts that had issued mortgagebacked securities to investors. The outstanding balance of debt securities held by third-party investors related to these mortgage loan securitization trusts was $\$ 1.4$ billion and $\$ 1.5$ billion as of June 30, 2017 and December 31, 2016, respectively.

We continue to service a portion of the remaining mortgage loans in these securitizations. We also retain rights to future cash flows arising from these securitizations, the most significant being certificated interest-only bonds issued by the trusts. We generally estimate the fair value of these retained interests based on the estimated present value of expected future cash flows, using our best estimates of the key assumptions which include credit losses, prepayment speeds and discount rates commensurate with the risks involved. For the mortgage loans that we continue to service, we do not consolidate the related trusts because we do not have the right to receive benefits nor the obligation to absorb losses that could potentially be significant to the trusts. For the remaining

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trusts, for which we no longer service the underlying mortgage loans, we do not consolidate these entities since we do not have the power to direct the activities that most significantly impact the economic performance of the trusts.

In connection with the securitization of certain option-ARM loans, a third party is obligated to advance a portion of any "negative amortization" resulting from monthly payments that are less than the interest accrued for that payment period. We have an agreement in place with the third party that mirrors this advance requirement. The amount advanced is tracked through mortgage-backed securities retained as part of the securitization transaction. As advances occur, we record an asset in the form of negative amortization bonds, which are held at fair value in other assets on our consolidated balance sheets. Our maximum exposure is affected by rate caps and monthly payment change caps, but the funding obligation cannot exceed the difference between the original loan balance multiplied by a preset negative amortization cap and the current unpaid principal balance. For the transactions where the negative amortization funding agreements have been terminated, incremental negative amortization is funded through the available cash flow in each transaction.

We have also entered into certain derivative contracts related to the securitization activities. These are classified as free-standing derivatives, with fair value adjustments recorded in non-interest income in our consolidated statements of income. See "Note 9Derivative Instruments and Hedging Activities" for further details on these derivatives.

## GreenPoint Mortgage Home Equity Lines of Credit ("HELOCs")

Our discontinued wholesale mortgage banking unit, GreenPoint Mortgage Funding, Inc. ("GreenPoint"), previously sold HELOCs in whole loan sales that were subsequently securitized by third parties. GreenPoint acquired residual interests in certain of those securitization trusts. We do not consolidate these trusts because we either lack the power to direct the activities that most significantly impact the economic performance of the trusts or because we do not have the right to receive benefits or the obligation to absorb losses that could potentially be significant to the trusts. As the residual interest holder, GreenPoint is required to fund advances on the HELOCs when certain performance triggers are met due to deterioration in asset performance. On behalf of GreenPoint, we have funded cumulative advances of $\$ 30$ million as of both June 30, 2017 and December 31, 2016. We also have unfunded commitments of $\$ 5$ million related to those interests for our non-consolidated VIEs as of both June 30, 2017 and December 31, 2016.

## GreenPoint Credit Manufactured Housing

We have retained certain interests and obligations related to the discontinued manufactured housing operations of GreenPoint Credit, LLC, a subsidiary of GreenPoint. Such discontinued operations, including the related recourse obligations, servicing rights and the primary obligation to execute mandatory clean-up calls in certain securitization transactions were sold to a third party in 2004. We do not consolidate these securitization trusts because we do not have the power to direct the activities that most significantly impact the economic performance of the trusts as we no longer service the loans.

The unpaid principal balance of manufactured housing securitization transactions where we are the residual interest holder was $\$ 646$ million and $\$ 702$ million as of June 30, 2017 and December 31, 2016, respectively. In the event the third-party servicer does not fulfill its obligation to exercise the clean-up calls on certain securitizations, the obligation reverts to us and we would be required to acquire a maximum of approximately $\$ 410$ million of loan receivables and other assets upon our execution of these clean-up calls with the requirement to absorb any losses on the loan receivables and other assets. See "Note 14 -Commitments, Contingencies, Guarantees and Others" for information related to these obligations.

We were required to fund letters of credit to cover losses on certain manufactured housing securitizations. We have the right to receive any funds remaining in the letters of credit after the securities are released. The fair value of these letters of credit are included in other assets on our consolidated balance sheets and totaled $\$ 84$ million and $\$ 85$ million as of June 30,2017 and December 31, 2016, respectively. We also have credit exposure on an agreement that we entered into to absorb a portion of the risk of loss on certain manufactured housing securitizations not subject to the funded letters of credit. Our maximum credit exposure related to the agreement totaled $\$ 12$ million as of both June 30, 2017 and December 31, 2016. Our obligation under the agreement included in other liabilities on our consolidated balance sheets was $\$ 8$ million as of both June 30, 2017 and December 31, 2016.

## CAPITAL ONE FINANCIAL CORPORATION NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

## Other VIEs

## Affordable Housing Entities

As part of our community reinvestment initiatives, we invest in private investment funds that make equity investments in multifamily affordable housing properties. We receive affordable housing tax credits for these investments. The activities of these entities are financed with a combination of invested equity capital and debt. We account for certain of our investments in qualified affordable housing projects using the proportional amortization method if certain criteria are met. The proportional amortization method amortizes the cost of the investment over the period in which the investor expects to receive tax credits and other tax benefits, and the resulting amortization is recognized as a component of income tax expense attributable to continuing operations. For the six months ended June 30, 2017 and 2016, we recognized amortization of $\$ 230$ million and $\$ 196$ million, respectively, and tax credits of $\$ 238$ million and $\$ 228$ million, respectively, associated with these investments within income tax provision. The carrying value of our equity investments in these qualified affordable housing projects was $\$ 4.0$ billion and $\$ 3.8$ billion as of June 30, 2017 and December 31, 2016, respectively. We are periodically required to provide additional financial or other support during the period of the investments. Our liability for these unfunded commitments was $\$ 1.4$ billion and $\$ 1.2$ billion as of June 30, 2017 and December 31, 2016, respectively. Predominantly all of this liability is expected to be paid from 2017 to 2019.

For those investment funds considered to be VIEs, we are not required to consolidate them if we do not have the power to direct the activities that most significantly impact the economic performance of those entities. We record our interests in these unconsolidated VIEs in loans held for investment, other assets and other liabilities on our consolidated balance sheets. Our interests consisted of assets of approximately $\$ 4.2$ billion and $\$ 3.9$ billion as of June 30, 2017 and December 31, 2016, respectively. Our maximum exposure to these entities is limited to our variable interests in the entities of $\$ 4.2$ billion and $\$ 3.9$ billion as of June 30 , 2017 and December 31, 2016, respectively. The creditors of the VIEs have no recourse to our general credit and we do not provide additional financial or other support other than during the period that we are contractually required to provide it. The total assets of the unconsolidated VIE investment funds were approximately $\$ 11.4$ billion and $\$ 11.5$ billion as of June 30, 2017 and December 31, 2016, respectively.

## Entities that Provide Capital to Low-Income and Rural Communities

We hold variable interests in entities ("Investor Entities") that invest in community development entities ("CDEs") that provide debt financing to businesses and non-profit entities in low-income and rural communities. Variable interests in the CDEs held by the consolidated Investor Entities are also our variable interests. The activities of the Investor Entities are financed with a combination of invested equity capital and debt. The activities of the CDEs are financed solely with invested equity capital. We receive federal and state tax credits for these investments. We consolidate the VIEs in which we have the power to direct the activities that most significantly impact the VIE's economic performance and where we have the obligation to absorb losses or right to receive benefits that could be potentially significant to the VIE. We have also consolidated other investments and CDEs that are not considered to be VIEs, but where we hold a controlling financial interest. The assets of the VIEs that we consolidated, which totaled approximately $\$ 1.1$ billion and $\$ 927$ million as of June 30, 2017 and December 31, 2016, respectively, are reflected on our consolidated balance sheets in cash, loans held for investment, interest receivable and other assets. The liabilities are reflected in other liabilities. The creditors of the VIEs have no recourse to our general credit. We have not provided additional financial or other support other than during the period that we are contractually required to provide it.

## Other

Other VIEs include variable interests that we hold in companies that promote renewable energy sources and other equity method investments. We were not required to consolidate these entities because we do not have the power to direct the activities that most significantly impact their economic performance. Our maximum exposure to these entities is limited to the investment on our consolidated balance sheets of $\$ 318$ million and $\$ 187$ million as of June 30, 2017 and December 31, 2016, respectively. The creditors of the other VIEs have no recourse to our general credit. We have not provided additional financial or other support other than during the period that we are contractually required to provide it.

## CAPITAL ONE FINANCIAL CORPORATION

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

## NOTE 7-GOODWILL AND INTANGIBLE ASSETS

The table below displays the components of goodwill, intangible assets and MSRs as of June 30, 2017 and December 31, 2016. Goodwill is presented separately on our consolidated balance sheets. Intangible assets and MSRs are included in other assets on our consolidated balance sheets.

Table 7.1: Components of Goodwill, Intangible Assets and MSRs

| (Dollars in millions) | June 30, 2017 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Carrying <br> Amount of <br> Assets ${ }^{10}$ |  | AccumulatedAmortization ${ }^{(1)}$ |  | Net Carrying Amount |  |
| Goodwill | \$ | 14,524 |  | N/A | \$ | 14,524 |
| Intangible assets: |  |  |  |  |  |  |
| Purchased credit card relationship ("PCCR") intangibles |  | 2,151 | \$ | $(1,802)$ |  | 349 |
| Core deposit intangibles |  | 1,391 |  | $(1,360)$ |  | 31 |
| Other ${ }^{(2)}$ |  | 314 |  | (152) |  | 162 |
| Total intangible assets |  | 3,856 |  | $(3,314)$ |  | 542 |
| Total goodwill and intangible assets | \$ | 18,380 | \$ | $(3,314)$ | \$ | 15,066 |
| MSRs: |  |  |  |  |  |  |
| Consumer MSRs ${ }^{(3)}$ | \$ | 85 |  | N/A | \$ | 85 |
| Commercial MSRs ${ }^{(4)}$ |  | 314 | \$ | (102) |  | 212 |
| Total MSRs | \$ | 399 | \$ | (102) | \$ | 297 |


| (Dollars in millions) | December 31, 2016 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Carrying Amount of Assets ${ }^{(1)}$ |  | Accumulated Amortization ${ }^{(1)}$ |  | NetCarryingAmount |  |
| Goodwill | \$ | 14,519 |  | N/A | \$ | 14,519 |
| Intangible assets: |  |  |  |  |  |  |
| PCCR intangibles |  | 2,151 | \$ | $(1,715)$ |  | 436 |
| Core deposit intangibles |  | 1,391 |  | $(1,345)$ |  | 46 |
| Other ${ }^{(2)}$ |  | 314 |  | (131) |  | 183 |
| Total intangible assets |  | 3,856 |  | $(3,191)$ |  | 665 |
| Total goodwill and intangible assets | \$ | 18,375 | \$ | $(3,191)$ | \$ | 15,184 |
| MSRs: |  |  |  |  |  |  |
| Consumer MSRs ${ }^{(3)}$ | \$ | 80 |  | N/A | \$ | 80 |
| Commercial MSRs ${ }^{(4)}$ |  | 276 | \$ | (82) |  | 194 |
| Total MSRs | \$ | 356 | \$ | (82) | \$ | 274 |

[^28]Amortization expense for amortizable intangible assets, which is presented separately in our consolidated statements of income, totaled $\$ 61$ million and $\$ 123$ million for the three and six months ended June 30, 2017, respectively, and $\$ 95$ million and $\$ 196$ million for the three and six months ended June 30, 2016, respectively.

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## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

## Goodwill

The following table presents changes in the carrying amount of goodwill as well as goodwill attributable to each of our business segments as of June 30, 2017 and December 31, 2016.

Table 7.2: Goodwill Attributable to Business Segments

| (Dollars in millions) | Credit Card |  | Consumer Banking |  | CommercialBanking |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Balance as of December 31, 2016 | \$ | 5,018 | \$ | 4,600 | \$ | 4,901 | \$ | 14,519 |
| Other adjustments ${ }^{(1)}$ |  | 5 |  | 0 |  | 0 |  | 5 |
| Balance as of June 30, 2017 | \$ | 5,023 | \$ | 4,600 | \$ | 4,901 | \$ | 14,524 |

[^29]
## CAPITAL ONE FINANCIAL CORPORATION

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

## NOTE 8-DEPOSITS AND BORROWINGS

## Deposits

Our deposits, which are our largest source of funding for our assets and operations, consist of non-interest-bearing and interestbearing deposits, which include checking accounts, money market deposit accounts, negotiable order of withdrawals, savings deposits and time deposits.

## Securitized and Unsecured Debt Obligations

In addition to our deposits, which serve as our primary funding source, we use a variety of other funding sources including shortterm borrowings, the issuance of senior and subordinated notes and other borrowings, and securitization transactions. In addition, we utilize FHLB advances, which are secured by certain portions of our loan and investment securities portfolios, for our funding needs. The securitized debt obligations are separately presented on our consolidated balance sheets as they represent obligations of consolidated securitization trusts, while federal funds purchased and securities loaned or sold under agreements to repurchase, senior and subordinated notes and other borrowings, including FHLB advances, are included in other debt on our consolidated balance sheets.

## Securitized Debt Obligations

Our borrowings due to securitization investors decreased to $\$ 18.4$ billion as of June 30, 2017 from $\$ 18.8$ billion as of December 31, 2016. During the first six months of $2017, \$ 3.0$ billion of new debt was issued to third-party investors from our credit card loan securitization trust, more than offset by $\$ 3.5$ billion of maturities.

## Senior and Subordinated Notes

We had $\$ 28.5$ billion and $\$ 23.4$ billion of senior and subordinated notes outstanding as of June 30, 2017 and December 31, 2016, respectively. During the first six months of 2017, we issued $\$ 6.5$ billion of long-term senior and subordinated debt comprised of $\$ 1.4$ billion of floating-rate notes and $\$ 5.1$ billion of fixed-rate notes. During the first six months of 2017, $\$ 1.5$ billion of senior and subordinated notes matured.

## FHLB Advances and Other

We have access to funding through the FHLB system and the Federal Reserve Discount Window. Our FHLB and Federal Reserve memberships require us to hold FHLB and Federal Reserve stock which totaled $\$ 1.4$ billion and $\$ 1.9$ billion as of June 30, 2017 and December 31, 2016, respectively, and are included in other assets on our consolidated balance sheets.

Our FHLB advances and lines of credit are secured by our investment securities, residential home loans, multifamily real estate loans, commercial real estate loans and HELOCs. Outstanding FHLB advances totaled $\$ 2.1$ billion and $\$ 17.2$ billion as of June 30, 2017 and December 2016, respectively, substantially all of which represented long-term advances generally callable on either a one-month or a three-month basis. We did not access the Federal Reserve Discount Window for funding during 2016 or the first six months of 2017.

## Composition of Deposits, Short-Term Borrowings and Long-Term Debt

The table below summarizes the components of our deposits, short-term borrowings and long-term debt as of June 30, 2017 and December 31, 2016. Our total short-term borrowings consist of federal funds purchased and securities loaned or sold under agreements to repurchase. Our long-term debt consists of borrowings with an original contractual maturity of greater than one year. The carrying value presented below for these borrowings include unamortized debt premiums and discounts, net of debt issuance costs and fair value hedge accounting adjustments.

## CAPITAL ONE FINANCIAL CORPORATION

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Table 8.1: Components of Deposits, Short-Term Borrowings and Long-Term Debt

| (Dollars in millions) | $\begin{gathered} \text { June 30, } \\ 2017 \end{gathered}$ |  | $\underset{2016}{\text { December 31, }}$ |  |
| :---: | :---: | :---: | :---: | :---: |
| Deposits: |  |  |  |  |
| Non-interest-bearing deposits | \$ | 25,953 | \$ | 25,502 |
| Interest-bearing deposits |  | 213,810 |  | 211,266 |
| Total deposits | \$ | 239,763 | \$ | 236,768 |
| Short-term borrowings: |  |  |  |  |
| Federal funds purchased and securities loaned or sold under agreements to repurchase | \$ | 958 | \$ | 992 |
| Total short-term borrowings | \$ | 958 | \$ | 992 |


| (Dollars in millions) | June 30, 2017 |  |  |  |  | $\begin{gathered} \text { December 31, } \\ 2016 \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Maturity Dates | Interest Rates | WeightedAverage Interest Rate |  | rrying alue |  |  |
| Long-term debt: |  |  |  |  |  |  |  |
| Securitized debt obligations ${ }^{(1)}$ | 2017-2025 | 1.20-5.75\% | 1.88\% | \$ | 18,358 | \$ | 18,826 |
| Senior and subordinated notes: ${ }^{(1)}$ |  |  |  |  |  |  |  |
| Fixed unsecured senior debt | 2017-2027 | 1.50-6.75 | 2.76 |  | 21,174 |  | 17,546 |
| Floating unsecured senior debt | 2018-2023 | 1.85-2.33 | 2.08 |  | 2,748 |  | 1,353 |
| Total unsecured senior debt |  |  | 2.68 |  | 23,922 |  | 18,899 |
| Fixed unsecured subordinated debt | 2019-2026 | 3.38-8.80 | 4.09 |  | 4,556 |  | 4,532 |
| Total senior and subordinated notes |  |  |  |  | 28,478 |  | 23,431 |
| Other long-term borrowings: |  |  |  |  |  |  |  |
| FHLB advances | 2017-2023 | 1.20-5.54 | 1.24 |  | 2,114 |  | 17,179 |
| Capital lease obligations | 2024-2035 | 3.09-12.86 | 5.90 |  | 46 |  | 32 |
| Total other long-term borrowings |  |  |  |  | 2,160 |  | 17,211 |
| Total long-term debt |  |  |  | \$ | 48,996 | \$ | 59,468 |
| Total short-term borrowings and long-term debt |  |  |  | \$ | 49,954 | \$ | 60,460 |

[^30]
## CAPITAL ONE FINANCIAL CORPORATION

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

## Components of Interest Expense

The following table displays interest expense attributable to short-term borrowings and long-term debt for the three and six months ended June 30, 2017 and 2016:

Table 8.2: Components of Interest Expense on Short-Term Borrowings and Long-Term Debt

| (Dollars in millions) | Three Months Ended June 30, |  |  |  | Six Months Ended June 30, |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2017 |  | 2016 |  | 2017 |  | 2016 |  |
| Short-term borrowings: |  |  |  |  |  |  |  |  |
| Federal funds purchased and securities loaned or sold under agreements to repurchase | \$ | 1 | \$ | 1 | \$ | 2 | \$ | 2 |
| Total short-term borrowings |  | 1 |  | 1 |  | 2 |  | 2 |
| Long-term debt: |  |  |  |  |  |  |  |  |
| Securitized debt obligations ${ }^{(1)}$ |  | 82 |  | 47 |  | 151 |  | 95 |
| Senior and subordinated notes ${ }^{(1)}$ |  | 179 |  | 111 |  | 328 |  | 217 |
| Other long-term borrowings |  | 11 |  | 27 |  | 35 |  | 50 |
| Total long-term debt |  | 272 |  | 185 |  | 514 |  | 362 |
| Total interest expense on short-term borrowings and long-term debt | \$ | 273 | \$ | 186 | \$ | 516 | \$ | 364 |

${ }^{(1)}$ Interest expense includes the impact from qualifying hedge accounting relationships.

## CAPITAL ONE FINANCIAL CORPORATION NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

## NOTE 9-DERIVATIVE INSTRUMENTS AND HEDGING ACTIVITIES

## Use of Derivatives

We manage asset and liability positions and market risk exposure and limits in accordance with market risk management policies that are approved by our Board of Directors. Our primary market risks stem from the impact on our earnings and economic value of equity from changes in interest rates and, to a lesser extent, changes in foreign exchange rates. We employ several techniques to manage our interest rate sensitivity, which include changing the duration and re-pricing characteristics of various assets and liabilities by using interest rate derivatives. Our current policies also include the use of derivatives to hedge exposures denominated in foreign currency so we may limit our earnings and capital ratio exposures to foreign exchange risk. We execute our derivative contracts in both the over-the-counter ("OTC") and exchange-traded derivative markets. Under the Dodd-Frank Act, we are required to clear eligible derivative transactions through Central Counterparty Clearinghouses ("CCPs") such as the Chicago Mercantile Exchange ("CME") and Clearnet ("LCH"), which are often referred to as "central clearinghouses." The majority of our derivatives are interest rate swaps. In addition, we may use a variety of other derivative instruments, including caps, floors, options, futures and forward contracts, to manage our interest rate and foreign exchange risks. We offer various interest rate, foreign exchange rate and commodity derivatives as an accommodation to our customers within our Commercial Banking business, and usually offset our exposure through derivative transactions with other counterparties.

## Derivatives Counterparty Credit Risk

Derivative instruments contain an element of credit risk that arises from the potential failure of a counterparty to perform according to the terms of the contract. Our exposure to derivative counterparty credit risk, at any point in time, is represented by the fair value of derivatives in a gain position, or derivative asset position, assuming no recoveries of underlying collateral.

To mitigate the risk of counterparty default, we enter into legally enforceable master netting agreements and collateral agreements, where possible, with certain derivative counterparties. We generally enter into these agreements on a bilateral basis with our counterparties. These bilateral agreements typically provide the right to offset exposures and require one counterparty to post collateral on derivative instruments in a net liability position to the other counterparty. Certain of these bilateral agreements include provisions requiring that our debt maintain a credit rating of investment grade or above by each of the major credit rating agencies. In the event of a downgrade of our debt credit rating below investment grade, some of our counterparties would have the right to terminate the derivative contract and close out the existing positions.

We also clear certain OTC derivatives with central clearinghouses through futures commission merchants ("FCMs") as part of the regulatory requirement. The use of the central clearinghouses and the FCMs reduces our bilateral counterparty credit exposures while it increases our credit exposures to CCPs and FCMs. We are required by CCPs to post initial and variation margin to mitigate the risk of non-payment through our FCMs. Our FCM agreements governing these derivative transactions generally include provisions that may require us to post more collateral or otherwise change terms in our agreements under certain circumstances. Effective January 3, 2017, the CME amended its rulebook to legally characterize variation margin cash payments for cleared OTC derivatives as a settlement of the position rather than collateral. We adopted this variation margin rule change in the second quarter of 2017. As a result, we began reducing the corresponding derivative assets and liabilities for CME-cleared OTC derivatives to reflect the settlement of these positions. Variation margin payments for LCH-cleared OTC derivatives continue to be characterized as collateral.

We record counterparty credit risk valuation adjustments ("CVAs") on our OTC derivative contracts to properly reflect the credit quality of the counterparty. We consider collateral and legally enforceable master netting agreements that mitigate our credit exposure to each counterparty in determining the counterparty credit risk valuation adjustment, which may be adjusted in future periods due to changes in the fair value of the derivative contracts, collateral and creditworthiness of the counterparty. We also adjust the fair value of our derivative liabilities to reflect the impact of our own credit quality ("DVAs"). We calculate this adjustment by comparing the spreads on our credit default swaps to the discount benchmark curve.

## Accounting for Derivatives

Our derivatives are designated as either qualifying accounting hedges or free-standing derivatives. Qualifying accounting hedges are designated as fair value hedges, cash flow hedges or net investment hedges. Free-standing derivatives primarily consist of customer-accommodation derivatives and economic hedges that do not qualify for hedge accounting.

## CAPITAL ONE FINANCIAL CORPORATION NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

- Fair Value Hedges: We designate derivatives as fair value hedges when they are used to manage our exposure to changes in the fair value of certain financial assets and liabilities, which fluctuate in value as a result of movements in interest rates. Changes in the fair value of derivatives designated as fair value hedges are recorded in earnings together with offsetting changes in the fair value of the hedged item and any resulting ineffectiveness. Our fair value hedges consist of interest rate swaps that are intended to modify our exposure to interest rate risk on various fixed-rate assets and liabilities.
- Cash Flow Hedges: We designate derivatives as cash flow hedges when they are used to manage our exposure to variability in cash flows related to forecasted transactions. Changes in the fair value of derivatives designated as cash flow hedges are recorded as a component of AOCI, to the extent that the hedge relationships are effective, and amounts are reclassified from AOCI to earnings as the forecasted transactions impact earnings. To the extent that any ineffectiveness exists in the hedge relationships, the amounts are recorded in current period earnings. Our cash flow hedges use interest rate swaps and floors that are intended to hedge the variability in interest receipts or interest payments on some of our variable-rate assets or liabilities. We also enter into foreign currency forward derivative contracts to hedge our exposure to variability in cash flows related to intercompany borrowings denominated in foreign currency.
- Net Investment Hedges: We use net investment hedges to manage the foreign currency exposure related to our net investments in foreign operations that have functional currencies other than the U.S. dollar. Changes in the fair value of net investment hedges are recorded in the translation adjustment component of AOCI, offsetting the translation gain or loss from those foreign operations. We execute net investment hedges using foreign exchange forward contracts to hedge the translation exposure of the net investment in our foreign operations.
- Free-Standing Derivatives: We use free-standing derivatives to hedge the risk of changes in the fair value of residential MSRs, mortgage loan origination and purchase commitments and other interests held. We also categorize our customer accommodation derivatives and the related offsetting contracts as free-standing derivatives. Changes in the fair value of free-standing derivatives are recorded in earnings as a component of other non-interest income.


## Balance Sheet Presentation

The following table summarizes the notional and fair values of our derivative instruments on as of June 30, 2017 and December 31, 2016, which are segregated by derivatives that are designated as accounting hedges and those that are not, and are further segregated by type of contract within those two categories. The total derivative assets and liabilities are adjusted on an aggregate basis to take into consideration the effects of legally enforceable master netting agreements and any associated cash collateral received or pledged.

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Table 9.1: Derivative Assets and Liabilities at Fair Value

| (Dollars in millions) | June 30, 2017 |  |  |  |  |  | December 31, 2016 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Notional or Contractual Amount |  | Derivative ${ }^{(1)(5)}$ |  |  |  | Notional or Contractual Amount |  | Derivative ${ }^{(1)}$ |  |  |  |
|  |  |  | Assets |  | Liabilities |  |  |  | Assets |  | Liabilities |  |
| Derivatives designated as accounting hedges: |  |  |  |  |  |  |  |  |  |  |  |  |
| Interest rate contracts: |  |  |  |  |  |  |  |  |  |  |  |  |
| Fair value hedges | \$ | 51,592 | \$ | 124 | \$ | 89 | \$ | 40,480 | \$ | 295 | \$ | 569 |
| Cash flow hedges |  | 58,700 |  | 30 |  | 89 |  | 50,400 |  | 151 |  | 287 |
| Total interest rate contracts |  | 110,292 |  | 154 |  | 178 |  | 90,880 |  | 446 |  | 856 |
| Foreign exchange contracts: |  |  |  |  |  |  |  |  |  |  |  |  |
| Cash flow hedges |  | 5,802 |  | 0 |  | 143 |  | 5,620 |  | 108 |  | 9 |
| Net investment hedges |  | 2,716 |  | 1 |  | 101 |  | 2,396 |  | 163 |  | 0 |
| Total foreign exchange contracts |  | 8,518 |  | 1 |  | 244 |  | 8,016 |  | 271 |  | 9 |
| Total derivatives designated as accounting hedges |  | 118,810 |  | 155 |  | 422 |  | 98,896 |  | 717 |  | 865 |
| Derivatives not designated as accounting hedges: |  |  |  |  |  |  |  |  |  |  |  |  |
| Interest rate contracts covering: |  |  |  |  |  |  |  |  |  |  |  |  |
| MSRs ${ }^{(2)}$ |  | 1,491 |  | 11 |  | 2 |  | 1,696 |  | 17 |  | 21 |
| Customer accommodation |  | 42,657 |  | 571 |  | 437 |  | 39,474 |  | 670 |  | 530 |
| Other interest rate exposures ${ }^{(3)}$ |  | 2,837 |  | 36 |  | 12 |  | 1,105 |  | 33 |  | 8 |
| Total interest rate contracts |  | 46,985 |  | 618 |  | 451 |  | 42,275 |  | 720 |  | 559 |
| Other contracts |  | 1,055 |  | 0 |  | 6 |  | 1,767 |  | 57 |  | 14 |
| Total derivatives not designated as accounting hedges |  | 48,040 |  | 618 |  | 457 |  | 44,042 |  | 777 |  | 573 |
| Total derivatives | \$ | 166,850 | \$ | 773 | \$ | 879 | \$ | 142,938 | \$ | 1,494 | \$ | 1,438 |
| Less: netting adjustment ${ }^{(4)}$ |  |  |  | (309) |  | (355) |  |  |  | (539) |  | (336) |
| Total derivative assets/liabilities |  |  | \$ | 464 | \$ | 524 |  |  | \$ | 955 | \$ | 1,102 |

[^31]
## Offsetting of Financial Assets and Liabilities

Derivative contracts and repurchase agreements that we execute bilaterally in the OTC market are governed by enforceable master netting arrangements where we generally have the right to offset exposure with the same counterparty. Either counterparty can generally request to net settle all contracts through a single payment upon default on, or termination of, any one contract. We elect to offset the derivative assets and liabilities under netting arrangements for balance sheet presentation where a right of setoff exists. Derivative contracts that are cleared with central clearinghouses through FCMs are not subject to offsetting due to the uncertainty existing around an end-user's ability to setoff these derivative contracts. Therefore, as of June 30, 2017 and December 31, 2016, we did not offset our derivative positions cleared through clearinghouses.

We also maintain collateral agreements with certain derivative counterparties. For bilateral derivatives, we review our collateral positions on a daily basis and exchange collateral with our counterparties in accordance with standard International Swaps and Derivatives Association documentation and other related agreements. Agreements with certain bilateral counterparties require both parties to maintain collateral in the event the fair values of derivative instruments exceed established exposure thresholds. For

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centrally cleared derivatives, we are subject to initial margin and daily variation margin posting with the central clearinghouses. Acceptable types of collateral are typically in the form of cash or high quality liquid securities.

The exchange of collateral is dependent upon the fair value of the derivative instruments as well as the fair value of the pledged collateral. When valuing collateral, an estimate of the variation in price and liquidity over time is subtracted in the form of a "haircut" to discount the value of the collateral pledged.

The following table presents as of June 30, 2017 and December 31, 2016 the gross and net fair values of our derivative assets and liabilities and repurchase agreements, as well as the related offsetting amounts permitted under U.S. GAAP. The table also includes cash and non-cash collateral received or pledged associated with such arrangements. The collateral amounts shown are limited to the extent of the related net derivative fair values or outstanding balances, thus instances of over-collateralization are not shown.

Table 9.2: Offsetting of Financial Assets and Financial Liabilities
(Dollars in millions)
${ }^{(1)}$ Reflects a reduction of derivative assets of $\$ 58$ million and a reduction of derivative liabilities of $\$ 348$ million on our consolidated balance sheets as of June 30,2017 as a result of adoption of the CME variation margin rule change in the second quarter of 2017.
(2) We received cash collateral from derivative counterparties totaling $\$ 234$ million and $\$ 448$ million as of June 30, 2017 and December 31, 2016, respectively. We also received securities from derivative counterparties with a fair value of $\$ 1$ million and $\$ 16$ million as of June 30 , 2017 and December 31, 2016, respectively, which we have the ability to re-pledge. We posted $\$ 837$ million and $\$ 1.5$ billion of cash collateral as of June 30, 2017 and December 31, 2016, respectively.
${ }^{(3)}$ Represents customer repurchase agreements that mature the next business day. As of June 30, 2017, we pledged collateral with a fair value of $\$ 977$ million under these customer repurchase agreements, which were primarily agency RMBS securities.

## Income Statement Presentation and AOCI

## Fair Value Hedges and Free-Standing Derivatives

The net gains (losses) recognized in earnings related to derivatives in fair value hedging relationships and free-standing derivatives are presented below for the three and six months ended June 30, 2017 and 2016.

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## Table 9.3: Gains and Losses on Fair Value Hedges and Free-Standing Derivatives

| (Dollars in millions) | Three Months Ended June 30, |  |  |  | Six Months Ended June 30, |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2017 |  | 2016 |  | 2017 |  | 2016 |  |
| Derivatives designated as accounting hedges: ${ }^{(1)}$ |  |  |  |  |  |  |  |  |
| Fair value interest rate contracts: |  |  |  |  |  |  |  |  |
| Gains recognized in earnings on derivatives | \$ | 138 | \$ | 182 | \$ | 93 | \$ | 390 |
| Losses recognized in earnings on hedged items |  | (132) |  | (175) |  | (93) |  | (367) |
| Net fair value hedge ineffectiveness gains (losses) |  | 6 |  | 7 |  | 0 |  | 23 |
| Derivatives not designated as accounting hedges: ${ }^{(1)}$ |  |  |  |  |  |  |  |  |
| Interest rate contracts covering: |  |  |  |  |  |  |  |  |
| MSRs |  | 3 |  | 8 |  | 3 |  | 18 |
| Customer accommodation |  | 6 |  | 7 |  | 16 |  | 12 |
| Other interest rate exposures |  | 14 |  | 16 |  | 21 |  | 31 |
| Total interest rate contracts |  | 23 |  | 31 |  | 40 |  | 61 |
| Other contracts |  | 0 |  | (9) |  | 0 |  | (9) |
| Total gains on derivatives not designated as accounting hedges |  | 23 |  | 22 |  | 40 |  | 52 |
| Net derivative gains recognized in earnings | \$ | 29 | \$ | 29 | \$ | 40 | \$ | 75 |

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## CAPITAL ONE FINANCIAL CORPORATION

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## Cash Flow and Net Investment Hedges

The table below shows the net gains (losses) related to derivatives designated as cash flow hedges and net investment hedges for the three and six months ended June 30, 2017 and 2016.

Table 9.4: Gains and Losses on Derivatives Designated as Cash Flow Hedges and Net Investment Hedges

| (Dollars in millions) | Three Months Ended June 30, |  |  |  | Six Months Ended June 30, |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2017 |  | 2016 |  | 2017 |  | 2016 |  |
| Gains (losses) recorded in AOCI: |  |  |  |  |  |  |  |  |
| Cash flow hedges: |  |  |  |  |  |  |  |  |
| Interest rate contracts | \$ | 69 | \$ | 192 | \$ | 39 | \$ | 618 |
| Foreign exchange contracts |  | 5 |  | 0 |  | 9 |  | 0 |
| Subtotal |  | 74 |  | 192 |  | 48 |  | 618 |
| Net investment hedges: |  |  |  |  |  |  |  |  |
| Foreign exchange contracts |  | (58) |  | 122 |  | (80) |  | 163 |
| Net derivatives gains (losses) recognized in AOCI | \$ | 16 | \$ | 314 | \$ | (32) | \$ | 781 |
| Gains (losses) recorded in earnings: |  |  |  |  |  |  |  |  |
| Cash flow hedges: |  |  |  |  |  |  |  |  |
| Gains (losses) reclassified from AOCI into earnings: |  |  |  |  |  |  |  |  |
| Interest rate contracts ${ }^{(1)}$ | \$ | 24 | \$ | 48 | \$ | 61 | \$ | 98 |
| Foreign exchange contracts ${ }^{(2)}$ |  | 5 |  | 1 |  | 8 |  | 0 |
| Subtotal |  | 29 |  | 49 |  | 69 |  | 98 |
| Gains (losses) recognized in earnings due to ineffectiveness: |  |  |  |  |  |  |  |  |
| Interest rate contracts ${ }^{(2)}$ |  | 4 |  | 0 |  | 3 |  | 3 |
| Net derivative gains (losses) recognized in earnings | \$ | 33 | \$ | 49 | \$ | 72 | \$ | 101 |

${ }^{(1)}$ Amounts reclassified are recorded in our consolidated statements of income in interest income or interest expense.
${ }^{(2)}$ Amounts are recorded in our consolidated statements of income in other non-interest income or other interest income.
In the next 12 months, we expect to reclassify to earnings net after-tax gains of $\$ 47$ million currently recorded in AOCI as of June 30, 2017. These amounts will offset the cash flows associated with the hedged forecasted transactions. The maximum length of time over which forecasted transactions were hedged was approximately seven years as of June 30,2017 . The amount we expect to reclassify into earnings may change as a result of changes in market conditions and ongoing actions taken as part of our overall risk management strategy.

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## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

## NOTE 10-STOCKHOLDERS' EQUITY

## Preferred Stock

The following table summarizes the Company's preferred stock issued and outstanding as of June 30, 2017 and December 31, 2016.

Table 10.1: Preferred Stock Issued and Outstanding ${ }^{(1)}$

| Series | Description | Issuance Date | Redeemable by Issuer Beginning |  |  | Liquidation Preference per Share |  |  | Carrying Value (in millions) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Per Annum Dividend Rate | Dividend Frequency |  |  | Total Shares Outstanding | $\begin{gathered} \text { June 30, } \\ 2017 \end{gathered}$ |  | $\begin{gathered} \text { December 31, } \\ 2016 \end{gathered}$ |  |
| Series B | $\begin{gathered} 6.00 \% \\ \text { Non-Cumulative } \end{gathered}$ | $\begin{gathered} \text { August 20, } \\ 2012 \end{gathered}$ | $\begin{gathered} \text { September 1, } \\ 2017 \end{gathered}$ | 6.00\% | Quarterly | \$ | 1,000 | 875,000 | \$ | 853 | \$ | 853 |
| Series C | $6.25 \%$ <br> Non-Cumulative | June 12, 2014 | $\begin{gathered} \text { September 1, } \\ 2019 \end{gathered}$ | 6.25 | Quarterly |  | 1,000 | 500,000 |  | 484 |  | 484 |
| Series D | $\begin{gathered} 6.70 \% \\ \text { Non-Cumulative } \end{gathered}$ | $\begin{gathered} \text { October 31, } \\ 2014 \end{gathered}$ | $\begin{aligned} & \text { December 1, } \\ & 2019 \end{aligned}$ | 6.70 | Quarterly |  | 1,000 | 500,000 |  | 485 |  | 485 |
| Series E | Fixed-toFloating Rate Non-Cumulative | May 14, 2015 | June 1, 2020 | $\begin{aligned} & \text { 5.55\% through } \\ & 5 / 31 / 2020 ; \\ & \text { 3-mo. LIBOR } \\ & +380 \mathrm{bps} \\ & \text { thereafter } \end{aligned}$ | Semi- <br> Annually through 5/31/2020; Quarterly thereafter |  | 1,000 | 1,000,000 |  | 988 |  | 988 |
| Series F | $\begin{gathered} 6.20 \% \\ \text { Non-Cumulative } \end{gathered}$ | $\underset{2015}{\underset{\text { August }}{24}}$ | $\begin{aligned} & \text { December 1, } \\ & 2020 \end{aligned}$ | 6.20 | Quarterly |  | 1,000 | 500,000 |  | 484 |  | 484 |
| Series G | $\begin{gathered} 5.20 \% \\ \text { Non-Cumulative } \end{gathered}$ | July 29, 2016 | $\begin{aligned} & \text { December } 1 \text {, } \\ & 2021 \end{aligned}$ | 5.20 | Quarterly |  | 1,000 | 600,000 |  | 583 |  | 583 |
| Series H | $\begin{gathered} 6.00 \% \\ \text { Non-Cumulative } \end{gathered}$ | $\begin{gathered} \text { November 29, } \\ 2016 \end{gathered}$ | $\begin{aligned} & \text { December 1, } \\ & 2021 \end{aligned}$ | 6.00 | Quarterly |  | 1,000 | 500,000 |  | 483 |  | 483 |
| Total |  |  |  |  |  |  |  |  | \$ | 4,360 | \$ | 4,360 |

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## Accumulated Other Comprehensive Income

The following table presents the changes in AOCI by component for the three and six months ended June 30, 2017 and 2016.

## Table 10.2: Accumulated Other Comprehensive Income

| (Dollars in millions) | Three Months Ended June 30, 2017 |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Securities Available for Sale |  | $\begin{gathered} \text { Securities } \\ \text { Held to } \\ \text { Maturity }{ }^{(1)} \end{gathered}$ |  | Cash <br> Flow <br> Hedges |  | ForeignCurrencyTranslationAdjustments ${ }^{(2)}$ |  | Other |  | Total |  |
| AOCI as of March 31, 2017 | \$ | 32 | \$ | (598) | \$ | (144) | \$ | (205) | \$ | (19) | \$ | (934) |
| Other comprehensive income before reclassifications |  | 147 |  | 0 |  | 74 |  | 31 |  | 4 |  | 256 |
| Amounts reclassified from AOCI into earnings |  | 2 |  | 23 |  | (29) |  | 0 |  | (1) |  | (5) |
| Net other comprehensive income (loss) |  | 149 |  | 23 |  | 45 |  | 31 |  | 3 |  | 251 |
| AOCI as of June 30, 2017 | \$ | 181 | \$ | (575) | \$ | (99) | \$ | (174) | \$ | (16) | \$ | (683) |

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| (Dollars in millions) | Six Months Ended June 30, 2017 |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Securities Available for Sale |  | $\begin{aligned} & \text { Securities } \\ & \text { Held to to } \\ & \text { Maturity }{ }^{(1)} \end{aligned}$ |  | Cash <br> Flow <br> Hedges |  | Foreign <br> Currency <br> Translation <br> Adjustments $^{(2)}$ |  | Other |  | Total |  |
| AOCI as of December 31, 2016 | \$ | (4) | \$ | (621) | \$ | (78) | \$ | (222) | \$ | (24) | \$ | (949) |
| Other comprehensive income before reclassifications |  | 183 |  | 0 |  | 48 |  | 48 |  | 11 |  | 290 |
| Amounts reclassified from AOCI into earnings |  | 2 |  | 46 |  | (69) |  | 0 |  | (3) |  | (24) |
| Net other comprehensive income (loss) |  | 185 |  | 46 |  | (21) |  | 48 |  | 8 |  | 266 |
| AOCI as of June 30, 2017 | \$ | 181 | \$ | (575) | \$ | (99) | \$ | (174) | \$ | (16) | \$ | (683) |


| (Dollars in millions) | Three Months Ended June 30, 2016 |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Securities Available for Sale |  | $\begin{aligned} & \text { Securities } \\ & \text { Held to } \\ & \text { Maturity }{ }^{(1)} \end{aligned}$ |  | Cash <br> Flow <br> Hedges |  | ForeignCurrencyTranslationAdjustments $^{(2)}$ |  | Other |  | Total |  |
| AOCI as of March 31, 2016 | \$ | 349 | \$ | (704) | \$ | 497 | \$ | (142) | \$ | (41) | \$ | (41) |
| Other comprehensive income (loss) before reclassifications |  | 137 |  | 0 |  | 192 |  | (30) |  | 8 |  | 307 |
| Amounts reclassified from AOCI into earnings |  | (1) |  | 25 |  | (49) |  | 0 |  | 0 |  | (25) |
| Net other comprehensive income (loss) |  | 136 |  | 25 |  | 143 |  | (30) |  | 8 |  | 282 |
| AOCI as of June 30, 2016 | \$ | 485 | \$ | (679) | \$ | 640 | \$ | (172) | \$ | (33) | \$ | 241 |


| (Dollars in millions) | Six Months Ended June 30, 2016 |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Securities Available for Sale |  | $\begin{gathered} \text { Securities } \\ \text { Held to } \\ \text { Maturity }{ }^{(1)} \end{gathered}$ |  | Cash <br> Flow <br> Hedges |  | ForeignCurrencyTranslationAdjustments $^{(2)}$ |  | Other |  | Total |  |
| AOCI as of December 31, 2015 | \$ | 162 | \$ | (725) | \$ | 120 | \$ | (143) | \$ | (30) | \$ | (616) |
| Other comprehensive income (loss) before reclassifications |  | 319 |  | 0 |  | 618 |  | (29) |  | (5) |  | 903 |
| Amounts reclassified from AOCI into earnings |  | 4 |  | 46 |  | (98) |  | 0 |  | 2 |  | (46) |
| Net other comprehensive income (loss) |  | 323 |  | 46 |  | 520 |  | (29) |  | (3) |  | 857 |
| AOCI as of June 30, 2016 | \$ | 485 | \$ | (679) | \$ | 640 | \$ | (172) | \$ | (33) | \$ | 241 |

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## CAPITAL ONE FINANCIAL CORPORATION

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

The following table presents the impacts on net income of amounts reclassified from each component of AOCI for the three and six months ended June 30, 2017 and 2016.

Table 10.3: Reclassifications from AOCI

| (Dollars in millions) |  | Amount Reclassified from AOCI |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Three Months Ended June 30, |  |  |  | Six Months Ended June 30, |  |  |  |
| AOCI Components | Affected Income Statement Line Item | 2017 |  | 2016 |  | 2017 |  | 2016 |  |
| Securities available for sale: |  |  |  |  |  |  |  |  |  |
|  | Non-interest income | \$ | (4) | \$ | 1 | \$ | (4) | \$ | (7) |
|  | Income tax provision (benefit) |  | (2) |  | 0 |  | (2) |  | (3) |
|  | Net income (loss) |  | (2) |  | 1 |  | (2) |  | (4) |
| Securities held to maturity: ${ }^{(1)}$ |  |  |  |  |  |  |  |  |  |
|  | Interest income |  | (37) |  | (40) |  | (73) |  | (73) |
|  | Income tax provision (benefit) |  | (14) |  | (15) |  | (27) |  | (27) |
|  | Net income (loss) |  | (23) |  | (25) |  | (46) |  | (46) |
| Cash flow hedges: |  |  |  |  |  |  |  |  |  |
| Interest rate contracts: | Interest income |  | 39 |  | 78 |  | 97 |  | 157 |
| Foreign exchange contracts: | Interest income |  | 7 |  | 1 |  | 13 |  | 0 |
|  | Non-interest income |  | 0 |  | 0 |  | 0 |  | (1) |
|  | Income from continuing operations before income taxes |  | 46 |  | 79 |  | 110 |  | 156 |
|  | Income tax provision |  | 17 |  | 30 |  | 41 |  | 58 |
|  | Net income |  | 29 |  | 49 |  | 69 |  | 98 |
| Other: |  |  |  |  |  |  |  |  |  |
|  | Various (pension and other) |  | 2 |  | 0 |  | 4 |  | (2) |
|  | Income tax provision |  | 1 |  | 0 |  | 1 |  | 0 |
|  | Net income |  | 1 |  | 0 |  | 3 |  | (2) |
| Total reclassifications |  | \$ | 5 | \$ | 25 | \$ | 24 | \$ | 46 |

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 NOTES TO CONSOLIDATED FINANCIAL STATEMENTSThe table below summarizes other comprehensive income activity and the related tax impact for the three and six months ended June 30, 2017 and 2016.

Table 10.4: Other Comprehensive Income (Loss)

| (Dollars in millions) | Three Months Ended June 30, |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2017 |  |  |  |  |  | 2016 |  |  |  |  |  |
|  | $\begin{aligned} & \text { Before } \\ & \text { Tax } \end{aligned}$ |  | Provision(Benefit) |  | $\begin{gathered} \text { After } \\ \text { Tax } \end{gathered}$ |  | $\begin{gathered} \text { Before } \\ \text { Tax } \end{gathered}$ |  | Provision(Benefit) |  | $\begin{gathered} \text { After } \\ \text { Tax } \end{gathered}$ |  |
| Other comprehensive income: |  |  |  |  |  |  |  |  |  |  |  |  |
| Net unrealized gains on securities available for sale | \$ | 237 | \$ | 88 | \$ | 149 | \$ | 212 | \$ | 76 | \$ | 136 |
| Net changes in securities held to maturity |  | 37 |  | 14 |  | 23 |  | 41 |  | 16 |  | 25 |
| Net unrealized gains (losses) on cash flow hedges |  | 72 |  | 27 |  | 45 |  | 227 |  | 84 |  | 143 |
| Foreign currency translation adjustments ${ }^{(1)}$ |  | (3) |  | (34) |  | 31 |  | 40 |  | 70 |  | (30) |
| Other |  | 5 |  | 2 |  | 3 |  | 12 |  | 4 |  | 8 |
| Other comprehensive income | \$ | 348 | \$ | 97 | \$ | 251 | \$ | 532 | \$ | 250 | \$ | 282 |


| (Dollars in millions) | Six Months Ended June 30, |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2017 |  |  |  |  |  | 2016 |  |  |  |  |  |
|  | $\begin{gathered} \text { Before } \\ \text { Tax } \end{gathered}$ |  | Provision (Benefit) |  | $\begin{aligned} & \hline \text { After } \\ & \text { Tax } \end{aligned}$ |  | Before Tax |  | Provision (Benefit) |  | $\begin{aligned} & \hline \text { After } \\ & \text { Tax } \end{aligned}$ |  |
| Other comprehensive income: |  |  |  |  |  |  |  |  |  |  |  |  |
| Net unrealized gains on securities available for sale | \$ | 283 | \$ | 98 | \$ | 185 | \$ | 508 | \$ | 185 | \$ | 323 |
| Net changes in securities held to maturity |  | 73 |  | 27 |  | 46 |  | 74 |  | 28 |  | 46 |
| Net unrealized gains (losses) on cash flow hedges |  | (32) |  | (11) |  | (21) |  | 827 |  | 307 |  | 520 |
| Foreign currency translation adjustments ${ }^{(1)}$ |  | 1 |  | (47) |  | 48 |  | 66 |  | 95 |  | (29) |
| Other |  | 12 |  | 4 |  | 8 |  | (5) |  | (2) |  | (3) |
| Other comprehensive income | \$ | 337 | \$ | 71 | \$ | 266 | \$ | 1,470 | \$ | 613 | \$ | 857 |

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## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

## NOTE 11-EARNINGS PER COMMON SHARE

The following table sets forth the computation of basic and diluted earnings per common share.

## Table 11.1: Computation of Basic and Diluted Earnings per Common Share

| (Dollars and shares in millions, except per share data) |  | Ionths | End | ne 30 |  | onths E | de | 30 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2017 |  | 2016 |  | 2017 |  | 2016 |  |
| Income from continuing operations, net of tax | \$ | 1,047 | \$ | 943 | \$ | 1,842 | \$ | 1,961 |
| Income (loss) from discontinued operations, net of tax |  | (11) |  | (1) |  | 4 |  | (6) |
| Net income |  | 1,036 |  | 942 |  | 1,846 |  | 1,955 |
| Dividends and undistributed earnings allocated to participating securities ${ }^{(1)}$ |  | (8) |  | (6) |  | (13) |  | (12) |
| Preferred stock dividends |  | (80) |  | (65) |  | (133) |  | (102) |
| Net income available to common stockholders | \$ | 948 | \$ | 871 | \$ | 1,700 | \$ | 1,841 |
|  |  |  |  |  |  |  |  |  |
| Total weighted-average basic shares outstanding |  | 484.0 |  | 511.7 |  | 483.1 |  | 517.6 |
| Effect of dilutive securities: |  |  |  |  |  |  |  |  |
| Stock options |  | 2.4 |  | 2.0 |  | 2.6 |  | 1.9 |
| Other contingently issuable shares |  | 1.0 |  | 1.2 |  | 1.2 |  | 1.2 |
| Warrants ${ }^{(2)}$ |  | 0.7 |  | 1.6 |  | 0.8 |  | 1.6 |
| Total effect of dilutive securities |  | 4.1 |  | 4.8 |  | 4.6 |  | 4.7 |
| Total weighted-average diluted shares outstanding |  | 488.1 |  | 516.5 |  | 487.7 |  | 522.3 |
|  |  |  |  |  |  |  |  |  |
| Basic earnings per common share: |  |  |  |  |  |  |  |  |
| Net income from continuing operations | \$ | 1.98 | \$ | 1.70 | \$ | 3.51 | \$ | 3.57 |
| Income (loss) from discontinued operations |  | (0.02) |  | 0.00 |  | 0.01 |  | (0.01) |
| Net income per basic common share | \$ | 1.96 | \$ | 1.70 | \$ | 3.52 | \$ | 3.56 |
|  |  |  |  |  |  |  |  |  |
| Diluted earnings per common share: ${ }^{(3)}$ |  |  |  |  |  |  |  |  |
| Net income from continuing operations | \$ | 1.96 | \$ | 1.69 | \$ | 3.48 | \$ | 3.53 |
| Income (loss) from discontinued operations |  | (0.02) |  | 0.00 |  | 0.01 |  | (0.01) |
| Net income per diluted common share | \$ | 1.94 | \$ | 1.69 | \$ | 3.49 | \$ | 3.52 |

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## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

## NOTE 12-FAIR VALUE MEASUREMENT

Fair value, also referred to as an exit price, is defined as the price that would be received for an asset or paid to transfer a liability in an orderly transaction between market participants on the measurement date. The fair value accounting guidance provides a three-level fair value hierarchy for classifying financial instruments. This hierarchy is based on the markets in which the assets or liabilities trade and whether the inputs to the valuation techniques used to measure fair value are observable or unobservable. The fair value measurement of a financial asset or liability is assigned a level based on the lowest level of any input that is significant to the fair value measurement in its entirety. The three levels of the fair value hierarchy are described below:

Level 1: Valuation is based on quoted prices (unadjusted) in active markets for identical assets or liabilities.
Level 2: Valuation is based on observable market-based inputs, other than quoted prices in active markets for identical 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 of substantially the full term of the assets or liabilities.
Level 3: Valuation is generated from techniques that use significant assumptions not observable in the market. Valuation techniques include pricing models, discounted cash flow methodologies or similar techniques.

The accounting guidance for fair value measurements requires that we maximize the use of observable inputs and minimize the use of unobservable inputs in determining fair value. The accounting guidance provides for the irrevocable option to elect, on a contract-by-contract basis, to measure certain financial assets and liabilities at fair value at inception of the contract and record any subsequent changes in fair value in earnings. We have not made any material fair value option elections as of or for the periods disclosed herein.

The determination and classification of financial instruments in the fair value hierarchy is performed at the end of each reporting period. We consider all available information, including observable market data, indications of market liquidity and orderliness, and our understanding of the valuation techniques and significant inputs. For additional information on the valuation techniques used in estimating the fair value of our financial assets and liabilities on a recurring or nonrecurring basis and for estimating the fair value for financial instruments that are not recorded at fair value, see "Note 17-Fair Value Measurement" in our 2016 Form 10-K.

## Fair Value Governance and Control

We have a governance framework and a number of key controls that are intended to ensure that our fair value measurements are appropriate and reliable. Our governance framework provides for independent oversight and segregation of duties. Our control processes include review and approval of new transaction types, price verification and review of valuation judgments, methods, models, process controls and results.

Groups independent of our trading and investing functions participate in the review and validation process. Tasks performed by these groups include periodic verification of fair value measurements to determine if assigned fair values are reasonable, including comparing prices from third-party pricing services to other available market information.

Our Fair Value Committee ("FVC"), which includes representation from business areas, Risk Management and Finance divisions, provides guidance and oversight to ensure an appropriate valuation control environment. The FVC regularly reviews and approves our fair valuations to ensure that our valuation practices are consistent with industry standards and adhere to regulatory and accounting guidance.

We have a model policy, established by an independent Model Risk Office, which governs the validation of models and related supporting documentation to ensure the appropriate use of models for pricing and fair value measurements. The Model Risk Office validates all models and provides ongoing monitoring of their performance.

The fair valuation governance process is set up in a manner that allows the Chairperson of the FVC to escalate valuation disputes that cannot be resolved by the FVC to a more senior committee called the Valuations Advisory Committee ("VAC") for resolution. The VAC is chaired by the Chief Financial Officer and includes other members of senior management. The VAC is only required to convene to review escalated valuation disputes.

## CAPITAL ONE FINANCIAL CORPORATION

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## Assets and Liabilities Measured at Fair Value on a Recurring Basis

The following table displays our assets and liabilities measured on our consolidated balance sheets at fair value on a recurring basis as of June 30, 2017 and December 31, 2016. During the six months ended June 30, 2017, we had minimal movements between Levels 1 and 2.

Table 12.1: Assets and Liabilities Measured at Fair Value on a Recurring Basis

| (Dollars in millions) | June 30, 2017 |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Fair Value Measurements Using |  |  |  |  |  | $\begin{gathered} \text { Netting } \\ \text { Adjustments }{ }^{(1)} \end{gathered}$ |  | Total |  |
|  | Level 1 |  | Level 2 |  | Level 3 |  |  |  |  |  |
| Assets: |  |  |  |  |  |  |  |  |  |  |
| Securities available for sale: |  |  |  |  |  |  |  |  |  |  |
| U.S. Treasury securities | \$ | 5,215 | \$ | 0 | \$ | 0 | \$ | - | \$ | 5,215 |
| RMBS |  | 0 |  | 28,699 |  | 429 |  | - |  | 29,128 |
| CMBS |  | 0 |  | 4,909 |  | 17 |  | - |  | 4,926 |
| Other ABS |  | 0 |  | 627 |  | 0 |  | - |  | 627 |
| Other securities |  | 281 |  | 934 |  | 9 |  | - |  | 1,224 |
| Total securities available for sale |  | 5,496 |  | 35,169 |  | 455 |  | - |  | 41,120 |
| Other assets: |  |  |  |  |  |  |  |  |  |  |
| Derivative assets ${ }^{(1)(2)}$ |  | 2 |  | 714 |  | 57 |  | (309) |  | 464 |
| Other ${ }^{(3)}$ |  | 256 |  | 0 |  | 273 |  | - |  | 529 |
| Total assets | \$ | 5,754 | \$ | 35,883 | \$ | 785 | \$ | (309) | \$ | 42,113 |
| Liabilities: |  |  |  |  |  |  |  |  |  |  |
| Other liabilities: |  |  |  |  |  |  |  |  |  |  |
| Derivative liabilities ${ }^{(1)(2)}$ | \$ | 1 | \$ | 846 | \$ | 32 | \$ | (355) | \$ | 524 |
| Total liabilities | \$ | 1 |  | 846 | \$ | 32 | \$ | (355) | \$ | 524 |
|  | December 31, 2016 |  |  |  |  |  |  |  |  |  |
|  | Fair Value Measurements Using |  |  |  |  |  | $\begin{gathered} \text { Netting } \\ \text { Adjustments }{ }^{(1)} \end{gathered}$ |  | Total |  |
| (Dollars in millions) | Level 1 |  | Level 2 |  | Level 3 |  |  |  |  |  |
| Assets: |  |  |  |  |  |  |  |  |  |  |
| Securities available for sale: |  |  |  |  |  |  |  |  |  |  |
| U.S. Treasury securities | \$ | 5,065 | \$ | 0 | \$ | 0 | \$ | - | \$ | 5,065 |
| RMBS |  | 0 |  | 28,731 |  | 518 |  | - |  | 29,249 |
| CMBS |  | 0 |  | 4,937 |  | 51 |  | - |  | 4,988 |
| Other ABS |  | 0 |  | 714 |  | 0 |  | - |  | 714 |
| Other securities |  | 295 |  | 417 |  | 9 |  | - |  | 721 |
| Total securities available for sale |  | 5,360 |  | 34,799 |  | 578 |  | - |  | 40,737 |
| Other assets: |  |  |  |  |  |  |  |  |  |  |
| Derivative assets ${ }^{(1)(2)}$ |  | 7 |  | 1,440 |  | 47 |  | (539) |  | 955 |
| Other ${ }^{(3)}$ |  | 219 |  | 0 |  | 281 |  | - |  | 500 |
| Total assets | \$ | 5,586 |  | 36,239 | \$ | 906 | \$ | (539) | \$ | 42,192 |
| Liabilities: |  |  |  |  |  |  |  |  |  |  |
| Other liabilities: |  |  |  |  |  |  |  |  |  |  |
| Derivative liabilities ${ }^{(1)(2)}$ | \$ | 12 |  | 1,397 | \$ | 29 | \$ | (336) | \$ | 1,102 |
| Total liabilities | \$ | 12 |  | 1,397 | \$ | 29 | \$ | (336) | \$ | 1,102 |

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${ }^{(1)}$ Represents balance sheet netting of derivative assets and liabilities, and related payable and receivables for cash collateral held or placed with the same counterparty. See "Note 9—Derivative Instrument and Hedging Activities" for additional information.
(2) Does not reflect $\$ 3$ million and $\$ 5$ million recognized as a net valuation allowance on derivative assets and liabilities for non-performance risk as of June 30, 2017 and December 31, 2016, respectively. Non-performance risk is included in the derivative assets and liabilities which are part of other assets and liabilities on the consolidated balance sheets and offset through non-interest income in the consolidated statements of income.
(3) Other includes consumer MSRs of $\$ 85$ million and $\$ 80$ million, retained interests in securitizations of $\$ 188$ million and $\$ 201$ million and deferred compensation plan assets of $\$ 256$ million and $\$ 219$ million as of June 30, 2017 and December 31, 2016, respectively.

## Level 3 Recurring Fair Value Rollforward

The table below presents a reconciliation for all assets and liabilities measured and recognized at fair value on a recurring basis using significant unobservable inputs (Level 3) for the three and six months ended June 30, 2017 and 2016. When assets and liabilities are transferred between levels, we recognize the transfer as of the end of the period.

## Table 12.2: Level 3 Recurring Fair Value Rollforward

| (Dollars in millions) | Fair Value Measurements Using Significant Unobservab Three Months Ended June 30, 2017 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Balance, April 1, 2017 |  | Total Gains (Losses) (Realized/Unrealized) |  |  |  | Purchases |  | Sales |  | Issuances |  | $\underline{\text { Settlements }}$ |  | $\begin{aligned} & \text { Transfers } \\ & \text { Into } \\ & \text { Level } 3^{(2)} \end{aligned}$ |  | Transfers Out of Level $3^{(2)}$ |  | Balance, June 30, 2017 |  | Net Unrealized Gains (Losses) Included in Net Income Related to Assets and Liabilities Still Held as of June 30, 2017 ${ }^{(3)}$ |  |
|  |  |  | $\begin{gathered} \text { Included } \\ \text { in Net } \\ \text { Income }^{(1)} \end{gathered}$ |  | $\begin{gathered} \text { Included } \\ \text { in } \\ \text { OCI } \end{gathered}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Assets: $-\sim-\square-\square-\square$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Securities available for sale: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| RMBS | \$ | 449 | \$ | 8 | \$ | 10 | \$ | 0 | \$ | (5) | \$ | 0 | \$ | (24) | \$ | 159 | \$ | (168) | \$ | 429 | \$ | 8 |
| CMBS |  | 78 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | (1) |  | 0 |  | (60) |  | 17 |  | 0 |
| Other securities |  | 9 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 9 |  | 0 |
| Total securities available for sale |  | 536 |  | 8 |  | 10 |  | 0 |  | (5) |  | 0 |  | (25) |  | 159 |  | (228) |  | 455 |  | 8 |
| Other assets: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Derivative assets ${ }^{(4)}$ |  | 53 |  | 4 |  | 0 |  | 0 |  | 0 |  | 22 |  | (15) |  | 0 |  | (7) |  | 57 |  | 4 |
| Consumer MSRs |  | 86 |  | (5) |  | 0 |  | 0 |  | 0 |  | 5 |  | (1) |  | 0 |  | 0 |  | 85 |  | (5) |
| Retained interest in securitizations |  | 195 |  | (7) |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 188 |  | (7) |
| Liabilities: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Other liabilities: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Derivative liabilities ${ }^{(4)}$ | \$ | (31) | \$ | (3) | \$ | 0 | \$ | 0 | \$ | 0 | \$ | (7) | \$ | 7 | \$ | 0 | \$ | 2 | \$ | (32) | \$ | (3) |

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Fair Value Measurements Using Significant Unobservable Inputs (Level 3)

| (Dollars in millions) | Three Months Ended June 30, 2016 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Balance, April 1, 2016 |  | Total Gains (Losses) (Realized/Unrealized) |  |  |  | Purchases |  | Sales |  | Issuances |  | Settlements |  | TransfersInto Level $3^{(2)}$ |  | $\begin{gathered} \text { Transfers } \\ \text { Out of } \\ \text { Level } 3^{(2)} \end{gathered}$ |  | Balance,June 30, 2016 |  | Net Unrealized Gains (Losses) Included in Net Income Related to Assets and Liabilities Still Held as of June 30, 2016 ${ }^{(3)}$ |  |
|  |  |  | Included in Net Income ${ }^{(1)}$ |  | $\begin{gathered} \text { Included } \\ \text { in } \\ \text { OCI } \end{gathered}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Assets: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Securities available for sale: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| RMBS | \$ | 505 | \$ | 7 | \$ | 11 | \$ | 59 | \$ | 0 | \$ | 0 | \$ | (31) | \$ | 80 | \$ | (76) | \$ | 555 | \$ | 8 |
| CMBS |  | 251 |  | 0 |  | 1 |  | 63 |  | 0 |  | 0 |  | (6) |  | 0 |  | (181) |  | 128 |  | 0 |
| Other ABS |  | 30 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 30 |  | 0 |
| Other securities |  | 11 |  | 0 |  | 0 |  | 8 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 19 |  | 0 |
| Total securities available for sale |  | 797 |  | 7 |  | 12 |  | 130 |  | 0 |  | 0 |  | (37) |  | 80 |  | (257) |  | 732 |  | 8 |
| Other assets: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Derivative assets ${ }^{(4)}$ |  | 71 |  | 9 |  | 0 |  | 0 |  | 0 |  | 30 |  | (15) |  | 0 |  | (10) |  | 85 |  | 9 |
| Consumer MSRs |  | 59 |  | (8) |  | 0 |  | 0 |  | 0 |  | 4 |  | (2) |  | 0 |  | 0 |  | 53 |  | (8) |
| Retained interest in securitizations |  | 201 |  | 2 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 203 |  | 2 |

## Liabilities:

Other liabilities:


Fair Value Measurements Using Significant Unobservable Inputs (Level 3)

| (Dollars in millions) | Six Months Ended June 30, 2017 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { Balance, } \\ \text { January }, \\ 2017 \end{gathered}$ |  | Total Gains (Losses) (Realized/Unrealized) |  |  |  | Purchases |  | Sales |  | Issuances |  | Settlements |  | $\begin{gathered} \text { Transfers } \\ \text { Into } \\ \text { Level } 3^{(2)} \end{gathered}$ |  | Transfers Out of Level $3^{(2)}$ |  | Balance, June 30, 2017 |  | Net UnrealizedGains (Losses)Included in NetIncome Related toAssets andLiabilitiesStill Held as ofJune 30, 2017 |  |
|  |  |  | $\begin{gathered} \text { Included } \\ \text { in Net } \\ \text { Income }^{(1)} \end{gathered}$ |  | Included in OCI |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Assets: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Securities available for sale: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| RMBS | \$ | 518 | \$ | 17 | \$ | 18 | \$ | 0 | \$ | (5) | \$ | 0 | \$ | (46) | \$ | 212 | \$ | (285) | \$ | 429 | \$ | 17 |
| CMBS |  | 51 |  | 0 |  | 0 |  | 60 |  | 0 |  | 0 |  | (2) |  | 0 |  | (92) |  | 17 |  | 0 |
| Other securities |  | 9 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 9 |  | 0 |
| Total securities available for sale |  | 578 |  | 17 |  | 18 |  | 60 |  | (5) |  | 0 |  | (48) |  | 212 |  | (377) |  | 455 |  | 17 |
| Other assets: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Derivative assets ${ }^{(4)}$ |  | 47 |  | 3 |  | 0 |  | 0 |  | 0 |  | 40 |  | (25) |  | 0 |  | (8) |  | 57 |  | 3 |
| Consumer MSRs |  | 80 |  | (4) |  | 0 |  | 0 |  | 0 |  | 12 |  | (3) |  | 0 |  | 0 |  | 85 |  | (4) |
| Retained interest in securitizations |  | 201 |  | (13) |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 188 |  | (13) |
| Liabilities: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Other liabilities: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Derivative liabilities ${ }^{(4)}$ | \$ | (29) | \$ | (2) | \$ | 0 | \$ | 0 | \$ | 0 | \$ | (13) | \$ | 10 | \$ | 0 | \$ | 2 | \$ | (32) | \$ | (2) |

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| (Dollars in millions) | Fair Value Measurements Using Significant Unobserv Six Months Ended June 30, 2016 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | $\begin{aligned} & \text { Balance, } \\ & \text { January 1, } \\ & 2016 \end{aligned}$ |  | Total Gains (Losses) (Realized/Unrealized) |  |  |  | Purchases |  | Sales |  | Issuances |  | Settlements |  | $\begin{aligned} & \text { Transfers } \\ & \text { Into } \\ & \text { Level }{ }^{(2)} \end{aligned}$ |  | Transfers Out of Level $3^{(2)}$ |  | Balance, June 30, 2016 |  | Net UnrealizedGains (Losses)Included in NetIncome Related toAssets andLiabilitiesStill Held as ofJune 30, 2016 |  |
|  |  |  | Included in Net <br> Income ${ }^{(1)}$ |  | $\begin{gathered} \text { Included } \\ \text { in } \\ \text { OCI } \end{gathered}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Assets: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Securities available for sale: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| RMBS | \$ | 504 | \$ | 13 | \$ | 6 | \$ | 59 | \$ | 0 | \$ | 0 | \$ | (48) | \$ | 207 | \$ | (186) | \$ | 555 | \$ | 14 |
| CMBS |  | 97 |  | 0 |  | 2 |  | 156 |  | 0 |  | 0 |  | (10) |  | 64 |  | (181) |  | 128 |  | 0 |
| Other ABS |  | 0 |  | 0 |  | 0 |  | 30 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 30 |  | 0 |
| Other securities |  | 14 |  | 0 |  | 0 |  | 8 |  | 0 |  | 0 |  | (3) |  | 0 |  | 0 |  | 19 |  | 0 |
| Total securities available for sale |  | 615 |  | 13 |  | 8 |  | 253 |  | 0 |  | 0 |  | (61) |  | 271 |  | (367) |  | 732 |  | 14 |
| Other assets: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Derivative assets ${ }^{(4)}$ |  | 57 |  | 28 |  | 0 |  | 0 |  | 0 |  | 42 |  | (26) |  | 0 |  | (16) |  | 85 |  | 28 |
| Consumer MSRs |  | 68 |  | (20) |  | 0 |  | 0 |  | 0 |  | 8 |  | (3) |  | 0 |  | 0 |  | 53 |  | (20) |
| Retained interest in securitizations |  | 211 |  | (8) |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 203 |  | (8) |
| Liabilities: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Other liabilities: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Derivative liabilities ${ }^{(4)}$ | \$ | (27) | \$ | (29) | \$ | 0 | \$ | 0 | \$ | 0 | \$ | (31) | \$ | 13 | \$ | 0 | \$ | 7 | \$ | (67) | \$ | (29) |

[^38]
## Significant Level 3 Fair Value Asset and Liability Input Sensitivity

Changes in unobservable inputs may have a significant impact on fair value. Certain of these unobservable inputs will, in isolation, have a directionally consistent impact on the fair value of the instrument for a given change in that input. Alternatively, the fair value of the instrument may move in an opposite direction for a given change in another input. In general, an increase in the discount rate, default rates, loss severity and credit spreads, in isolation, would result in a decrease in the fair value measurement. In addition, an increase in default rates would generally be accompanied by a decrease in recovery rates, slower prepayment rates and an increase in liquidity spreads.

## Techniques and Inputs for Level 3 Fair Value Measurements

The following table presents the significant unobservable inputs used to determine the fair values of our Level 3 financial instruments on a recurring basis. We utilize multiple third-party pricing services to obtain fair value for our securities. Several of our thirdparty pricing services are only able to provide unobservable input information for a limited number of securities due to software licensing restrictions. Other third-party pricing services are able to provide unobservable input information for all securities for which they provide a valuation. As a result, the unobservable input information for the securities available for sale presented below represents a composite summary of all information we are able to obtain. The unobservable input information for all other Level 3 financial instruments is based on the assumptions used in our internal valuation models.

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Table 12.3: Quantitative Information about Level 3 Fair Value Measurements

| (Dollars in millions) | Quantitative Information about Level 3 Fair Value Measurements |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \hline \text { Fair Value at } \\ \text { June 30, } \\ 2017 \\ \hline \end{gathered}$ |  | Significant Valuation Techniques | Significant Unobservable Inputs | Range | Weighted Average |
| Assets: - |  |  |  |  |  |  |
| Securities available for sale: |  |  |  |  |  |  |
| RMBS | \$ | 429 | Discounted cash flows (3rd party pricing) | Yield <br> Voluntary prepayment rate Default rate Loss severity | $\begin{aligned} & 1-9 \% \\ & 0-33 \% \\ & 0-17 \% \\ & 9-90 \% \end{aligned}$ | $\begin{aligned} & 5 \% \\ & \mathbf{4 \%} \\ & \mathbf{4 \%} \\ & \mathbf{5 8 \%} \end{aligned}$ |
| CMBS |  | 17 | Discounted cash flows (3rd party pricing) | Yield <br> Voluntary prepayment rate | $\begin{aligned} & \mathbf{3 \%} \\ & 0 \% \end{aligned}$ | $\begin{aligned} & 3 \% \\ & 0 \% \end{aligned}$ |
| Other securities |  | 9 | Discounted cash flows | Yield | 2\% | 2\% |
| Other assets: |  |  |  |  |  |  |
| Derivative assets ${ }^{(1)}$ |  | 57 | Discounted cash flows | Swap rates | 2-3\% | 2\% |
| Consumer MSRs |  | 85 | Discounted cash flows | Total prepayment rate Discount rate Option-adjusted spread rate Servicing cost (\$ per loan) | $\begin{aligned} & 8-21 \% \\ & \mathbf{1 6 \%} \\ & \mathbf{5 0 0 - 1 , 5 0 0} \text { bps } \\ & \mathbf{\$ 7 5 - \$ 1 0 0} \end{aligned}$ | $\begin{aligned} & 15 \% \\ & 16 \% \\ & 585 \text { bps } \\ & \$ 76 \end{aligned}$ |
| Retained interests in securitization ${ }^{(2)}$ |  | 188 | Discounted cash flows | Life of receivables (months) Voluntary prepayment rate Discount rate Default rate Loss severity | $\begin{aligned} & 2-85 \\ & 2-11 \% \\ & 3-12 \% \\ & 1-5 \% \\ & 9-111 \% \end{aligned}$ | N/A |
| Liabilities: |  |  |  |  |  |  |
| Derivative liabilities ${ }^{(1)}$ | \$ | 32 | Discounted cash flows | Swap rates | 2\% | 2\% |


| (Dollars in millions) | Quantitative Information about Level 3 Fair Value Measurements |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Fair Value at December 31, 2016 |  | Significant Valuation Techniques | Significant Unobservable Inputs | Range | Weighted Average |
| Assets: |  |  |  |  |  |  |
| Securities available for sale: |  |  |  |  |  |  |
| RMBS | \$ | 518 | Discounted cash flows (3rd party pricing) | Yield <br> Voluntary prepayment rate Default rate Loss severity | $\begin{aligned} & 0-15 \% \\ & 0-30 \% \\ & 0-16 \% \\ & 9-87 \% \end{aligned}$ | $\begin{aligned} & 5 \% \\ & 4 \% \\ & 4 \% \\ & 57 \% \end{aligned}$ |
| CMBS |  | 51 | Discounted cash flows (3rd party pricing) | Yield <br> Voluntary prepayment rate | $\begin{aligned} & 2 \% \\ & 0 \% \end{aligned}$ | $\begin{aligned} & 2 \% \\ & 0 \% \end{aligned}$ |
| Other securities |  | 9 | Discounted cash flows | Yield | 1-2\% | 1\% |
| Other assets: |  |  |  |  |  |  |
| Derivative assets ${ }^{(1)}$ |  | 47 | Discounted cash flows | Swap rates | 2\% | 2\% |
| Consumer MSRs |  | 80 | Discounted cash flows | Total prepayment rate Discount rate Option-adjusted spread rate Servicing cost (\$ per loan) | $\begin{aligned} & 8-20 \% \\ & 15 \% \\ & 580-1,500 \mathrm{bps} \\ & \$ 75-\$ 100 \end{aligned}$ | $\begin{aligned} & 15 \% \\ & 15 \% \\ & 636 \mathrm{bps} \\ & \$ 76 \end{aligned}$ |
| Retained interests in securitization ${ }^{(2)}$ |  | 201 | Discounted cash flows | Life of receivables (months) Voluntary prepayment rate Discount rate Default rate Loss severity | $\begin{aligned} & 6-87 \\ & 2-11 \% \\ & 4-11 \% \\ & 1-6 \% \\ & 7-102 \% \end{aligned}$ | N/A |
| Liabilities: |  |  |  |  |  |  |
| Derivative liabilities ${ }^{(1)}$ | \$ | 29 | Discounted cash flows | Swap rates | 2\% | 2\% |

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## CAPITAL ONE FINANCIAL CORPORATION

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

## Assets and Liabilities Measured at Fair Value on a Nonrecurring Basis

We are required to measure and recognize certain assets at fair value on a nonrecurring basis on the consolidated balance sheets. These assets are not measured at fair value on an ongoing basis but are subject to fair value adjustments in certain circumstances (for example, from the application of lower of cost or fair value accounting or when we evaluate for impairment).

The following table presents the carrying value of the assets measured at fair value on a nonrecurring basis and still held as of June 30, 2017 and December 31, 2016, and for which a nonrecurring fair value measurement was recorded during the six and twelve months then ended:

Table 12.4: Nonrecurring Fair Value Measurements

| (Dollars in millions) | June 30, 2017 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | EstimatedFair Value Hierarchy |  |  |  | Total |  |
|  | Level 2 |  | Level 3 |  |  |  |
| Loans held for investment | \$ | 0 | \$ | 390 | \$ | 390 |
| Loans held for sale |  | 559 |  | 1 |  | 560 |
| Other assets ${ }^{(1)}$ |  | 0 |  | 35 |  | 35 |
| Total | \$ | 559 | \$ | 426 | \$ | 985 |
| (Dollars in millions) | December 31, 2016 |  |  |  |  |  |
|  | EstimatedFair Value Hierarchy |  |  |  |  |  |
|  | Level 2 |  | Level 3 |  | Total |  |
| Loans held for investment | \$ | 0 | \$ | 587 | \$ | 587 |
| Loans held for sale |  | 157 |  | 0 |  | 157 |
| Other assets ${ }^{(1)}$ |  | 0 |  | 83 |  | 83 |
| Total | \$ | 157 | \$ | 670 | \$ | 827 |

${ }^{(1)}$ Other assets includes foreclosed property and repossessed assets of $\$ 34$ million and long-lived assets held for sale of $\$ 1$ million as of June 30, 2017, compared to foreclosed property and repossessed assets of $\$ 43$ million and long-lived assets held for sale of $\$ 40$ million as of December 31, 2016.

In the above table, loans held for investment primarily include nonperforming loans for which specific reserves or charge-offs have been recognized. These loans are classified as Level 3, as they are valued based in part on the estimated fair value of the underlying collateral and the non-recoverable rate, which is considered to be a significant unobservable input. Collateral fair value sources include the appraisal value obtained from independent appraisers, broker pricing opinions or other available market information. The non-recoverable rate ranged from $0 \%$ to $17 \%$, with a weighted average of $9 \%$, and from $0 \%$ to $73 \%$, with a weighted average of $16 \%$, as of June 30,2017 and December 31, 2016, respectively. The fair value of the loans held for sale and the other assets classified as Level 3 is determined based on appraisal value or listing price which involves significant judgment; the significant unobservable inputs and related quantitative information are not meaningful to disclose as they vary significantly across properties and collateral.

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The following table presents total nonrecurring fair value measurements for the period, included in earnings, attributable to the change in fair value relating to assets that are still held at June 30, 2017 and 2016.

Table 12.5: Nonrecurring Fair Value Measurements Included in Earnings

| (Dollars in millions) | Total Gains (Losses) |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Six Months Ended June 30, |  |  |  |
|  | 2017 |  | 2016 |  |
| Loans held for investment | \$ | (116) | \$ | (105) |
| Loans held for sale |  | (3) |  | 0 |
| Other assets ${ }^{(1)}$ |  | (6) |  | (6) |
| Total | \$ | (125) | \$ | (111) |

${ }^{(1)}$ Other assets includes losses related to foreclosed property, repossessed assets and long-lived assets held for sale.

## Fair Value of Financial Instruments

The following table presents the carrying value and estimated fair value, including the level within the fair value hierarchy, of our financial instruments that are not measured at fair value on a recurring basis on our consolidated balance sheets as of June 30, 2017 and December 31, 2016.

Table 12.6: Fair Value of Financial Instruments

| (Dollars in millions) | June 30, 2017 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { Carrying } \\ \text { Value } \end{gathered}$ | $\begin{gathered} \text { Estimated } \\ \text { Fair } \\ \text { Value } \end{gathered}$ | Estimated Fair Value Hierarchy |  |  |  |  |  |
|  |  |  | Level 1 |  | Level 2 |  | Level 3 |  |
| Financial assets: |  |  |  |  |  |  |  |  |
| Cash and cash equivalents | \$ 6,715 | \$ 6,715 | \$ | 3,352 | \$ | 3,363 | \$ | 0 |
| Restricted cash for securitization investors | 300 | 300 |  | 300 |  | 0 |  | 0 |
| Securities held to maturity | 27,720 | 28,423 |  | 199 |  | 28,185 |  | 39 |
| Net loans held for investment | 237,132 | 241,048 |  | 0 |  | 0 |  | , 048 |
| Loans held for sale | 777 | 785 |  | 0 |  | 783 |  | 2 |
| Interest receivable | 1,346 | 1,346 |  | 0 |  | 1,346 |  | 0 |
| Other investments ${ }^{(1)}$ | 1,481 | 1,481 |  | 0 |  | 1,471 |  | 10 |
| Financial liabilities: |  |  |  |  |  |  |  |  |
| Deposits | \$ 239,763 | \$ 240,273 | \$ | 25,953 |  | 214,320 | \$ | 0 |
| Securitized debt obligations | 18,358 | 18,477 |  | 0 |  | 18,477 |  | 0 |
| Senior and subordinated notes | 28,478 | 28,937 |  | 0 |  | 28,937 |  | 0 |
| Federal funds purchased and securities loaned or sold under agreements to repurchase | 958 | 958 |  | 0 |  | 958 |  | 0 |
| Other borrowings | 2,160 | 2,114 |  | 0 |  | 2,114 |  | 0 |
| Interest payable | 376 | 376 |  | 0 |  | 376 |  | 0 |

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## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

| (Dollars in millions) | December 31, 2016 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Carrying | Estimated <br> Fair <br> Value | Estimated Fair Value Hierarchy |  |  |  |  |
|  |  |  | Level 1 |  | Level 2 | Level 3 |  |
| Financial assets: |  |  |  |  |  |  |  |
| Cash and cash equivalents | \$ 9,976 | \$ 9,976 | \$ | 4,185 | \$ 5,791 | \$ | 0 |
| Restricted cash for securitization investors | 2,517 | 2,517 |  | 2,517 | 0 |  | 0 |
| Securities held to maturity | 25,712 | 26,196 |  | 199 | 25,962 |  | 35 |
| Net loans held for investment | 239,083 | 242,935 |  | 0 | 0 |  |  |
| Loans held for sale | 1,043 | 1,038 |  | 0 | 1,038 |  | 0 |
| Interest receivable | 1,351 | 1,351 |  | 0 | 1,351 |  | 0 |
| Other investments ${ }^{(1)}$ | 2,029 | 2,029 |  | 0 | 2,020 |  | 9 |
| Financial liabilities: |  |  |  |  |  |  |  |
| Deposits | \$ 236,768 | \$ 237,082 | \$ | 25,502 | \$ 211,580 | \$ | 0 |
| Securitized debt obligations | 18,826 | 18,920 |  | 0 | 18,920 |  | 0 |
| Senior and subordinated notes | 23,431 | 23,774 |  | 0 | 23,774 |  | 0 |
| Federal funds purchased and securities loaned or sold under agreements to repurchase | 992 | 992 |  | 0 | 992 |  | 0 |
| Other borrowings | 17,211 | 17,180 |  | 0 | 17,180 |  | 0 |
| Interest payable | 327 | 327 |  | 0 | 327 |  | 0 |

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## CAPITAL ONE FINANCIAL CORPORATION NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

## NOTE 13-BUSINESS SEGMENTS

Our principal operations are currently organized into three major business segments, which are defined based on the products and services provided or the type of customer served: Credit Card, Consumer Banking and Commercial Banking. The operations of acquired businesses have been integrated into our existing business segments. Certain activities that are not part of a segment, such as management of our corporate investment portfolio and asset/liability management by our centralized Corporate Treasury group, are included in the Other category.

## Basis of Presentation

We report the results of each of our business segments on a continuing operations basis. See "Note 2-Discontinued Operations" for a discussion of our discontinued operations. The results of our individual businesses reflect the manner in which management evaluates performance and makes decisions about funding our operations and allocating resources.

## Business Segment Reporting Methodology

The results of our business segments are intended to present each segment as if it were a stand-alone business. Our internal management and reporting process used to derive our segment results employs various allocation methodologies, including funds transfer pricing, to assign certain balance sheet assets, deposits and other liabilities and their related revenue and expenses directly or indirectly attributable to each business segment. Our funds transfer pricing process provides a funds credit for sources of funds, such as deposits generated by our Consumer Banking and Commercial Banking businesses, and a funds charge for the use of funds by each segment. Due to the integrated nature of our business segments, estimates and judgments have been made in allocating certain revenue and expense items. Transactions between segments are based on specific criteria or approximate third-party rates. We regularly assess the assumptions, methodologies and reporting classifications used for segment reporting, which may result in the implementation of refinements or changes in future periods. We provide additional information on the allocation methodologies used to derive our business segment results in "Note 18-Business Segments" in our 2016 Form 10-K.

## Segment Results and Reconciliation

We may periodically change our business segments or reclassify business segment results based on modifications to our management reporting methodologies or changes in organizational alignment. The following tables present our business segment results for the three and six months ended June 30, 2017 and 2016, selected balance sheet data as of June 30, 2017 and 2016, and a reconciliation of our total business segment results to our reported consolidated income from continuing operations, loans held for investment and deposits.

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## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

## Table 13.1: Segment Results and Reconciliation

| (Dollars in millions) | Three Months Ended June 30, 2017 |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \hline \text { Credit } \\ & \text { Card } \end{aligned}$ |  | $\begin{aligned} & \text { Consumer } \\ & \text { Banking } \end{aligned}$ |  | $\begin{gathered} \text { Commercial } \\ \text { Banking }^{(1)} \\ \hline \end{gathered}$ |  | Other ${ }^{(1)}$ |  | Consolidated Total |  |
| Net interest income | \$ | 3,294 | \$ | 1,578 | \$ | 569 | \$ | 32 | \$ | 5,473 |
| Non-interest income |  | 875 |  | 183 |  | 183 |  | (10) |  | 1,231 |
| Total net revenue |  | 4,169 |  | 1,761 |  | 752 |  | 22 |  | 6,704 |
| Provision (benefit) for credit losses |  | 1,397 |  | 268 |  | 140 |  | (5) |  | 1,800 |
| Non-interest expense |  | 1,918 |  | 1,059 |  | 381 |  | 56 |  | 3,414 |
| Income (loss) from continuing operations before income taxes |  | 854 |  | 434 |  | 231 |  | (29) |  | 1,490 |
| Income tax provision (benefit) |  | 301 |  | 158 |  | 85 |  | (101) |  | 443 |
| Income from continuing operations, net of tax | \$ | 553 | \$ | 276 | \$ | 146 | \$ | 72 | \$ | 1,047 |
| Loans held for investment | \$ | 101,590 | \$ | 74,973 | \$ | 67,672 | \$ | 67 | \$ | 244,302 |
| Deposits |  | 0 |  | 186,607 |  | 33,153 |  | 20,003 |  | 239,763 |


| (Dollars in millions) | Three Months Ended June 30, 2016 |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \hline \text { Credit } \\ & \text { Card } \end{aligned}$ |  | $\begin{gathered} \hline \text { Consumer } \\ \text { Banking } \\ \hline \end{gathered}$ |  | $\begin{gathered} \text { Commercial } \\ \text { Banking }{ }^{(1)} \\ \hline \end{gathered}$ |  | Other ${ }^{(1)}$ |  | Consolidated Total |  |
| Net interest income | \$ | 3,045 | \$ | 1,439 | \$ | 559 | \$ | 50 | \$ | 5,093 |
| Non-interest income |  | 859 |  | 175 |  | 129 |  | (2) |  | 1,161 |
| Total net revenue |  | 3,904 |  | 1,614 |  | 688 |  | 48 |  | 6,254 |
| Provision (benefit) for credit losses |  | 1,261 |  | 204 |  | 128 |  | (1) |  | 1,592 |
| Non-interest expense |  | 1,883 |  | 1,006 |  | 343 |  | 63 |  | 3,295 |
| Income (loss) from continuing operations before income taxes |  | 760 |  | 404 |  | 217 |  | (14) |  | 1,367 |
| Income tax provision (benefit) |  | 276 |  | 147 |  | 79 |  | (78) |  | 424 |
| Income from continuing operations, net of tax | \$ | 484 | \$ | 257 | \$ | 138 | \$ | 64 | \$ | 943 |
| Loans held for investment | \$ | 96,904 | \$ | 71,415 | \$ | 66,202 | \$ | 82 | \$ | 234,603 |
| Deposits |  | 0 |  | 176,340 |  | 34,281 |  | 10,438 |  | 221,059 |

## CAPITAL ONE FINANCIAL CORPORATION

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Six Months Ended June 30, 2017

| (Dollars in millions) | $\begin{gathered} \text { Credit } \\ \text { Card } \end{gathered}$ |  | $\begin{gathered} \text { Consumer } \\ \text { Banking } \\ \hline \end{gathered}$ |  | $\begin{gathered} \text { Commercial } \\ \text { Banking }^{(1)} \\ \hline \end{gathered}$ |  | Other ${ }^{(1)}$ |  | Consolidated Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Net interest income | \$ | 6,640 | \$ | 3,095 | \$ | 1,135 | \$ | 77 | \$ | 10,947 |
| Non-interest income |  | 1,613 |  | 378 |  | 341 |  | (40) |  | 2,292 |
| Total net revenue |  | 8,253 |  | 3,473 |  | 1,476 |  | 37 |  | 13,239 |
| Provision (benefit) for credit losses |  | 3,114 |  | 547 |  | 138 |  | (7) |  | 3,792 |
| Non-interest expense |  | 3,847 |  | 2,101 |  | 772 |  | 128 |  | 6,848 |
| Income (loss) from continuing operations before income taxes |  | 1,292 |  | 825 |  | 566 |  | (84) |  | 2,599 |
| Income tax provision (benefit) |  | 468 |  | 301 |  | 207 |  | (219) |  | 757 |
| Income from continuing operations, net of tax | \$ | 824 | \$ | 524 | \$ | 359 | \$ | 135 | \$ | 1,842 |
| Loans held for investment | \$ | 101,590 | \$ | 74,973 | \$ | 67,672 | \$ | 67 | \$ | 244,302 |
| Deposits |  | 0 |  | 186,607 |  | 33,153 |  | 20,003 |  | 239,763 |


| (Dollars in millions) | Six Months Ended June 30, 2016 |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | CreditCard |  | $\begin{gathered} \hline \text { Consumer } \\ \text { Banking } \\ \hline \end{gathered}$ |  | $\begin{gathered} \hline \text { Commercial } \\ \text { Banking }^{1()} \\ \hline \end{gathered}$ |  | Other ${ }^{(1)}$ |  | Consolidated Total |  |
| Net interest income | \$ | 6,078 | \$ | 2,859 | \$ | 1,096 | \$ | 116 | \$ | 10,149 |
| Non-interest income |  | 1,706 |  | 366 |  | 247 |  | 6 |  | 2,325 |
| Total net revenue |  | 7,784 |  | 3,225 |  | 1,343 |  | 122 |  | 12,474 |
| Provision (benefit) for credit losses |  | 2,332 |  | 434 |  | 356 |  | (3) |  | 3,119 |
| Non-interest expense |  | 3,746 |  | 1,996 |  | 665 |  | 111 |  | 6,518 |
| Income (loss) from continuing operations before income taxes |  | 1,706 |  | 795 |  | 322 |  | 14 |  | 2,837 |
| Income tax provision (benefit) |  | 613 |  | 289 |  | 117 |  | (143) |  | 876 |
| Income from continuing operations, net of tax | \$ | 1,093 | \$ | 506 | \$ | 205 | \$ | 157 | \$ | 1,961 |
| Loans held for investment | \$ | 96,904 | \$ | 71,415 | \$ | 66,202 | \$ | 82 | \$ | 234,603 |
| Deposits |  | 0 |  | 176,340 |  | 34,281 |  | 10,438 |  | 221,059 |

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## CAPITAL ONE FINANCIAL CORPORATION

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

## NOTE 14-COMMITMENTS, CONTINGENCIES, GUARANTEES AND OTHERS

## Commitments to Lend

Our unfunded lending commitments primarily consist of credit card lines, loan commitments to customers of both our Commercial Banking and Consumer Banking businesses, as well as standby and commercial letters of credit. These commitments, other than credit card lines, are legally binding conditional agreements that have fixed expirations or termination dates and specified interest rates and purposes. The contractual amount of these commitments represents the maximum possible credit risk to us should the counterparty draw upon the commitment. We generally manage the potential risk of unfunded lending commitments by limiting the total amount of arrangements, monitoring the size and maturity structure of these portfolios and applying the same credit standards for all of our credit activities.

For unused credit card lines, we have not experienced and do not anticipate that all of our customers will access their entire available line at any given point in time. Commitments to extend credit other than credit card lines generally require customers to maintain certain credit standards. Collateral requirements and loan-to-value ("LTV") ratios are the same as those for funded transactions and are established based on management's credit assessment of the customer. These commitments may expire without being drawn upon; therefore, the total commitment amount does not necessarily represent future funding requirements.

We also issue letters of credit, such as financial standby, performance standby and commercial letters of credit, to meet the financing needs of our customers. Standby letters of credit are conditional commitments issued by us to guarantee the performance of a customer to a third party in a borrowing arrangement. Commercial letters of credit are short-term commitments issued primarily to facilitate trade finance activities for customers and are generally collateralized by the goods being shipped to the client. These collateral requirements are similar to those for funded transactions and are established based on management's credit assessment of the customer. Management conducts regular reviews of all outstanding letters of credit and the results of these reviews are considered in assessing the adequacy of our allowance for loan and lease losses.

The following table presents contractual amount and carrying value of our unfunded lending commitments as of June 30, 2017 and December 31, 2016. The carrying value represents our reserve and deferred revenue on legally binding commitments.

Table 14.1: Unfunded Lending Commitments: Contractual Amount and Carrying Value

| (Dollars in millions) | Contractual Amount |  |  |  | Carrying Value |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { June 30, } \\ & 2017 \end{aligned}$ |  | $\begin{gathered} \hline \text { December 31, } \\ 2016 \end{gathered}$ |  | $\begin{gathered} \hline \text { June 30, } \\ 2017 \end{gathered}$ |  | $\begin{gathered} \hline \text { December 31, } \\ 2016 \end{gathered}$ |  |
| Standby letter of credit and commercial letter of credit ${ }^{(1)}$ | \$ | 2,050 | \$ | 1,936 | \$ | 43 | \$ | 42 |
| Credit card lines |  | 317,662 |  | 312,864 |  | N/A |  | N/A |
| Other loan commitments ${ }^{(2)}$ |  | 29,802 |  | 28,402 |  | 101 |  | 98 |
| Total unfunded lending commitments | \$ | 349,514 | \$ | 343,202 | \$ | 144 | \$ | 140 |

${ }^{(1)}$ These financial guarantees have expiration dates ranging from 2017 to 2025 as of June 30, 2017.
${ }^{(2)}$ Includes $\$ 902$ million and $\$ 699$ million of advised lines of credit as of June 30, 2017 and December 31, 2016, respectively.

## Loss Sharing Agreements and Other Obligations

Within our Commercial Banking business, we originate multifamily commercial real estate loans with the intent to sell them to the GSEs. We enter into loss sharing agreements with the GSEs upon the sale of the loans. At inception, we record a liability representing the fair value of our obligation which is subsequently amortized as we are released from risk of payment under the loss sharing agreement. If payment under the loss sharing agreement becomes probable and estimable, an additional liability may be recorded on the consolidated balance sheets and a non-interest expense may be recognized in the consolidated statements of income. The amount of liability recognized on our consolidated balance sheets for our loss sharing agreements was $\$ 51$ million and $\$ 48$ million as of June 30, 2017 and December 31, 2016, respectively.

## CAPITAL ONE FINANCIAL CORPORATION NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

In certain securitizations in connection with the discontinued manufactured housing operations of GreenPoint Credit, LLC, the third-party servicer has an obligation to exercise mandatory clean-up calls. In the event the third party servicer does not fulfill its obligation to exercise these clean-up calls, the obligation reverts to us. The amount of loan receivables and other assets subject to these clean-up calls is approximately $\$ 410$ million. Based on our current projections, we expect these securitizations to reach their individual clean-up call thresholds beginning in 2017 and continuing through 2019. According to current information and estimates, we also expect the fair value of the loan receivables and other assets to be less than the contractual amount required to exercise the clean-up calls. We monitor the underlying assets for trends in delinquencies and related losses and review the third party servicer's financial strength. As of June 30, 2017, we recorded a liability of $\$ 42$ million associated with these clean-up call obligations. Our best estimate is that any reasonably possible future losses associated with these clean-up call obligations in excess of the liability recorded are not significant to the Company's financial position.

## U.K. Payment Protection Insurance

In the U.K., we previously sold payment protection insurance ("PPI") and other ancillary cross sell products. In response to an elevated level of customer complaints across the industry, heightened media coverage and pressure from consumer advocacy groups, the U.K. Financial Conduct Authority ("FCA"), formerly the Financial Services Authority, investigated and raised concerns about the way the industry has handled complaints related to the sale of these insurance policies. For the past several years, the U.K.'s Financial Ombudsman Service ("FOS") has been adjudicating customer complaints relating to PPI, escalated to it by consumers who disagree with the rejection of their complaint by firms, leading to customer remediation payments by us and others within the industry. On October 2, 2015, the FCA issued a Statement on PPI ("FCA Proposal") announcing it has decided to consult on the introduction of a time bar for PPI complaints and on new rules and guidance about how banks should handle unfair relationship PPI complaints covered by s.140A of the Consumer Credit Act of 1974 ("Consumer Credit Act"). On March 2, 2017, the FCA further issued a statement that sets out final rules and guidance on the PPI complaints deadline, which has been set as August 29, 2019. The statement also provides clarity on how to handle PPI complaints under s.140A of the Consumer Credit Act, including guidance on how redress for such complaints should be calculated.

In determining our best estimate of incurred losses for future remediation payments, management considers numerous factors, including (i) the number of customer complaints we expect in the future; (ii) our expectation of upholding those complaints; (iii) the expected number of complaints customers escalate to the FOS; (iv) our expectation of the FOS upholding such escalated complaints; (v) the number of complaints that fall under the s.140A of the Consumer Credit Act; and (vi) the estimated remediation payout to customers. We monitor these factors each quarter and adjust our reserves to reflect the latest data.

Management's best estimate of incurred losses related to U.K. PPI totaled $\$ 315$ million and $\$ 238$ million as of June 30, 2017 and December 31, 2016, respectively. The increase in the reserve was primarily driven by an addition of $\$ 99$ million recorded in the first quarter of 2017. Other movements were due to a combination of utilization of the reserve through customer refund payments and foreign exchange movements. For the three months ended June 30, 2017, no additions were made to our reserve. Our best estimate of reasonably possible future losses beyond our reserve as of June 30, 2017 is approximately $\$ 200$ million.

## Mortgage Representation and Warranty Liabilities

We acquired three subsidiaries that originated residential mortgage loans and sold these loans to various purchasers, including purchasers who created securitization trusts. These subsidiaries are Capital One Home Loans, LLC, which was acquired in February 2005; GreenPoint, which was acquired in December 2006 as part of the North Fork acquisition; and Chevy Chase Bank, F.S.B. ("CCB"), which was acquired in February 2009 and subsequently merged into CONA (collectively, the "subsidiaries").

In connection with their sales of mortgage loans, the subsidiaries entered into agreements containing varying representations and warranties about, among other things, the ownership of the loan, the validity of the lien securing the loan, the loan's compliance with any applicable loan criteria established by the purchaser, including underwriting guidelines and the existence of mortgage insurance, and the loan's compliance with applicable federal, state and local laws. The representations and warranties do not address the credit performance of the mortgage loans, but mortgage loan performance often influences whether a claim for breach of representation and warranty will be asserted and has an effect on the amount of any loss in the event of a breach of a representation or warranty.

## CAPITAL ONE FINANCIAL CORPORATION

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Each of these subsidiaries may be required to repurchase mortgage loans in the event of certain breaches of these representations and warranties. In the event of a repurchase, the subsidiary is typically required to pay the unpaid principal balance of the loan together with interest and certain expenses (including, in certain cases, legal costs incurred by the purchaser and/or others). The subsidiary then recovers the loan or, if the loan has been foreclosed, the underlying collateral. The subsidiary is exposed to any losses on the repurchased loans, taking into account any recoveries on the collateral. In some instances, rather than repurchase the loans, a subsidiary may agree to make cash payments to make a purchaser whole on losses or to settle repurchase claims, possibly including claims for attorneys' fees and interest. In addition, our subsidiaries may be required to indemnify certain purchasers and others against losses they incur as a result of certain breaches of representations and warranties.

These subsidiaries, in total, originated and sold to non-affiliates approximately $\$ 111$ billion original principal balance of mortgage loans between 2005 and 2008, which are the years (or "vintages") with respect to which our subsidiaries have received the vast majority of the repurchase-related requests and other related claims.

The following table presents the original principal balance of mortgage loan originations for the three general categories of purchasers of mortgage loans and the estimated unpaid principal balance as of June 30, 2017 and December 31, 2016.

Table 14.2: Unpaid Principal Balance of Mortgage Loans Originated and Sold to Third Parties Based on Category of Purchaser

| (Dollars in billions) | EstimatedUnpaid Principal Balance |  |  |  | Original <br> Principal Balance |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \hline \text { June 30, } \\ 2017 \\ \hline \end{gathered}$ |  | $\begin{gathered} \hline \text { December 31, } \\ 2016 \end{gathered}$ |  |  |  |
| GSEs | \$ | 1 | \$ | 2 | \$ | 11 |
| Insured Securitizations |  | 3 |  | 3 |  | 20 |
| Uninsured Securitizations and Other |  | 11 |  | 12 |  | 80 |
| Total | \$ | 15 | \$ | 17 | \$ | 111 |

Of the $\$ 20$ billion in original principal balance of mortgage loans sold directly by our subsidiaries to private-label purchasers who placed the loans into securitizations supported by bond insurance ("Insured Securitizations"), approximately $48 \%$ of the original principal balance was covered by bond insurance. Further, approximately $\$ 16$ billion original principal balance was placed in securitizations as to which the monoline bond insurers have made repurchase-related requests or loan file requests to one of our subsidiaries ("Active Insured Securitizations") and the remaining approximately $\$ 4$ billion original principal balance was placed in securitizations as to which the monoline bond insurers have not made repurchase-related requests or loan file requests to one of our subsidiaries ("Inactive Insured Securitizations"). Insured Securitizations often allow the monoline bond insurer to act independently of the investors. Bond insurers typically have indemnity agreements directly with both the mortgage originators and the securitizers, and they often have super-majority rights within the trust documentation that allow them to direct trustees to pursue mortgage repurchase-related requests without coordination with other investors.

Because we do not service most of the loans our subsidiaries sold to others, we do not have complete information about the current ownership of a portion of the $\$ 80$ billion in original principal balance of mortgage loans not sold directly to GSEs or placed in Insured Securitizations. We have determined based on information obtained from third-party databases that about $\$ 48$ billion original principal balance of these mortgage loans was placed in private-label publicly issued securitizations not supported by bond insurance ("Uninsured Securitizations"). An additional approximately $\$ 22$ billion original principal balance of mortgage loans were initially sold to private investors as whole loans. Various known and unknown investors purchased the remaining \$10 billion original principal balance of mortgage loans.

With respect to the $\$ 111$ billion in original principal balance of mortgage loans originated and sold to others between 2005 and 2008, we estimate that approximately $\$ 15$ billion in unpaid principal balance remains outstanding as of June 30 , 2017, of which approximately $\$ 2$ billion in unpaid principal balance is at least 90 days delinquent. Approximately $\$ 23$ billion in losses have been realized by third parties. Because we do not service most of the loans we sold to others, we do not have complete information about the underlying credit performance levels for some of these mortgage loans. These amounts reflect our best estimates, including extrapolations of underlying credit performance where necessary. These estimates are dependent on the availability of performance data.

The subsidiaries had open repurchase-related requests with regard to approximately $\$ 652$ million original principal balance of mortgage loans as of June 30, 2017, a decrease of \$717 million from \$1.4 billion as of December 31, 2016.

## CAPITAL ONE FINANCIAL CORPORATION NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

The substantial majority of remaining repurchase requests are related to ongoing litigation. The repurchase-related requests reflect the original principal balance amounts of the mortgage loans at issue and do not correspond to the losses our subsidiary would incur upon the repurchase of these loans.

Total repurchase-related requests include all timely requests ever received by our subsidiaries where the requesting party has not formally rescinded the repurchase-related requests or our subsidiary has not agreed to either repurchase the loan at issue or make the requesting party whole with respect to its losses. We have received relatively few repurchase-related requests subsequent to the New York's highest court ruling in 2015 that the statute of limitations for repurchase claims begins when the relevant representations and warranties were made, as opposed to some later date during the life of the loan. Additionally, we have received relatively few repurchase-related demands for vintages after 2007, mostly because GreenPoint ceased originating mortgages in August 2007.

We established reserves for the $\$ 11$ billion original principal balance of GSE loans, based on open claims and historic repurchase rates. We have entered into and completed repurchase or settlement agreements with respect to the majority of our repurchase exposure to the GSEs.

Our reserves could also be impacted by any claims which may be brought by governmental agencies under the Financial Institutions Reform, Recovery and Enforcement Act ("FIRREA"), the False Claims Act or other federal or state statutes. For example, GreenPoint and Capital One have received requests for information and/or subpoenas from various governmental regulators and law enforcement authorities, including members of the Residential Mortgage-Backed Securities ("RMBS") Working Group, relating to the origination of loans for sale to the GSEs and to RMBS participants. We are cooperating with these regulators and other authorities in responding to such requests.

For the $\$ 16$ billion original principal balance in Active Insured Securitizations, our reserving approach is based upon the expected resolution of litigation directed by the monoline bond insurers. Accordingly, our representation and warranty reserves related to Active Insured Securitizations are litigation reserves. In establishing these litigation reserves, we consider the current and future monoline insurer losses inherent within the securitization and apply legal judgment to the developing factual and legal record to estimate the liability for each securitization. We also consider both our own past monoline settlements and publicly available industry monoline settlements in establishing these litigation reserves. Our reserves with respect to the U.S. Bank Litigation, referenced below, are related to Active Insured Securitizations. Further, to the extent we have litigation reserves with respect to indemnification risks from certain representation and warranty lawsuits brought by monoline bond insurers against third-party securitizations sponsors, where one of our subsidiaries provided some or all of the mortgage collateral within the securitization but is not a defendant in the litigation, such reserves are also contained within this category.

For the $\$ 4$ billion original principal balance of mortgage loans in Inactive Insured Securitizations and the $\$ 48$ billion original principal balance of mortgage loans in Uninsured Securitizations, we establish reserves based on an assessment of probable and estimable legal liability, if any, utilizing both our own experience and publicly available industry settlement information to estimate lifetime liability. In contrast with the bond insurers in the Insured Securitizations, investors in Uninsured Securitizations often face a number of legal and logistical hurdles before they can force a securitization trustee to pursue mortgage repurchases, including the need to coordinate with a certain percentage of investors holding the securities and to indemnify the trustee for any litigation it undertakes. Accordingly, we only reserve for such exposures when a trustee or investor with standing brings claims and it is probable we have incurred a loss. Some Uninsured Securitization investors are currently suing investment banks and securitization sponsors under federal and/or state securities laws. Although we face some indirect indemnity risks from these litigations, we generally have not established reserves with respect to these indemnity risks because we do not consider them to be both probable and reasonably estimable liabilities. In addition, to the extent we have litigation reserves with respect to indemnification risks from certain representation and warranty lawsuits brought by parties who purchased loans from our subsidiaries and subsequently resold the loans into securitizations, such reserves are also contained within this category.

For the $\$ 22$ billion original principal balance of mortgage loans sold to private investors as whole loans, we establish reserves based on open claims and historical repurchase rates.

## CAPITAL ONE FINANCIAL CORPORATION

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

The aggregate reserve for all three subsidiaries totaled $\$ 521$ million as of June 30,2017 compared to $\$ 630$ million as of December 31, 2016. The decrease was primarily due to favorable legal developments. The table below summarizes changes in our representation and warranty reserve for the three and six months ended June 30, 2017 and 2016.

Table 14.3: Changes in Representation and Warranty Reserve ${ }^{(1)}$

| (Dollars in millions) |  | onths | End | 30, |  | ths E | ded |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2017 |  | 2016 |  | 2017 |  | 2016 |  |
| Representation and warranty reserve, beginning of period | \$ | 516 | \$ | 613 | \$ | 630 | \$ | 610 |
| Provision (benefit) for mortgage representation and warranty losses: |  |  |  |  |  |  |  |  |
| Recorded in continuing operations |  | 0 |  | (1) |  | (25) |  | (2) |
| Recorded in discontinued operations |  | 6 |  | 2 |  | (61) |  | 5 |
| Total provision (benefit) for mortgage representation and warranty losses |  | 6 |  | 1 |  | (86) |  | 3 |
| Net realized recoveries (losses) |  | (1) |  | 0 |  | (23) |  | 1 |
| Representation and warranty reserve, end of period | \$ | 521 | \$ | 614 | \$ | 521 | \$ | 614 |

${ }^{(1)}$ Reported on our consolidated balance sheets as a component of other liabilities.
As part of our business planning processes, we have considered various outcomes relating to the future representation and warranty liabilities of our subsidiaries that are possible but do not rise to the level of being both probable and reasonably estimable outcomes justifying an incremental accrual under applicable accounting standards. Our current best estimate of reasonably possible future losses from representation and warranty claims beyond our reserves as of June 30, 2017 is approximately $\$ 1.3$ billion, a decrease from our $\$ 1.5$ billion estimate at December 31, 2016. The estimate as of June 30, 2017 covers all reasonably possible losses relating to representation and warranty claim activity, including those relating to the cases more specifically described below in Mortgage Repurchase Litigation.

In estimating reasonably possible future losses in excess of our current reserves, for Active Insured Securitizations, we assume loss rates on the high end of those observed in monoline settlements or court rulings. For our remaining GSE exposures, Uninsured Securitizations and whole loan exposures, our reasonably possible risk estimates assume lifetime loss rates and claims rates at the highest levels of our past experience and also consider the limited instances of observed settlements. We do not however, based on industry precedent, assume claim rates or loss rates for these risk categories will be as high as those assumed for the Active Insured Securitizations. Should the number of claims or the loss rates on these claims increase significantly, our estimate of reasonably possible risk would increase materially. We also assume that repurchase-related requests will be resolved at discounts reflecting the nature of the claims, the vintage of the underlying loans and evolving legal precedents.

Notwithstanding our ongoing attempts to estimate a reasonably possible amount of future losses beyond our current accrual levels based on current information, it is possible that actual future losses will exceed both the current accrual level and our current estimate of the amount of reasonably possible losses. Our reserve and reasonably possible loss estimates involve considerable judgment and reflect that there is still significant uncertainty regarding numerous factors that may impact the ultimate loss levels, including, but not limited to: litigation outcomes; court rulings; governmental enforcement decisions; future repurchase and indemnification claim levels; securitization trustees pursuing mortgage repurchase litigation unilaterally or in coordination with investors; investors successfully pursuing repurchase litigation independently and without the involvement of the trustee as a party; ultimate repurchase and indemnification rates; future mortgage loan performance levels; actual recoveries on the collateral; and macroeconomic conditions (including unemployment levels and housing prices). In light of the significant uncertainty as to the ultimate liability our subsidiaries may incur from these matters, an adverse outcome in one or more of these matters could be material to our results of operations or cash flows for any particular reporting period.

## CAPITAL ONE FINANCIAL CORPORATION NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

## Litigation

In accordance with the current accounting standards for loss contingencies, we establish reserves for litigation related matters that arise from the ordinary course of our business activities when it is probable that a loss associated with a claim or proceeding has been incurred and the amount of the loss can be reasonably estimated. None of the amounts we currently have recorded individually or in the aggregate are considered to be material to our financial condition. Litigation claims and proceedings of all types are subject to many uncertain factors that generally cannot be predicted with assurance. Below we provide a description of potentially material legal proceedings and claims.

For some of the matters disclosed below, we are able to determine estimates of potential future outcomes that are not probable and reasonably estimable outcomes justifying either the establishment of a reserve or an incremental reserve build, but which are reasonably possible outcomes. For other disclosed matters, such an estimate is not possible at this time. For those matters below where an estimate is possible (excluding the reasonably possible future losses relating to the Mortgage Repurchase Litigation described below, which are included within the estimate of reasonably possible representation and warranty losses discussed above), management currently estimates the reasonably possible future losses beyond our reserves as of June 30, 2017 is approximately $\$ 200$ million. Notwithstanding our attempt to estimate a reasonably possible range of loss beyond our current accrual levels for some litigation matters based on current information, it is possible that actual future losses will exceed both the current accrual level and the range of reasonably possible losses disclosed here. Given the inherent uncertainties involved in these matters, especially those involving governmental agencies, and the very large or indeterminate damages sought in some of these matters, there is significant uncertainty as to the ultimate liability we may incur from these litigation matters and an adverse outcome in one or more of these matters could be material to our results of operations or cash flows for any particular reporting period.

## Interchange Litigation

In 2005, a number of entities, each purporting to represent a class of retail merchants, filed antitrust lawsuits against MasterCard and Visa and several member banks, including our subsidiaries and us, alleging among other things, that the defendants conspired to fix the level of interchange fees. The complaints seek injunctive relief and civil monetary damages, which could be trebled. Separately, a number of large merchants have asserted similar claims against Visa and MasterCard only (together with the lawsuits described above, "Interchange Lawsuits"). In October 2005, the class and merchant Interchange Lawsuits were consolidated before the U.S. District Court for the Eastern District of New York for certain purposes, including discovery. In July 2012, the parties executed and filed with the court a Memorandum of Understanding agreeing to resolve the litigation on certain terms set forth in a settlement agreement attached to the Memorandum. The class settlement provides for, among other things, (i) payments by defendants to the class and individual plaintiffs totaling approximately $\$ 6.6$ billion; (ii) a distribution to the class merchants of an amount equal to 10 basis points of certain interchange transactions for a period of eight months; and (iii) modifications to certain Visa and MasterCard rules regarding point of sale practices. In December 2013, the district court granted final approval of the proposed class settlement, which was appealed to the Second Circuit Court of Appeals in January 2014. On June 30, 2016, the Second Circuit Court of Appeals vacated the district court's certification of the class, reversed approval of the proposed class settlement, and remanded the litigation to the district court for further proceedings, ruling that some of the merchants that were part of the proposed class settlement were not adequately represented. Because the Second Circuit ruling remands the litigation to the district court for further proceedings, the ultimate outcome in this matter is uncertain. Several merchant plaintiffs also opted out of the class settlement before it was overturned, and some of those plaintiffs have sued MasterCard, Visa and various member banks, including Capital One. The opt-out cases are consolidated before the U.S. District Court for the Eastern District of New York for certain purposes, including discovery. Visa and MasterCard have settled a number of individual opt-out cases, requiring non-material payments from all banks, including Capital One. Separate settlement and judgment sharing agreements between Capital One, MasterCard and Visa allocate the liabilities of any judgment or settlement arising from the Interchange Lawsuits and associated opt-out cases. Visa created a litigation escrow account following its IPO of stock in 2008, which funds any settlements for its member banks, and any settlements related to MasterCard allocated losses are reflected in Capital One's reserves.

## Mortgage Repurchase Litigation

In February 2009, GreenPoint was named as a defendant in a lawsuit commenced in the New York County Supreme Court, by U.S. Bank, N. A., Syncora Guarantee Inc. and CIFG Assurance North America, Inc. ("U.S. Bank Litigation"). Plaintiffs allege, among other things, that GreenPoint breached certain representations and warranties in two contracts pursuant to which GreenPoint sold approximately 30,000 mortgage loans having an aggregate original principal balance of approximately $\$ 1.8$ billion to a purchaser that ultimately transferred most of these mortgage loans to a securitization trust. Some of the securities issued by the

## CAPITAL ONE FINANCIAL CORPORATION NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

trust were insured by Syncora and CIFG. Plaintiffs seek unspecified damages and an order compelling GreenPoint to repurchase the entire portfolio of 30,000 mortgage loans based on alleged breaches of representations and warranties relating to a limited sampling of loans in the portfolio, or, alternatively, the repurchase of specific mortgage loans to which the alleged breaches of representations and warranties relate. In March 2010, the court granted GreenPoint's motion to dismiss with respect to plaintiffs Syncora and CIFG but denied the motion with respect to U.S. Bank. GreenPoint subsequently answered the complaint with respect to U.S. Bank, denying the allegations, and filed a counterclaim against U.S. Bank alleging breach of covenant of good faith and fair dealing. In February 2012, the court denied plaintiffs' motion for leave to file an amended complaint and dismissed Syncora and CIFG from the case. Syncora and CIFG appealed their dismissal to the New York Supreme Court, Appellate Division, First Department ("First Department"), which affirmed the dismissal in April 2013. The New York Court of Appeals denied Syncora's and CIFG's motion for leave to appeal the First Department's decision in February 2014. Therefore, the case is now proceeding with U.S. Bank as the sole plaintiff.

In May, June and July 2012, the Federal Housing Finance Agency ("FHFA") (acting as conservator for Freddie Mac) filed three summonses with notice in the New York state court against GreenPoint, on behalf of the trustees for three RMBS trusts backed by loans originated by GreenPoint with an aggregate original principal balance of $\$ 3.4$ billion. In January 2013, the plaintiffs filed an amended consolidated complaint in the name of the three trusts, acting by the respective trustees, alleging breaches of contractual representations and warranties regarding compliance with GreenPoint underwriting guidelines relating to certain loans ("FHFA Litigation"). Plaintiffs seek specific performance of the repurchase obligations with respect to the loans for which they have provided notice of alleged breaches as well as all other allegedly breaching loans, rescissory damages, indemnification, costs and interest. On March 29, 2017, the trial court granted GreenPoint's motion for summary judgment and dismissed plaintiff's claims as untimely. In May 2017, the plaintiff appealed the dismissal to the Second Circuit.

As noted above in the section entitled Mortgage Representation and Warranty Liabilities, the Company's subsidiaries establish reserves with respect to representation and warranty litigation matters, where appropriate, within the Company's overall representation and warranty reserves.

## Anti-Money Laundering

Capital One is being investigated by the New York District Attorney's Office ("NYDA"), the Department of Justice and the Financial Crimes Enforcement Network ("FinCEN") of the U.S. Department of Treasury with respect to certain former check casher clients of the Commercial Banking business and Capital One's anti-money laundering ("AML") program. Capital One is cooperating with all agencies involved in the investigation.

In addition, Capital One is subject to an open consent order with the OCC dated July 10, 2015 concerning regulatory deficiencies in our AML program.

## Other Pending and Threatened Litigation

In addition, we are commonly subject to various pending and threatened legal actions relating to the conduct of our normal business activities. In the opinion of management, the ultimate aggregate liability, if any, arising out of all such other pending or threatened legal actions will not be material to our consolidated financial position or our results of operations.

## Item 3. Quantitative and Qualitative Disclosures about Market Risk

For a discussion of the quantitative and qualitative disclosures about market risk, see "MD\&A—Risk Management—Market Risk Management" and "MD\&A-Market Risk Profile."

## Item 4. Controls and Procedures

## Overview

We are required under applicable laws and regulations to maintain controls and procedures, which include disclosure controls and procedures as well as internal control over financial reporting, as further described below.

## (a) Disclosure Controls and Procedures

Disclosure controls and procedures refer to controls and other procedures designed to provide reasonable assurance that information required to be disclosed in our financial reports is recorded, processed, summarized and reported within the time periods specified by the U.S. Securities and Exchange Commission ("SEC") rules and forms and that such information is accumulated and communicated to management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding our required disclosure. In designing and evaluating our disclosure controls and procedures, we recognize that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives, and we must apply judgment in evaluating and implementing possible controls and procedures.

## Evaluation of Disclosure Controls and Procedures

As required by Rule 13a-15 of the Securities Exchange Act of 1934 ("Exchange Act"), our management, including the Chief Executive Officer and Chief Financial Officer, conducted an evaluation of the effectiveness of our disclosure controls and procedures (as that term is defined in Rules 13a-15(e) and 15d-15(e) of the Exchange Act) as of June 30, 2017, the end of the period covered by this Report on Form 10-Q. Based upon that evaluation, the Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were effective as of June 30, 2017, at a reasonable level of assurance, in recording, processing, summarizing and reporting information required to be disclosed within the time periods specified by the SEC rules and forms.

## (b) Changes in Internal Control Over Financial Reporting

We regularly review our disclosure controls and procedures and make changes intended to ensure the quality of our financial reporting. There were no changes in internal control over financial reporting that occurred in the second quarter of 2017 that materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

## PART II-OTHER INFORMATION

## Item 1. Legal Proceedings

The information required by Item 103 of Regulation S-K is included in "Note 14-Commitments, Contingencies, Guarantees and Others."

## Item 1A. Risk Factors

We are not aware of any material changes from the risk factors set forth under "Part I—Item 1A. Risk Factors" in our 2016 Form 10-K.

## Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

The following table presents information related to repurchases of shares of our common stock for each calendar month in the second quarter of 2017.
(Dollars in millions, except per share information)

[^42]
## Item 3. Defaults Upon Senior Securities

None.

## Item 4. Mine Safety Disclosures

Not applicable.

## Item 5. Other Information

None.

## Item 6. Exhibits

An index to exhibits has been filed as part of this Report and is incorporated herein by reference.

## SIGNATURES

Pursuant to the requirements of Section 13 of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

## CAPITAL ONE FINANCIAL CORPORATION

Date: July 28, 2017
By: /s/ R. SCOTT BLACKLEY
R. Scott Blackley

Chief Financial Officer

# EXHIBIT INDEX <br> CAPITAL ONE FINANCIAL CORPORATION QUARTERLY REPORT ON FORM 10-Q DATED JUNE 30, 2017 <br> Commission File No. 1-13300 

The following exhibits are incorporated by reference or filed herewith. References to the "2003 Form 10-K" are to the Company's Annual Report on Form 10-K for the year ended December 31, 2003, filed on March 5, 2004.

| Exhibit No. | Description |
| :---: | :---: |
| 3.1 | Restated Certificate of Incorporation of Capital One Financial Corporation (as restated April 30, 2015) (incorporated by reference to Exhibit 3.1 of the Current Report on Form 8-K, filed on May 4, 2015). |
| 3.2 | Amended and Restated Bylaws of Capital One Financial Corporation, dated October 5, 2015 (incorporated by reference to Exhibit 3.1 of the Current Report on Form 8-K, filed on October 5, 2015). |
| 3.3.1 | Certificate of Designations of Fixed Rate Non-Cumulative Perpetual Preferred Stock, Series B, dated August 16, 2012 (incorporated by reference to Exhibit 3.1 of the Current Report on Form 8-K, filed on August 20, 2012). |
| 3.3.2 | Certificate of Designations of Fixed Rate Non-Cumulative Perpetual Preferred Stock, Series C, dated June 11, 2014 (incorporated by reference to Exhibit 3.1 of the Current Report on Form 8-K, filed June 12, 2014). |
| 3.3.3 | Certificate of Designations of Fixed Rate Non-Cumulative Perpetual Preferred Stock, Series D, dated October 29, 2014 (incorporated by reference to Exhibit 3.1 of the Current Report on Form 8-K, filed October 31, 2014). |
| 3.3.4 | Certificate of Designations of Fixed-to-Floating Rate Non-Cumulative Perpetual Preferred Stock, Series E, dated May 12, 2015 (incorporated by reference to Exhibit 3.1 of the Current Report on Form 8-K, filed May 14, 2015). |
| 3.3.5 | Certificate of Designations of Fixed Rate Non-Cumulative Perpetual Preferred Stock, Series F, dated August 20, 2015 (incorporated by reference to Exhibit 3.1 of the Current Report on Form 8-K, filed August 24, 2015). |
| 3.3.6 | Certificate of Designations of Fixed Rate Non-Cumulative Perpetual Preferred Stock, Series G, dated July 28, 2016 (incorporated by reference to Exhibit 3.1 of the Current Report on Form 8-K, filed July 29, 2016). |
| 3.3.7 | Certificate of Designations of Fixed Rate Non-Cumulative Perpetual Preferred Stock, Series H, dated November 28, 2016 (incorporated by reference to Exhibit 3.1 of the Current Report on Form 8-K, filed on November 29, 2016). |
| 4.1.1 | Specimen certificate representing the common stock of Capital One Financial Corporation (incorporated by reference to Exhibit 4.1 of the 2003 Form 10-K). |
| 4.1.2 | Warrant Agreement, dated December 3, 2009, between Capital One Financial Corporation and Computershare Trust Company, N.A. (incorporated by reference to the Exhibit 4.1 of the Form 8-A, filed on December 4, 2009). |
| 4.1.3 | Deposit Agreement, dated August 20, 2012 (incorporated by reference to Exhibit 4.1 of the Current Report on Form 8-K, filed on August 20, 2012). |
| 4.2 | Pursuant to Item 601 (b)(4)(iii)(A) of Regulation S-K, copies of instruments defining the rights of holders of long-term debt are not filed. The Company agrees to furnish a copy thereof to the SEC upon request. |
| 10.1* | Form of Restricted Stock Unit Award Agreement granted to our directors under the Second Amended and Restated 2004 Stock Incentive Plan. |
| 12.1* | Computation of Ratio of Earnings to Fixed Charges and Earnings to Combined Fixed Charges and Preferred Stock Dividends. |
| 31.1* | Certification of Richard D. Fairbank. |
| 31.2* | Certification of R. Scott Blackley. |
| 32.1* | Certification** of Richard D. Fairbank. |
| 32.2* | Certification** of R. Scott Blackley. |
| 101.INS* | XBRL Instance Document. |
| 101.SCH* | XBRL Taxonomy Extension Schema Document. |
| 101.CAL* | XBRL Taxonomy Extension Calculation Linkbase Document. |
| 101.DEF* | XBRL Taxonomy Extension Definition Linkbase Document. |
| 101.LAB* | XBRL Taxonomy Extension Label Linkbase Document. |
| 101.PRE* | XBRL Taxonomy Extension Presentation Linkbase Document. |

* Indicates a document being filed with this Form 10-Q.
** Information in this Form 10-Q furnished herewith shall not be deemed to be "filed" for the purposes of Section 18 of the 1934 Act or otherwise subject to the liabilities of that section.


[^0]:    ${ }^{(1)}$ Tangible book value per common share is a non-GAAP measure calculated based on tangible common equity divided by common shares outstanding. See "MD\&A—Table A -Reconciliation of Non-GAAP Measures and Calculation of Regulatory Capital Measures" for additional information on non-GAAP measures.
    (2) Purchase volume consists of purchase transactions, net of returns, for the period for loans both classified as held for investment and held for sale. Excludes cash advance and balance transfer transactions.
    ${ }^{(3)}$ Total net revenue margin is calculated based on annualized total net revenue for the period divided by average interest-earning assets for the period.
    ${ }^{(4)}$ Net interest margin is calculated based on annualized net interest income for the period divided by average interest-earning assets for the period.
    ${ }^{(5)}$ Return on average tangible assets is a non-GAAP measure calculated based on annualized income from continuing operations, net of tax, for the period divided by average tangible assets for the period. See "MD\&A-Table A-Reconciliation of Non-GAAP Measures and Calculation of Regulatory Capital Measures" for additional information on non-GAAP measures.
    ${ }^{(6)}$ Return on average common equity is calculated based on annualized (i) income from continuing operations, net of tax; (ii) less dividends and undistributed earnings allocated to participating securities; (iii) less preferred stock dividends, for the period, divided by average common equity. Our calculation of return on average common equity may not be comparable to similarly-titled measures reported by other companies.

[^1]:    ${ }^{(1)}$ Past due fees included in interest income totaled approximately $\$ 382$ million and $\$ 766$ million in the second quarter and first six months of 2017 , respectively, and $\$ 354$ million and $\$ 706$ million in the second quarter and first six months of 2016, respectively.
    (2) Some of our tax-related commercial investments generate tax-exempt income or tax credits. Accordingly, we make certain reclassifications within our Commercial Banking business results to present revenues and yields on a taxable-equivalent basis, calculated assuming an effective tax rate approximately equal to our federal statutory rate of $35 \%$ with offsetting reclassifications to the Other category.
    ${ }^{(3)}$ Interest income and interest expense and the calculation of average yields on interest-earning assets and average rates on interest-bearing liabilities include the impact of hedge accounting.

[^2]:    ${ }^{(1)}$ We calculate the change in interest income and interest expense separately for each item. The portion of interest income or interest expense attributable to both volume and rate is allocated proportionately when the calculation results in a positive value. When the portion of interest income or interest expense attributable to both volume and rate results in a negative value, the total amount is allocated to volume or rate, depending on which amount is positive.
    (2) Some of our tax-related commercial investments generate tax-exempt income or tax credits. Accordingly, we make certain reclassifications within our Commercial Banking business results to present revenues and yields on a taxable-equivalent basis, calculated assuming an effective tax rate approximately equal to our federal statutory rate of $35 \%$ with offsetting reclassifications to the Other category.

[^3]:    ${ }^{(1)}$ Includes securities guaranteed by Government National Mortgage Association ("Ginnie Mae") and securities issued by Federal National Mortgage Association ("Fannie Mae") and Federal Home Loan Mortgage Corporation ("Freddie Mac").
    ${ }^{(2)}$ ABS collateralized by credit card loans constituted approximately $49 \%$ and $57 \%$ of the other ABS portfolio as of June 30, 2017 and December 31, 2016, respectively, and ABS collateralized by auto dealer floor plan inventory loans and leases constituted approximately $23 \%$ of the other ABS portfolio as of both June 30, 2017 and December 31, 2016.
    ${ }^{(3)}$ Includes supranational bonds, foreign government bonds, mutual funds and equity investments.

[^4]:    ${ }^{(1)}$ We recognize billed finance charges and fee income on open-ended loans in accordance with the contractual provisions of the credit arrangements and estimate the uncollectible amount on a quarterly basis. The estimated uncollectible amount of billed finance charges and fees is reflected as a reduction in revenue and is not included in our net charge-offs. Total net revenue was reduced by $\$ 313$ million and $\$ 634$ million in the second quarter and first six months of 2017 , respectively, and by $\$ 244$ million and $\$ 472$ million in the second quarter and first six months of 2016, respectively, for the estimated uncollectible amount of billed finance charges and fees and related losses. The finance charge and fee reserve totaled $\$ 401$ million and $\$ 402$ million as of June 30 , 2017 and December 31, 2016, respectively.
    (2) Period-end loans held for investment and average loans held for investment include billed finance charges and fees, net of the estimated uncollectible amount.
    (3) Average yield on loans held for investment is calculated by dividing annualized interest income for the period by average loans held for investment during the period. Interest income excludes various allocations including funds transfer pricing that assigns certain balance sheet assets, deposits and other liabilities and their related revenue and expenses attributable to each business segment.
    ${ }^{(4)}$ Total net revenue margin is calculated by dividing annualized total net revenue for the period by average loans held for investment during the period. Interest income also includes interest income on loans held for sale.
    ${ }^{(5)}$ Purchase volume consists of purchase transactions, net of returns, for the period for loans both classified as held for investment and held for sale. Excludes cash advance and balance transfer transactions.
    ${ }^{(6)}$ Within our credit card loan portfolio, only certain loans in our international card businesses are classified as nonperforming. See "MD\&A-Nonperforming Loans and Other Nonperforming Assets" for additional information.
    (7) Allowance coverage ratio is calculated by dividing the period-end allowance for loan and lease losses by period-end loans held for investment.

[^5]:    ${ }^{(1)}$ Average consumer banking loans held for investment includes purchased credit-impaired loans ("PCI loans") of $\$ 12.8$ billion and $\$ 16.9$ billion in the second quarter of 2017 and 2016, respectively, and $\$ 13.3$ billion and $\$ 17.5$ billion in the first six months of 2017 and 2016, respectively. Period-end consumer banking loans held for investment includes PCI loans with carrying values of $\$ 12.4$ billion and $\$ 14.5$ billion as of June 30, 2017 and December 31, 2016, respectively. See "MD\&A—Glossary and Acronyms" for the definition of "PCI loans."

[^6]:    ${ }^{(1)}$ Some of our tax-related commercial investments generate tax-exempt income or tax credits. Accordingly, we make certain reclassifications within our Commercial Banking business results to present revenues and yields on a taxable-equivalent basis, calculated assuming an effective tax rate approximately equal to our federal statutory tax rate of $35 \%$ with offsetting reclassifications to the Other category.
    ${ }^{(2)}$ The provision for losses on unfunded lending commitments is included in the provision for credit losses in our consolidated statements of income and the related reserve for unfunded lending commitments is included in other liabilities on our consolidated balance sheets. Our reserve for unfunded lending commitments totaled $\$ 132$ million and $\$ 129$ million as of June 30, 2017 and December 31, 2016, respectively.
    ${ }^{(3)}$ Average commercial banking loans held for investment includes PCI loans of $\$ 548$ million and $\$ 842$ million in the second quarter of 2017 and 2016 , respectively, and $\$ 577$ million and $\$ 884$ million in the first six months of 2017 and 2016, respectively. Period-end commercial banking loans held for investment includes PCI loans with carrying values of $\$ 524$ million and $\$ 613$ million as of June 30, 2017 and December 31, 2016, respectively. See "MD\&A -Glossary and Acronyms" for the definition of "PCI loans."

[^7]:    ${ }^{(1)}$ Capital ratios are calculated based on the Basel III Standardized Approach framework, subject to applicable transition provisions, such as the inclusion of the unrealized gains and losses on securities available for sale included in accumulated other comprehensive income ("AOCI") and adjustments related to intangible assets other than goodwill. The inclusion of AOCI and the adjustments related to intangible assets are phased-in at $60 \%$ for $2016,80 \%$ for 2017 and $100 \%$ for 2018.
    (2) Ratios as of June 30, 2017 are preliminary. As we continue to validate our data, the calculations are subject to change until we file our June 30, 2017 Form FR Y-9C-Consolidated Financial Statements for Holding Companies and Call Reports.
    ${ }^{(3)}$ Common equity Tier 1 capital ratio is a regulatory capital measure calculated based on common equity Tier 1 capital divided by risk-weighted assets.
    ${ }^{(4)}$ Tier 1 capital ratio is a regulatory capital measure calculated based on Tier 1 capital divided by risk-weighted assets.
    ${ }^{(5)}$ Total capital ratio is a regulatory capital measure calculated based on total capital divided by risk-weighted assets.
    (6) Tier 1 leverage ratio is a regulatory capital measure calculated based on Tier 1 capital divided by adjusted average assets.
    ${ }^{(7)}$ Supplementary leverage ratio ("SLR") is a regulatory capital measure calculated based on Tier 1 capital divided by total leverage exposure.

[^8]:    ${ }^{(1)}$ Estimated common equity Tier 1 capital, risk-weighted assets, and common equity Tier 1 capital ratio under the fully phased-in Basel III Standardized Approach are non-GAAP financial measures.
    ${ }^{(2)}$ Assumes adjustments are fully phased-in.

[^9]:    ${ }^{(1)}$ Industry categories are based on our interpretation of the North American Industry Classification System codes as they pertain to each individual loan.
    (2) In addition to loans outstanding, we also have unfunded lending commitments of approximately $\$ 3.1$ billion and $\$ 2.9$ billion to oil and gas companies as of June 30,2017 and December 31, 2016, respectively. For information on our total unfunded lending commitments see "Note 14 -Commitments, Contingencies, Guarantees and Others."
    ${ }^{(3)}$ Includes our taxi medallion lending portfolio among other portfolios.

[^10]:    ${ }^{(1)}$ Domestic card credit scores generally represent FICO scores. These scores are obtained from one of the major credit bureaus at origination and are refreshed monthly thereafter. We approximate non-FICO credit scores to comparable FICO scores for consistency purposes. Balances for which no credit score is available or the credit score is invalid are included in the 660 or below category.
    ${ }^{(2)}$ Auto credit scores generally represent average FICO scores obtained from three credit bureaus at the time of application and are not refreshed thereafter. Balances for which no credit score is available or the credit score is invalid are included in the 620 or below category.

[^11]:    ${ }^{(1)}$ The 30+ day performing and 30+ day delinquency rates are calculated by loan category by dividing 30+ day delinquent loans as of the end of the period by period-end loans held for investment for the specified loan category, including PCI loans as applicable.
    (2) Excluding the impact of PCI loans, the 30+ day performing delinquency rate for our home loan and total consumer banking portfolios was $0.38 \%$ and $4.54 \%$, respectively, as of June 30, 2017, and $0.59 \%$ and $5.12 \%$, respectively, as of December 31, 2016. Excluding the impact of PCI loans, the 30+ day delinquency rate for our home loan and total consumer banking portfolios was $2.34 \%$ and $5.18 \%$, respectively, as of June 30,2017 , and $2.86 \%$ and $5.82 \%$, respectively, as of December 31, 2016.

[^12]:    ${ }^{(1)}$ Delinquency rates are calculated by dividing 90+ day delinquent loans accruing interest by period-end loans held for investment, including PCI loans, for the specified loan category.

[^13]:    ${ }^{(1)}$ We recognized interest income for loans classified as nonperforming of $\$ 15$ million and $\$ 14$ million in the first six months of 2017 and 2016 , respectively. Interest income foregone related to nonperforming loans was $\$ 34$ million and $\$ 36$ million in the first six months of 2017 and 2016, respectively. Foregone interest income represents the amount of interest income that would have been recorded during the period for nonperforming loans as of the end of the period had the loans performed according to their contractual terms.
    (2) Excluding the impact of PCI loans, the nonperforming loan rates for our home loan and total consumer banking portfolios were $3.50 \%$ and $0.90 \%$, respectively, as of June 30, 2017, compared to $3.81 \%$ and $0.90 \%$, respectively, as of December 31, 2016.
    (3) Excluding the impact of domestic credit card loans, nonperforming loans as a percentage of total loans held for investment was $0.85 \%$ and $1.08 \%$ as of June 30, 2017 and December 31, 2016, respectively.
    (4) The denominator used in calculating the nonperforming asset ratios consists of total loans held for investment and total other nonperforming assets.
    ${ }^{(5)}$ Includes the net realizable value of certain partially charged off auto loans and repossessed assets obtained in satisfaction of auto loans.

[^14]:    ${ }^{(1)}$ Net charge-off(recovery) rates are calculated by dividing annualized net charge-offs by average loans held for investment for the period for each loan category.
    ${ }^{(2)}$ In the second quarter of 2017, we implemented changes in accounting estimate impacting our charge-off practices for the treatment of certain loans within our consumer banking loan portfolio. The Auto net charge-offs amount includes approximately $\$ 48$ million associated with implementing these changes, with an impact to the net charge-off rate of 38 basis points and 19 basis points for the three and six months ended June 30, 2017, respectively. Excluding this impact, the Auto net charge-off rate in those periods would have been $1.32 \%$ and $1.48 \%$, respectively. The impact to the Consumer Banking net charge-off rate was 26 basis points and 13 basis points for the three and six months ended June 30, 2017, respectively. Excluding this impact, the Consumer Banking net charge-off rate in those periods would have been $0.99 \%$ and $1.09 \%$, respectively. See "Note 1 -Summary of Significant Accounting Policies" in this Report for additional information.
    ${ }^{(3)}$ Excluding the impact of PCI loans, the net charge-off rates for our home loan and total consumer banking portfolios were $0.10 \%$ and $1.50 \%$, respectively, for the three months ended June 30, 2017, compared to $0.31 \%$ and $1.09 \%$, respectively, for the three months ended June 30,2016 ; and $0.09 \%$ and $1.48 \%$, respectively, for the six months ended June 30, 2017, compared to $0.24 \%$ and $1.24 \%$, respectively, for the six months ended June 30, 2016 .

[^15]:    (1) Primarily consists of the legacy loan portfolio of our discontinued GreenPoint mortgage operations
    (2) Represents foreign currency translation adjustments and the net impact of loan transfers and sales.

[^16]:    ${ }^{(1)}$ Includes non-credit-related OTTI that is recorded in accumulated other comprehensive income ("AOCI") of $\$ 4$ million and $\$ 9$ million as of June 30 , 2017 and December 31, 2016, respectively. Substantially all of this amount is related to non-agency RMBS.
    ${ }^{(2)}$ Includes Government National Mortgage Association ("Ginnie Mae") guaranteed securities, Federal National Mortgage Association ("Fannie Mae") and Federal Home Loan Mortgage Corporation ("Freddie Mac") issued securities.
    (3) ABS collateralized by credit card loans constituted approximately $49 \%$ and $57 \%$ of the other ABS portfolio as of June 30, 2017 and December 31,2016 , respectively, and ABS collateralized by auto dealer floor plan inventory loans and leases constituted approximately $23 \%$ of the other ABS portfolio as of both June 30, 2017 and December 31, 2016.
    (4) Includes supranational bonds, foreign government bonds, mutual funds and equity investments.

[^17]:    ${ }^{(1)}$ Certain investment securities were transferred from the available for sale category to the held to maturity category in 2013. This amount represents the unrealized holding gain or loss at the date of transfer, net of any subsequent accretion. Any bonds purchased into the securities held to maturity portfolio rather than transferred, will not have unrealized losses recognized in AOCI.

[^18]:    ${ }^{(1)}$ Nonperforming loans generally include loans that have been placed on nonaccrual status. PCI loans are excluded from loans reported as 90 days or more past due and accruing interest as well as nonperforming loans. See "Note 1—Summary of Significant Accounting Policies" in our 2016 Form 10-K for additional information on our policies for nonperforming loans.

[^19]:    ${ }^{(1)}$ Percentages by geographic region are calculated based on period-end amounts.

[^20]:    ${ }^{(1)}$ The PCI loan balances with an origination date in the years subsequent to 2012 represent refinancing of previously acquired home loans.
    (2) Percentages within each risk category are calculated based on period-end amounts.
    ${ }^{\text {(3) }}$ Modified loans are reported in the origination year of the initial borrowing.
    ${ }^{(4)}$ States listed represent those that have the highest individual concentration of home loans.

[^21]:    ${ }^{(1)}$ Percentages calculated based on total loans held for investment in each respective loan category using period-end amounts.
    (2) Geographic concentration is generally determined by the location of the borrower's business or the location of the collateral associated with the loan. Northeast consists of CT, MA, ME, NH, NJ, NY, PA and VT. Mid-Atlantic consists of DC, DE, MD, VA and WV. South consists of AL, AR, FL, GA, KY, LA, MO, MS, NC, SC, TN and TX.
    (3) Criticized exposures correspond to the "Special Mention," "Substandard" and "Doubtful" asset categories defined by banking regulatory authorities.

[^22]:    ${ }^{(1)}$ Represents the recorded investment of total loans modified in TDRs at the end of the quarter in which they were modified.
    (2) We present the modification types utilized most prevalently across our loan portfolios. As not every modification type is included in the table above, the total percentage of TDR activity may not add up to $100 \%$. Some loans may receive more than one type of concession as part of the modification.
    (3) Represents percentage of loans modified in TDRs during the period that were granted a reduced interest rate.
    (4) Due to multiple concessions granted to some troubled borrowers, percentages may total more than $100 \%$ for certain loan types.
    (5) Represents weighted average interest rate reduction for those loans that received an interest rate concession.
    ${ }^{(6)}$ Represents percentage of loans modified in TDRs during the period that were granted a maturity date extension.
    (7) Represents weighted average change in maturity date for those loans that received a maturity date extension.
    ${ }^{(8)}$ Represents percentage of loans modified in TDRs during the period that were granted forgiveness or forbearance of a portion of their balance.
    ${ }^{(9)}$ Represents the gross balance forgiven. For loans modified in bankruptcy, the gross balance reduction represents collateral value write-downs associated with the discharge of the borrower's obligations.

[^23]:    ${ }^{(1)}$ In the U.K., regulators require the acceptance of payment plan proposals in which the modified payments may be less than the contractual minimum amount. As a result, loans entering long-term TDR payment programs in the U.K. typically continue to age and ultimately charge off even when fully in compliance with the TDR program terms.

[^24]:    ${ }^{(1)}$ Represents changes in accretable yield for those loans in pools that are driven primarily by credit performance.
    ${ }^{(2)}$ Represents changes in accretable yield for those loans in pools that are driven primarily by actual prepayments and changes in estimated prepayments.

[^25]:    ${ }^{(1)}$ Primarily consists of the legacy loan portfolio of our discontinued GreenPoint mortgage operations.
    ${ }^{(2)}$ Represents foreign currency translation adjustments and the net impact of loan transfers and sales.

[^26]:    ${ }^{(1)}$ The component of the allowance for loan and lease losses for credit card and other consumer loans that we collectively evaluate for impairment is based on a statistical calculation supplemented by management judgment and interpretation. The component of the allowance for loan and lease losses for commercial loans that we collectively evaluate for impairment is based on historical loss experience for loans with similar characteristics and consideration of credit quality supplemented by management judgment and interpretation.
    ${ }^{(2)}$ The asset-specific component of the allowance for loan and lease losses for smaller-balance impaired loans is calculated on a pool basis using historical loss experience for the respective class of assets. The asset-specific component of the allowance for loan and lease losses for larger-balance commercial loans is individually calculated for each loan.
    ${ }^{(3)}$ The PCI loans component of the allowance for loan and lease losses is accounted for based on expected cash flows. See "Note 1—Summary of Significant Accounting Policies" in our 2016 Form 10-K for details on these loans.
    ${ }^{(4)}$ Allowance coverage ratio is calculated by dividing the period-end allowance for loan and lease losses by period-end loans held for investment within the specified loan category.

[^27]:    ${ }^{(1)}$ Represents the carrying amount of assets and liabilities owned by the VIE, which includes the seller's interest and repurchased notes held by other related parties.
    ${ }^{(2)}$ The carrying amount of assets of unconsolidated securitization-related VIEs consists of retained interests associated with the securitization of option-adjustable rate mortgage ("option-ARM") loans and letters of credit related to manufactured housing securitizations. These are reported on our consolidated balance sheets within other assets. The carrying amount of liabilities of unconsolidated securitization-related VIEs is comprised of obligations on certain swap agreements associated with the securitizations of manufactured housing loans and other obligations. These are reported on our consolidated balance sheets within other liabilities.
    (3) In certain investment structures, we consolidate a VIE which in turn holds as its primary asset an investment in an unconsolidated VIE. In these instances, we disclose the carrying amount of assets and liabilities on our consolidated balance sheets in the unconsolidated VIEs to avoid duplicating our exposure, as the unconsolidated VIEs are generally the operating entities generating the exposure. The carrying amount of assets and liabilities included in the unconsolidated VIE columns above related to these investment structures were $\$ 2.1$ billion of assets and $\$ 817$ million of liabilities as of June 30 , 2017 and $\$ 1.9$ billion of assets and $\$ 618$ million of liabilities as of December 31, 2016.

[^28]:    ${ }^{(1)}$ Certain intangible assets that were fully amortized in prior periods were removed from our consolidated balance sheets.
    ${ }^{(2)}$ Primarily consists of intangibles for sponsorship relationships, brokerage relationship intangibles, partnership and other contract intangibles and trade name intangibles.
    ${ }^{(3)}$ Represents MSRs related to our Consumer Banking business that are carried at fair value on our consolidated balance sheets.
    (4) Represents MSRs related to our Commercial Banking business that are subsequently accounted for under the amortization method and periodically assessed for impairment.

[^29]:    ${ }^{(1)}$ Represent foreign currency translation adjustments.

[^30]:    ${ }^{(1)}$ Carrying value includes fair value hedge accounting adjustments.

[^31]:    ${ }^{(1)}$ Derivative assets and liabilities presented above exclude valuation adjustments related to non-performance risk. As of June 30, 2017 and December 31, 2016, the cumulative CVA balances were $\$ 4$ million and $\$ 6$ million, respectively, and the cumulative DVA balances were less than $\$ 1$ million as of both June 30 , 2017 and December 31, 2016.
    (2) Includes interest rate swaps and to-be-announced contracts.
    (3) Includes mortgage-related derivatives.
    (4) Represents balance sheet netting of derivative assets and liabilities, and related payables and receivables for cash collateral held or placed with the same counterparty. See Table 9.2 for further information.
    (5) Reflects a reduction of derivative assets of $\$ 58$ million and a reduction of derivative liabilities of $\$ 348$ million on our consolidated balance sheets as of June 30,2017 as a result of adoption of the CME variation margin rule change in the second quarter of 2017.

[^32]:    ${ }^{(1)}$ Amounts are recorded in our consolidated statements of income in other non-interest income.

[^33]:    ${ }^{(1)}$ Except for Series E, ownership is held in the form of depositary shares, each representing a $1 / 40$ th interest in a share of fixed-rate non-cumulative perpetual preferred stock.

[^34]:    ${ }^{(1)}$ The amortization of unrealized holding gains or losses reported in AOCI for securities held to maturity will be offset by the amortization of premium or discount created from the transfer of securities from available for sale to held to maturity, which occurred at fair value. These unrealized gains or losses will be amortized over the remaining life of the security with no expected impact on future net income.
    ${ }^{(2)}$ Includes the impact from hedging instruments designated as net investment hedges.

[^35]:    ${ }^{(1)}$ The amortization of unrealized holding gains or losses reported in AOCI for securities held to maturity will be offset by the amortization of premium or discount created from the transfer of securities from available for sale to held to maturity, which occurred at fair value. These unrealized gains or losses will be amortized over the remaining life of the security with no expected impact on future net income.

[^36]:    ${ }^{(1)}$ Includes the impact from hedging instruments designated as net investment hedges.

[^37]:    ${ }^{(1)}$ Dividends and undistributed earnings allocated to participating securities includes undistributed earnings allocated to participating securities using the twoclass method under the accounting guidance for computing earnings per share.
    ${ }^{(2)}$ Represents warrants issued as part of the U.S. Department of Treasury's Troubled Assets Relief Program ("TARP"). There were 1.4 million and 4.1 million warrants to purchase common stock outstanding as of June 30, 2017 and 2016, respectively.
    ${ }^{(3)}$ Excluded from the computation of diluted earnings per share were 310,000 shares related to options with an exercise price of $\$ 82.08$ to $\$ 86.34$, and 266,000 shares related to options with exercise prices ranging from $\$ 82.08$ to $\$ 86.34$ for the three and six months ended June 30, 2017, respectively, and 2.1 million shares related to options with exercise prices ranging from $\$ 63.73$ to $\$ 82.62$, and 2.5 million shares related to options with exercise prices ranging from $\$ 63.73$ to $\$ 88.81$ for the three and six months ended June 30 , 2016, respectively, because their inclusion would be anti-dilutive.

[^38]:    ${ }^{(1)}$ Gains (losses) related to Level 3 Consumer MSRs, derivative assets and derivative liabilities, and retained interests in securitizations are reported in other non-interest income, which is a component of non-interest income, in our consolidated statements of income.
    ${ }^{(2)}$ During the three and six months ended June 30, 2017 and 2016, the transfers into Level 3 were primarily driven by the usage of unobservable assumptions in the pricing of these securities as evidenced by wider pricing variations among pricing vendors. Transfers out of Level 3 were primarily driven by the usage of assumptions corroborated by market observable information as evidenced by tighter pricing among multiple pricing sources.
    ${ }^{(3)}$ The amount presented for unrealized gains (losses) for assets still held as of the reporting date primarily represents impairments of securities available for sale, accretion on certain fixed maturity securities, changes in fair value of derivative instruments and mortgage servicing rights transactions.
    ${ }^{(4)}$ All Level 3 derivative assets and liabilities are presented on a gross basis and are not reduced by the impact of legally enforceable master netting agreements that allow us to net positive and negative positions and the related payables and receivables for cash collateral held or placed with the same counterparty.

[^39]:    ${ }^{(1)}$ All Level 3 derivative assets and liabilities are presented on a gross basis and are not reduced by the impact of legally enforceable master netting agreements that allow us to net positive and negative positions and the related payables and receivables for cash collateral held or placed with the same counterparty.
    (2) Due to the nature of the various mortgage securitization structures in which we have retained interests, it is not meaningful to present a consolidated weighted average for the significant unobservable inputs.

[^40]:    ${ }^{(1)}$ Other investments includes FHLB, Federal Reserve stock and cost method investments. These investments are included in other assets on our consolidated balance sheets.

[^41]:    ${ }^{(1)}$ Some of our tax-related commercial investments generate tax-exempt income or tax credits. Accordingly, we make certain reclassifications within our Commercial Banking business results to present revenues and yields on a taxable-equivalent basis, calculated assuming an effective tax rate approximately equal to our federal statutory tax rate of $35 \%$ with offsetting reclassifications to the Other category.

[^42]:    ${ }^{(1)}$ There were no repurchases of common stock under the 2016 Stock Repurchase Program. There were 13,966 shares withheld in May to cover taxes on restricted stock awards whose restrictions have lapsed.
    ${ }^{(2)}$ Amounts exclude commission costs.

