



## **Basel Pillar 3 Disclosures**

September 30, 2018

## TABLE OF CONTENTS

	<b>Page</b>
Introduction .....	1
Capital Management .....	3
Regulatory Capital and Capital Adequacy .....	3
Risk-Weighted Asset Measurement .....	5
Capital Ratios under Basel III Standardized Approach .....	6
Supplementary Leverage Ratio .....	8
Risk Management .....	10
Credit Risk .....	11
Counterparty Credit Risk .....	13
Credit Risk Mitigation .....	14
Securitization .....	15
Equities .....	17
Market Risk .....	18
Interest Rate Risk .....	21
Glossary and Acronyms .....	22
Disclosure Map .....	24

---

## INTRODUCTION

---

### Overview

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 September 30, 2018, 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 “Glossary and Acronyms” section of this Pillar 3 Disclosure (this “Report”).

### Regulatory Framework

Bank holding companies (“BHCs”) and national banks are subject to capital adequacy standards adopted by the Board of Governors of the Federal Reserve System (“Federal Reserve”), the Office of the Comptroller of the Currency (“OCC”) and the Federal Deposit Insurance Corporation (“FDIC”) (collectively, the “Federal Banking Agencies”). The capital adequacy standards set forth minimum risk-based and leverage capital requirements that are based on quantitative and qualitative measures of assets and off-balance sheet items. Moreover, as insured depository institutions, the Banks are subject to Prompt Corrective Action (“PCA”) capital regulations.

In July 2013, the Federal Banking Agencies adopted the Basel III capital framework (“Basel III Capital Rule”), which, in addition to implementing the Basel III Capital Rule, 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 (“CET1”) 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. According to the rule, parallel run must last at least four quarters, though in practice it has taken U.S. banks considerably longer to complete parallel run. The so-called Collins Amendment to the Dodd-Frank Act, as implemented in the Basel III Capital Rule, establishes a capital floor so that organizations subject to the Basel III Advanced Approaches may not hold less capital than would be required using the Basel III Standardized Approach capital calculations.

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. As of September 30, 2018, the Company and CONA are subject to the Market Risk Rule.

The Basel III Capital Rule also introduced the supplementary leverage ratio for all Advanced Approaches banking organizations with a minimum requirement of 3.0%. The supplementary leverage ratio compares Tier 1 capital to total leverage exposure, which includes all on-balance sheet assets and certain off-balance sheet exposures, including derivatives and unused commitments. Given

that we are in our Basel III Advanced Approaches parallel run, we calculate the ratio based on Tier 1 capital under the Standardized Approach. The minimum requirement for the supplementary leverage ratio became effective on January 1, 2018. As an Advanced Approaches banking organization, however, we were required to calculate and publicly disclose our supplementary leverage ratio beginning in the first quarter of 2015.

In October 2017, the Federal Banking Agencies proposed certain limited changes to the Basel III Capital Rule. There is uncertainty regarding how any of the proposed changes may impact the Basel III Standardized Approach and the Basel III Advanced Approaches. Additionally, in December 2017, the Basel Committee finalized certain modifications to the international Basel III capital standards, which would require rulemaking in the United States prior to becoming effective for United States banking organizations. There is uncertainty around which of those changes may be adopted in the United States and how those changes may impact the United States capital framework.

The Basel III Capital Rule includes requirements for quarterly public disclosures of qualitative and quantitative information regarding capital, capital adequacy and risk. These disclosures fall under the third Pillar of the Basel III capital framework (the “Pillar 3 Disclosures”), and are intended to allow market participants to assess key information about a bank's risk profile and its associated level of capital. For additional information about the capital adequacy guidelines we are subject to, see “Part I—Item 1. Business—Supervision and Regulation” and “MD&A—Capital Management” in our Annual Report on Form 10-K for the year ended December 31, 2017 (the “2017 Form 10-K”) and our Quarterly Report on Form 10-Q for the quarterly period ended September 30, 2018 (the “Q3 2018 Form 10-Q”).

### **Basis of Preparation**

This document contains Pillar 3 Disclosures as of and for the three months ended September 30, 2018, and has been prepared in accordance with the regulatory guidance prescribed by the Basel III Standardized Approach. The basis of consolidation that we use for regulatory reporting is consistent with the basis that we use for reporting under generally accepted accounting principles in the U.S. (“U.S. GAAP”) as established by the Financial Accounting Standards Board. The regulatory instructions, however, do not in all cases follow U.S. GAAP. As a result of these differences, information in this Report may not be directly comparable to our disclosures in our 2017 Form 10-K or Q3 2018 Form 10-Q.

This Report contains information that is based on our interpretations, expectations and assumptions under the Basel III Capital Rule, as well as interpretations provided by our regulators, and is subject to change based on changes to regulations and interpretations. Our most recent Pillar 3 Disclosures report is available on our website ([www.capitalone.com](http://www.capitalone.com)) under “About Us/ Investors” and it contains references to, and should be read in conjunction with our 2017 Form 10-K, Q3 2018 Form 10-Q and our Consolidated Financial Statements for Bank Holding Company (“FR Y-9C”) (also available on our website).

### **Forward-Looking Statements**

Certain statements in this disclosure are forward-looking statements, which involve a number of risks and uncertainties. We caution readers that any forward-looking information is not a guarantee of future performance and that actual results could differ materially from those contained in the forward-looking information due to a number of factors, including those listed from time to time in reports that we file with the Securities and Exchange Commission, including, but not limited to the 2017 Form 10-K and Q3 2018 Form 10-Q.

---

## CAPITAL

---

### Capital Management

The prudent management of capital is one of our highest priorities. Capital must be sufficient to support the business plans and risk profiles of our business activities and to absorb adverse shocks (both systemic and idiosyncratic). Capital is central to our continuing operations and ability to lend to creditworthy businesses and consumers amidst normal and stressed environments.

The level and composition of our capital are determined by multiple factors, including our consolidated regulatory capital requirements and our Internal Capital Adequacy Assessment Process (“ICAAP”). ICAAP includes internal stress testing and economic capital, and is a forward-looking assessment of our projected capital needs and resources, incorporating earnings, balance sheet and risk forecasts under baseline and adverse economic and market conditions. 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.

Our capital adequacy framework describes how we plan to ensure that we maintain the appropriate level and composition of our capital and remain resilient to potential uncertainties, consistent with the risk appetite and capital targets established by our Board of Directors. It includes clearly defined roles and responsibilities, a formal governance structure, and processes related to the overall implementation and oversight of our capital policy. Governance structures are designed to provide sound internal controls and to facilitate the Board of Directors' oversight and senior management's execution of the capital policy.

The Federal Reserve requires BHCs to submit a comprehensive capital plan and requests for capital actions on an annual basis, consistent with their Comprehensive Capital Analysis and Review (“CCAR”) requirements. The Federal Reserve uses the CCAR process to ensure that large BHCs have adequate capital and robust processes for managing their capital resources.

For additional information on capital management, see “MD&A—Capital Management” in our Q3 2018 Form 10-Q.

### Regulatory Capital and Capital Adequacy

Our regulatory capital structure consists of the following capital instruments:

#### *Common Stock*

Our common stock has par value of \$0.01 per share. As of September 30, 2018, we had approximately 474 million shares outstanding. For more information, see “Part I—Item 1. Financial Statements—Consolidated Balance Sheets” in our Q3 2018 Form 10-Q.

#### *Preferred Stock*

For information on our non-cumulative perpetual preferred stock, see “Note 10—Stockholders' Equity—Table 10.1: Preferred Stock Issued and Outstanding” in our Q3 2018 Form 10-Q.

#### *Unsecured Subordinated Debt*

For information on our unsecured subordinated debt, see “Note 8—Deposits and Borrowings—Table 8.1: Components of Deposits, Short-Term Borrowings and Long-Term Debt” in our Q3 2018 Form 10-Q.

The Basel III Capital Rule defines three categories of risk-based capital (CET1 capital, Tier 1 capital and Tier 2 capital) based on the capital elements' degree of permanency and capacity to absorb losses. CET1 capital primarily includes qualifying common shareholders' equity, retained earnings and accumulated other comprehensive income (“AOCI”) less certain deductions for goodwill, intangible assets, certain deferred tax assets, as well as certain other comprehensive income items. Tier 1 capital consists of CET1 capital in addition to capital instruments that qualify as Tier 1 capital such as non-cumulative perpetual preferred stock. Tier 2 capital includes qualifying allowance for credit losses and subordinated debt.

Table 1 summarizes our regulatory capital structure as of September 30, 2018.

**Table 1: Regulatory Capital Under Basel III Standardized Approach**

<i>(Dollars in millions)</i>	<b>September 30, 2018</b>
Common equity excluding AOCI . . . . .	\$ 48,154
Adjustments:	
AOCI <sup>(1)</sup> . . . . .	(1,877)
Goodwill, net of related deferred tax liabilities . . . . .	(14,345)
Intangible assets, net of related deferred tax liabilities . . . . .	(284)
Other . . . . .	817
Common equity Tier 1 capital . . . . .	32,465
Tier 1 capital instruments . . . . .	4,360
Additional Tier 1 capital adjustments . . . . .	1
Tier 1 capital . . . . .	36,826
Tier 2 capital instruments . . . . .	3,468
Qualifying allowance for loan and lease losses . . . . .	3,653
Tier 2 capital . . . . .	7,121
Total capital . . . . .	<u>\$ 43,947</u>

<sup>(1)</sup> Amounts presented are net of tax.

## Risk-Weighted Asset (“RWA”) Measurement

The Basel III Standardized Approach RWA is calculated based on the Basel III Capital Rule. Table 2 provides a distribution of our RWA by exposure categories prescribed by applicable regulations as of September 30, 2018. For a distribution of our RWA by balance sheet categories, see Schedule HC-R in our FR Y-9C as of September 30, 2018.

**Table 2: RWA by Basel Exposure Categories under Basel III Standardized Approach**

<i>(Dollars in millions)</i>	<b>September 30, 2018</b>
<b>RWA by Basel exposure categories:</b>	
Exposures to sovereign entities . . . . .	\$ —
Exposures to supranational entities . . . . .	—
Exposures to depository institutions, foreign banks and credit unions . . . . .	675
Exposures to public-sector entities . . . . .	12,559
Corporate exposures <sup>(1)</sup> . . . . .	63,472
Residential mortgage exposures . . . . .	222
Statutory multifamily mortgage exposures . . . . .	2,892
High-volatility commercial real estate loans . . . . .	975
Delinquent and past due loans . . . . .	3,982
Other loans <sup>(1)(2)</sup> . . . . .	158,493
Securitization exposures . . . . .	6,292
Equity exposures . . . . .	5,034
Other assets . . . . .	16,141
<b>RWA by balance sheet asset categories (excluding derivatives)</b> . . . . .	<b>270,737</b>
Off-balance sheet items . . . . .	19,162
Over-the-counter derivatives . . . . .	2,315
Centrally cleared derivatives . . . . .	43
Market risk . . . . .	119
<b>Total RWA before excess allowance for loan and lease losses</b> . . . . .	<b>292,376</b>
Excess allowance for loan and lease losses . . . . .	(3,682)
<b>Total RWA</b> . . . . .	<b>\$ 288,694</b>

<sup>(1)</sup> Excludes 90+ day delinquent and non-accrual loans which are reported separately as delinquent and past due loans.

<sup>(2)</sup> Includes credit card, auto and other loans that are not classified in any other exposure categories in the above table.

## Capital Ratios under Basel III Standardized Approach

The table below provides regulatory capital ratios under the Basel III Standardized Approach, the regulatory minimum capital adequacy ratios and the PCA well-capitalized level for each ratio (where applicable) as of September 30, 2018.

As of September 30, 2018, we exceeded the Federal Banking Agencies' minimum capital requirements, and each of the Banks exceeded the minimum regulatory requirements and were well capitalized under PCA requirements.

**Table 3: Capital Ratios<sup>(1)</sup>**

	September 30, 2018		
	Capital Ratio	Minimum Capital Adequacy	Well-Capitalized
<b>Capital One Financial Corp:</b>			
Common equity Tier 1 capital <sup>(2)</sup>	11.2%	4.5%	N/A
Tier 1 capital <sup>(3)</sup>	12.8	6.0	6.0%
Total capital <sup>(4)</sup>	15.2	8.0	10.0
Tier 1 leverage <sup>(5)</sup>	10.6	4.0	N/A
Supplementary leverage <sup>(6)</sup>	9.0	3.0	N/A
<b>COBNA:</b>			
Common equity Tier 1 capital <sup>(2)</sup>	15.6	4.5	6.5
Tier 1 capital <sup>(3)</sup>	15.6	6.0	8.0
Total capital <sup>(4)</sup>	17.9	8.0	10.0
Tier 1 leverage <sup>(5)</sup>	14.0	4.0	5.0
Supplementary leverage <sup>(6)</sup>	11.5	3.0	N/A
<b>CONA:</b>			
Common equity Tier 1 capital <sup>(2)</sup>	13.0	4.5	6.5
Tier 1 capital <sup>(3)</sup>	13.0	6.0	8.0
Total capital <sup>(4)</sup>	14.2	8.0	10.0
Tier 1 leverage <sup>(5)</sup>	9.1	4.0	5.0
Supplementary leverage <sup>(6)</sup>	8.0	3.0	N/A

<sup>(1)</sup> Capital ratios are calculated based on the Basel III Standardized Approach framework. Capital requirements that are not applicable are denoted by "N/A."

<sup>(2)</sup> Common equity Tier 1 capital ratio is a regulatory capital measure under the Basel III Capital Rule calculated based on CET1 capital divided by risk-weighted assets.

<sup>(3)</sup> Tier 1 capital ratio is a regulatory capital measure calculated based on Tier 1 capital divided by risk-weighted assets.

<sup>(4)</sup> Total capital ratio is a regulatory capital measure calculated based on total capital divided by risk-weighted assets.

<sup>(5)</sup> Tier 1 leverage ratio is a regulatory capital measure calculated based on Tier 1 capital divided by adjusted average assets.

<sup>(6)</sup> Supplementary leverage ratio is a regulatory capital measure calculated based on Tier 1 capital divided by total leverage exposure.

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 RWA under the Basel III Standardized Approach and the Basel III Advanced Approaches. 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. For a further discussion of the capital ratios and capital adequacy guidelines, see "MD&A—Capital Management" in our Q3 2018 Form 10-Q.



### ***Capital Buffer***

The Basel III Capital Rule requires banks to maintain a capital conservation buffer, composed of CET1 capital, of 2.5% above the regulatory minimum ratios. The capital conservation buffer requirement 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 1.875% in 2018.

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 CET1 capital and set at the discretion of the Federal Banking Agencies. As of September 30, 2018, 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 2018, the minimum capital requirement plus capital conservation buffer and countercyclical capital buffer for CET1 capital, Tier 1 capital and total capital ratios were 6.375%, 7.875% and 9.875%, respectively, for the Company and the Banks. A CET1 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 September 30, 2018, the Company and each of the Banks were 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.

## Supplementary Leverage Ratio

Table 4 provides the supplementary leverage ratio, Tier 1 capital and total leverage exposure and related components under the Basel III Standardized Approach as of September 30, 2018. The minimum requirement for the supplementary leverage ratio is 3.0%.

**Table 4: Supplementary Leverage Ratio**

<i>(Dollars in millions, except as noted)</i>	<b>September 30, 2018</b>
<b>Summary Comparison of Accounting Assets and Total Leverage Exposure</b>	
Total average consolidated assets . . . . .	\$ 361,968
Adjustment for derivative exposures . . . . .	5,663
Adjustment for repo-style exposures . . . . .	8
Adjustment for off-balance sheet exposures . . . . .	55,239
Amounts deducted from Tier 1 capital . . . . .	(14,640)
Total leverage exposure <sup>(1)</sup> . . . . .	<u>\$ 408,238</u>
<b>Supplementary Leverage Ratio</b>	
Average on-balance sheet assets <sup>(2)</sup> . . . . .	\$ 360,274
Amounts deducted from Tier 1 capital . . . . .	(14,640)
Total on-balance sheet exposures . . . . .	345,634
Replacement cost for derivative exposures <sup>(3)</sup> . . . . .	1,293
Potential future exposure for derivative exposures . . . . .	3,297
Notional principal amount of sold credit protection . . . . .	2,366
Total derivative exposures . . . . .	6,956
Repo-style transactions exposure . . . . .	409
Average off-balance sheet exposures at gross notional amounts . . . . .	377,698
Adjustments for conversion to credit equivalent amounts . . . . .	(322,459)
Total other off-balance sheet exposures . . . . .	55,239
Total leverage exposure <sup>(1)</sup> . . . . .	<u>\$ 408,238</u>
Tier 1 capital under the Basel III Standardized Approach . . . . .	\$ 36,826
Supplementary leverage ratio . . . . .	9.0%

<sup>(1)</sup> Reflects on- and off-balance sheet amounts based on the Basel III Capital Rule for supplementary leverage ratio.

<sup>(2)</sup> Excludes on-balance sheet assets for derivative and repurchase exposures and includes cash collateral received in derivative transactions.

<sup>(3)</sup> Net of cash variation margin.

As of September 30, 2018, the supplementary leverage ratio, Tier 1 capital and total leverage exposure was 11.5%, \$16.2 billion and \$140.7 billion, respectively for COBNA; and was 8.0%, \$25.0 billion and \$312.3 billion, respectively for CONA.

### ***Funds and Capital Transfer Restrictions***

Regulatory restrictions exist that limit the ability of the Banks to transfer funds to the Company. As of September 30, 2018, funds available for dividend payments from COBNA and CONA were \$3.0 billion and \$1.7 billion, respectively. Certain provisions in our borrowing agreements or the borrowing agreements of our subsidiaries may limit our subsidiaries' ability to pay dividends to us or our ability to pay dividends to our stockholders. For additional information on regulatory restrictions on transfer of funds or capital distributions between the Banks and the Company, see "MD&A—Capital Management—Dividend Policy and Stock Purchases" in our Q3 2018 Form 10-Q.

---

## 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 Chief Executive Officer (“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 2017 Form 10-K.

### Risk Appetite

Risk appetite defines the parameters for taking and accepting risks and are used by management and our Board of Directors to make business decisions. Risk appetite refers to the level of risk our business is willing to take in pursuit of our corporate business objectives. The Board of Directors approves our risk appetite including risk appetite statements and associated metrics, Board Notification Thresholds, and Board Limits for each of our eight risk categories. We communicate risk appetite statements, limits and thresholds to the appropriate levels in the organization and monitor adherence. While first line executives manage risk on a day-to-day basis, the Chief Risk Officer provides effective challenge and independent oversight to ensure that risks are within the appetite and specific limits established by the Board of Directors. The Chief Risk Officer regularly reports to the Board of Directors on the nature and level of risk across all eight risk categories. In addition to his broader management responsibilities, our CEO is

responsible for developing the strategy and mission of our organization, determining and leading our culture, and reviewing and providing input into our risk appetite.

For further information on our risk framework and structure and organization of the Risk Management function, see “MD&A—Risk Management” in our 2017 Form 10-K and Q3 2018 Form 10-Q.

---

## **CREDIT RISK**

---

### **Credit Risk Management**

Credit risk is the risk to current or projected financial condition and resilience arising from an obligor’s failure to meet the terms of any contract with the Company or otherwise perform as agreed. We try to ensure our credit portfolio is resilient to economic downturns. Our most important tool in this endeavor is sound underwriting. In unsecured consumer loan underwriting, we generally assume that loans will be subject to an environment in which losses are higher than those prevailing at the time of underwriting. In commercial underwriting, we generally require strong cash flow, collateral, covenants and guarantees. In addition to sound underwriting, we continually monitor our portfolio and take steps to collect or work out distressed loans. For further information on our loan underwriting standards, see “MD&A—Credit Risk Profile—Primary Loan Products” in our 2017 Form 10-K.

The Chief Risk Officer, in conjunction with the Consumer and Commercial Chief Credit Officers, is responsible for establishing credit risk policies and procedures, including underwriting and hold guidelines and credit approval authority, and monitoring credit exposure and performance of our lending-related transactions. These responsibilities are fulfilled by the Chief Consumer Credit Officer and the Chief Commercial Credit Officer who are responsible for evaluating the risk implications of credit strategy and for oversight of credit for both the existing portfolio and any new credit investments. The Chief Consumer Credit Officer and the Chief Commercial Credit Officer have formal approval authority for various types and levels of credit decisions, including individual commercial loan transactions. Division Presidents within each segment are responsible for managing the credit risk within their division and maintaining processes to control credit risk and comply with credit policies and guidelines. In addition, the Chief Risk Officer, in conjunction with the Chief Counterparty Credit Risk Officer, establishes policies, delegates approval authority and monitors performance for non-loan credit exposure entered into with financial counterparties or through the purchase of credit sensitive securities in our investment securities portfolio.

Our credit policies establish standards in five areas: customer selection, underwriting, monitoring, remediation and portfolio management. The standards in each area provide a framework comprising specific objectives and control processes. These standards are supported by detailed policies and procedures for each component of the credit process. Starting with customer selection, our goal is to generally provide credit on terms that generate above hurdle returns. We use a number of quantitative and qualitative factors to manage credit risk, including setting credit risk limits and guidelines for each of our lines of business. We monitor performance and forecasts relative to these guidelines and report results and any required mitigating actions to appropriate senior management committees and our Board of Directors.

### **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. Our primary loan products include credit card loans, auto loans and commercial loans which we generate through our Credit Card, Consumer Banking and Commercial Banking businesses. For a more detailed description of the composition of our loan portfolio, including an industry classification of our commercial loans and for information on our unfunded lending commitments related to our loan portfolio, see “MD&A—Credit Risk Profile” and “Note 4—Loans” in our Q3 2018 Form 10-Q.

We market our products primarily in the U.S. as well as in the U.K. and Canada, and actively manage our risk from concentration within certain geographic areas. For a detailed description of the geographic distribution of our loan portfolio, see “Note 4—Loans” in our Q3 2018 Form 10-Q. For our loan maturity classification, see “MD&A—Credit Risk Profile” in our 2017 Form 10-K.

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. In executing our investment activities, we comply with limits and guidelines approved by our Board of Directors that reflect our risk appetite and strategic goals. Our investment securities portfolio is concentrated in securities that generally have high credit ratings and low exposure to credit risk, such as securities issued and guaranteed by U.S. Treasury and U.S. government-sponsored enterprises or agencies. Our investment securities portfolio also includes non-agency residential mortgage-backed securities (“RMBS”) and other asset-backed securities (“ABS”) which are considered securitization exposures under the Basel III Capital Rule. For information about the credit risk related to our investment portfolio, see “MD&A—Consolidated Balance Sheet Analysis—Investment Securities” Q3 2018 Form 10-Q and “Note 3—Investment Securities” in our Q3 2018 Form 10-Q for a maturity distribution of our investment securities.

In the normal course of our business, we enter into certain derivative transactions that give rise to counterparty credit exposure to bank counterparties and derivative clearinghouses. For information on credit risk related to our derivative transactions, see “Note 9—Derivative Instruments and Hedging Activities” in our Q3 2018 Form 10-Q. For information on risk management practices and policies related to our derivative transactions, see “Counterparty Credit Risk” discussion in this Report.

For the average balances of our credit risk exposures, see “MD&A—Consolidated Results of Operations—Table 2: Average Balances, Net Interest Income and Net Interest Margin” in our Q3 2018 Form 10-Q. For a comprehensive view of our credit risk exposure by balance sheet categories, see Schedule HC-R in our FR Y-9C as of September 30, 2018.

### **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 one of the primary indicators of credit risk within our consumer loan portfolios, particularly in our credit card loan portfolios, as changes in delinquency rates can 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.

For a summary of accounting policies related to our credit quality indicators, such as delinquent and nonperforming loans, net charge-offs and troubled debt restructuring for each of our loan categories, see “Note 1—Summary of Significant Accounting Policies—Loans” in our 2017 Form 10-K. For a summary of methodologies and policies that we use to determine our allowance for loan and lease losses for our loan portfolio segments, see “Note 1—Summary of Significant Accounting Policies—Allowance for Loan and Lease Losses” in our 2017 Form 10-K.

For additional information about key concentrations and credit performance metrics, see references to our Q3 2018 Form 10-Q.

### ***Delinquent, Nonperforming and Impaired Loans***

For a quantitative summary of our delinquent, nonperforming and impaired loans, including geographic concentration, see “MD&A—Credit Risk Profile—Credit Risk Measurement” and “Note 4—Loans” in our Q3 2018 Form 10-Q.

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

We maintain an allowance for loan and lease losses that 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. We also separately estimate probable losses related to unfunded lending commitments, such as letters of credit, financial guarantees and binding unfunded loan commitments. For a summary of changes in our allowance for loan and lease losses and reserve for unfunded lending commitments, and components of the allowance for loan and lease losses by portfolio and by impairment methodology, see “MD&A—Credit Risk Profile—Allowance for Loan and Lease Losses and Reserve for Unfunded Lending Commitments” and “Note 5—Allowance for Loan and Lease Losses and Reserve for Unfunded Lending Commitments” in our Q3 2018 Form 10-Q.

## ***Asset Impairment***

We review our investment securities for impairment on a regular basis in accordance with applicable impairment accounting guidance, see “Note 3—Investment Securities” in our Q3 2018 Form 10-Q.

---

## **COUNTERPARTY CREDIT RISK**

---

Counterparty credit risk is the risk arising from the possibility that a counterparty may fail to fulfill contractual obligations, resulting in the termination or replacement of the transaction at a loss to us. We engage in certain non-lending activities that 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, 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&A—Consolidated Balance Sheets Analysis—Investment Securities” and credit risk related to derivative transactions in “Note 9—Derivative Instruments and Hedging Activities” in our Q3 2018 Form 10-Q.

### **Counterparty Credit Risk Management**

The primary responsibilities of counterparty credit risk management are the approval of new counterparty trading relationships and the subsequent ongoing review of the creditworthiness of the counterparties. We seek to proactively manage counterparty credit risk by selecting a well-diversified set of counterparties with low risk of default. The counterparty exposure arising from products such as, but not limited to, derivatives, syndication activity and investment securities is aggregated with all other borrower exposures for counterparty risk management purposes.

For traded products, we establish exposure limits for counterparty relationships based on our risk appetite. Credit limits are commensurate with the financial capacity and credit quality of the counterparty by reference to our internal credit rating, the capital position of the counterparty and product specific factors.

### **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 equal to the amount reported as a derivative asset on our balance sheet, assuming no recoveries of underlying collateral.

We clear certain over-the-counter (“OTC”) derivatives with central clearinghouses (“CCPs”) through futures commission merchants (“FCMs”) as part of the regulatory requirement. The use of the CCPs 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. For cleared OTC derivatives, we characterize variation margin cash payments as settlements.

We also enter into legally enforceable master netting agreements and collateral agreements, where possible, with certain derivative counterparties to mitigate the risk of default on a bilateral basis. 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.

### **Counterparty Credit Risk Valuation Adjustment**

We record counterparty credit risk valuation adjustments 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.

For information on policies that we use to manage our derivatives portfolio, see “Note 1—Summary of Significant Accounting Policies—Derivative Instruments and Hedging Activities” in our 2017 Form 10-K. For the financial impact of credit risk-related contingencies in our derivative contracts and the policies and processes that we use for collateral valuation and management, see “Note 9—Derivative Instruments and Hedging Activities—Derivatives Counterparty Credit Risk” in our Q3 2018 Form 10-Q.

### ***Collateral for Derivatives***

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 centrally cleared derivatives, we are subject to initial margin posting and daily variation margin settlement 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.

For a summary of our counterparty credit risk exposure, including the impact of netting and collateral as of September 30, 2018, see “Note 9—Derivative Instruments and Hedging Activities—Table 9.3: Offsetting of Financial Assets and Financial Liabilities” in our Q3 2018 Form 10-Q.

---

## **CREDIT RISK MITIGATION**

---

Credit risk mitigation is an essential component of our credit risk management. We use various risk mitigation techniques designed to reduce risk and minimize our losses in the event an obligor defaults. The most common mitigants that we use in our operations include collateral in the form of cash, investment grade securities, commercial property and other financial agreements such as loss sharing agreements, netting arrangements and third-party guarantees. The quality standards outlined in our underwriting policies remain the foundation for credit risk management and credit risk mitigation techniques supplement them by providing an alternative source of repayment.

In our secured loan portfolio, we have recourse to pledged collateral such as physical property or other financial assets that enable us to recover a portion of the contractual amount due in the event of a default. Assets that qualify as collateral include cash, securities, personal property such as vehicles and commercial real estate property. We also have certain credit card partnership arrangements that contain loss sharing provisions. The loss severity and the amount of credit reserves that are attributable to these portfolios are reduced based on the loss sharing amount due from the partners.

Our primary risk mitigation techniques for our derivatives portfolio are master netting agreements and collateral agreements as discussed in “Counterparty Credit Risk Management” in this Report.



---

## SECURITIZATION

---

The securitization framework of the Basel III Capital Rule applies to on- and off-balance sheet credit exposures that arise from a securitization transaction, or exposures that directly or indirectly reference a securitization exposure. Under the Basel III Capital Rule, a securitization is a transaction in which credit risk of one or more underlying exposures (substantially all of which need to be financial in nature) has been transferred to one or more third parties, where the credit risk associated with these underlying exposures has been separated into at least two tranches reflecting different levels of seniority and performance of the securitization transaction depends on the performance of these underlying exposures. We have exposure to securitizations that we have purchased, that we have originated, and that result from the tranching of credit risk in some of our commercial lending activities as discussed in more detail below.

Note that the scope of securitizations for regulatory capital purposes is not directly comparable to the securitization information reported under U.S. GAAP in “Note 6—Variable Interest Entities and Securitizations” in our Q3 2018 Form 10-Q. For example, as an originator, we have primarily securitized credit card loans, which have provided a source of funding for us and enabled us to transfer a certain portion of the economic risk of these loans. We are deemed to be the primary beneficiary of all of our non-mortgage securitization trusts under the applicable consolidation accounting guidance. Accordingly, these trusts have been consolidated in our financial statements, and we present the carrying amount of assets and liabilities on our consolidated balance sheets. Therefore, these securitization trusts are not considered a securitization for regulatory capital purposes.

Securitization exposures give rise to multiple types of risks including, but not limited to, credit, liquidity and interest rate risk. Our approach to managing risk from securitization exposures is consistent with our overall risk management framework. The key processes of the framework ensure that the performance of our securitization exposures is monitored, conforms to our risk appetite and remains in compliance with the regulatory due diligence requirements.

### **Roles and Objectives**

We are engaged in securitization activities as an investor, an originator and a servicer.

Our investment securities portfolio includes securitizations originated by third parties. These investments represent a majority of our securitization exposure and include non-agency RMBS and other ABS. These securities contribute to the achievement of overall portfolio strategies and objectives with regard to liquidity, interest rate risk, credit risk, return targets and other objectives, as appropriate. For additional information about our investments in RMBS and ABS, see “Note 3—Investment Securities” in our Q3 2018 Form 10-Q.

We had previously securitized mortgage loans by transferring these loans to securitization trusts that had issued mortgage-backed securities to investors. We do not consolidate these securitization trusts under U.S. GAAP. Our residential mortgage exposure from these originated securitizations primarily consists of our retained interests in option-ARM mortgage loans securitized into mortgage-backed securities with an outstanding balance of \$1.0 billion, as of September 30, 2018; and our residual interest in manufactured housing securitizations consisting of the right to receive any remaining funds from letters of credit previously funded to cover losses from loans with an unpaid principal receivables balances of \$211 million as of September 30, 2018. We continue to service some of our originated securitizations, and the cash advances we are required to make as part of our servicing agreements are also considered a securitization exposure for regulatory capital purposes. For additional information about our involvement in securitization transactions as an originator and servicer, see “Note 6—Variable Interest Entities and Securitizations” in our Q3 2018 Form 10-Q.

As of September 30, 2018, our securitization exposures include commercial loans to special purpose entities secured by financial collateral with an outstanding balance of \$3.8 billion and total exposure of \$4.5 billion.

For information on our accounting policies related to securitization exposure, see “Note 1—Summary of Significant Accounting Policies—Investment Securities” and “Note 1—Summary of Significant Accounting Policies—Securitization of Loans” in our 2017 Form 10-K.

Table 5 summarizes our regulatory capital securitization exposure by type as of September 30, 2018.

**Table 5: Securitization Exposure by Underlying Exposure Type**

<i>(Dollars in millions)</i>	<b>September 30, 2018</b>	
Residential mortgage . . . . .	\$	1,967
Asset-backed . . . . .		276
Loans . . . . .		4,520
Other <sup>(1)</sup> . . . . .		82
<b>Total exposure . . . . .</b>	<b>\$</b>	<b>6,845</b>

<sup>(1)</sup> Includes exposures from certain originated manufactured housing securitizations.

### Regulatory Capital Approach

We use the Simplified Supervisory Formula Approach (“SSFA”) under the Basel III Standardized Approach to assign risk weights to our securitization exposures. This approach is based on a formula that starts with a baseline derived from the capital requirements that apply to all exposures underlying the securitization and then assigns risk weights based on the subordination level of an exposure. As a result, the SSFA provides for risk sensitivity by applying relatively higher capital requirements to the more risky junior tranches of a securitization that are the first to absorb losses and relatively lower requirements to the most senior exposures. The approach also takes into account delinquencies on underlying assets and adjusts the capital requirement up or down as a function of these delinquencies.

Table 6 aggregates our securitization exposure and RWA by risk weight bands as of September 30, 2018.

**Table 6: Securitization Exposure and RWA by Risk Weight Bands**

<i>(Dollars in millions)</i>	<b>September 30, 2018</b>	
	<b>Exposure</b>	<b>RWA</b>
20% to ≤ 100% . . . . .	\$ 5,063	\$ 1,211
> 100% to ≤ 250% . . . . .	1,002	2,144
> 250% to ≤ 500% . . . . .	639	1,802
> 500% to ≤ 1250% . . . . .	141	1,135
<b>Total . . . . .</b>	<b>\$ 6,845</b>	<b>\$ 6,292</b>

---

## EQUITIES

---

Equity exposure refers to a security or instrument that represents a direct or an indirect ownership interest in, and is a residual claim on, the assets and income of a company. Our equity exposures consist primarily of non-publicly traded investments in entities or funds that support community development initiatives, restricted equity investments in Federal Reserve Bank (“FRB”) and Federal Home Loan Bank (“FHLB”) stock, and other miscellaneous investments. In addition, under the Basel III Capital Rule, our investment in fixed income funds related to our separate account Bank-Owned Life Insurance (“BOLI”) is treated as equity exposure. We invest in equity holdings primarily for business and strategic reasons and manage our exposure within our Risk Management framework.

For a discussion of the policies that determine the valuation of and accounting for our equity holdings, see “Note 1—Summary of Significant Accounting Policies—Principles of Consolidation” and “Note 1—Summary of Significant Accounting Policies—Restricted Equity Investments” in our 2017 Form 10-K.

### Regulatory Capital Approach

We use the Simple Risk Weight Approach (“SRWA”) for equity exposures excluding investment funds. Under the SRWA, we apply the risk weights assigned by applicable regulations to the equity exposures. The SRWA sets a maximum risk weight of 100%, provided that the non-significant equity exposure does not exceed 10% of our Tier 1 plus Tier 2 capital. Our non-significant equity exposure did not exceed the 10% threshold for the three months ended September 30, 2018 and therefore the maximum risk weight we applied was 100%. We use the Alternative Modified Look-Through Approach (“AMLTA”) to calculate RWA for equity exposures to investment funds. Our investment funds are primarily related to our BOLI program. Under the AMLTA, the equity exposures are allocated on a pro rata basis depending on the investment fund limits in the fund prospectus and assigned a risk weight that corresponds to the investment type.

Table 7 provides a summary of our equity exposure and RWA as of September 30, 2018.

**Table 7: Capital Requirements by Risk Weight for Equity Investments**

<i>(Dollars in millions)</i>	September 30, 2018		
	Exposure	Risk Weight	RWA
FRB stock	\$ 1,321	—%	\$ —
FHLB stock	105	20	21
BOLI and other investment funds	636	48	304
Community development	3,977	100	3,978
Other	731	100	731
Total	<u>\$ 6,770</u>		<u>\$ 5,034</u>

---

## MARKET RISK

---

### Overview

The Market Risk Rule applies to assets and liabilities that meet the U.S. banking agencies' definition of “covered positions.” Covered positions include trading assets and liabilities, foreign exchange and commodity positions, with certain exceptions, and positions used to hedge covered positions. A trading position is defined as a position that is held (i) for the purpose of short-term resale, (ii) with the intent of benefiting from actual or expected short-term price movements, or (iii) to lock in arbitrage profits. Exposures excluded from the Market Risk Rule are subject to the other applicable provisions of the Basel III Standardized Approach described herein. The classification of an exposure as a trading asset or liability under U.S. GAAP does not determine its treatment under the Market Risk Rule.

Our covered positions are comprised primarily of various interest rate, foreign exchange rate and commodity derivatives offered as an accommodation to our customers as part of our Commercial Banking business and structural foreign exchange exposures related to certain of our international operations. We offset the majority of the market risk exposure of our customer accommodation derivatives through derivative transactions with other counterparties and hedge the majority of our structural foreign exchange exposures.

### Market Risk Management

Our Board of Directors approves our overall market risk objectives, which include market risk management strategies, policies, and procedures. The Chief Risk Officer, in conjunction with the Chief Market and Liquidity Risk Officer, is responsible for the establishment of market risk management policies and standards as well as the governance and monitoring of market risk at a corporate level.

The market risk positions for the Company and each of the Banks are calculated separately and in aggregate, and analyzed against pre-established limits. Results are reported to the Asset Liability Committee monthly and to the Risk Committee of the Board of Directors no less than quarterly. Management is authorized to utilize financial instruments as outlined in our policies to manage market risk exposure. For further information on our market risk management and structure of the organization, see “MD&A—Risk Management” in our 2017 Form 10-K.

### Valuation Policies, Procedures and Methodologies

We apply fair value methodologies specified under U.S. GAAP to determine the fair value of our covered positions. Fair value 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. For additional information on our valuation policies, procedures and methodologies, refer to “MD&A—Critical Accounting Policies and Estimates—Fair Value,” and “Note 17—Fair Value Measurement” in our 2017 Form 10-K.

## Measures in Market Risk RWA

The following table presents Regulatory RWA by components and market risk-based capital as of September 30, 2018.

**Table 8: Regulatory Market Risk RWA and Capital**

<i>(Dollars in millions)</i>	<b>September 30, 2018</b>	
	<b>RWA<sup>(1)</sup></b>	<b>Capital</b>
Regulatory Value-at-Risk (“VaR”) 10-day holding period <sup>(2)</sup>	\$ 30	\$ 2
Regulatory Stressed Value-at-Risk (“SVaR”) 10-day holding period <sup>(2)</sup>	86	7
De minimis covered positions	3	—
Total market risk	<u>\$ 119</u>	<u>\$ 9</u>

<sup>(1)</sup> Regulatory VaR-Based Capital times 12.5.

<sup>(2)</sup> Regulatory VaR times a capital multiplier of 3.

## Regulatory Value-at-Risk

Regulatory VaR is a statistically-based risk measure used to estimate the potential loss from adverse market movements in a normal market environment. We use internal models to produce a daily Regulatory VaR measure of the general market risk of all covered positions. 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 10 business days.

Due to the nature of our covered positions, we are not subject to the incremental risk or comprehensive risk capital requirement. Equity securities and options in our trading portfolio are treated as de minimis, which requires capital to be held dollar-for-dollar against these exposures. Our covered positions currently do not have exposure to credit spreads.

## Regulatory Stressed Value-at-Risk

Regulatory SVaR represents the level of risk contained in a bank’s covered positions during a period of significant market instability. Similar to Regulatory VaR, we compute Regulatory SVaR daily, using a 10-day holding period and a 99 percent confidence level. We calculate Regulatory SVaR using the same internal models as Regulatory VaR, but apply historical data from a continuous 250 business day period of financial stress instead of the most recent 500 business days. We recalculate the stressed period monthly to ensure that the Regulatory SVaR produced by our model is representative of the worst case Regulatory VaR during the historical period.

The following table shows our period end, minimum, maximum, and mean Regulatory VaR by risk category and Regulatory SVaR values for the three months ended September 30, 2018.

**Table 9: 10-Day Regulatory VaR (By Risk Category) and Regulatory SVaR**

<i>(Dollars in millions)</i>	<b>Three Months Ended September 30, 2018</b>			
	<b>Period End</b>	<b>Min</b>	<b>Max</b>	<b>Mean</b>
<b>VaR</b>	\$ 0.8	\$ 0.6	\$ 1.1	\$ 0.8
Interest rate	0.5	0.4	0.6	0.5
Foreign exchange	0.3	0.2	0.6	0.3
Commodities	—	—	—	—
<b>SVaR</b>	2.9	1.6	3.0	2.3

## Model Validation

An independent Model Risk Office governs the validation of models we employ to assess and analyze our market risk exposures and related supporting documentation to ensure the appropriate use of these models. The Model Validation Group, a part of the Model Risk Office, validates our VaR and SVaR models and provides monitoring of their performance. For additional information, refer to “MD&A—Critical Accounting Policies and Estimates—Fair Value” in our 2017 Form 10-K.

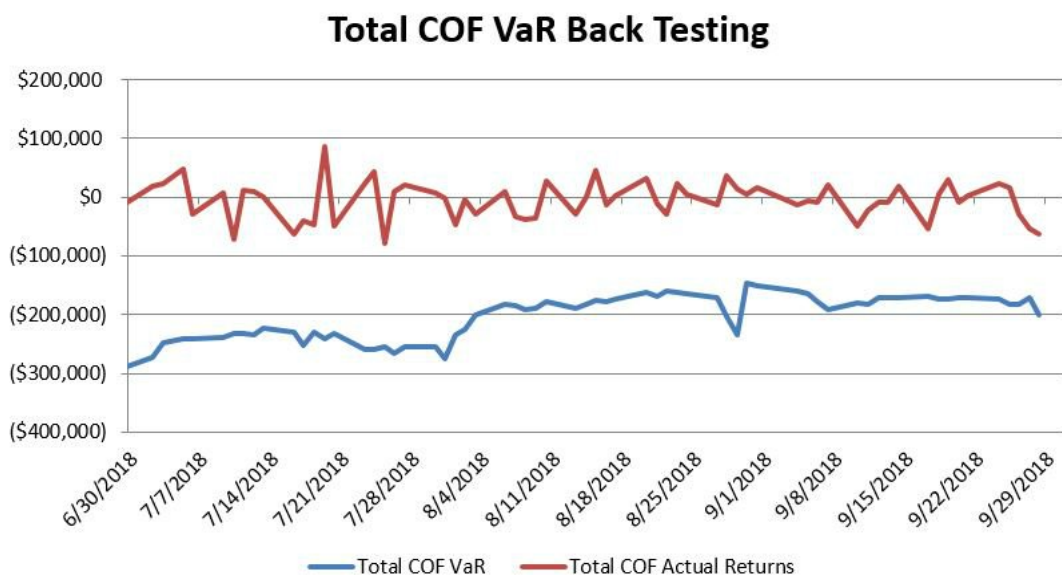
## Stress Testing

We conduct stress tests quarterly on our covered positions as part of our internal risk management process. Stress testing is a form of scenario analysis in which historical and hypothetical scenarios are applied to a portfolio in order to assess the impact of various stressed market conditions.

Historical scenarios are intended to measure the market risk exposure by assuming particularly adverse and unexpected market movements which have occurred in the past will impact our portfolio in the near future. These scenarios could last anywhere from a few days to several months. We currently use multiple historical scenarios covering interest rates and foreign exchange rates. Hypothetical scenarios are also used in our analysis and are designed to capture events that have not yet occurred, but could lead to a major financial crisis. We use multiple hypothetical scenarios, where customized shocks of varying magnitudes are applied to interest rates.

## Back-Testing

Back-testing is a process used to validate our internal VaR model and assess its accuracy. Back-testing is performed daily and provides a comparison of actual returns on our covered positions with estimated VaR-based measures. Actual returns are calculated as the changes in value of our covered positions that would have occurred if end-of-day positions were to remain unchanged, and excluding fees, commissions, reserves, net interest income and intraday trading. We compare our actual returns with the corresponding daily VaR-based measure over a one business day holding period and a confidence level of 99 percent. An instance where the actual loss in our covered positions on a day exceeds the VaR for that day is labeled as a breach. The number of breaches should be consistent with the confidence level applied. Each breach is identified and investigated. If breaches occur more frequently than the confidence level applied, the VaR model would undergo further evaluation to identify the potential drivers of the unexpected breaches. The model is subject to periodic adjustments to remain consistent with market conditions and portfolio composition. The following graph shows the daily VaR estimates against the daily actual returns in our covered positions for the three months ended September 30, 2018. The observed outcome of our back-testing was no breaches identified and provided a satisfactory outcome for the VaR validation process.



## **Securitization Positions**

As of September 30, 2018, we had no securitization positions that were covered positions under the Market Risk Rule.

---

## **INTEREST RATE RISK**

---

We consider the impact on both net interest income and economic value of equity in measuring and managing our interest rate risk. For a discussion around the nature, key assumptions and frequency of measurement of interest rate risk and the sensitivity of net interest income and economic value of equity to interest rate movements, see “MD&A—Market Risk Profile—Market Risk Measurement” in our Q3 2018 Form 10-Q.

---

## ***Glossary and Acronyms***

---

**Basel III Capital Rule:** The Board of Governors of the Federal Reserve System, the Federal Deposit Insurance Corporation, and the Office of the Comptroller of the Currency issued a rule implementing the Basel III capital framework developed by the Basel Committee on Banking Supervision as well as certain Dodd-Frank Act and other capital provisions.

**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.

**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.

**Corporate exposure:** Exposure that is not an exposure to a sovereign, a depository institution, a foreign bank, a credit union, a public-sector entity, a residential mortgage exposure, a pre-sold construction loan, a statutory multifamily mortgage, a high volatility commercial real estate exposure, a cleared transaction, a default fund contribution, a securitization exposure, an equity exposure, or an unsettled transaction.

**Delinquent or past due exposures:** An exposure that is not guaranteed or not secured (and that is not a sovereign exposure or a residential mortgage exposure) if it is 90 days or more past due or on nonaccrual.

**Dodd-Frank Act:** Dodd-Frank Wall Street Reform and Consumer Protection Act.

**Excess allowance for loan and lease losses:** Portion of the allowance for loan and lease losses that exceeds the 1.25% threshold of risk-weighted assets and is therefore not includible in Tier 2 capital. Excess allowance is deducted from risk-weighted assets for regulatory capital calculation.

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

**Federal Reserve:** The Board of Governors of the Federal Reserve System.

**High Volatility Commercial Real Estate:** Wholesale exposure or credit facility that finances or has financed the acquisition, development, or construction of real property.

**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.

**Public sector entity:** A state, local authority, or other governmental subdivision below the level of a sovereign, including U.S. states and municipalities.

**Residential mortgage exposure:** An exposure that is primarily secured by a first or subsequent lien on a one-to-four family residential property, or an exposure with an original and outstanding amount of \$1 million or less that is primarily secured by a first or subsequent lien on residential property that is not one-to-four family.

**Risk-weighted assets:** 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.

**Sovereign exposure:** An exposure directly and unconditionally backed by the full faith and credit of a central government or an agency, department, ministry, or central bank of a central government.

**Statutory multifamily mortgage:** A loan secured by a multifamily residential property that meets the requirements under the Resolution Trust Corporation Refinancing, Restructuring, and Improvement Act of 1991.



---

## *Acronyms*

---

**ABS:** Asset-backed security  
**AMLTA:** Alternative Modified Look-Through Approach  
**AOCI:** Accumulated other comprehensive income  
**BHC:** Bank holding company  
**BOLI:** Bank-Owned Life Insurance  
**CCAR:** Comprehensive Capital Analysis and Review  
**CEO:** Chief Executive Officer  
**CET1:** Common equity Tier 1  
**COF:** Capital One Financial Corporation  
**FCM:** Futures commission merchant  
**FHLB:** Federal Home Loan Banks  
**FRB:** Federal reserve bank  
**GSIB:** Globally systemically important bank  
**ICAAP:** Internal Capital Adequacy Assessment Process  
**OCC:** Office of the Comptroller of the Currency  
**OTC:** Over-the-counter  
**PCA:** Prompt corrective action  
**RMBS:** Residential mortgage-backed securities  
**RWA:** Risk-weighted assets  
**SRWA:** Simple Risk Weight Approach  
**SSFA:** Simplified Supervisory Formula Approach

## DISCLOSURE MAP

Pillar 3 Disclosure	Description	Pillar 3 Report	Page Reference	
			Q3 2018 10-Q	2017 Form 10-K
Capital structure	Capital instruments - terms and conditions	3	28, 64, 103, 111	121, 177, 185
	Risk-based capital structure	4		
Capital adequacy	Capital management	3	28	70-73
	Risk-weighted assets by exposure type	5		
	Capital ratios	6	30	70-73
	Supplementary leverage ratio	8		
	Funds and capital transfer restrictions	9	31	73-74
Risk management	Objectives, policies, strategies and processes	10	9, 14, 32, 33, 73, 79, 104	75-79
Credit risk: general disclosures	Credit risk management	11		79-80
	Credit risk profile	11, 12	9, 15, 33, 73, 82, 104	44, 51, 79, 144, 150, 152, 179
	Credit risk measurement	12		127-132
	ALLL, impaired and delinquent loans	12, 13	33, 42, 76, 79, 91	84-87, 91, 148, 151, 165-167
	Accounting policies			67-68, 128, 129, 134
Counterparty credit risk	Counterparty credit risk management	13, 14	15, 104, 108	51, 179
Credit risk mitigation	Overview	14		
Securitization	Roles and objectives	15	73, 95	144, 145, 171
	Securitization exposure and RWA	16		
	Accounting policies			67-68, 135
Equities	Objectives and accounting policies	17		125, 134
	Equity investment by risk weight	17		
Market risk	Overview	18		
	Market risk management	18		78
	Valuation policies	18		68-69, 204
	Measures in market risk RWA	19		
	Regulatory Value-at-Risk and Stressed Value-at-Risk	19		
	Model validation	19, 20		68-69
	Stress testing	20		
	Back testing	20		
	Securitization positions	21		
Interest rate risk	Nature, assumptions, frequency of measurement	21	49	98, 99
	Earnings sensitivity to rate shocks	21	49	99