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

FORM 10-Q

(Mark One)

☑ QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the Quarterly Period Ended March 31, 2020

or

☐ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the transition period from to

Commission file number:
1-6523

Exact name of registrant as specified in its charter:
Bank of America Corporation

State or other jurisdiction of incorporation or organization:
Delaware

IRS Employer Identification No.:
56-0906609

Address of principal executive offices:
Bank of America Corporate Center
100 N. Tryon Street
Charlotte, North Carolina 28255

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

Former name, former address and former fiscal year, if changed since last report:

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, par value $0.01 per share	BAC	New York Stock Exchange
Depositary Shares, each representing a 1/1,000th interest in a share of Floating Rate Non-Cumulative Preferred Stock, Series E	BAC PrE	New York Stock Exchange
Depositary Shares, each representing a 1/1,000th interest in a share of 6.200% Non-Cumulative Preferred Stock, Series CC	BAC PrC	New York Stock Exchange
Depositary Shares, each representing a 1/1,000th interest in a share of 6.000% Non-Cumulative Preferred Stock, Series EE	BAC PrA	New York Stock Exchange
Depositary Shares, each representing a 1/1,000th interest in a share of 6.000% Non-Cumulative Preferred Stock, Series GG	BAC PrB	New York Stock Exchange
Depositary Shares, each representing a 1/1,000th interest in a share of 5.875% Non-Cumulative Preferred Stock, Series HH	BAC PrK	New York Stock Exchange
7.25% Non-Cumulative Perpetual Convertible Preferred Stock, Series L	BAC PrL	New York Stock Exchange
Depositary Shares, each representing a 1/1,200th interest in a share of Bank of America Corporation Floating Rate Non-Cumulative Preferred Stock, Series 1	BML PrG	New York Stock Exchange

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Depositary Shares, each representing a 1/1,200th interest in a share of Bank of America Corporation Floating Rate Non-Cumulative Preferred Stock, Series 2	BML PrH	New York Stock Exchange
Depositary Shares, each representing a 1/1,200th interest in a share of Bank of America Corporation Floating Rate Non-Cumulative Preferred Stock, Series 4	BML PrJ	New York Stock Exchange
Depositary Shares, each representing a 1/1,200th interest in a share of Bank of America Corporation Floating Rate Non-Cumulative Preferred Stock, Series 5	BML PrL	New York Stock Exchange
Floating Rate Preferred Hybrid Income Term Securities of BAC Capital Trust XIII (and the guarantee related thereto)	BAC/PF	New York Stock Exchange
5.63% Fixed to Floating Rate Preferred Hybrid Income Term Securities of BAC Capital Trust XIV (and the guarantee related thereto)	BAC/PG	New York Stock Exchange
Income Capital Obligation Notes initially due December 15, 2066 of Bank of America Corporation	MER PrK	New York Stock Exchange
Senior Medium-Term Notes, Series A, Step Up Callable Notes, due November 28, 2031 of BofA Finance LLC (and the guarantee of the Registrant with respect thereto)	BAC/31B	New York Stock Exchange
Depositary Shares, each representing a 1/1,000th interest in a share of 5.375% Non-Cumulative Preferred Stock, Series KK	BAC PrM	New York Stock Exchange
Depositary Shares, each representing a 1/1,000th interest in a share 5.000% Non-Cumulative Preferred Stock, Series LL	BAC PrN	New York Stock Exchange

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 ☑ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted 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 such files).

Yes ☑ 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 ☑ Accelerated filer ☐ Non-accelerated filer ☐ 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 Exchange Act Rule 12b-2).

Yes ☐ No ☑

On April 30, 2020, there were 8,675,610,948 shares of Bank of America Corporation Common Stock outstanding.

Bank of America Corporation and Subsidiaries
March 31, 2020
Form 10-Q

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Part I. Financial Information

Part II. Other Information

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

Bank of America Corporation (the "Corporation") and its management may make certain statements that constitute "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. These statements can be identified by the fact that they do not relate strictly to historical or current facts. Forward-looking statements often use words such as "anticipates," "targets," "expects," "hopes," "estimates," "intends," "plans," "goals," "believes," "continue" and other similar expressions or future or conditional verbs such as "will," "may," "might," "should," "would" and "could." Forward-looking statements represent the Corporation's current expectations, plans or forecasts of its future results, revenues, expenses, efficiency ratio, capital measures, strategy, and future business and economic conditions more generally, and other future matters. These statements are not guarantees of future results or performance and involve certain known and unknown risks, uncertainties and assumptions that are difficult to predict and are often beyond the Corporation's control. Actual outcomes and results may differ materially from those expressed in, or implied by, any of these forward-looking statements.

You should not place undue reliance on any forward-looking statement and should consider the following uncertainties and risks, as well as the risks and uncertainties more fully discussed under Item 1A. Risk Factors of our 2019 Annual Report on Form 10-K and in any of the Corporation's subsequent Securities and Exchange Commission filings: the Corporation's potential judgments, claims, damages, penalties, fines and reputational damage resulting from pending or future litigation and regulatory and government actions, including as a result of our participation in and execution of government programs related to the COVID-19 pandemic; the possibility that the Corporation's future liabilities may be in excess of its recorded liability and estimated range of possible loss for litigation, regulatory, and representations and warranties exposures; the possibility that the Corporation could face increased servicing, fraud, indemnity, contribution or other claims from one or more counterparties, including trustees, purchasers of loans, underwriters, issuers, monolines, private-label and other investors, or other parties involved in securitizations; the Corporation's ability to resolve representations and warranties repurchase and related claims, including claims brought by investors or trustees seeking to avoid the statute of limitations for repurchase claims; the risks related to the discontinuation of the London InterBank Offered Rate and other reference rates, including increased expenses and litigation and the effectiveness of hedging strategies; uncertainties about the financial stability and growth rates of non-U.S. jurisdictions, the risk that those jurisdictions may face difficulties servicing their sovereign debt, and related stresses on financial markets, currencies and trade, and the Corporation's exposures to such risks, including direct, indirect and operational; the impact of U.S. and global interest rates, inflation, currency exchange rates, economic conditions, trade policies and tensions, including tariffs, and potential geopolitical instability; the impact of the interest rate environment on the Corporation's business, financial condition and results of operations; the possibility that future credit losses may be higher than currently expected due to changes in economic assumptions, customer behavior, adverse developments with respect to U.S. or global economic conditions and other uncertainties; the Corporation's ability to achieve its expense targets and expectations regarding net interest income, provision for credit losses, net charge-offs, effective tax rate, loan growth or other projections; adverse changes to the Corporation's credit ratings from the major credit rating agencies; an inability to access capital markets or maintain deposits or borrowing costs; estimates of the fair value and other accounting values, subject to impairment assessments, of certain of the Corporation's assets and liabilities; the estimated or actual impact of changes in accounting standards or assumptions in applying those standards; uncertainty regarding the content, timing and impact of regulatory capital and liquidity requirements; the impact of adverse changes to total loss-absorbing capacity requirements and/or global systemically important bank surcharges; the potential impact of actions of the Board of Governors of the Federal Reserve System on the Corporation's capital plans; the effect of regulations, other guidance or additional information on the impact from the Tax Cuts and Jobs Act; the impact of implementation and compliance with U.S. and international laws, regulations and regulatory interpretations, including, but not limited to, recovery and resolution planning requirements, Federal Deposit Insurance Corporation assessments, the Volcker Rule, fiduciary standards, derivatives regulations and the Coronavirus Aid, Relief, and Economic Security Act and any similar or related rules and regulations; a failure or disruption in or breach of the Corporation's operational or security systems or infrastructure, or those of third parties, including as a result of cyber attacks or campaigns; the impact on the Corporation's business, financial condition and results of operations from the United Kingdom's exit from the European Union; the impact of any future federal government shutdown and uncertainty regarding the federal government's debt limit; the emergence of widespread health emergencies or pandemics, including the magnitude and duration of the COVID-19 pandemic and its impact on the U.S. and/or global economy, financial market conditions and our business, results of operations and financial condition; the impact of natural disasters, military conflict, terrorism or other geopolitical events; and other matters.

Forward-looking statements speak only as of the date they are made, and the Corporation undertakes no obligation to update any forward-looking statement to reflect the impact of circumstances or events that arise after the date the forward-looking statement was made.

Notes to the Consolidated Financial Statements referred to in Management's Discussion and Analysis of Financial Condition and Results of Operations (MD&A) are incorporated by reference into the MD&A. Certain prior-period amounts have been reclassified to conform to current-period presentation. Throughout the MD&A, the Corporation uses certain acronyms and abbreviations which are defined in the Glossary.

Executive Summary

Business Overview

The Corporation is a Delaware corporation, a bank holding company (BHC) and a financial holding company. When used in this report, "the Corporation," "we," "us" and "our" may refer to Bank of America Corporation individually, Bank of America Corporation and its subsidiaries, or certain of Bank of America Corporation's subsidiaries or affiliates. Our principal executive offices are located in Charlotte, North Carolina. Through our banking and various nonbank subsidiaries throughout the U.S. and in international markets, we provide a diversified range of banking and nonbank financial services and products through four business segments: *Consumer Banking*, *Global Wealth & Investment Management (GWIM)*, *Global Banking* and *Global Markets*, with the remaining operations recorded in *All Other*. We operate our banking activities primarily under the Bank of America, National Association (Bank of America, N.A. or BANA) charter. At March 31, 2020, the Corporation had $2.6 trillion in assets and a headcount of approximately 209,000 employees.

As of March 31, 2020, we served clients through operations across the U.S., its territories and approximately 35 countries. Our retail banking footprint covers approximately 90 percent of the U.S. population, and we serve approximately 66 million consumer and small business clients with approximately 4,300 retail financial centers, approximately 16,900 ATMs, and leading digital banking platforms (www.bankofamerica.com) with more than 39 million active users, including approximately 30 million active mobile users. We offer industry-leading support to approximately three million small business owners. Our wealth management businesses, with client balances of $2.7 trillion, provide tailored solutions to meet client needs through a full set of investment management, brokerage, banking, trust and retirement products. We are a global leader in corporate and investment banking and trading across a broad range of asset classes serving corporations, governments, institutions and individuals around the world.

Recent Developments

Capital Management

During the first quarter of 2020, we repurchased $6.4 billion of common stock pursuant to the Board of Directors' (the Board) repurchase authorization under our 2019 Comprehensive Capital Analysis and Review (CCAR) plan, including repurchases to offset equity-based compensation awards.

As announced on March 15, 2020, due to the impact of the Coronavirus Disease 2019 (COVID-19) pandemic on the global economy, we temporarily suspended common stock repurchases from the date of the announcement through the end of the second quarter of 2020. We made this decision to enable us to provide maximum support to our customers and the broader economy through lending and other services. The suspension does not include repurchases to offset shares issued under equity compensation plans. As a well-capitalized financial institution, we may reinstate our repurchase program at such time as our Board deems advisable, taking into account economic conditions and other considerations. For more information on our capital resources, see Capital Management on page 18.

COVID-19 Pandemic 2020

In the first quarter of 2020, the World Health Organization declared the outbreak of COVID-19 a pandemic. The COVID-19 pandemic has resulted in authorities implementing numerous measures attempting to contain the spread and impact of COVID-19, such as travel bans and restrictions, quarantines, shelter-in-place orders and limitations on business activity, including closures. These measures are, among other things, severely restricting global economic activity, which is disrupting global supply chains, lowering asset valuations, significantly increasing unemployment and underemployment levels, decreasing liquidity in markets for certain securities and causing significant volatility and disruptions in the financial, energy and commodity markets. These measures have also negatively impacted, and could continue to negatively impact businesses, market participants, our counterparties and clients, and the U.S. and/or global economy for a prolonged period of time.

To address the economic impact in the U.S., in March and April 2020, the President signed into law four economic stimulus packages to provide relief to businesses and individuals, including the Coronavirus Aid, Relief, and Economic Security Act (CARES Act). Among other measures, the CARES Act created funding for the Small Business Administration (SBA) Paycheck Protection Program (PPP), which provides loans to small businesses to keep their employees on payroll and make other eligible payments. The original funding for the PPP was fully allocated by mid-April 2020, with additional funding made available on April 24, 2020 under the Paycheck Protection Program and Health Care Enhancement Act.

On April 9, 2020, the Board of Governors of the Federal Reserve System (Federal Reserve) took additional steps to bolster the economy by providing additional funding sources for small and mid-sized businesses as well as for state and local governments as they work through cash flow stresses caused by the COVID-19 pandemic. Additionally, the Federal Reserve has taken other steps to provide fiscal and monetary stimuli, including reducing the federal funds rate and the interest rate on the Federal Reserve's discount window, and implementing programs to promote liquidity in certain securities markets. The Federal Reserve, along with other U.S. banking regulators, has also issued interagency guidance to financial institutions that are working with borrowers affected by COVID-19.

In response to the pandemic, we have implemented protocols and processes to help protect our employees, community partners and clients. These measures include:

- Operating our businesses from remote locations, leveraging our business continuity plans and capabilities that include having the majority of employees work from home, and other employees operating using pre-planned contingency strategies for critical site-based operations. These capabilities have allowed us to continue to service our clients. We will continue to manage the increased operational risk related to the execution of our business continuity plans in accordance with our Risk Framework and Operational Risk Management Program.
- Offering assistance to our commercial, consumer and small business clients affected by the COVID-19 pandemic, which includes payment deferrals, refunds of certain fees, pausing foreclosure sales, evictions and repossessions, participation in the CARES Act and Federal Reserve lending programs for businesses, including the SBA PPP, and continuing to provide access to the important financial services on which our clients rely. For more information, see Credit Risk Management on page 25 and *Note 1 – Summary of Significant Accounting Principles* to the Consolidated Financial Statements.
- Temporarily suspending common stock repurchases, except those offsetting shares issued under equity compensation plans, to maximize capital and liquidity resources. For more

information, see Capital Management on page 18, and Liquidity Risk on page 23.

- Pledging $100 million to local communities to purchase medical supplies, food and other priorities.

In connection with reviewing our financial condition in light of the pandemic, we evaluated our assets, including goodwill and other intangibles and equity investments, for potential impairment, and reviewed fair values of financial instruments that are carried at fair value. Based upon our review as of March 31, 2020, no impairments have been recorded and there have been no significant changes in fair value hierarchy classifications. We have also elected to delay for two years the phase-in of the capital impact from our adoption of the new accounting standard on credit losses. For more information, see Capital Management on page 18.

The Corporation has implemented various consumer and commercial loan modification programs to provide its borrowers relief from the economic impacts of COVID-19. Based on guidance in the CARES Act that the Corporation adopted, COVID-19 related modifications to consumer and commercial loans that were current as of December 31, 2019 are exempt from troubled debt restructuring (TDR) classification under accounting principles generally accepted in the United States of America (GAAP). In addition, the bank regulatory agencies issued interagency guidance stating that COVID-19 related short-term modifications (i.e., six months or less) granted to consumer or commercial loans that were current as of the loan modification program implementation date are not TDRs. For more information, see *Note 1 – Summary of Significant Accounting Principles* and *Note 5 – Outstanding Loans and Leases and Allowance for Credit Losses* to the Consolidated Financial Statements.

The table below provides a summary of the percentage of our loans and loan balances that we have modified in response to COVID-19 under payment deferral or forbearance programs, none of which are classified as TDRs.

Table 1 Client Loan Modifications

	April 27, 2020		
	% of Accounts with Completed Modifications	% of Balances with Completed Modifications	Program Details
Consumer and Small Business Credit Card	4%	8%	Deferral of up to 90 days for Consumer and Small Business; interest continues to accrue and is added to principal balance each month
Small Business loans and lines of credit	19	41	Deferral of 90 days; for loans, interest continues to accrue and deferred payment is added to end of loan; for lines, interest continues to accrue and is added to principal balance when deferral ends
Mortgage and home equity lines of credit (1)	5	7	Deferral of 90 days; interest continues to accrue and deferred payment is added to end of loan
Consumer vehicle lending (2)	5	6	Deferral of 60 days for Consumer; deferral of 90 days for Small Business; interest continues to accrue and deferred payment is added to end of loan
Commercial loans (3)	3	1	Primarily deferral of up to 90 days; interest continues to accrue with various repayment options; may include short-term covenant waivers
Total	**4%**	**4%**	

(1) Mortgage and home equity lines of credit includes loans that are held for investment (owned by Bank of America).
(2) Vehicle lending includes both consumer and small business.
(3) Statistics represent clients who have been given temporary deferment of principal and/or interest for a defined period of time.

Given the unprecedented uncertainty and rapidly evolving economic effects and social impacts of the COVID-19 pandemic, the future direct and indirect impact on our business, results of operations and financial condition are highly uncertain. Should current economic conditions persist or continue to deteriorate, we expect that this macroeconomic environment will have a continued adverse effect on our business and results of operations, which could include, but not be limited to: decreased demand for our products and services, protracted periods of lower interest rates, lower asset management fees, lower sales and trading revenue due to decreased market liquidity resulting from heightened volatility, increased noninterest expenses, including operational losses, and increased credit losses due to deterioration in the financial condition of our consumer and commercial borrowers, including declining asset and collateral values, which may continue to increase our provision for credit losses and net charge-offs. Our provision for credit losses and net charge-offs could also be impacted by continued volatility in the energy and commodity markets. For more information on how the risks related to COVID-19 may adversely affect our business, results of operations and financial condition, see Part II, Item 1A. Risk Factors on page 96.

LIBOR and Other Benchmark Rates

As previously disclosed, to facilitate an orderly transition from Interbank Offered Rates (IBORs) and other benchmark rates to alternative reference rates (ARRs), the Corporation has established an enterprise-wide program to identify, assess and monitor risks associated with the expected discontinuation or unavailability of benchmarks, including the London InterBank Offered Rate (LIBOR). As part of this program, the Corporation continues to identify, assess and monitor risks associated with the expected discontinuation or unavailability of LIBOR and other benchmarks, and evaluate and address documentation and contractual mechanics of outstanding IBOR-based products and contracts that mature after 2021 and new and potential future ARR-based products and contracts to achieve operational readiness. This program, which is led by the Corporation's Chief Operating Officer, includes active involvement of senior management and regular reports to the Enterprise Risk Committee. The program is structured to address the Corporation's industry and regulatory engagement, client and financial contract changes, internal and external communications, technology and operations modifications, introduction of new products, migration of existing clients, and program strategy and governance. As the markets for ARRs continue to grow, the Corporation continues to monitor the development and usage of ARRs, including the Secured Overnight Financing Rate. Additionally, any prolonged economic and market disruptions resulting from COVID-19 may have an adverse impact on the market and industry transition to ARRs, including the readiness of other market participants and third-party vendors, and the

Corporation's engagement with impacted clients and their operational readiness to transition to ARRs. For more information on the expected replacement of LIBOR and other benchmark rates, see Executive Summary - Recent Developments - LIBOR and Other Benchmark Rates in the MD&A and Item 1A. Risk Factors - Other of the Corporation's 2019 Annual Report on Form 10-K. For more information about the Corporation's risks related to the COVID-19 pandemic, see Part II, Item 1A. Risk Factors on page 96.

Financial Highlights

Effective January 1, 2020, we adopted the new accounting standard on current expected credit losses (CECL), under which the allowance is measured based on management's best estimate of lifetime expected credit losses. Prior periods presented reflect measurement of the allowance based on management's estimate of probable incurred credit losses. For more information, see *Note 1 – Summary of Significant Accounting Principles* to the Consolidated Financial Statements.

Table 2 Summary Income Statement and Selected Financial Data

	Three Months Ended March 31	
(Dollars in millions, except per share information)	**2020**	2019
Income statement		
Net interest income	**$ 12,130**	$ 12,375
Noninterest income	**10,637**	10,629
Total revenue, net of interest expense	**22,767**	23,004
Provision for credit losses	**4,761**	1,013
Noninterest expense	**13,475**	13,224
Income before income taxes	**4,531**	8,767
Income tax expense	**521**	1,456
Net income	**4,010**	7,311
Preferred stock dividends	**469**	442
Net income applicable to common shareholders	**$ 3,541**	$ 6,869
Per common share information		
Earnings	**$ 0.40**	$ 0.71
Diluted earnings	**0.40**	0.70
Dividends paid	**0.18**	0.15
Performance ratios		
Return on average assets (1)	**0.65%**	1.26%
Return on average common shareholders' equity (1)	**5.91**	11.42
Return on average tangible common shareholders' equity (2)	**8.32**	16.01
Efficiency ratio (1)	**59.19**	57.48
	March 31 2020	December 31 2019
Balance sheet		
Total loans and leases	**$ 1,050,785**	$ 983,426
Total assets	**2,619,954**	2,434,079
Total deposits	**1,583,325**	1,434,803
Total liabilities	**2,355,036**	2,169,269
Total common shareholders' equity	**241,491**	241,409
Total shareholders' equity	**264,918**	264,810

(1) For definitions, see Key Metrics on page 95.
(2) Return on average tangible common shareholders' equity is a non-GAAP financial measure. For more information and a corresponding reconciliation to the most closely related financial measures defined by accounting principles generally accepted in the United States of America, see Non-GAAP Reconciliations on page 45.

Net income was $4.0 billion, or $0.40 per diluted share, for the three months ended March 31, 2020 compared to $7.3 billion , or $0.70 per diluted share, for the same period in 2019. The decline in net income was largely due to an increase in the provision for credit losses primarily due to the deteriorating economic outlook related to COVID-19, and to a lesser extent, an increase in noninterest expense and lower revenue.

Total assets increased $185.9 billion from December 31, 2019 to $2.6 trillion primarily driven by higher cash and cash equivalents due to elevated deposit balances, an increase in loans and leases due to commercial credit line draws as clients secure liquidity under current market conditions, and residential mortgage loan growth, and an increase in federal funds sold and securities borrowed or purchased under agreements to resell as a result of elevated deposit balances being deployed to short-term investments.

Total liabilities increased $185.8 billion from December 31, 2019 to $2.4 trillion primarily driven by higher deposits as a result of client responses to market volatility as well as tax refund inflows, an increase in derivative liabilities driven by lower interest rates, and an increase in long-term debt due to debt issuances and a debt basis adjustment primarily due to lower interest rates.

Shareholders' equity increased $108 million from December 31, 2019 primarily due to market value increases on debt securities and net income, partially offset by returns of capital to shareholders through common stock repurchases and common and preferred stock dividends as well as the impact of the adoption of the new credit loss accounting standard.

Net Interest Income

Net interest income decreased $245 million to $12.1 billion for the three months ended March 31, 2020 compared to the same period in 2019. Net interest yield on a fully taxable-equivalent (FTE) basis decreased 18 basis points (bps) to 2.33 percent. The decrease in net interest income was primarily driven by lower interest rates, partially offset by one additional day of interest accruals and loan and deposit growth. Based on the forward interest rate curve and other relevant assumptions at March 31, 2020, we expect net interest income of approximately $11 billion in the second quarter of 2020 which should begin to stabilize in the second half of 2020, assuming year-over-year average loan and deposit percentage growth in the mid-single digits across our businesses that would mitigate the impacts of longer-term asset repricing. For more information on net interest yield and the FTE basis, see Supplemental Financial Data on page 7, and for more information on interest rate risk management, see Interest Rate Risk Management for the Banking Book on page 41.

Noninterest Income

Table 3 Noninterest Income

(Dollars in millions)	Three Months Ended March 31 2020	2019
Fees and commissions:		
Card income	**$ 1,272**	$ 1,375
Service charges	**1,903**	1,839
Investment and brokerage services	**3,758**	3,360
Investment banking fees	**1,388**	1,264
Total fees and commissions	**8,321**	7,838
Market making and similar activities	**2,807**	2,768
Other income	**(491)**	23
Total noninterest income	**$ 10,637**	$ 10,629

Noninterest income was relatively unchanged at $10.6 billion for the three months ended March 31, 2020 compared to the same period in 2019. The following highlights the significant changes in the components of noninterest income.

- Card income decreased $103 million primarily driven by higher points and rewards expense.
- Investment and brokerage services income increased $398 million primarily driven by higher market valuations, positive assets under management (AUM) flows and transactional revenue, partially offset by declines in AUM pricing.
- Investment banking fees increased $124 million due to higher debt and equity underwriting fees.
- Other income decreased $514 million primarily due to unrealized losses in the fair value option and leveraged finance portfolios, partially offset by higher gains on sales of debt securities.

Provision for Credit Losses

The provision for credit losses increased $3.7 billion to $4.8 billion for the three months ended March 31, 2020 compared to the same period in 2019, primarily due to a deteriorating economic outlook related to COVID-19. For more information on the provision for credit losses, see Allowance for Credit Losses on page 38.

Noninterest Expense

Table 4 Noninterest Expense

(Dollars in millions)	Three Months Ended March 31 2020	2019
Compensation and benefits	**$ 8,341**	$ 8,249
Occupancy and equipment	**1,702**	1,605
Information processing and communications	**1,209**	1,164
Product delivery and transaction related	**777**	662
Marketing	**438**	442
Professional fees	**375**	360
Other general operating	**633**	742
Total noninterest expense	**$ 13,475**	$ 13,224

Noninterest expense increased $251 million to $13.5 billion for the three months ended March 31, 2020 compared to the same period in 2019. The increase was primarily due to investments across the franchise including in client-facing associates, employee compensation programs, technology and real estate, and an increase in revenue-related expenses, which were partially offset by efficiency savings.

Income Tax Expense

Table 5 Income Tax Expense

(Dollars in millions)	Three Months Ended March 31 2020	2019
Income before income taxes	**$ 4,531**	$ 8,767
Income tax expense	**521**	1,456
Effective tax rate	**11.5%**	16.6%

The effective tax rates for the three months ended March 31, 2020 and 2019 were primarily driven by our recurring tax preference benefits and tax benefits from deductions associated with share-based compensation. The decline in the effective tax rate resulted from lower pretax income. We expect the effective tax rate for full-year 2020 to be approximately 14 to 15 percent, absent unusual items.

Supplemental Financial Data

Non-GAAP Financial Measures

In this Form 10-Q, we present certain non-GAAP financial measures. Non-GAAP financial measures exclude certain items or otherwise include components that differ from the most directly comparable measures calculated in accordance with GAAP. Non-GAAP financial measures are provided as additional useful information to assess our financial condition, results of operations (including period-to-period operating performance) or compliance with prospective regulatory requirements. These non-GAAP financial measures are not intended as a substitute for GAAP financial measures and may not be defined or calculated the same way as non-GAAP financial measures used by other companies.

We view net interest income and related ratios and analyses on an FTE basis, which when presented on a consolidated basis are non-GAAP financial measures. To derive the FTE basis, net interest income is adjusted to reflect tax-exempt income on an equivalent before-tax basis with a corresponding increase in income tax expense. For purposes of this calculation, we use the federal statutory tax rate of 21 percent and a representative state tax rate. Net interest yield, which measures the basis points we earn over the cost of funds, utilizes net interest income on an FTE basis. We believe that presentation of these items on an FTE basis allows for comparison of amounts from both taxable and tax-exempt sources and is consistent with industry practices.

We may present certain key performance indicators and ratios excluding certain items (e.g., debit valuation adjustment (DVA) gains (losses)) which result in non-GAAP financial measures. We believe that the presentation of measures that exclude these items is useful because such measures provide additional information to assess the underlying operational performance and trends of our businesses and to allow better comparison of period-to-period operating performance.

We also evaluate our business based on certain ratios that utilize tangible equity, a non-GAAP financial measure. Tangible equity represents shareholders' equity or common shareholders' equity reduced by goodwill and intangible assets (excluding mortgage servicing rights (MSRs)), net of related deferred tax liabilities ("adjusted" shareholders' equity or common shareholders' equity). These measures are used to evaluate our use of equity. In addition, profitability, relationship and investment models use both return on average tangible common shareholders' equity and return on average tangible shareholders' equity as key measures to support our overall growth goals. These ratios are as follows:

- Return on average tangible common shareholders' equity measures our net income applicable to common shareholders as a percentage of adjusted average common shareholders' equity. The tangible common equity ratio represents adjusted ending common shareholders' equity divided by total tangible assets.
- Return on average tangible shareholders' equity measures our net income as a percentage of adjusted average total shareholders' equity. The tangible equity ratio represents adjusted ending shareholders' equity divided by total tangible assets.
- Tangible book value per common share represents adjusted ending common shareholders' equity divided by ending common shares outstanding.

We believe that the use of ratios that utilize tangible equity provides additional useful information because they present measures of those assets that can generate income. Tangible book value per common share provides additional useful information about the level of tangible assets in relation to outstanding shares of common stock.

The aforementioned supplemental data and performance measures are presented in Tables 6 and 7.

For more information on the reconciliation of these non-GAAP financial measures to the corresponding GAAP financial measures, see Non-GAAP Reconciliations on page 45.

Key Performance Indicators

We present certain key financial and nonfinancial performance indicators (key performance indicators) that management uses when assessing our consolidated and/or segment results. We believe they are useful to investors because they provide additional information about our underlying operational performance and trends. These key performance indicators (KPIs) may not be defined or calculated in the same way as similar KPIs used by other companies. For information on how these metrics are defined, see Key Metrics on page 95.

Our consolidated key performance indicators, which include various equity and credit metrics, are presented in Table 2 on page 5 and/or Table 6 on page 8.

For information on key segment performance metrics, see Business Segment Operations on page 10.

Table 6 Selected Quarterly Financial Data

(In millions, except per share information)	2020 Quarter	2019 Quarters			
	First	Fourth	Third	Second	First
Income statement					
Net interest income	**$ 12,130**	$ 12,140	$ 12,187	$ 12,189	$ 12,375
Noninterest income	**10,637**	10,209	10,620	10,895	10,629
Total revenue, net of interest expense	**22,767**	22,349	22,807	23,084	23,004
Provision for credit losses	**4,761**	941	779	857	1,013
Noninterest expense	**13,475**	13,239	15,169	13,268	13,224
Income before income taxes	**4,531**	8,169	6,859	8,959	8,767
Income tax expense	**521**	1,175	1,082	1,611	1,456
Net income	**4,010**	6,994	5,777	7,348	7,311
Net income applicable to common shareholders	**3,541**	6,748	5,272	7,109	6,869
Average common shares issued and outstanding	**8,815.6**	9,017.1	9,303.6	9,523.2	9,725.9
Average diluted common shares issued and outstanding	**8,862.7**	9,079.5	9,353.0	9,559.6	9,787.3
Performance ratios					
Return on average assets (1)	**0.65%**	1.13%	0.95%	1.23%	1.26%
Four-quarter trailing return on average assets (2)	**0.99**	1.14	1.17	1.24	1.22
Return on average common shareholders' equity (1)	**5.91**	11.00	8.48	11.62	11.42
Return on average tangible common shareholders' equity (1)	**8.32**	15.43	11.84	16.24	16.01
Return on average shareholders' equity (1)	**6.10**	10.40	8.48	11.00	11.14
Return on average tangible shareholders' equity (3)	**8.29**	14.09	11.43	14.88	15.10
Total ending equity to total ending assets	**10.11**	10.88	11.06	11.33	11.23
Total average equity to total average assets	**10.60**	10.89	11.21	11.17	11.28
Dividend payout	**44.57**	23.90	31.48	19.95	21.20
Per common share data					
Earnings	**$ 0.40**	$ 0.75	$ 0.57	$ 0.75	$ 0.71
Diluted earnings	**0.40**	0.74	0.56	0.74	0.70
Dividends paid	**0.18**	0.18	0.18	0.15	0.15
Book value (1)	**27.84**	27.32	26.96	26.41	25.57
Tangible book value (3)	**19.79**	19.41	19.26	18.92	18.26
Market capitalization	**$ 184,181**	$ 311,209	$ 264,842	$ 270,935	$ 263,992
Average balance sheet					
Total loans and leases	**$ 990,283**	$ 973,986	$ 964,733	$ 950,525	$ 944,020
Total assets	**2,494,928**	2,450,005	2,412,223	2,399,051	2,360,992
Total deposits	**1,439,336**	1,410,439	1,375,052	1,375,450	1,359,864
Long-term debt	**210,816**	206,026	202,620	201,007	196,726
Common shareholders' equity	**241,078**	243,439	246,630	245,438	243,891
Total shareholders' equity	**264,534**	266,900	270,430	267,975	266,217
Asset quality					
Allowance for credit losses (4)	**$ 17,126**	$ 10,229	$ 10,242	$ 10,333	$ 10,379
Nonperforming loans, leases and foreclosed properties (5)	**4,331**	3,837	3,723	4,452	5,145
Allowance for loan and lease losses as a percentage of total loans and leases outstanding (5)	**1.51%**	0.97%	0.98%	1.00%	1.02%
Allowance for loan and lease losses as a percentage of total nonperforming loans and leases (5)	**389**	265	271	228	197
Net charge-offs	**$ 1,122**	$ 959	$ 811	$ 887	$ 991
Annualized net charge-offs as a percentage of average loans and leases outstanding (5)	**0.46%**	0.39%	0.34%	0.38%	0.43%
Capital ratios at period end (6)					
Common equity tier 1 capital	**10.8%**	11.2%	11.4%	11.7%	11.6%
Tier 1 capital	**12.3**	12.6	12.9	13.3	13.1
Total capital	**14.6**	14.7	15.1	15.4	15.2
Tier 1 leverage	**7.9**	7.9	8.2	8.4	8.4
Supplementary leverage ratio	**6.4**	6.4	6.6	6.8	6.8
Tangible equity (3)	**7.7**	8.2	8.4	8.7	8.5
Tangible common equity (3)	**6.7**	7.3	7.4	7.6	7.6
Total loss-absorbing capacity and long-term debt metrics					
Total loss-absorbing capacity to risk-weighted assets	**24.6%**	24.6%	24.8%	25.5%	24.8%

Total loss-absorbing capacity to supplementary leverage exposure	**12.8**	12.5	12.7	13.0	12.8
Eligible long-term debt to risk-weighted assets	**11.6**	11.5	11.4	11.8	11.4
Eligible long-term debt to supplementary leverage exposure	**6.1**	5.8	5.8	6.0	5.9

(1) For definitions, see Key Metrics on page 95.
(2) Calculated as total net income for four consecutive quarters divided by annualized average assets for four consecutive quarters.
(3) Tangible equity ratios and tangible book value per share of common stock are non-GAAP financial measures. For more information on these ratios and corresponding reconciliations to GAAP financial measures, see Supplemental Financial Data on page 7 and Non-GAAP Reconciliations on page 45.
(4) Includes the allowance for loan and lease losses and the reserve for unfunded lending commitments.
(5) Balances and ratios do not include loans accounted for under the fair value option. For additional exclusions from nonperforming loans, leases and foreclosed properties, see Consumer Portfolio Credit Risk Management – Nonperforming Consumer Loans, Leases and Foreclosed Properties Activity on page 31 and corresponding Table 27 and Commercial Portfolio Credit Risk Management – Nonperforming Commercial Loans, Leases and Foreclosed Properties Activity on page 35 and corresponding Table 34.
(6) For more information, including which approach is used to assess capital adequacy, see Capital Management on page 18.

Table 7 Quarterly Average Balances and Interest Rates - FTE Basis

(Dollars in millions)	**Average Balance**	**Interest Income/ Expense (1)**	**Yield/ Rate**	Average Balance	Interest Income/ Expense (1)	Yield/ Rate
	First Quarter 2020			First Quarter 2019		
Earning assets						
Interest-bearing deposits with the Federal Reserve, non-U.S. central banks and other banks	**$ 130,282**	**$ 268**	**0.83%**	$ 134,962	$ 506	1.52%
Time deposits placed and other short-term investments	**10,894**	**30**	**1.11**	8,453	59	2.82
Federal funds sold and securities borrowed or purchased under agreements to resell	**278,794**	**819**	**1.18**	274,308	1,195	1.77
Trading account assets	**156,685**	**1,266**	**3.25**	140,228	1,341	3.87
Debt securities	**465,215**	**2,868**	**2.49**	441,680	3,148	2.83
Loans and leases (2):						
Residential mortgage	**239,994**	**1,987**	**3.31**	210,174	1,862	3.55
Home equity	**40,040**	**421**	**4.22**	47,690	593	5.03
Credit card	**94,471**	**2,464**	**10.49**	95,008	2,530	10.80
Direct/Indirect and other consumer (3)	**90,954**	**746**	**3.30**	90,430	821	3.69
Total consumer	**465,459**	**5,618**	**4.85**	443,302	5,806	5.29
U.S. commercial	**330,420**	**2,846**	**3.46**	316,089	3,349	4.29
Non-U.S. commercial	**111,388**	**802**	**2.90**	101,996	886	3.52
Commercial real estate (4)	**63,418**	**583**	**3.70**	60,859	702	4.68
Commercial lease financing	**19,598**	**161**	**3.29**	21,774	196	3.60
Total commercial	**524,824**	**4,392**	**3.36**	500,718	5,133	4.15
Total loans and leases	**990,283**	**10,010**	**4.06**	944,020	10,939	4.69
Other earning assets	**87,876**	**981**	**4.49**	67,667	1,135	6.80
Total earning assets	**2,120,029**	**16,242**	**3.08**	2,011,318	18,323	3.68
Cash and due from banks	**27,997**			25,824		
Other assets, less allowance for loan and lease losses	**346,902**			323,850		
Total assets	**$ 2,494,928**			$ 2,360,992		
Interest-bearing liabilities						
U.S. interest-bearing deposits:						
Savings	**$ 50,600**	**$ 1**	**0.01%**	$ 53,573	$ 1	0.01%
NOW and money market deposit accounts	**770,474**	**653**	**0.34**	731,025	1,157	0.64
Consumer CDs and IRAs	**53,363**	**151**	**1.14**	41,791	74	0.72
Negotiable CDs, public funds and other deposits	**67,985**	**209**	**1.23**	65,974	367	2.25
Total U.S. interest-bearing deposits	**942,422**	**1,014**	**0.43**	892,363	1,599	0.73
Non-U.S. interest-bearing deposits:						
Banks located in non-U.S. countries	**1,904**	**3**	**0.60**	2,387	6	1.02
Governments and official institutions	**161**	**—**	**0.05**	178	—	0.11
Time, savings and other	**75,625**	**167**	**0.89**	64,212	190	1.20
Total non-U.S. interest-bearing deposits	**77,690**	**170**	**0.88**	66,777	196	1.19
Total interest-bearing deposits	**1,020,112**	**1,184**	**0.47**	959,140	1,795	0.76
Federal funds purchased, securities loaned or sold under agreements to repurchase, short-term borrowings and other interest-bearing liabilities	**304,503**	**1,120**	**1.48**	265,163	1,852	2.83
Trading account liabilities	**48,142**	**329**	**2.75**	45,593	345	3.07
Long-term debt	**210,816**	**1,335**	**2.54**	196,726	1,803	3.69
Total interest-bearing liabilities	**1,583,573**	**3,968**	**1.01**	1,466,622	5,795	1.60
Noninterest-bearing sources:						
Noninterest-bearing deposits	**419,224**			400,724		
Other liabilities (5)	**227,597**			227,429		
Shareholders' equity	**264,534**			266,217		
Total liabilities and shareholders' equity	**$ 2,494,928**			$ 2,360,992		
Net interest spread			**2.07%**			2.08%
Impact of noninterest-bearing sources			**0.26**			0.43
Net interest income/yield on earning assets (6)		**$ 12,274**	**2.33%**		$ 12,528	2.51%

(1) Includes the impact of interest rate risk management contracts. For more information, see Interest Rate Risk Management for the Banking Book on page 41.
(2) Nonperforming loans are included in the respective average loan balances. Income on these nonperforming loans is generally recognized on a cost recovery basis.
(3) Includes non-U.S. consumer loans of $2.9 billion and $2.8 billion for the first quarter of 2020 and 2019.
(4) Includes U.S. commercial real estate loans of $59.6 billion and $56.4 billion, and non-U.S. commercial real estate loans of $3.8 billion and $4.5 billion for the first quarter of 2020 and 2019.
(5) Includes $35.7 billion and $31.4 billion of structured notes and liabilities for the first quarter of 2020 and 2019.
(6) Net interest income includes FTE adjustments of $144 million and $153 million for the first quarter of 2020 and 2019.

Business Segment Operations

Segment Description and Basis of Presentation

We report our results of operations through the following four business segments: *Consumer Banking, GWIM, Global Banking* and *Global Markets*, with the remaining operations recorded in *All Other*. We manage our segments and report their results on an FTE basis. For more information, see Business Segment Operations in the MD&A of the Corporation's 2019 Annual Report on Form 10-K.

We periodically review capital allocated to our businesses and allocate capital annually during the strategic and capital planning processes. We utilize a methodology that considers the effect of regulatory capital requirements in addition to internal risk-based capital models. Our internal risk-based capital models use a risk-adjusted methodology incorporating each segment's credit, market, interest rate, business and operational risk components. For more information on the nature of these risks, see Managing Risk on page 18. The capital allocated to the business segments is referred to as allocated capital. Allocated equity in the reporting units is comprised of allocated capital plus capital for the portion of goodwill and intangibles specifically assigned to the reporting unit. For more information, see *Note 7 – Goodwill and Intangible Assets* to the Consolidated Financial Statements.

For more information on our presentation of financial information on an FTE basis, see Supplemental Financial Data on page 7, and for reconciliations to consolidated total revenue, net income and period-end total assets, see *Note 17 – Business Segment Information* to the Consolidated Financial Statements.

Key Performance Indicators

We present certain key financial and nonfinancial performance indicators that management uses when evaluating segment results. We believe they are useful to investors because they provide additional information about our segments' operational performance, customer trends and business growth.

Consumer Banking

	Deposits		Consumer Lending		Total Consumer Banking		
	Three Months Ended March 31						
(Dollars in millions)	**2020**	2019	**2020**	2019	**2020**	2019	% Change
Net interest income	**$ 3,948**	$ 4,307	**$ 2,914**	$ 2,799	**$ 6,862**	$ 7,106	(3)%
Noninterest income:							
Card income	**(8)**	(7)	**1,118**	1,204	**1,110**	1,197	(7)
Service charges	**995**	1,020	**—**	—	**995**	1,020	(2)
All other income	**97**	232	**65**	77	**162**	309	(48)
Total noninterest income	**1,084**	1,245	**1,183**	1,281	**2,267**	2,526	(10)
Total revenue, net of interest expense	**5,032**	5,552	**4,097**	4,080	**9,129**	9,632	(5)
Provision for credit losses	**115**	46	**2,143**	928	**2,258**	974	132
Noninterest expense	**2,725**	2,655	**1,770**	1,712	**4,495**	4,367	3
Income before income taxes	**2,192**	2,851	**184**	1,440	**2,376**	4,291	(45)
Income tax expense	**537**	698	**45**	353	**582**	1,051	(45)
Net income	**$ 1,655**	$ 2,153	**$ 139**	$ 1,087	**$ 1,794**	$ 3,240	(45)
Effective tax rate (1)					**24.5%**	24.5%	
Net interest yield	**2.17%**	2.52%	**3.76%**	3.95%	**3.57**	3.96	
Return on average allocated capital	**55**	73	**2**	18	**19**	36	
Efficiency ratio	**54.14**	47.80	**43.20**	41.98	**49.23**	45.33	

Balance Sheet

	Three Months Ended March 31						
Average	**2020**	2019	**2020**	2019	**2020**	2019	% Change
Total loans and leases	**$ 5,435**	$ 5,311	**$ 311,511**	$ 286,956	**$ 316,946**	$ 292,267	8%
Total earning assets (2)	**731,928**	693,091	**312,127**	287,259	**773,635**	727,390	6
Total assets (2)	**764,117**	724,559	**317,580**	297,729	**811,277**	769,328	5
Total deposits	**731,277**	692,234	**5,392**	4,767	**736,669**	697,001	6
Allocated capital	**12,000**	12,000	**26,500**	25,000	**38,500**	37,000	4
Period end	**March 31 2020**	December 31 2019	**March 31 2020**	December 31 2019	**March 31 2020**	December 31 2019	% Change
Total loans and leases	**$ 5,466**	$ 5,467	**$ 312,069**	$ 311,942	**$ 317,535**	$ 317,409	—%
Total earning assets (2)	**756,869**	724,573	**312,739**	312,684	**800,143**	760,174	5
Total assets (2)	**789,846**	758,459	**317,141**	322,717	**837,522**	804,093	4
Total deposits	**756,873**	725,665	**5,514**	5,080	**762,387**	730,745	4

(1) Estimated at the segment level only.
(2) In segments and businesses where the total of liabilities and equity exceeds assets, we allocate assets from *All Other* to match the segments' and businesses' liabilities and allocated shareholders' equity. As a result, total earning assets and total assets of the businesses may not equal total *Consumer Banking.*

Consumer Banking, which is comprised of Deposits and Consumer Lending, offers a diversified range of credit, banking and investment products and services to consumers and small businesses. For more information about *Consumer Banking,* including our Deposits and Consumer Lending businesses, see Business Segment Operations in the MD&A of the Corporation's 2019 Annual Report on Form 10-K.

Consumer Banking Results

Net income for *Consumer Banking* decreased $1.4 billion to $1.8 billion for the three months ended March 31, 2020 compared to

the same period in 2019 primarily due to an increase in the provision for credit losses and lower revenue.

Net interest income decreased $244 million to $6.9 billion primarily due to lower interest rates partially offset by higher deposit and loan balances in the quarter. Noninterest income decreased $259 million to $2.3 billion driven by lower other income due to the allocation of asset and liability management (ALM) results and a decline in card income.

The provision for credit losses increased $1.3 billion to $2.3 billion primarily due to the impact of COVID-19. Noninterest expense increased $128 million to $4.5 billion primarily driven by the cost of increased client activity and continued investments for business growth, partially offset by improved productivity and lower support costs.

The return on average allocated capital was 19 percent, down from 36 percent, driven by lower net income and, to a lesser extent, an increase in allocated capital. For information on capital allocated to the business segments, see Business Segment Operations on page 10.

Deposits

Net income for Deposits decreased $498 million to $1.7 billion driven by lower net interest income and noninterest income. Net interest income declined $359 million to $3.9 billion primarily due to lower interest rates, partially offset by growth in deposits. Noninterest income decreased $161 million to $1.1 billion primarily driven by lower other income due to the allocation of ALM results and lower service charges.

The provision for credit losses increased $69 million to $115 million primarily due to the impact of COVID-19. Noninterest expense increased $70 million to $2.7 billion driven by continued investments in the business, partially offset by operating efficiencies.

Average deposits increased $39.0 billion to $731.3 billion driven by strong organic growth. Growth in checking and time deposits of $36.3 billion was coupled with growth in traditional savings and money market savings of $2.6 billion.

The following table provides key performance indicators for Deposits. Management uses these metrics, and we believe they are useful to investors because they provide additional information to evaluate our deposit profitability and mobile/digital trends.

Key Statistics – Deposits

	Three Months Ended March 31	
	2020	2019
Total deposit spreads (excludes noninterest costs) (1)	**2.17%**	2.38%
Period End		
Consumer investment assets (in millions) (2)	**$ 212,227**	$ 210,930
Active digital banking users (units in thousands) (3)	**39,075**	37,034
Active mobile banking users (units in thousands) (4)	**29,820**	27,127
Financial centers	**4,297**	4,353
ATMs	**16,855**	16,378

(1) Includes deposits held in Consumer Lending.
(2) Includes client brokerage assets, deposit sweep balances and AUM in *Consumer Banking*.
(3) Active digital banking users represents mobile and/or online users over the last three months.
(4) Active mobile banking users represents mobile users over the last three months.

Consumer investment assets increased $1.3 billion driven by client flows offset by market performance. Active mobile banking users increased three million reflecting continuing changes in our customers' banking preferences. The number of financial centers declined by a net 56 reflecting changes in customer preferences to self-service options as we continue to optimize our consumer banking network and improve our cost to serve.

Consumer Lending

Net income for Consumer Lending decreased $948 million to $139 million primarily due to an increase in the provision for credit losses. Revenue of $4.1 billion was relatively unchanged.

Net interest income increased $115 million to $2.9 billion driven by loan growth. Noninterest income decreased $98 million to $1.2 billion primarily driven by lower card income.

The provision for credit losses increased $1.2 billion to $2.1 billion primarily due to the impact of COVID-19. Noninterest expense increased $58 million to $1.8 billion primarily driven by investments in the business.

Average loans increased $24.6 billion to $311.5 billion primarily driven by an increase in residential mortgages.

The following table provides key performance indicators for Consumer Lending. Management uses these metrics, and we believe they are useful to investors because they provide additional information about loan growth and profitability.

Key Statistics – Consumer Lending

	Three Months Ended March 31	
(Dollars in millions)	**2020**	2019
Total credit card (1)		
Gross interest yield (2)	**10.49%**	10.80%
Risk-adjusted margin (3)	**7.94**	8.03
New accounts (in thousands)	**1,055**	1,034
Purchase volumes	**$ 64,379**	$ 62,751
Debit card purchase volumes	**$ 88,588**	$ 85,030

(1) Includes *GWIM's* credit card portfolio.
(2) Calculated as the effective annual percentage rate divided by average loans.
(3) Calculated as the difference between total revenue less net credit losses divided by average loans.

During the three months ended March 31, 2020, the total credit card risk-adjusted margin decreased 9 bps, primarily driven by a portfolio shift away from promotional-rate loans. Total credit card purchase volumes increased $1.6 billion to $64.4 billion, and debit card purchase volumes increased $3.6 billion to $88.6 billion, reflecting higher levels of consumer spending.

Key Statistics – Loan Production (1)

	Three Months Ended March 31	
(Dollars in millions)	**2020**	2019
Consumer Banking:		
First mortgage	**$ 12,881**	$ 8,155
Home equity	**$ 2,641**	$ 2,485
Total (2):		
First mortgage	**$ 18,938**	$ 11,460
Home equity	**3,024**	2,825

(1) The loan production amounts represent the unpaid principal balance of loans and, in the case of home equity, the principal amount of the total line of credit.
(2) In addition to loan production in *Consumer Banking*, there is also first mortgage and home equity loan production in *GWIM*.

First mortgage loan originations in *Consumer Banking* and for the total Corporation increased $4.7 billion and $7.5 billion for the three months ended March 31, 2020 compared to the same period in 2019 primarily driven by a lower interest rate environment driving higher first-lien mortgage refinances.

Home equity production in *Consumer Banking* and for the total Corporation increased $156 million and $199 million, primarily driven by higher demand.

Global Wealth & Investment Management

(Dollars in millions)	Three Months Ended March 31 2020	2019	% Change
Net interest income	**$ 1,571**	$ 1,684	(7)%
Noninterest income:			
Investment and brokerage services	**3,122**	2,842	10
All other income	**243**	294	(17)
Total noninterest income	**3,365**	3,136	7
Total revenue, net of interest expense	**4,936**	4,820	2
Provision for credit losses	**189**	5	n/m
Noninterest expense	**3,600**	3,434	5
Income before income taxes	**1,147**	1,381	(17)
Income tax expense	**281**	338	(17)
Net income	**$ 866**	$ 1,043	(17)
Effective tax rate	**24.5%**	24.5%	
Net interest yield	**2.17**	2.40	
Return on average allocated capital	**23**	29	
Efficiency ratio	**72.95**	71.25	

Balance Sheet

Average	Three Months Ended March 31 2020	2019	% Change
Total loans and leases	**$ 178,639**	$ 164,403	9 %
Total earning assets	**290,916**	285,050	2
Total assets	**303,173**	297,133	2
Total deposits	**263,411**	261,841	1
Allocated capital	**15,000**	14,500	3

Period end	**March 31 2020**	**December 31 2019**	% Change
Total loans and leases	**$ 181,492**	$ 176,600	3 %
Total earning assets	**311,118**	287,195	8
Total assets	**323,866**	299,770	8
Total deposits	**282,395**	263,113	7

n/m = not meaningful

GWIM consists of two primary businesses: Merrill Lynch Global Wealth Management (MLGWM) and Bank of America Private Bank. For more information about *GWIM*, see Business Segment Operations in the MD&A of the Corporation's 2019 Annual Report on Form 10-K.

Net income for *GWIM* decreased $177 million to $866 million for the three months ended March 31, 2020 compared to the same period in 2019 due to higher provision for credit losses, higher noninterest expense and lower net interest income, partially offset by higher noninterest income. The operating margin was 23 percent compared to 29 percent a year ago.

Net interest income decreased $113 million to $1.6 billion due to the impact of lower interest rates, partially offset by the impact of growth in loans and deposits.

Noninterest income, which primarily includes investment and brokerage services income, increased $229 million to $3.4 billion. The increase was primarily driven by higher market valuations, positive AUM flows and increased transactional revenue, partially offset by declines in AUM pricing compared to the same period in 2019.

The provision for credit losses increased $184 million to $189 million primarily due to the impact of COVID-19. Noninterest expense increased $166 million to $3.6 billion, primarily due to higher revenue-related incentives along with investments for business growth.

The return on average allocated capital was 23 percent, down from 29 percent, due to lower net income and, to a lesser extent, a small increase in allocated capital.

MLGWM revenue of $4.1 billion increased three percent primarily driven by higher market valuations, positive AUM flows and increased transactional revenue, partially offset by decreases in net interest income and AUM pricing.

Bank of America Private Bank revenue of $863 million increased one percent primarily driven by higher market valuations partially offset by lower net interest income.

Key Indicators and Metrics

(Dollars in millions, except as noted)	Three Months Ended March 31	
	2020	2019
Revenue by Business		
Merrill Lynch Global Wealth Management	**$ 4,073**	$ 3,965
Bank of America Private Bank	**863**	855
Total revenue, net of interest expense	**$ 4,936**	$ 4,820
Client Balances by Business, at period end		
Merrill Lynch Global Wealth Management	**$ 2,215,531**	$ 2,384,492
Bank of America Private Bank	**443,080**	452,477
Total client balances	**$ 2,658,611**	$ 2,836,969
Client Balances by Type, at period end		
Assets under management	**$ 1,092,482**	$ 1,169,713
Brokerage and other assets	**1,155,461**	1,282,091
Deposits	**282,395**	261,168
Loans and leases (1)	**184,011**	167,455
Less: Managed deposits in assets under management	**(55,738)**	(43,458)
Total client balances	**$ 2,658,611**	$ 2,836,969
Assets Under Management Rollforward		
Assets under management, beginning of period	**$ 1,275,555**	$ 1,072,234
Net client flows	**7,035**	5,918
Market valuation/other	**(190,108)**	91,561
Total assets under management, end of period	**$ 1,092,482**	$ 1,169,713
Associates, at period end		
Number of financial advisors	**17,646**	17,535
Total wealth advisors, including financial advisors	**19,628**	19,524
Total primary sales professionals, including financial advisors and wealth advisors	**20,851**	20,657
Merrill Lynch Global Wealth Management Metric		
Financial advisor productivity (2) (in thousands)	**$ 1,138**	$ 1,039
Bank of America Private Bank Metric, at period end		
Primary sales professionals	**1,778**	1,795

(1) Includes margin receivables which are classified in customer and other receivables on the Consolidated Balance Sheet.
(2) For a definition, see Key Metrics on page 95.

Client Balances

Client balances decreased $178.4 billion, or six percent, to $2.7 trillion at March 31, 2020 compared to March 31, 2019. The decrease in client balances was primarily due to lower end of period market valuations partially offset by positive net flows.

Global Banking

(Dollars in millions)	Three Months Ended March 31 2020	2019	% Change
Net interest income	$ 2,612	$ 2,790	(6%)
Noninterest income:			
Service charges	796	713	12
Investment banking fees	761	709	7
All other income	431	943	(54)
Total noninterest income	1,988	2,365	(16)
Total revenue, net of interest expense	4,600	5,155	(11)
Provision for credit losses	2,093	111	n/m
Noninterest expense	2,321	2,266	2
Income before income taxes	186	2,778	(93)
Income tax expense	50	750	(93)
Net income	$ 136	$ 2,028	(93)
Effective tax rate	27.0%	27.0%	
Net interest yield	2.57	2.98	
Return on average allocated capital	1	20	
Efficiency ratio	50.44	43.96	

Balance Sheet

Average	Three Months Ended March 31 2020	2019	% Change
Total loans and leases	$ 386,483	$ 370,108	4%
Total earning assets	409,052	380,308	8
Total assets	465,926	434,920	7
Total deposits	382,373	349,037	10
Allocated capital	42,500	41,000	4

Period end	March 31 2020	December 31 2019	% Change
Total loans and leases	$ 437,122	$ 379,268	15 %
Total earning assets	505,451	407,180	24
Total assets	562,529	464,032	21
Total deposits	477,108	383,180	25

n/m = not meaningful

Global Banking, which includes Global Corporate Banking, Global Commercial Banking, Business Banking and Global Investment Banking, provides a wide range of lending-related products and services, integrated working capital management and treasury solutions, and underwriting and advisory services through our network of offices and client relationship teams. For more information about *Global Banking*, see Business Segment Operations in the MD&A of the Corporation's 2019 Annual Report on Form 10-K.

Net income for *Global Banking* decreased $1.9 billion to $136 million for the three months ended March 31, 2020 compared to the same period in 2019 primarily driven by higher provision for credit losses, and to a lesser extent, lower revenue.

Revenue decreased $555 million to $4.6 billion driven by lower net interest income and noninterest income. Net interest income decreased $178 million to $2.6 billion primarily due to the allocation of ALM results and spread compression, partially offset by growth in loan and deposit balances.

Noninterest income decreased $377 million to $2.0 billion primarily due to valuation adjustments on leveraged loans and the fair value option loan portfolio, partially offset by higher investment banking fees.

The provision for credit losses increased $2.0 billion to $2.1 billion primarily due to the impact of COVID-19. Noninterest expense increased $55 million primarily due to continued investment in the business, partially offset by lower revenue-related incentives.

The return on average allocated capital was one percent in 2020 compared to 20 percent in 2019, due to lower net income and, to a lesser extent, an increase in allocated capital. For information on capital allocated to the business segments, see Business Segment Operations on page 10.

Global Corporate, Global Commercial and Business Banking

The table below and following discussion present a summary of the results, which exclude certain investment banking activities in *Global Banking*.

Global Corporate, Global Commercial and Business Banking

(Dollars in millions)	Global Corporate Banking 2020	Global Corporate Banking 2019	Global Commercial Banking 2020	Global Commercial Banking 2019	Business Banking 2020	Business Banking 2019	Total 2020	Total 2019
	Three Months Ended March 31							
Revenue								
Business Lending	**$ 951**	$ 1,045	**$ 981**	$ 1,034	**$ 82**	$ 94	**$ 2,014**	$ 2,173
Global Transaction Services	**871**	1,007	**878**	891	**256**	266	**2,005**	2,164
Total revenue, net of interest expense	**$ 1,822**	$ 2,052	**$ 1,859**	$ 1,925	**$ 338**	$ 360	**$ 4,019**	$ 4,337
Balance Sheet								
Average								
Total loans and leases	**$ 182,705**	$ 176,288	**$ 188,581**	$ 178,450	**$ 15,181**	$ 15,343	**$ 386,467**	$ 370,081
Total deposits	**187,920**	168,126	**153,880**	142,534	**40,571**	38,404	**382,371**	349,064
Period end								
Total loans and leases	**$ 209,028**	$ 175,855	**$ 212,443**	$ 181,931	**$ 15,658**	$ 15,236	**$ 437,129**	$ 373,022
Total deposits	**246,237**	166,238	**189,584**	139,505	**41,286**	38,178	**477,107**	343,921

Business Lending revenue decreased $159 million for the three months ended March 31, 2020 compared to the same period in 2019. The decrease was primarily driven by valuation adjustments on loans in the fair value option portfolio, partly offset by the impact of higher loan and lease balances.

Global Transaction Services revenue decreased $159 million driven by the allocation of ALM results, partially offset by the impact of higher deposit balances.

Average loans and leases increased four percent driven by growth in the commercial and industrial loan portfolio. Average deposits increased 10 percent due to growth in domestic and international interest-bearing balances.

Global Investment Banking

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

Investment Banking Fees

(Dollars in millions)	Global Banking 2020	Global Banking 2019	Total Corporation 2020	Total Corporation 2019
	Three Months Ended March 31			
Products				
Advisory	**$ 247**	$ 303	**$ 269**	$ 343
Debt issuance	**424**	327	**927**	748
Equity issuance	**90**	79	**283**	234
Gross investment banking fees	**761**	709	**1,479**	1,325
Self-led deals	**(43)**	(20)	**(91)**	(61)
Total investment banking fees	**$ 718**	$ 689	**$ 1,388**	$ 1,264

Total Corporation investment banking fees, excluding self-led deals, of $1.4 billion, which are primarily included within *Global Banking* and *Global Markets*, increased 10 percent for the three months ended March 31, 2020 compared to the same period in 2019 primarily driven by higher debt and equity issuance fees, partially offset by lower advisory fees.

Global Markets

(Dollars in millions)	Three Months Ended March 31 2020	2019	% Change
Net interest income	$ 1,153	$ 953	21 %
Noninterest income:			
Investment and brokerage services	567	444	28
Investment banking fees	602	537	12
Market making and similar activities	2,973	2,082	43
All other income	(70)	165	(142)
Total noninterest income	4,072	3,228	26
Total revenue, net of interest expense	5,225	4,181	25
Provision for credit losses	107	(23)	n/m
Noninterest expense	2,813	2,755	2
Income before income taxes	2,305	1,449	59
Income tax expense	599	413	45
Net income	$ 1,706	$ 1,036	65
Effective tax rate	26.0%	28.5%	
Return on average allocated capital	19	12	
Efficiency ratio	53.82	65.91	

Balance Sheet

Average	Three Months Ended March 31 2020	2019	% Change
Trading-related assets:			
Trading account securities	$ 257,254	$ 225,254	14 %
Reverse repurchases	115,698	122,753	(6)
Securities borrowed	83,271	84,343	(1)
Derivative assets	46,825	41,953	12
Total trading-related assets	503,048	474,303	6
Total loans and leases	71,660	70,080	2
Total earning assets	501,616	472,414	6
Total assets	712,980	664,052	7
Total deposits	33,323	31,366	6
Allocated capital	36,000	35,000	3

Period end	March 31 2020	December 31 2019	% Change
Total trading-related assets	$ 439,480	$ 452,496	(3)%
Total loans and leases	78,591	72,993	8
Total earning assets	465,632	471,701	(1)
Total assets	654,735	641,806	2
Total deposits	38,536	34,676	11

n/m = not meaningful

Global Markets offers sales and trading services and research services to institutional clients across fixed-income, credit, currency, commodity and equity businesses. *Global Markets* product coverage includes securities and derivative products in both the primary and secondary markets. For more information about *Global Markets*, see Business Segment Operations in the MD&A of the Corporation's 2019 Annual Report on Form 10-K.

The following explanations for current period-over-period changes in results for *Global Markets*, including those disclosed under Sales and Trading Revenue, exclude net DVA, but the explanations would be the same if net DVA were included. Revenue amounts excluding net DVA are a non-GAAP financial measure. For more information on net DVA, see Supplemental Financial Data on page 7.

Net income for *Global Markets* increased $670 million to $1.7 billion for the three months ended March 31, 2020 compared to the same period in 2019. Net DVA gains were $300 million compared to losses of $90 million during the same period in 2019. Excluding net DVA, net income increased $374 million to $1.5 billion. These increases were primarily driven by an increase in revenue, partially offset by higher noninterest expense and an increase in the provision for credit losses.

Revenue increased $1.0 billion to $5.2 billion as sales and trading revenue increased $1.2 billion, and excluding net DVA, increased $782 million. These increases were driven by higher revenue across Equities and Fixed Income, Currencies and Commodities (FICC).

The provision for credit losses increased $130 million primarily due to the impact of COVID-19. Noninterest expense increased $58 million to $2.8 billion primarily driven by higher revenue-related expenses.

Average total assets increased $48.9 billion to $713.0 billion for the three months ended March 31, 2020 compared to the same period in 2019 primarily due to increased levels of inventory in FICC to facilitate expected client demand and higher client balances in Equities. Period-end total assets increased $12.9 billion since December 31, 2019 to $654.7 billion primarily driven by higher loan and derivative balances in FICC.

The return on average allocated capital was 19 percent, up from 12 percent, reflecting higher net income, partially offset by a small increase in allocated capital. For more information on

capital allocated to the business segments, see Business Segment Operations on page 10.

Sales and Trading Revenue

For a description of sales and trading revenue, see Business Segment Operations in the MD&A of the Corporation's 2019 Annual Report on Form 10-K. The following table and related discussion present sales and trading revenue, substantially all of which is in *Global Markets,* with the remainder in *Global Banking.* In addition, the following table and related discussion present sales and trading revenue, excluding net DVA, which is a non-GAAP financial measure. For more information on net DVA, see Supplemental Financial Data on page 7.

Sales and Trading Revenue (1, 2, 3)

	Three Months Ended March 31	
(Dollars in millions)	**2020**	2019
Sales and trading revenue(2)		
Fixed-income, currencies and commodities	**$ 2,945**	$ 2,281
Equities	**1,690**	1,182
Total sales and trading revenue	**$ 4,635**	$ 3,463
Sales and trading revenue, excluding net DVA (4)		
Fixed-income, currencies and commodities	**$ 2,671**	$ 2,360
Equities	**1,664**	1,193
Total sales and trading revenue, excluding net DVA	**$ 4,335**	$ 3,553

(1) For more information on sales and trading revenue, see *Note 3 – Derivatives* to the Consolidated Financial Statements.
(2) Includes FTE adjustments of $62 million and $48 million for the three months ended March 31, 2020 and 2019.
(3) Includes *Global Banking* sales and trading revenue of $228 million and $118 million for the three months ended March 31, 2020 and 2019.
(4) FICC and Equities sales and trading revenue, excluding net DVA, is a non-GAAP financial measure. FICC net DVA gains were $274 million and losses of $79 million for the three months ended March 31, 2020 and 2019. Equities net DVA gains were $26 million and losses of $11 million for the three months ended March 31, 2020 and 2019.

FICC revenue increased $311 million for the three months ended March 31, 2020 compared to the same period in 2019 driven by increased client activity and improved market making conditions across macro products, partially offset by weaker performances in credit sensitive businesses. Equities revenueincreased $471 million driven by increased client activity and a strong trading performance in the more volatile market environment.

All Other

	Three Months Ended March 31		
(Dollars in millions)	**2020**	2019	% Change
Net interest income	**$ 76**	$ (5)	n/m
Noninterest income (loss)	**(1,055)**	(626)	69 %
Total revenue, net of interest expense	**(979)**	(631)	55
Provision for credit losses	**114**	(54)	n/m
Noninterest expense	**246**	402	(39)
Loss before income taxes	**(1,339)**	(979)	37
Income tax benefit	**(847)**	(943)	(10)
Net loss	**$ (492)**	$ (36)	n/m

Balance Sheet

	Three Months Ended March 31		
Average	**2020**	2019	% Change
Total loans and leases	**$ 36,555**	$ 47,162	(22)%
Total assets (1)	**201,572**	195,559	3
Total deposits	**23,560**	20,619	14
Period end	**March 31 2020**	December 31 2019	% Change
Total loans and leases	**$ 36,045**	$ 37,156	(3)%
Total assets (1)	**241,302**	224,378	8
Total deposits	**22,899**	23,089	(1)

(1) In segments where the total of liabilities and equity exceeds assets, which are generally deposit-taking segments, we allocate assets from *All Other* to those segments to match liabilities (i.e., deposits) and allocated shareholders' equity. Average allocated assets were $572.2 billion and $542.5 billion for the three months ended March 31, 2020 and 2019, and period-end allocated assets were $665.8 billion and $565.4 billion at March 31, 2020 and December 31, 2019.
n/m = not meaningful

All Other consists of ALM activities, equity investments, non-core mortgage loans and servicing activities, liquidating businesses and certain expenses not otherwise allocated to a business segment. ALM activities encompass certain residential mortgages, debt securities, and interest rate and foreign currency risk management activities. Substantially all of the results of ALM activities are allocated to our business segments. For more information on our ALM activities, see *Note 17 – Business Segment Information* to the Consolidated Financial Statements. Equity investments include our merchant services joint venture, as well as a portfolio of equity, real estate and other alternative investments. For information on our merchant services joint venture, see *Note 10 – Commitments and Contingencies* to the Consolidated Financial Statements. For more information about *All Other,* see Business Segment Operations in the MD&A of the Corporation's 2019 Annual Report on Form 10-K.

Residential mortgage loans that are held for ALM purposes, including interest rate or liquidity risk management, are classified as core and are presented on the balance sheet of *All Other*. During the three months ended March 31, 2020, residential mortgage loans held for ALM activities decreased $416 million to $21.3 billion primarily as a result of payoffs and paydowns. Non-core residential mortgage and home equity loans, which are principally runoff portfolios, are also held in *All Other*. During the three months ended March 31, 2020, total non-core loans decreased $806 million to $14.9 billion due primarily to payoffs and paydowns, as well as Federal Housing Administration (FHA) loan conveyances, partially offset by repurchases. For more information on the composition of the core and non-core portfolios, see Consumer Portfolio Credit Risk Management on page 25.

The net loss for *All Other* increased $456 million, driven by lower revenue and higher provision for credit losses, partially offset by lower noninterest expense.

Revenue decreased $348 million due primarily to certain valuation adjustments in noninterest income.

Noninterest expense decreased $156 million to $246 million primarily due to lower incentive compensation.

The income tax benefit decreased $96 million reflecting a lower level of tax preference benefits recognized in the quarter, partially offset by the impact of higher pretax losses. Both periods included income tax benefit adjustments to eliminate the FTE treatment of certain tax credits recorded in *Global Banking*.

Off-Balance Sheet Arrangements and Contractual Obligations

We have contractual obligations to make future payments on debt and lease agreements. Additionally, in the normal course of business, we enter into contractual arrangements whereby we commit to future purchases of products or services from unaffiliated parties. For more information on obligations and commitments, see *Note 10 – Commitments and Contingencies* to the Consolidated Financial Statements herein, as well as Off-Balance Sheet Arrangements and Contractual Obligations in the MD&A of the Corporation's 2019 Annual Report on Form 10-K, and *Note 12 – Long-term Debt* and *Note 13 – Commitments and Contingencies* to the Consolidated Financial Statements of the Corporation's 2019 Annual Report on Form 10-K.

Representations and Warranties Obligations

For more information on representations and warranties obligations in connection with the sale of mortgage loans, see *Note 13 – Commitments and Contingencies* to the Consolidated Financial Statements of the Corporation's 2019 Annual Report on Form 10-K.

Managing Risk

Risk is inherent in all our business activities. The seven key types of risk faced by the Corporation are strategic, credit, market, liquidity, compliance, operational and reputational. Sound risk management enables us to serve our customers and deliver for our shareholders. If not managed well, risks can result in financial loss, regulatory sanctions and penalties, and damage to our reputation, each of which may adversely impact our ability to execute our business strategies. We take a comprehensive approach to risk management with a defined Risk Framework and an articulated Risk Appetite Statement which are approved annually by the Enterprise Risk Committee and the Board.

Our Risk Framework serves as the foundation for the consistent and effective management of risks facing the Corporation. The Risk Framework sets forth clear roles, responsibilities and accountability for the management of risk and provides a blueprint for how the Board, through delegation of authority to committees and executive officers, establishes risk appetite and associated limits for our activities.

Our Risk Appetite Statement is intended to ensure that the Corporation maintains an acceptable risk profile by providing a common framework and a comparable set of measures for senior management and the Board to clearly indicate the level of risk the Corporation is willing to accept. Risk appetite is set at least annually and is aligned with the Corporation's strategic, capital and financial operating plans. Our line of business strategies and risk appetite are also similarly aligned.

For more information about the Corporation's risks related to the COVID-19 pandemic, see Part II, Item 1A. Risk Factors on page 96. These COVID-19 related risks are being managed within our Risk Framework and supporting risk management programs.

For more information on our Risk Framework, our risk management activities and the key types of risk faced by the Corporation, see the Managing Risk through Reputational Risk sections in the MD&A of the Corporation's 2019 Annual Report on Form 10-K.

Capital Management

The Corporation manages its capital position so that its capital is more than adequate to support its business activities and aligns with risk, risk appetite and strategic planning. For more information on capital management, including related regulatory requirements, see Capital Management in the MD&A of the Corporation's 2019 Annual Report on Form 10-K.

CCAR and Capital Planning

During the first quarter of 2020, we repurchased $6.4 billion of common stock pursuant to the Board's authorization. For more information, see Capital Management - - CCAR and Capital Planning in the MD&A of the Corporation's 2019 Annual Report on Form 10-K.

As announced on March 15, 2020, due to the impact of the COVID-19 pandemic on the global economy, we temporarily suspended common stock repurchases from the date of the announcement through the end of the second quarter of 2020. We made this decision to enable us to provide maximum support to our customers and the broader economy through lending and other services. The suspension does not include repurchases to offset shares issued under equity compensation plans. As a well-capitalized financial institution, we may reinstate our repurchase program at such time as our Board deems advisable, taking into account economic conditions and other considerations.

At such time that we reinstate our stock repurchase program, our stock repurchases will be subject to various factors, including the Corporation's capital position, liquidity, financial performance and alternative uses of capital, stock trading price and general market conditions, and may be suspended at any time. The repurchases may be effected through open market purchases or privately negotiated transactions, including repurchase plans that satisfy the conditions of Rule 10b5-1 of the Securities Exchange Act of 1934, as amended (Exchange Act).

The Federal Reserve requires BHCs to submit a capital plan and planned capital actions on an annual basis, consistent with the rules governing the CCAR capital plan. In April 2020, we submitted our 2020 CCAR capital plan and related supervisory stress tests. The Federal Reserve has announced that it will disclose CCAR capital plan supervisory stress test results by June 30, 2020. These results will determine the stress test depletion used in the calculation of the Corporation's stress capital buffer under the final rule published by the Federal Reserve in March 2020. For more information, see Regulatory Developments in this section.

Regulatory Capital

As a financial services holding company, we are subject to regulatory capital rules, including Basel 3, issued by U.S. banking regulators. The Corporation's depository institution subsidiaries are also subject to the Prompt Corrective Action (PCA) framework. The Corporation and its primary affiliated banking entity, BANA, are Advanced approaches institutions under Basel 3 and are required to report regulatory risk-based capital ratios and risk-weighted assets under both the Standardized and Advanced approaches. The approach that yields the lower ratio is used to assess capital adequacy including under the PCA framework. As of March 31, 2020, the Common equity tier 1 (CET1) and Tier 1 capital ratios for the Corporation were lower under the Standardized approach whereas the Advanced approaches yielded a lower Total capital ratio.

Minimum Capital Requirements

In order to avoid restrictions on capital distributions and discretionary bonus payments, the Corporation must meet risk-based capital ratio requirements that include a capital conservation buffer greater than 2.5 percent, plus any applicable countercyclical capital buffer and a global systemically important bank (G-SIB) surcharge. The buffers and surcharge must be comprised solely of CET1 capital.

The Corporation is also required to maintain a minimum supplementary leverage ratio (SLR) of 3.0 percent plus a leverage buffer of 2.0 percent in order to avoid certain restrictions on capital distributions and discretionary bonus payments. Our insured depository institution subsidiaries are required to maintain a minimum 6.0 percent SLR to be considered well capitalized under the PCA framework.

Capital Composition and Ratios

Table 8 presents Bank of America Corporation's capital ratios and related information in accordance with Basel 3 Standardized and Advanced approaches as measured at March 31, 2020 and December 31, 2019. For the periods presented herein, the Corporation met the definition of well capitalized under current regulatory requirements.

Table 8 Bank of America Corporation Regulatory Capital under Basel 3

(Dollars in millions, except as noted)	Standardized Approach (1)	Advanced Approaches (1)	Regulatory Minimum (2)
	March 31, 2020		
Risk-based capital metrics:			
Common equity tier 1 capital	**$ 168,115**	**$ 168,115**	
Tier 1 capital	**191,532**	**191,532**	
Total capital (3)	**228,511**	**221,009**	
Risk-weighted assets (in billions)	**1,561**	**1,512**	
Common equity tier 1 capital ratio	**10.8%**	**11.1%**	**9.5%**
Tier 1 capital ratio	**12.3**	**12.7**	**11.0**
Total capital ratio	**14.6**	**14.6**	**13.0**
Leverage-based metrics:			
Adjusted quarterly average assets (in billions) (4)	**$ 2,422**	**$ 2,422**	
Tier 1 leverage ratio	**7.9%**	**7.9%**	**4.0**
SLR leverage exposure (in billions)		**$ 2,984**	
SLR		**6.4%**	**5.0**
	December 31, 2019		
Risk-based capital metrics:			
Common equity tier 1 capital	$ 166,760	$ 166,760	
Tier 1 capital	188,492	188,492	
Total capital (3)	221,230	213,098	
Risk-weighted assets (in billions)	1,493	1,447	
Common equity tier 1 capital ratio	11.2%	11.5%	9.5%
Tier 1 capital ratio	12.6	13.0	11.0
Total capital ratio	14.8	14.7	13.0
Leverage-based metrics:			
Adjusted quarterly average assets (in billions) (4)	$ 2,374	$ 2,374	
Tier 1 leverage ratio	7.9%	7.9%	4.0
SLR leverage exposure (in billions)		$ 2,946	
SLR		6.4%	5.0

(1) As of March 31, 2020, capital ratios are calculated using the regulatory capital rule that allows a five-year transition period related to the adoption of CECL.
(2) The capital conservation buffer and G-SIB surcharge were 2.5 percent at both March 31, 2020 and December 31, 2019. The countercyclical capital buffer for both periods was zero. The SLR minimum includes a leverage buffer of 2.0 percent.
(3) Total capital under the Advanced approaches differs from the Standardized approach due to differences in the amount permitted in Tier 2 capital related to the qualifying allowance for credit losses.
(4) Reflects total average assets adjusted for certain Tier 1 capital deductions.

At March 31, 2020, CET1 capital was $168.1 billion, an increase of $1.4 billion from December 31, 2019, driven by earnings and net unrealized gains on available-for-sale (AFS) debt securities included in accumulated other comprehensive income (OCI), partially offset by common stock repurchases and dividends. Total capital under the Advanced approaches increased $7.9 billion primarily driven by the same factors as CET1 capital, increases in excess eligible credit reserves included in Tier 2 capital and issuance of preferred stock. Risk-weighted assets under the Standardized approach, which yielded the lower CET1 capital ratio at March 31, 2020, increased $67.6 billion during the three months ended March 31, 2020 to $1,561 billion primarily due to increased exposure in *Global Markets* and increased loan revolver draws in *Global Banking*.

Table 9 shows the capital composition at March 31, 2020 and December 31, 2019.

Table 9 Capital Composition under Basel 3

(Dollars in millions)	**March 31 2020**	December 31 2019
Total common shareholders' equity	**$ 241,491**	$ 241,409
CECL transitional amount (1)	**3,299**	—
Goodwill, net of related deferred tax liabilities	**(68,570)**	(68,570)
Deferred tax assets arising from net operating loss and tax credit carryforwards	**(5,337)**	(5,193)
Intangibles, other than mortgage servicing rights and goodwill, net of related deferred tax liabilities	**(1,236)**	(1,328)
Defined benefit pension plan net assets	**(1,014)**	(1,003)
Cumulative unrealized net (gain) loss related to changes in fair value of financial liabilities attributable to own creditworthiness, net-of-tax	**(370)**	1,278
Other	**(148)**	167
Common equity tier 1 capital	**168,115**	166,760
Qualifying preferred stock, net of issuance cost	**23,426**	22,329
Other	**(9)**	(597)
Tier 1 capital	**191,532**	188,492
Tier 2 capital instruments	**24,076**	22,538
Eligible credit reserves included in Tier 2 capital (2)	**5,407**	2,097
Other	**(6)**	(29)
Total capital under the Advanced approaches	**$ 221,009**	$ 213,098

(1) The CECL transitional amount includes 100 percent of the initial adoption impact of the new CECL accounting standard plus 25 percent of the increase in the allowance for credit losses from January 1, 2020 through March 31, 2020. For more information, see Regulatory Developments on page 22.
(2) The balance at March 31, 2020 includes the impact of transition provisions related to the new CECL accounting standard.

Table 10 shows the components of risk-weighted assets as measured under Basel 3 at March 31, 2020 and December 31, 2019.

Table 10 Risk-weighted Assets under Basel 3

	Standardized Approach	**Advanced Approaches**	Standardized Approach	Advanced Approaches
(Dollars in billions)	**March 31, 2020**		December 31, 2019	
Credit risk	**$ 1,492**	**$ 901**	$ 1,437	$ 858
Market risk	**69**	**69**	56	55
Operational risk	**n/a**	**500**	n/a	500
Risks related to credit valuation adjustments	**n/a**	**42**	n/a	34
Total risk-weighted assets	**$ 1,561**	**$ 1,512**	$ 1,493	$ 1,447

n/a = not applicable

Bank of America, N.A. Regulatory Capital

Table 11 presents regulatory capital information for BANA in accordance with Basel 3 Standardized and Advanced approaches as measured at March 31, 2020 and December 31, 2019. BANA met the definition of well capitalized under the PCA framework for both periods.

Table 11 Bank of America, N.A. Regulatory Capital under Basel 3

(Dollars in millions, except as noted)	Standardized Approach (1)	Advanced Approaches (1)	Regulatory Minimum (2)
	March 31, 2020		
Risk-based capital metrics:			
Common equity tier 1 capital	**$ 153,089**	**$ 153,089**	
Tier 1 capital	**153,089**	**153,089**	
Total capital (3)	**167,936**	**159,644**	
Risk-weighted assets (in billions)	**1,288**	**1,042**	
Common equity tier 1 capital ratio	**11.9%**	**14.7%**	**7.0%**
Tier 1 capital ratio	**11.9**	**14.7**	**8.5**
Total capital ratio	**13.0**	**15.3**	**10.5**
Leverage-based metrics:			
Adjusted quarterly average assets (in billions) (4)	**$ 1,797**	**$ 1,797**	
Tier 1 leverage ratio	**8.5%**	**8.5%**	**5.0**
SLR leverage exposure (in billions)		**$ 2,183**	
SLR		**7.0%**	**6.0**
	December 31, 2019		
Risk-based capital metrics:			
Common equity tier 1 capital	$ 154,626	$ 154,626	
Tier 1 capital	154,626	154,626	
Total capital (3)	166,567	158,665	
Risk-weighted assets (in billions)	1,241	991	
Common equity tier 1 capital ratio	12.5%	15.6%	7.0%
Tier 1 capital ratio	12.5	15.6	8.5
Total capital ratio	13.4	16.0	10.5
Leverage-based metrics:			
Adjusted quarterly average assets (in billions) (4)	$ 1,780	$ 1,780	
Tier 1 leverage ratio	8.7%	8.7%	5.0
SLR leverage exposure (in billions)		$ 2,177	
SLR		7.1%	6.0

(1) As of March 31, 2020, capital ratios are calculated using the regulatory capital rule that allows a five-year transition period related to the adoption of CECL.
(2) Risk-based capital regulatory minimums at March 31, 2020 are the minimum ratios under Basel 3 including a capital conservation buffer of 2.5 percent. The regulatory minimums for the leverage ratios as of both period ends and risk-based capital ratios as of December 31, 2019 are the percent required to be considered well capitalized under the PCA framework.
(3) Total capital under the Advanced approaches differs from the Standardized approach due to differences in the amount permitted in Tier 2 capital related to the qualifying allowance for credit losses.
(4) Reflects total average assets adjusted for certain Tier 1 capital deductions.

Total Loss-Absorbing Capacity Requirements

Total loss-absorbing capacity (TLAC) consists of the Corporation's Tier 1 capital and eligible long-term debt issued directly by the Corporation. Eligible long-term debt for TLAC ratios is comprised of unsecured debt that has a remaining maturity of at least one year and satisfies additional requirements as prescribed in the TLAC final rule. As with the risk-based capital ratios and SLR, the Corporation is required to maintain TLAC ratios in excess of minimum requirements plus applicable buffers to avoid restrictions on capital distributions and discretionary bonus payments. Table 12 presents the Corporation's TLAC and long-term debt ratios and related information as of March 31, 2020.

Table 12 Bank of America Corporation Total Loss-Absorbing Capacity and Long-Term Debt

(Dollars in millions)	TLAC (1)	Regulatory Minimum (2)	Long-term Debt	Regulatory Minimum (3)
	March 31, 2020			
Total eligible balance	**$ 383,281**		**$ 181,135**	
Percentage of risk-weighted assets (4)	**24.6%**	**22.0%**	**11.6%**	**8.5%**
Percentage of SLR leverage exposure	**12.8**	**9.5**	**6.1**	**4.5**
	December 31, 2019			
Total eligible balance	$ 367,449		$ 171,349	
Percentage of risk-weighted assets (4)	24.6%	22.0%	11.5%	8.5%
Percentage of SLR leverage exposure	12.5	9.5	5.8	4.5

(1) As of March 31, 2020, TLAC ratios are calculated using the regulatory capital rule that allows a five-year transition period related to the adoption of CECL.
(2) The TLAC risk-weighted assets regulatory minimum consists of 18.0 percent plus a TLAC risk-weighted assets buffer comprised of 2.5 percent plus the method 1 G-SIB surcharge of 1.5 percent. The countercyclical buffer is zero for both periods. The TLAC SLR leverage exposure regulatory minimum consists of 7.5 percent plus a 2.0 percent TLAC leverage buffer. The TLAC risk-weighted assets and leverage buffers must be comprised solely of CET1 capital and Tier 1 capital, respectively.
(3) The long-term debt risk-weighted assets regulatory minimum is comprised of 6.0 percent plus an additional 2.5 percent requirement based on the Corporation's method 2 G-SIB surcharge. The long-term debt leverage exposure regulatory minimum is 4.5 percent.
(4) The approach that yields the higher risk-weighted assets is used to calculate TLAC and long-term debt ratios, which was the Standardized approach as of March 31, 2020 and December 31, 2019.

Regulatory Developments

The following supplements the disclosure in Capital Management – Regulatory Developments in the MD&A of the Corporation's 2019 Annual Report on Form 10-K.

Revisions to Basel 3 to Address Current Expected Credit Loss Accounting

On January 1, 2020, the Corporation adopted the new accounting standard that requires the measurement of the allowance for credit losses to be based on management's best estimate of lifetime expected credit losses inherent in the Corporation's relevant financial assets. For more information, see *Note 1 – Summary of Significant Accounting Principles* to the Consolidated Financial Statements. On March 27, 2020, in response to the COVID-19 pandemic, U.S. banking regulators issued an interim final rule that the Corporation adopted to delay for two years the initial adoption impact of CECL on regulatory capital, followed by a three-year transition period to phase out the aggregate amount of the capital benefit provided during 2020 and 2021 (i.e., a five-year transition period). During the two-year delay, the Corporation will add back to CET1 capital 100 percent of the initial adoption impact of CECL plus 25 percent of the cumulative quarterly changes in the allowance for credit losses (i.e., quarterly transitional amounts). After two years, starting on January 1, 2022, the quarterly transitional amounts along with the initial adoption impact of CECL will be phased out of CET1 capital over the three-year period.

Stress Capital Buffer

On March 4, 2020, the Federal Reserve issued a final rule that integrates the annual quantitative assessment of the CCAR program with the buffer requirements in the U.S. Basel 3 Final Rule. The new approach replaces the existing static 2.5 percent capital conservation buffer for Basel 3 Standardized approach requirements with a stress capital buffer, calculated as the decline in the CET1 capital ratio under the supervisory severely adverse scenario plus four quarters of planned common stock dividends, floored at 2.5 percent. The stress capital buffer requirement is effective October 1, 2020. The Corporation will receive its stress capital buffer in its 2020 CCAR results.

In conjunction with this new requirement, the Federal Reserve has removed the annual CCAR quantitative objection process beginning with CCAR 2020. While the final rule continues to require that the Corporation describe its planned capital distributions in its CCAR capital plan, the Corporation is no longer required to seek prior approval if it makes capital distributions in excess of those included in its CCAR capital plan. The Corporation is instead subject to automatic distribution limitations if its capital ratios fall below its buffer requirements, which include the stress capital buffer.

Eligible Retained Income

On March 17, 2020, in response to the economic impact of the COVID-19 pandemic, the Federal Reserve, the Office of the Comptroller of the Currency (OCC) and the Federal Deposit Insurance Corporation (FDIC) issued an interim final rule that revises the definition of eligible retained income to be based on average net income over the prior four quarters. This change would more gradually phase in automatic distribution restrictions to the extent capital buffers are breached.

Supplementary Leverage Ratio

On April 1, 2020, in response to the economic impact of the COVID-19 pandemic, the Federal Reserve issued an interim final rule to temporarily exclude the on-balance sheet amounts of U.S. Treasury securities and deposits at Federal Reserve Banks from the calculation of SLR leverage exposure for bank holding companies. The rule is effective for June 30, 2020 through March 31, 2021 reports.

Paycheck Protection Program Loans

On April 9, 2020, in response to the economic impact of the COVID-19 pandemic, the Federal Reserve, OCC and FDIC issued an interim final rule that excludes loans pledged as collateral to the Federal Reserve's PPP Lending Facility from SLR leverage exposure, average total consolidated assets, and Advanced and Standardized risk-weighted assets. Additionally, PPP loans, which are guaranteed by the Small Business Administration, will receive a zero percent risk weight under the Basel 3 Advanced and Standardized approaches. For more information on the PPP, see Executive Summary - Recent Developments – COVID-19 Pandemic 2020 on page 3.

Volcker Rule

In 2019, U.S. financial regulators finalized certain changes to the Volcker Rule, including removing the requirement for banking organizations to deduct from Tier 1 capital ownership interests of covered funds acquired or retained under the underwriting or market-making exemptions of the Volcker Rule, which the banking entity did not organize or offer. This change became effective for the Corporation on January 1, 2020.

Regulatory Capital and Securities Regulation

The Corporation's principal U.S. broker-dealer subsidiaries are BofA Securities, Inc. (BofAS), Merrill Lynch Professional Clearing Corp. (MLPCC) and Merrill Lynch, Pierce, Fenner & Smith Incorporated (MLPF&S). BofAS was formed as a result of the reorganization of MLPF&S which was completed in May 2019. The Corporation's principal European broker-dealer subsidiaries are Merrill Lynch International (MLI) and BofA Securities Europe SA (BofASE).

The U.S. broker-dealer subsidiaries are subject to the net capital requirements of Rule 15c3-1 under the Exchange Act. BofAS computes its minimum capital requirements as an alternative net capital broker-dealer under Rule 15c3-1, and MLPCC and MLPF&S compute their minimum capital requirements in accordance with the alternative standard under Rule 15c3-1. BofAS and MLPCC are also registered as futures commission merchants and are subject to U.S. Commodity Futures Trading Commission (CFTC) Regulation 1.17.

BofAS provides institutional services, and in accordance with the alternative net capital requirements, is required to maintain tentative net capital in excess of $1.0 billion and net capital in excess of the greater of $500 million or a certain percentage of its reserve requirement. BofAS must also notify the Securities and Exchange Commission (SEC) in the event its tentative net capital is less than $5.0 billion. BofAS is also required to hold a certain percentage of its risk-based margin in order to meet its CFTC minimum net capital requirement. At March 31, 2020, BofAS had tentative net capital of $15.9 billion. BofAS also had regulatory net capital of $12.0 billion which exceeded the minimum requirement of $3.4 billion.

MLPCC is a fully-guaranteed subsidiary of BofAS and provides clearing and settlement services. At March 31, 2020, MLPCC's regulatory net capital of $5.9 billion exceeded the minimum requirement of $1.0 billion.

MLPF&S provides retail services. At March 31, 2020, MLPF&S' regulatory net capital was $4.1 billion which exceeded the minimum requirement of $102 million.

Our European broker-dealers are regulated by non-U.S. regulators. MLI, a U.K. investment firm, is regulated by the Prudential Regulation Authority and the Financial Conduct Authority and is subject to certain regulatory capital requirements. At March 31, 2020, MLI's capital resources were $34.6 billion, which exceeded the minimum Pillar 1 requirement of $14.6 billion. BofASE, a French investment firm, is regulated by the Autorité de Contrôle Prudentiel et de Résolution and the Autorité des Marchés Financiers, and is subject to certain regulatory capital requirements. At March 31, 2020, BofASE's capital resources were $5.3 billion which exceeded the minimum Pillar 1 requirement of $2.1 billion.

Liquidity Risk

Funding and Liquidity Risk Management

Our primary liquidity risk management objective is to meet expected or unexpected cash flow and collateral needs while continuing to support our businesses and customers under a range of economic conditions. To achieve that objective, we analyze and monitor our liquidity risk under expected and stressed conditions, maintain liquidity and access to diverse funding sources, including our stable deposit base, and seek to align liquidity-related incentives and risks. These liquidity risk management practices have allowed us to effectively manage the market stress that began in the first quarter of 2020 from the COVID-19 pandemic. For more information on the effects of the pandemic, see Executive Summary - Recent Developments – COVID-19 Pandemic 2020 on page 3.

We define liquidity as readily available assets, limited to cash and high-quality, liquid, unencumbered securities that we can use to meet our contractual and contingent financial obligations as those obligations arise. We manage our liquidity position through line of business and ALM activities, as well as through our legal entity funding strategy, on both a forward and current (including intraday) basis under both expected and stressed conditions. We believe that a centralized approach to funding and liquidity management enhances our ability to monitor liquidity requirements, maximizes access to funding sources, minimizes borrowing costs and facilitates timely responses to liquidity events. For more information regarding global funding and liquidity risk management, as well as liquidity sources, liquidity arrangements, contingency planning and credit ratings discussed below, see Liquidity Risk in the MD&A of the Corporation's 2019 Annual Report on Form 10-K.

NB Holdings Corporation

We have intercompany arrangements with certain key subsidiaries under which we transferred certain assets of Bank of America Corporation, as the parent company, which is a separate and distinct legal entity from our banking and nonbank subsidiaries, and agreed to transfer certain additional parent company assets not needed to satisfy anticipated near-term expenditures, to NB Holdings Corporation, a wholly-owned holding company subsidiary (NB Holdings). The parent company is expected to continue to have access to the same flow of dividends, interest and other amounts of cash necessary to service its debt, pay dividends and perform other obligations as it would have had if it had not entered into these arrangements and transferred any assets. These arrangements support our preferred single point of entry resolution strategy, under which only the parent company would be resolved under the U.S. Bankruptcy Code.

Global Liquidity Sources and Other Unencumbered Assets

Table 13 presents average Global Liquidity Sources (GLS) for the three months ended March 31, 2020 and December 31, 2019.

Table 13 Average Global Liquidity Sources

(Dollars in billions)	Three Months Ended March 31 2020	Three Months Ended December 31 2019
Parent company and NB Holdings	**$ 50**	$ 59
Bank subsidiaries	**451**	454
Other regulated entities	**64**	63
Total Average Global Liquidity Sources	**$ 565**	$ 576

We maintain liquidity available to the Corporation, including the parent company and selected subsidiaries, in the form of cash and high-quality, liquid, unencumbered securities. Typically, parent company and NB Holdings liquidity is in the form of cash deposited with BANA.

Our bank subsidiaries' liquidity is primarily driven by deposit and lending activity, as well as securities valuation and net debt activity. Liquidity at bank subsidiaries excludes the cash deposited by the parent company and NB Holdings. Our bank subsidiaries can also generate incremental liquidity by pledging a range of unencumbered loans and securities to certain Federal Home Loan Banks (FHLBs) and the Federal Reserve Discount Window. The cash we could have obtained by borrowing against this pool of specifically-identified eligible assets was $359 billion and $372 billion at March 31, 2020 and December 31, 2019. We have established operational procedures to enable us to borrow against these assets, including regularly monitoring our total pool of eligible loans and securities collateral. Eligibility is defined in guidelines from the FHLBs and the Federal Reserve and is subject to change at their discretion. Due to regulatory restrictions, liquidity generated by the bank subsidiaries can generally be used only to fund obligations within the bank subsidiaries, and transfers to the parent company or nonbank subsidiaries may be subject to prior regulatory approval.

Liquidity held in other regulated entities, comprised primarily of broker-dealer subsidiaries, is primarily available to meet the obligations of that entity and transfers to the parent company or to any other subsidiary may be subject to prior regulatory approval due to regulatory restrictions and minimum requirements. Our other regulated entities also hold unencumbered investment-grade securities and equities that we believe could be used to generate additional liquidity.

Table 14 presents the composition of average GLS for the three months ended March 31, 2020 and December 31, 2019.

Table 14 Average Global Liquidity Sources Composition

(Dollars in billions)	Three Months Ended March 31 2020	Three Months Ended December 31 2019
Cash on deposit	**$ 113**	$ 103
U.S. Treasury securities	**83**	98
U.S. agency securities and mortgage-backed securities	**354**	358
Non-U.S. government securities	**15**	17
Total Average Global Liquidity Sources	**$ 565**	$ 576

Our GLS are substantially the same in composition to what qualifies as High Quality Liquid Assets (HQLA) under the final U.S. Liquidity Coverage Ratio (LCR) rules. However, HQLA for purposes of calculating LCR is not reported at market value, but at a lower value that incorporates regulatory deductions and the exclusion of excess liquidity held at certain subsidiaries. The LCR is calculated as the amount of a financial institution's unencumbered HQLA relative to the estimated net cash outflows the institution could encounter over a 30-day period of significant liquidity stress, expressed as a percentage. Our average consolidated HQLA, on a net basis, was $464 billion for both the three months ended March 31, 2020 and December 31, 2019. For the same periods, the average consolidated LCR was 115 percent and 116 percent. Our LCR fluctuates due to normal business flows from customer activity.

Liquidity Stress Analysis

We utilize liquidity stress analysis to assist us in determining the appropriate amounts of liquidity to maintain at the parent company and our subsidiaries to meet contractual and contingent cash outflows under a range of scenarios. For more information on our liquidity stress analysis, see Liquidity Risk – Liquidity Stress Analysis in the MD&A of the Corporation's 2019 Annual Report on Form 10-K.

Diversified Funding Sources

We fund our assets primarily with a mix of deposits, and secured and unsecured liabilities through a centralized, globally coordinated funding approach diversified across products, programs, markets, currencies and investor groups. We fund a substantial portion of our lending activities through our deposits, which were $1.58 trillion and $1.43 trillion at March 31, 2020 and December 31, 2019.

Our trading activities in other regulated entities are primarily funded on a secured basis through securities lending and repurchase agreements, and these amounts will vary based on customer activity and market conditions.

Long-term Debt

During the three months ended March 31, 2020, we issued $18.7 billion of long-term debt consisting of $15.9 billion of notes issued by Bank of America Corporation, substantially all of which was TLAC compliant, $516 million of notes issued by Bank of America, N.A. and $2.3 billion of other debt, substantially all of which was structured liabilities.

During the three months ended March 31, 2020, we had total long-term debt maturities and redemptions in the aggregate of $7.6 billion consisting of $2.1 billion for Bank of America Corporation, $2.6 billion for Bank of America, N.A. and $2.9 billion of other debt. Table 15 presents the carrying value of aggregate annual contractual maturities of long-term debt at March 31, 2020.

Table 15 Long-term Debt by Maturity

(Dollars in millions)	Remainder of 2020	2021	2022	2023	2024	Thereafter	Total
Bank of America Corporation							
Senior notes (1)	$ 8,074	$ 15,726	$ 14,772	$ 23,518	$ 17,543	$ 99,150	**$ 178,783**
Senior structured notes	662	396	2,095	296	473	14,119	**18,041**
Subordinated notes	—	338	339	—	3,370	20,199	**24,246**
Junior subordinated notes	—	—	—	—	—	738	**738**
Total Bank of America Corporation	8,736	16,460	17,206	23,814	21,386	134,206	**221,808**
Bank of America, N.A.							
Senior notes	2,429	3,310	—	520	—	8	**6,267**
Subordinated notes	—	—	—	—	—	1,977	**1,977**
Advances from Federal Home Loan Banks	2,509	502	3	1	—	96	**3,111**
Securitizations and other Bank VIEs (2)	1,100	4,023	1,248	—	—	—	**6,371**
Other	25	54	—	141	—	160	**380**
Total Bank of America, N.A.	6,063	7,889	1,251	662	—	2,241	**18,106**
Other debt							
Structured liabilities	5,113	2,509	1,465	1,290	652	5,354	**16,383**
Nonbank VIEs (2)	—	—	—	—	—	415	**415**
Total other debt	5,113	2,509	1,465	1,290	652	5,769	**16,798**
Total long-term debt	**$ 19,912**	**$ 26,858**	**$ 19,922**	**$ 25,766**	**$ 22,038**	**$ 142,216**	**$ 256,712**

(1) Total includes $126.4 billion of outstanding notes that are both TLAC eligible and callable one year before their stated maturities, including $7.2 billion during the remainder of 2020, and $11.6 billion, $15.1 billion, $10.8 billion and $9.4 billion during each year of 2021 through 2024, respectively, and $72.3 billion thereafter. The call features give us the flexibility to retire long-term notes before their final year outstanding, when they are no longer eligible to count toward TLAC requirements, and replace them with new TLAC-eligible debt, should we choose to do so.

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

Table 16 presents our long-term debt by major currency at March 31, 2020 and December 31, 2019.

Table 16 Long-term Debt by Major Currency

(Dollars in millions)	March 31 2020	December 31 2019
U.S. dollar	**$ 207,035**	$ 191,284
Euro	**33,782**	32,781
British pound	**4,834**	5,067
Japanese yen	**4,113**	4,310
Canadian dollar	**3,979**	3,857
Australian dollar	**1,664**	1,957
Other	**1,305**	1,600
Total long-term debt	**$ 256,712**	$ 240,856

Total long-term debt increased $15.9 billion during three months ended March 31, 2020 primarily due to debt issuances and valuation adjustments, partially offset by maturities and redemptions. We may, from time to time, purchase outstanding debt instruments in various transactions, depending on market conditions, liquidity and other factors. Our other regulated entities may also make markets in our debt instruments to provide liquidity for investors.

We use derivative transactions to manage the duration, interest rate and currency risks of our borrowings, considering the characteristics of the assets they are funding. For more information on our ALM activities, see Interest Rate Risk Management for the Banking Book on page 41.

We may issue unsecured debt in the form of structured notes for client purposes, certain of which qualify as TLAC-eligible debt. During three months ended March 31, 2020, we issued $4.6 billion of structured notes, which are debt obligations that pay investors returns linked to other debt or equity securities, indices, currencies or commodities. We typically hedge the returns we are obligated to pay on these liabilities with derivatives and/or investments in the underlying instruments, so that from a funding perspective, the cost is similar to our other unsecured long-term debt. We could be required to settle certain structured note obligations for cash or other securities prior to maturity under certain circumstances, which we consider for liquidity planning purposes. We believe, however, that a portion of such borrowings will remain outstanding beyond the earliest put or redemption date.

Substantially all of our senior and subordinated debt obligations contain no provisions that could trigger a requirement for an early repayment, require additional collateral support, result in changes to terms, accelerate maturity or create additional financial obligations upon an adverse change in our credit ratings, financial ratios, earnings, cash flows or stock price. For more information on long-term debt funding, including issuances and maturities and redemptions, see *Note 12 – Long-term Debt* to the Consolidated Financial Statements of the Corporation's 2019 Annual Report on Form 10-K.

Credit Ratings

Credit ratings and outlooks are opinions expressed by rating agencies on our creditworthiness and that of our obligations or securities, including long-term debt, short-term borrowings, preferred stock and other securities, including asset securitizations. Table 17 presents the Corporation's current long-term/short-term senior debt ratings and outlooks expressed by the rating agencies.

On April 22, 2020, Fitch Ratings (Fitch) completed its review of the large, complex securities trading and universal banks in the U.S., including Bank of America, in response to declining economic activity from the COVID-19 pandemic. The agency affirmed the long-term and short-term senior debt ratings of the Corporation and all of its rated subsidiaries, except for select issuer and instrument level ratings that had previously been placed under criteria observation (UCO) on March 4, 2020, following changes in the agency's bank rating criteria on February 28, 2020.

Concurrently, Fitch reached a conclusion on select UCO designations for the Corporation and upgraded the long-term and short-term senior debt ratings of MLI and BofASE by one notch to AA-/F1+. The agency also upgraded the preferred stock rating of the Corporation by one notch to BBB and downgraded the subordinated debt rating of the Corporation by one notch to A-. According to Fitch, rating changes under UCO are the sole result of bank rating criteria change and do not reflect a change in the underlying fundamentals of the institution. Fitch's rating outlook for all our long-term ratings is currently Stable.

The ratings from Moody's Investors Service (Moody's) and Standard & Poor's Global Ratings (S&P) for the Corporation and its subsidiaries did not change from those disclosed in the Corporation's 2019 Annual Report on Form 10-K.

For more information on additional collateral and termination payments that could be required in connection with certain over-the-counter derivative contracts and other trading agreements in the event of a credit rating downgrade, see *Note 3 – Derivatives* to the Consolidated Financial Statements herein and Item 1A. Risk Factors of the Corporation's 2019 Annual Report on Form 10-K.

Table 17 Senior Debt Ratings

	Moody's Investors Service			Standard & Poor's Global Ratings			Fitch Ratings		
	Long-term	Short-term	Outlook	Long-term	Short-term	Outlook	Long-term	Short-term	Outlook
Bank of America Corporation	A2	P-1	Stable	A-	A-2	Stable	A+	F1	Stable
Bank of America, N.A.	Aa2	P-1	Stable	A+	A-1	Stable	AA-	F1+	Stable
Bank of America Merrill Lynch International Designated Activity Company	NR	NR	NR	A+	A-1	Stable	AA-	F1+	Stable
Merrill Lynch, Pierce, Fenner & Smith Incorporated	NR	NR	NR	A+	A-1	Stable	AA-	F1+	Stable
BofA Securities, Inc.	NR	NR	NR	A+	A-1	Stable	AA-	F1+	Stable
Merrill Lynch International	NR	NR	NR	A+	A-1	Stable	AA-	F1+	Stable
BofA Securities Europe SA	NR	NR	NR	A+	A-1	Stable	AA-	F1+	Stable

NR = not rated

Credit Risk Management

For information on our credit risk management activities, see Consumer Portfolio Credit Risk Management below, Commercial Portfolio Credit Risk Management on page 31, Non-U.S. Portfolio on page 37, Allowance for Credit Losses on page 38, and *Note 5 – Outstanding Loans and Leases and Allowance for Credit Losses* to the Consolidated Financial Statements.

During the first quarter of 2020, the COVID-19 pandemic negatively impacted economic activity in the U.S. and around the world. While we did see increases in Commercial nonperforming loans and reservable criticized exposures, we did not see meaningful impacts to Consumer portfolio delinquencies, nonperforming loans or charge-offs as of and during the three months ended March 31, 2020. To provide relief to individuals and businesses in the U.S., in March and April 2020, the President signed into law four economic stimulus packages, including the CARES Act. U.S. bank regulatory agencies also issued interagency guidance to financial institutions that are working with borrowers affected by COVID-19.

To support our customers, we have implemented various loan modification programs and other forms of support, including offering loan payment deferrals, refunding certain fees and pausing foreclosure sales, evictions and repossessions. For a summary of the loan modification programs that we have implemented along with a summary of deferral requests that have been executed, see Executive Summary - Recent Developments – COVID-19 Pandemic 2020 on page 3.

For information on the accounting for loan modifications related to the COVID-19 pandemic, see *Note 1 – Summary of Significant Accounting Principles* to the Consolidated Financial Statements.

Consumer Portfolio Credit Risk Management

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

Consumer Credit Portfolio

Although COVID-19 is severely impacting economic activity, it did not have a meaningful impact on the consumer portfolio delinquencies, nonperforming loans or charge-offs as of and during the three months ended March 31, 2020 but there may be adverse impacts to credit quality metrics in future periods if negative economic conditions continue. Net charge-offs increased $37 million to $872 million for the three months ended March 31, 2020 driven by seasoning in the credit card portfolio.

The consumer allowance for loan and lease losses increased $4.5 billion during the three months ended March 31, 2020 to $9.1 billion due to the adoption of the new CECL accounting standard and deterioration in the economic outlook resulting from the impact of COVID-19. For more information, see Allowance for Credit Losses on page 38.

For more information on our accounting policies regarding delinquencies, nonperforming status, charge-offs and TDRs for the consumer portfolio, see *Note 1 – Summary of Significant Accounting Principles* and *Note 5 – Outstanding Loans and Leases* to the Consolidated Financial Statements of the Corporation's 2019 Annual Report on Form 10-K. For information on our interest accrual policies and delinquency status for loan modifications related to the COVID-19 pandemic, see *Note 1 – Summary of Significant Accounting Principles* to the Consolidated Financial Statements.

Table 18 presents our outstanding consumer loans and leases, consumer nonperforming loans and accruing consumer loans past due 90 days or more.

Table 18 Consumer Credit Quality

(Dollars in millions)	Outstandings March 31 2020	Outstandings December 31 2019	Nonperforming March 31 2020	Nonperforming December 31 2019	Accruing Past Due 90 Days or More March 31 2020	Accruing Past Due 90 Days or More December 31 2019
Residential mortgage (1)	**$ 243,545**	$ 236,169	**$ 1,580**	$ 1,470	**$ 951**	$ 1,088
Home equity	**39,567**	40,208	**578**	536	**—**	—
Credit card	**91,890**	97,608	**n/a**	n/a	**991**	1,042
Direct/Indirect consumer (2)	**90,246**	90,998	**46**	47	**30**	33
Other consumer	**150**	192	**—**	—	**—**	—
Consumer loans excluding loans accounted for under the fair value option	**$ 465,398**	$ 465,175	**$ 2,204**	$ 2,053	**$ 1,972**	$ 2,163
Loans accounted for under the fair value option (3)	**556**	594				
Total consumer loans and leases	**$ 465,954**	$ 465,769				
Percentage of outstanding consumer loans and leases (4)	**n/a**	n/a	**0.47%**	0.44%	**0.42%**	0.47%
Percentage of outstanding consumer loans and leases, excluding fully-insured loan portfolios (4)	**n/a**	n/a	**0.49**	0.46	**0.23**	0.24

(1) Residential mortgage loans accruing past due 90 days or more are fully-insured loans. At March 31, 2020 and December 31, 2019, residential mortgage includes $637 million and $740 million of loans on which interest had been curtailed by the FHA, and therefore were no longer accruing interest, although principal was still insured, and $314 million and $348 million of loans on which interest was still accruing.
(2) Outstandings primarily include auto and specialty lending loans and leases of $50.0 billion and $50.4 billion, U.S. securities-based lending loans of $36.4 billion and $36.7 billion and non-U.S. consumer loans of $3.0 billion and $2.8 billion at March 31, 2020 and December 31, 2019.
(3) Consumer loans accounted for under the fair value option include residential mortgage loans of $231 million and $257 million and home equity loans of $325 million and $337 million at March 31, 2020 and December 31, 2019. For more information on the fair value option, see *Note 15 – Fair Value Option* to the Consolidated Financial Statements.
(4) Excludes consumer loans accounted for under the fair value option. At both March 31, 2020 and December 31, 2019, $6 million of loans accounted for under the fair value option were past due 90 days or more and not accruing interest.
n/a = not applicable

Table 19 presents net charge-offs and related ratios for consumer loans and leases.

Table 19 Consumer Net Charge-offs and Related Ratios

(Dollars in millions)	Net Charge-offs Three Months Ended March 31 2020	Net Charge-offs 2019	Net Charge-off Ratios (1) 2020	Net Charge-off Ratios (1) 2019
Residential mortgage	**$ (1)**	$ (16)	**— %**	(0.03)%
Home equity	**(11)**	11	**(0.11)**	0.10
Credit card	**770**	745	**3.28**	3.18
Direct/Indirect consumer	**40**	54	**0.18**	0.24
Other consumer	**74**	41	**n/m**	n/m
Total	**$ 872**	$ 835	**0.75**	0.77

(1) Net charge-off ratios are calculated as annualized net charge-offs divided by average outstanding loans and leases excluding loans accounted for under the fair value option.
n/m = not meaningful

Table 20 presents outstandings, nonperforming balances, net charge-offs, allowance for credit losses and provision for credit losses for the core and non-core portfolios within the consumer real estate portfolio. We categorize consumer real estate loans as core and non-core based on loan and customer characteristics such as origination date, product type, loan-to-value (LTV), Fair Isaac Corporation (FICO) score and delinquency status consistent with our current consumer and mortgage servicing strategy. Generally, loans that were originated after January 1, 2010, qualified under government-sponsored enterprise underwriting guidelines, or otherwise met our underwriting guidelines in place in 2015 are characterized as core loans. All other loans are generally characterized as non-core loans and represent runoff portfolios. Core loans as reported in Table 20 include loans held in the *Consumer Banking* and *GWIM* segments, as well as loans held for ALM activities in *All Other*.

As shown in Table 20, outstanding core consumer real estate loans increased $7.5 billion during the three months ended March 31, 2020 driven by an increase of $7.9 billion in residential mortgage, partially offset by a $353 million decrease in home equity.

Table 20 Consumer Real Estate Portfolio (1)

	Outstandings		Nonperforming		Net Charge-offs	
	March 31	December 31	March 31	December 31	Three Months Ended March 31	
(Dollars in millions)	2020	2019	2020	2019	2020	2019
Core portfolio						
Residential mortgage	**$ 233,635**	$ 225,770	**$ 899**	$ 883	**$ (1)**	$ (3)
Home equity	**34,873**	35,226	**388**	363	**2**	21
Total core portfolio	**268,508**	260,996	**1,287**	1,246	**1**	18
Non-core portfolio						
Residential mortgage	**9,910**	10,399	**681**	587	**—**	(13)
Home equity	**4,694**	4,982	**190**	173	**(13)**	(10)
Total non-core portfolio	**14,604**	15,381	**871**	760	**(13)**	(23)
Consumer real estate portfolio						
Residential mortgage	**243,545**	236,169	**1,580**	1,470	**(1)**	(16)
Home equity	**39,567**	40,208	**578**	536	**(11)**	11
Total consumer real estate portfolio	**$ 283,112**	$ 276,377	**$ 2,158**	$ 2,006	**$ (12)**	$ (5)

	Allowance for Credit Losses		Provision for Credit Losses	
	March 31	December 31	Three Months Ended March 31	
	2020	2019	2020	2019
Core portfolio				
Residential mortgage	**$ 338**	$ 229	**$ 124**	$ (4)
Home equity	**602**	120	**146**	(22)
Total core portfolio	**940**	349	**270**	(26)
Non-core portfolio				
Residential mortgage	**92**	96	**90**	(31)
Home equity (2)	**(75)**	101	**21**	(13)
Total non-core portfolio	**17**	197	**111**	(44)
Consumer real estate portfolio				
Residential mortgage	**430**	325	**214**	(35)
Home equity (3)	**527**	221	**167**	(35)
Total consumer real estate portfolio	**$ 957**	$ 546	**$ 381**	$ (70)

(1) Outstandings and nonperforming loans exclude loans accounted for under the fair value option. Consumer loans accounted for under the fair value option include residential mortgage loans of $231 million and $257 million and home equity loans of $325 million and $337 million at March 31, 2020 and December 31, 2019. For more information, see *Note 15 – Fair Value Option* to the Consolidated Financial Statements.
(2) The home equity non-core allowance is in a negative position at March 31, 2020 as it includes expected recoveries of amounts previously charged off.
(3) Home equity allowance includes a reserve for unfunded lending commitments of $149 million at March 31, 2020.

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

Residential Mortgage

The residential mortgage portfolio made up the largest percentage of our consumer loan portfolio at 52 percent of consumer loans and leases at March 31, 2020. Approximately 51 percent of the residential mortgage portfolio was in *Consumer Banking* and 36 percent was in *GWIM*. The remaining portion was in *All Other* and was comprised of loans used in our overall ALM activities, delinquent FHA loans repurchased pursuant to our servicing agreements with the Government National Mortgage Association as well as loans repurchased related to our representations and warranties.

Outstanding balances in the residential mortgage portfolioincreased $7.4 billion during the three months ended March 31, 2020 as retention of new originations was partially offset by runoff.

At March 31, 2020 and December 31, 2019, the residential mortgage portfolio included $18.8 billion and $18.7 billion of outstanding fully-insured loans, of which $10.9 billion and $11.2 billion had FHA insurance with the remainder protected by long-term standby agreements.

Table 21 presents certain residential mortgage key credit statistics on both a reported basis and excluding the fully-insured loan portfolio. The following discussion presents the residential mortgage portfolio excluding the fully-insured loan portfolio.

Table 21 Residential Mortgage – Key Credit Statistics

(Dollars in millions)	Reported Basis (1) March 31 2020	Reported Basis (1) December 31 2019	Excluding Fully-insured Loans (1) March 31 2020	Excluding Fully-insured Loans (1) December 31 2019
Outstandings	**$ 243,545**	$ 236,169	**$ 224,720**	$ 217,479
Accruing past due 30 days or more	**2,937**	3,108	**1,338**	1,296
Accruing past due 90 days or more	**951**	1,088	**—**	—
Nonperforming loans	**1,580**	1,470	**1,580**	1,470
Percent of portfolio				
Refreshed LTV greater than 90 but less than or equal to 100	**2%**	2%	**2%**	2%
Refreshed LTV greater than 100	**1**	1	**1**	1
Refreshed FICO below 620	**2**	3	**1**	2
2006 and 2007 vintages (2)	**3**	4	**3**	4

(1) Outstandings, accruing past due, nonperforming loans and percentages of portfolio exclude loans accounted for under the fair value option. For information on our interest accrual policies and delinquency status for loan modifications related to the COVID-19 pandemic, see *Note 1 – Summary of Significant Accounting Principles* to the Consolidated Financial Statements.
(2) These vintages of loans accounted for $440 million, or 28 percent, and $365 million, or 25 percent, of nonperforming residential mortgage loans at March 31, 2020 and December 31, 2019.

Nonperforming outstanding balances in the residential mortgage portfolio increased $110 million during the three months ended March 31, 2020 primarily driven by the inclusion of certain loans that were previously classified as purchased credit-impaired loans and accounted for under a pool basis. Upon adoption of the new credit loss standard, these loans are accounted for on an individual basis and, if applicable, included in nonperforming loans. Of the nonperforming residential mortgage loans at March 31, 2020, $612 million, or 39 percent, were current on contractual payments. Loans accruing past due 30 days or more increased $42 million.

Net charge-offs increased $15 million to a net recovery of $1 million for the three months ended March 31, 2020 compared to a net recovery of $16 million for the same period in 2019, as the prior-year period included recoveries on sales of previously charged-off loans.

Of the $224.7 billion in total residential mortgage loans outstanding at March 31, 2020, as shown in Table 21, 26 percent were originated as interest-only loans. The outstanding balance of interest-only residential mortgage loans that have entered the amortization period was $7.0 billion, or 12 percent, at March 31, 2020. Residential mortgage loans that have entered the amortization period generally have experienced a higher rate of early stage delinquencies and nonperforming status compared to the residential mortgage portfolio as a whole. At March 31, 2020, $125 million, or two percent of outstanding interest-only residential mortgages that had entered the amortization period were accruing past due 30 days or more compared to $1.3 billion, or one percent, for the entire residential mortgage portfolio. In addition, at March 31, 2020, $287 million, or four percent, of outstanding interest-only residential mortgage loans that had entered the amortization period were nonperforming, of which $115 million were contractually current, compared to $1.6 billion, or one percent, for the entire residential mortgage portfolio. Loans that have yet to enter the amortization period in our interest-only residential mortgage portfolio are primarily well-collateralized loans to our wealth management clients and have an interest-only period of three to ten years. Approximately 95 percent of these loans that have yet to enter the amortization period will not be required to make a fully-amortizing payment until 2022 or later.

Table 22 presents outstandings, nonperforming loans and net charge-offs by certain state concentrations for the residential mortgage portfolio. The Los Angeles-Long Beach-Santa Ana Metropolitan Statistical Area (MSA) within California represented 16 percent of outstandings at both March 31, 2020 and December 31, 2019. In the New York area, the New York-Northern New Jersey-Long Island MSA made up 13 percent of outstandings at both March 31, 2020 and December 31, 2019.

Table 22 Residential Mortgage State Concentrations

(Dollars in millions)	Outstandings (1) March 31 2020	Outstandings (1) December 31 2019	Nonperforming (1) March 31 2020	Nonperforming (1) December 31 2019	Net Charge-offs Three Months Ended March 31 2020	Net Charge-offs Three Months Ended March 31 2019
California	**$ 92,107**	$ 88,998	**$ 326**	$ 274	**$ (3)**	$ (8)
New York	**23,192**	22,385	**212**	196	**1**	—
Florida	**13,172**	12,833	**156**	143	**(2)**	(3)
Texas	**9,237**	8,943	**66**	65	**—**	(1)
New Jersey	**9,149**	8,734	**75**	77	**—**	(2)
Other	**77,863**	75,586	**745**	715	**3**	(2)
Residential mortgage loans	**$ 224,720**	$ 217,479	**$ 1,580**	$ 1,470	**$ (1)**	$ (16)
Fully-insured loan portfolio	**18,825**	18,690				
Total residential mortgage loan portfolio	**$ 243,545**	$ 236,169				

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

Home Equity

At March 31, 2020, the home equity portfolio made up nine percent of the consumer portfolio and was comprised of home equity lines of credit (HELOCs), home equity loans and reverse mortgages. We no longer originate home equity loans or reverse mortgages.

At March 31, 2020, our HELOC portfolio had an outstanding balance of $37.0 billion, or 94 percent of the total home equity portfolio, compared to $37.5 billion, or 93 percent, at December 31, 2019. HELOCs generally have an initial draw period of 10 years, and after the initial draw period ends, the loans generally convert to 15- or 20-year amortizing loans.

At both March 31, 2020 and December 31, 2019, our home equity loan portfolio had an outstanding balance of $1.2 billion, or three percent of the total home equity portfolio. At March 31, 2020, our reverse mortgage portfolio had an outstanding balance of $1.4 billion, or three percent of the total home equity portfolio, compared to $1.5 billion, or four percent, at December 31, 2019.

At March 31, 2020, 80 percent of the home equity portfolio was in *Consumer Banking*, 12 percent was in *All Other* and the remainder of the portfolio was primarily in *GWIM*. Outstanding balances in the home equity portfolio decreased $641 million during the three months ended March 31, 2020 primarily due to paydowns outpacing new originations and draws on existing lines. Of the total home equity portfolio at March 31, 2020 and December 31, 2019, $14.8 billion, or 37 percent, and $15.0 billion, or 37 percent, were in first-lien positions. At March 31, 2020, outstanding balances in the home equity portfolio that were in a second-lien or more junior-lien position and where we also held the first-lien loan totaled $6.9 billion, or 17 percent of our total home equity portfolio.

Unused HELOCs totaled $43.7 billion and $43.6 billion at March 31, 2020 and December 31, 2019. The increase was primarily driven by new production partially offset by customers choosing to close accounts. The HELOC utilization rate was 46 percent at both March 31, 2020 and December 31, 2019.

Table 23 presents certain home equity portfolio key credit statistics.

Table 23 Home Equity – Key Credit Statistics (1)

(Dollars in millions)	March 31 2020	December 31 2019
Outstandings	$ 39,567	$ 40,208
Accruing past due 30 days or more (2)	205	218
Nonperforming loans (2)	578	536
Percent of portfolio		
Refreshed CLTV greater than 90 but less than or equal to 100	1%	1%
Refreshed CLTV greater than 100	2	2
Refreshed FICO below 620	3	3
2006 and 2007 vintages (3)	17	18

(1) Outstandings, accruing past due, nonperforming loans and percentages of the portfolio exclude loans accounted for under the fair value option. For information on our interest accrual policies and delinquency status for loan modifications related to the COVID-19 pandemic, see *Note 1 – Summary of Significant Accounting Principles* to the Consolidated Financial Statements.
(2) Accruing past due 30 days or more include $29 million and $30 million and nonperforming loans include $59 million and $57 million of loans where we serviced the underlying first lien at March 31, 2020 and December 31, 2019.
(3) These vintages of loans accounted for 35 percent and 34 percent of nonperforming home equity loans at March 31, 2020 and December 31, 2019.

Nonperforming outstanding balances in the home equity portfolio increased $42 million during the three months ended March 31, 2020 primarily driven by the inclusion of certain loans that were previously classified as purchased credit-impaired loans and accounted for under a pool basis. Upon adoption of the new credit loss standard, these loans are accounted for on an individual basis and, if applicable, included in nonperforming loans. Of the nonperforming home equity loans at March 31, 2020, $266 million, or 46 percent, were current on contractual payments. Nonperforming loans that are contractually current primarily consist of collateral-dependent TDRs, including those that have been discharged in Chapter 7 bankruptcy, junior-lien loans where the underlying first lien is 90 days or more past due, as well as loans that have not yet demonstrated a sustained period of payment performance following a TDR. In addition, $173 million, or 30 percent of nonperforming home equity loans were 180 days or more past due and had been written down to the estimated fair value of the collateral, less costs to sell. Accruing loans that were 30 days or more past due decreased $13 million during the three months ended March 31, 2020.

Net charge-offs decreased $22 million to a net recovery of $11 million for the three months ended March 31, 2020 compared to net charge-offs of $11 million for the same period in 2019, as the prior-year period included charge-offs from home equity loan sales.

Of the $39.6 billion in total home equity portfolio outstandings at March 31, 2020, as shown in Table 23, 16 percent require interest-only payments. The outstanding balance of HELOCs that have reached the end of their draw period and have entered the amortization period was $11.0 billion at March 31, 2020. The HELOCs that have entered the amortization period have experienced a higher percentage of early stage delinquencies and nonperforming status when compared to the HELOC portfolio as a whole. At March 31, 2020, $144 million, or one percent of outstanding HELOCs that had entered the amortization period were accruing past due 30 days or more. In addition, at March 31, 2020, $406 million, or four percent, were nonperforming. Loans that have yet to enter the amortization period in our interest-only portfolio are primarily post-2008 vintages and generally have better credit quality than the previous vintages that had entered the amortization period. We communicate to contractually current customers more than a year prior to the end of their draw period to inform them of the potential change to the payment structure before entering the amortization period, and provide payment options to customers prior to the end of the draw period.

Although we do not actively track how many of our home equity customers pay only the minimum amount due on their home equity loans and lines, we can infer some of this information through a review of our HELOC portfolio that we service and that is still in its revolving period. During the three months ended March 31, 2020, 21 percent of these customers with an outstanding balance did not pay any principal on their HELOCs.

Table 24 presents outstandings, nonperforming balances and net charge-offs by certain state concentrations for the home equity portfolio. In the New York area, the New York-Northern New Jersey-Long Island MSA made up 13 percent of the outstanding home equity portfolio at both March 31, 2020 and December 31, 2019. The Los Angeles-Long Beach-Santa Ana MSA within California made up 11 percent of the outstanding home equity portfolio at both March 31, 2020 and December 31, 2019.

Table 24 Home Equity State Concentrations

(Dollars in millions)	Outstandings (1) March 31 2020	Outstandings (1) December 31 2019	Nonperforming (1) March 31 2020	Nonperforming (1) December 31 2019	Net Charge-offs Three Months Ended March 31 2020	Net Charge-offs Three Months Ended March 31 2019
California	**$ 11,106**	$ 11,232	**$ 116**	$ 101	**$ (5)**	$ (5)
Florida	**4,241**	4,327	**75**	71	**(3)**	(3)
New Jersey	**3,145**	3,216	**60**	56	**—**	5
New York	**2,819**	2,899	**88**	85	**1**	10
Massachusetts	**1,979**	2,023	**31**	29	**1**	—
Other	**16,277**	16,511	**208**	194	**(5)**	4
Total home equity loan portfolio	**$ 39,567**	$ 40,208	**$ 578**	$ 536	**$ (11)**	$ 11

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

Credit Card

At March 31, 2020, 97 percent of the credit card portfolio was managed in *Consumer Banking* with the remainder in *GWIM*. Outstandings in the credit card portfolio decreased $5.7 billion during the three months ended March 31, 2020 to $91.9 billion due to a seasonal decline in purchase volumes. Net charge-offs increased $25 million to $770 million during the three months ended March 31, 2020 compared to $745 million for the same period in 2019 due to portfolio seasoning. Credit card loans 30 days or more past due and still accruing interest decreased $135 million and loans 90 days or more past due and still accruing interest decreased $51 million due to seasonal declines.

Unused lines of credit for credit card increased to $345.0 billion at March 31, 2020 from $336.9 billion at December 31, 2019 driven by seasonally lower purchase volumes.

Table 25 presents certain state concentrations for the credit card portfolio.

Table 25 Credit Card State Concentrations

(Dollars in millions)	Outstandings March 31 2020	Outstandings December 31 2019	Accruing Past Due 90 Days or More (1) March 31 2020	Accruing Past Due 90 Days or More (1) December 31 2019	Net Charge-offs Three Months Ended March 31 2020	Net Charge-offs Three Months Ended March 31 2019
California	**$ 15,166**	$ 16,135	**$ 174**	$ 178	**$ 136**	$ 132
Florida	**8,657**	9,075	**127**	135	**101**	90
Texas	**7,540**	7,815	**89**	93	**65**	59
New York	**5,670**	5,975	**75**	80	**60**	61
Washington	**4,184**	4,639	**26**	26	**18**	18
Other	**50,673**	53,969	**500**	530	**390**	385
Total credit card portfolio	**$ 91,890**	$ 97,608	**$ 991**	$ 1,042	**$ 770**	$ 745

(1) For information on our interest accrual policies and delinquency status for loan modifications related to the COVID-19 pandemic, see *Note 1 – Summary of Significant Accounting Principles* to the Consolidated Financial Statements.

Direct/Indirect Consumer

At March 31, 2020, 56 percent of the direct/indirect portfolio was included in *Consumer Banking* (consumer auto and specialty lending – automotive, recreational vehicle, marine, aircraft and consumer personal loans) and 44 percent was included in *GWIM* (principally securities-based lending loans).

Outstandings of $90.2 billion in the direct/indirect portfolio were relatively unchanged at March 31, 2020 compared to December 31, 2019.

Table 26 presents certain state concentrations for the direct/indirect consumer loan portfolio.

Table 26 Direct/Indirect State Concentrations

(Dollars in millions)	Outstandings March 31 2020	Outstandings December 31 2019	Accruing Past Due 90 Days or More (1) March 31 2020	Accruing Past Due 90 Days or More (1) December 31 2019	Net Charge-offs Three Months Ended March 31 2020	Net Charge-offs Three Months Ended March 31 2019
California	**$ 11,827**	$ 11,912	**$ 4**	$ 4	**$ 6**	$ 7
Florida	**10,245**	10,154	**4**	4	**7**	8
Texas	**9,297**	9,516	**5**	5	**6**	10
New York	**6,376**	6,394	**1**	1	**2**	3
New Jersey	**3,441**	3,468	**—**	1	**—**	1
Other	**49,060**	49,554	**16**	18	**19**	25
Total direct/indirect loan portfolio	**$ 90,246**	$ 90,998	**$ 30**	$ 33	**$ 40**	$ 54

(1) For information on our interest accrual policies and delinquency status for loan modifications related to the COVID-19 pandemic, see *Note 1 – Summary of Significant Accounting Principles* to the Consolidated Financial Statements.

Nonperforming Consumer Loans, Leases and Foreclosed Properties Activity

Table 27 presents nonperforming consumer loans, leases and foreclosed properties activity for the three months ended March 31, 2020 and 2019. During the three months ended March 31, 2020, nonperforming consumer loans increased $151 million to $2.2 billion primarily driven by the inclusion of $150 million of certain loans that were previously classified as purchased credit-impaired loans and accounted for under a pool basis.

At March 31, 2020, $673 million, or 31 percent of nonperforming loans were 180 days or more past due and had been written down to their estimated property value less costs to sell. In addition, at March 31, 2020, $921 million, or 42 percent of nonperforming consumer loans were modified and are now current after successful trial periods, or are current loans classified as nonperforming loans in accordance with applicable policies.

Foreclosed properties decreased $3 million during the three months ended March 31, 2020 to $226 million as liquidations outpaced additions.

Nonperforming loans also include certain loans that have been modified in TDRs where economic concessions have been granted to borrowers experiencing financial difficulties. Nonperforming TDRs are included in Table 27. For more information on our loan modification programs offered in response to the COVID-19 pandemic, which are not TDRs, see Executive Summary - Recent Developments – COVID-19 Pandemic 2020 on page 3 and *Note 1 – Summary of Significant Accounting Principles* to the Consolidated Financial Statements.

Table 27 Nonperforming Consumer Loans, Leases and Foreclosed Properties Activity

(Dollars in millions)	Three Months Ended March 31 2020	2019
Nonperforming loans and leases, January 1	**$ 2,053**	$ 3,842
Additions	**477**	391
Reductions:		
Paydowns and payoffs	**(106)**	(188)
Sales	**(6)**	(164)
Returns to performing status (1)	**(165)**	(249)
Charge-offs	**(27)**	(28)
Transfers to foreclosed properties	**(22)**	(26)
Total net reductions to nonperforming loans and leases	**151**	(264)
Total nonperforming loans and leases, March 31	**2,204**	3,578
Foreclosed properties, March 31 (2)	**226**	236
Nonperforming consumer loans, leases and foreclosed properties, March 31	**$ 2,430**	$ 3,814
Nonperforming consumer loans and leases as a percentage of outstanding consumer loans and leases (3)	**0.47%**	0.81%
Nonperforming consumer loans, leases and foreclosed properties as a percentage of outstanding consumer loans, leases and foreclosed properties (3)	**0.52**	0.86

(1) Consumer loans may be returned to performing status when all principal and interest is current and full repayment of the remaining contractual principal and interest is expected, or when the loan otherwise becomes well-secured and is in the process of collection.
(2) Foreclosed property balances do not include properties insured by certain government-guaranteed loans, principally FHA-insured, of $224 million and $400 million at March 31, 2020 and 2019.
(3) Outstanding consumer loans and leases exclude loans accounted for under the fair value option.

Table 28 presents TDRs for the consumer real estate portfolio. Performing TDR balances are excluded from nonperforming loans and leases in Table 27. For more information on our loan modification programs offered in response to the COVID-19 pandemic, which are not TDRs, see Executive Summary - Recent Developments – COVID-19 Pandemic 2020 on page 3.

Table 28 Consumer Real Estate Troubled Debt Restructurings

(Dollars in millions)	March 31, 2020 Nonperforming	Performing	Total	December 31, 2019 Nonperforming	Performing	Total
Residential mortgage (1, 2)	**$ 881**	**$ 3,654**	**$ 4,535**	$ 921	$ 3,832	$ 4,753
Home equity (3)	**250**	**941**	**1,191**	252	977	1,229
Total consumer real estate troubled debt restructurings	**$ 1,131**	**$ 4,595**	**$ 5,726**	$ 1,173	$ 4,809	$ 5,982

(1) At both March 31, 2020 and December 31, 2019, residential mortgage TDRs deemed collateral dependent totaled $1.2 billion, and included $720 million and $748 million of loans classified as nonperforming and $455 million and $468 million of loans classified as performing.
(2) At March 31, 2020 and December 31, 2019, residential mortgage performing TDRs include $2.0 billion and $2.1 billion of loans that were fully-insured.
(3) At March 31, 2020 and December 31, 2019, home equity TDRs deemed collateral dependent totaled $427 million and $442 million, and include $207 million and $209 million of loans classified as nonperforming and $220 million and $233 million of loans classified as performing.

In addition to modifying consumer real estate loans, we work with customers who are experiencing financial difficulty by modifying credit card and other consumer loans. Credit card and other consumer loan modifications generally involve a reduction in the customer's interest rate on the account and placing the customer on a fixed payment plan not exceeding 60 months, all of which are considered TDRs (the renegotiated TDR portfolio).

Modifications of credit card and other consumer loans are made through renegotiation programs utilizing direct customer contact, but may also utilize external renegotiation programs. The renegotiated TDR portfolio is excluded in large part from Table 27 as substantially all of the loans remain on accrual status until either charged off or paid in full. At March 31, 2020 and December 31, 2019, our renegotiated TDR portfolio was $694 million and $679 million, of which $590 million and $570 million were current or less than 30 days past due under the modified terms. The increase in the renegotiated TDR portfolio was primarily driven by new renegotiated enrollments outpacing runoff of existing portfolios.

Commercial Portfolio Credit Risk Management

Commercial credit risk is evaluated and managed with the goal that concentrations of credit exposure continue to be aligned with our risk appetite. We review, measure and manage concentrations of credit exposure by industry, product, geography, customer relationship and loan size. We also review, measure and manage commercial real estate loans by geographic location and property type. In addition, within our non-U.S. portfolio, we evaluate exposures by region and by country. Tables 33, 36 and 39 summarize our concentrations. We also utilize syndications of exposure to third parties, loan sales, hedging and other risk mitigation techniques to manage the size and risk profile of the commercial credit portfolio. For more information on our industry concentrations, see Commercial Portfolio Credit Risk Management – Industry Concentrations on page 35 and Table 36.

For more information on our accounting policies regarding delinquencies, nonperforming status, net charge-offs and TDRs for the commercial portfolio, see *Note 1 – Summary of Significant Accounting Principles* to the Consolidated Financial Statements of the Corporation's 2019 Annual Report on Form 10-K.

For information on the accounting for loan modifications related to the COVID-19 pandemic, see *Note 1 – Summary of Significant Accounting Principles* to the Consolidated Financial Statements.

Commercial Credit Portfolio

During the three months ended March 31, 2020, commercial asset quality weakened as a result of the economic impact from COVID-19. Large corporate and commercial clients drew down on their existing lines of credit which contributed to a $67.2 billion increase in commercial loans for the three months ended March 31, 2020. These draws were well diversified across industries and approximately 90 percent were investment grade or collateralized.

Credit quality of commercial real estate borrowers in most sectors remained stable but also began to experience varying degrees of strain as a result of COVID-19. Many real estate markets experienced disruption in demand, supply chain challenges and underlying tenant difficulties.

The commercial allowance for loan and lease losses increased $1.8 billion during the three months ended March 31, 2020 to $6.7 billion due to the deterioration in the economic outlook resulting from the impact of COVID-19. For more information, see Allowance for Credit Losses on page 38.

Total commercial utilized credit exposure increased $84.6 billion during the three months ended March 31, 2020 to $719.9 billion driven by higher loans and leases. The utilization rate for loans and leases, standby letters of credit (SBLCs) and financial guarantees, and commercial letters of credit, in the aggregate, was 64 percent at March 31, 2020 and 58 percent at December 31, 2019.

Table 29 presents commercial credit exposure by type for utilized, unfunded and total binding committed credit exposure. Commercial utilized credit exposure includes SBLCs and financial guarantees and commercial letters of credit that have been issued and for which we are legally bound to advance funds under prescribed conditions during a specified time period, and excludes exposure related to trading account assets. Although funds have not yet been advanced, these exposure types are considered utilized for credit risk management purposes.

Table 29 Commercial Credit Exposure by Type

(Dollars in millions)	Commercial Utilized (1) March 31 2020	Commercial Utilized (1) December 31 2019	Commercial Unfunded (2, 3, 4) March 31 2020	Commercial Unfunded (2, 3, 4) December 31 2019	Total Commercial Committed March 31 2020	Total Commercial Committed December 31 2019
Loans and leases	**$ 584,831**	$ 517,657	**$ 344,887**	$ 405,834	**$ 929,718**	$ 923,491
Derivative assets (5)	**57,654**	40,485	**—**	—	**57,654**	40,485
Standby letters of credit and financial guarantees	**35,720**	36,062	**458**	468	**36,178**	36,530
Debt securities and other investments	**27,228**	25,546	**4,440**	5,101	**31,668**	30,647
Loans held-for-sale	**5,919**	7,047	**10,712**	15,135	**16,631**	22,182
Operating leases	**6,994**	6,660	**—**	—	**6,994**	6,660
Commercial letters of credit	**871**	1,049	**365**	451	**1,236**	1,500
Other	**665**	800	**—**	—	**665**	800
Total	**$ 719,882**	$ 635,306	**$ 360,862**	$ 426,989	**$ 1,080,744**	$ 1,062,295

(1) Commercial utilized exposure includes loans of $8.5 billion and $7.7 billion and issued letters of credit with a notional amount of $156 million and $170 million accounted for under the fair value option at March 31, 2020 and December 31, 2019.
(2) Commercial unfunded exposure includes commitments accounted for under the fair value option with a notional amount of $3.6 billion and $4.2 billion at March 31, 2020 and December 31, 2019.
(3) Excludes unused business card lines, which are not legally binding.
(4) Includes the notional amount of unfunded legally binding lending commitments net of amounts distributed (i.e., syndicated or participated) to other financial institutions. The distributed amounts were $10.5 billion and $10.6 billion at March 31, 2020 and December 31, 2019.
(5) Derivative assets are carried at fair value, reflect the effects of legally enforceable master netting agreements and have been reduced by cash collateral of $53.4 billion and $33.9 billion at March 31, 2020 and December 31, 2019. Not reflected in utilized and committed exposure is additional non-cash derivative collateral held of $35.7 billion and $35.2 billion at March 31, 2020 and December 31, 2019, which consists primarily of other marketable securities.

Outstanding commercial loans and leases increased $67.2 billion during the three months ended March 31, 2020 primarily in the commercial and industrial portfolio. Nonperforming commercial loans increased $353 million and commercial reservable criticized utilized exposure increased $5.9 billion driven primarily by the impact of COVID-19 and was broad-based across industries. Table 30 presents our commercial loans and leases portfolio and related credit quality information at March 31, 2020 and December 31, 2019.

Table 30 Commercial Credit Quality

(Dollars in millions)	Outstandings March 31 2020	Outstandings December 31 2019	Nonperforming March 31 2020	Nonperforming December 31 2019	Accruing Past Due 90 Days or More (3) March 31 2020	Accruing Past Due 90 Days or More (3) December 31 2019
Commercial and industrial:						
U.S. commercial	**$ 358,504**	$ 307,048	**$ 1,240**	$ 1,094	**$ 188**	$ 106
Non-U.S. commercial	**116,612**	104,966	**90**	43	**1**	8
Total commercial and industrial	**475,116**	412,014	**1,330**	1,137	**189**	114
Commercial real estate	**66,654**	62,689	**408**	280	**39**	19
Commercial lease financing	**19,180**	19,880	**44**	32	**31**	20
	560,950	494,583	**1,782**	1,449	**259**	153
U.S. small business commercial (1)	**15,421**	15,333	**70**	50	**95**	97
Commercial loans excluding loans accounted for under the fair value option	**576,371**	509,916	**1,852**	1,499	**354**	250
Loans accounted for under the fair value option (2)	**8,460**	7,741	**—**	—	**—**	—
Total commercial loans and leases	**$ 584,831**	$ 517,657	**$ 1,852**	$ 1,499	**$ 354**	$ 250

(1) Includes card-related products.
(2) Commercial loans accounted for under the fair value option include U.S. commercial of $5.1 billion and $4.7 billion and non-U.S. commercial of $3.4 billion and $3.1 billion at March 31, 2020 and December 31, 2019. For more information on the fair value option, see *Note 15 – Fair Value Option* to the Consolidated Financial Statements.
(3) For information on our interest accrual policies and delinquency status for loan modifications related to the COVID-19 pandemic, see *Note 1 – Summary of Significant Accounting Principles* to the Consolidated Financial Statements.

Table 31 presents net charge-offs and related ratios for our commercial loans and leases for the three months ended March 31, 2020 and 2019.

Table 31 Commercial Net Charge-offs and Related Ratios

(Dollars in millions)	Net Charge-offs 2020	Net Charge-offs 2019	Net Charge-off Ratios (1) 2020	Net Charge-off Ratios (1) 2019
	Three Months Ended March 31			
Commercial and industrial:				
U.S. commercial	**$ 163**	$ 83	**0.21%**	0.11%
Non-U.S. commercial	**1**	—	**—**	—
Total commercial and industrial	**164**	83	**0.16**	0.08
Commercial real estate	**6**	5	**0.04**	0.03
Commercial lease financing	**5**	—	**0.10**	—
	175	88	**0.14**	0.07
U.S. small business commercial	**75**	68	**1.95**	1.90
Total commercial	**$ 250**	$ 156	**0.19**	0.13

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

Table 32 presents commercial reservable criticized utilized exposure by loan type. Criticized exposure corresponds to the Special Mention, Substandard and Doubtful asset categories as defined by regulatory authorities. Total commercial reservable criticized utilized exposure increased $5.9 billion, or 52 percent, during the three months ended March 31, 2020 driven by the impact of COVID-19 with increases spread across multiple industries including the energy sector, which was also impacted by the weakness in oil prices and oil price volatility in the quarter. At March 31, 2020 and December 31, 2019, 89 percent and 90 percent of commercial reservable criticized utilized exposure was secured.

Table 32 Commercial Reservable Criticized Utilized Exposure (1, 2)

(Dollars in millions)	March 31, 2020		December 31, 2019	
Commercial and industrial:				
U.S. commercial	**$ 13,190**	**3.40%**	$ 8,272	2.46%
Non-U.S. commercial	**1,499**	**1.23**	989	0.89
Total commercial and industrial	**14,689**	**2.88**	9,261	2.07
Commercial real estate	**1,560**	**2.27**	1,129	1.75
Commercial lease financing	**412**	**2.15**	329	1.66
	16,661	**2.79**	10,719	2.01
U.S. small business commercial	**739**	**4.79**	733	4.78
Total commercial reservable criticized utilized exposure (1)	**$ 17,400**	**2.84**	$ 11,452	2.09

(1) Total commercial reservable criticized utilized exposure includes loans and leases of $16.5 billion and $10.7 billion and commercial letters of credit of $884 million and $715 million at March 31, 2020 and December 31, 2019.
(2) Percentages are calculated as commercial reservable criticized utilized exposure divided by total commercial reservable utilized exposure for each exposure category.

Commercial and Industrial

Commercial and industrial loans include U.S. commercial and non-U.S. commercial portfolios.

U.S. Commercial

At March 31, 2020, 72 percent of the U.S. commercial loan portfolio, excluding small business, was managed in *Global*

Banking, 15 percent in *Global Markets*, 12 percent in *GWIM* (generally business-purpose loans for high net worth clients) and the remainder primarily in *Consumer Banking*. U.S. commercial loans increased $51.5 billion during the three months ended March 31, 2020 across all lines of business. Reservable criticized utilized exposure increased $4.9 billion, or 59 percent, driven by the impact of COVID-19 and was broad-based across industries.

Non-U.S. Commercial

At March 31, 2020, 83 percent of the non-U.S. commercial loan portfolio was managed in *Global Banking* and 17 percent in *Global Markets*. Non-U.S. commercial loans increased $11.6 billion during the three months ended March 31, 2020, primarily in *Global Banking*. For information on the non-U.S. commercial portfolio, see Non-U.S. Portfolio on page 37.

Commercial Real Estate

Commercial real estate primarily includes commercial loans secured by non-owner-occupied real estate and is dependent on the sale or lease of the real estate as the primary source of repayment. Outstanding loans increased $4.0 billion, or six percent, during the three months ended March 31, 2020 to $66.7 billion due to new originations and increased utilizations under existing credit facilities outpacing paydowns. The portfolio remains diversified across property types and geographic regions. California represented the largest state concentration at 23 percent and 24 percent of the commercial real estate portfolio at March 31, 2020 and December 31, 2019. The commercial real estate portfolio is predominantly managed in *Global Banking* and consists of loans made primarily to public and private developers, and commercial real estate firms.

For the three months ended March 31, 2020, we continued to see low default rates and solid credit quality although we began to see some developing weakness in the non-residential portfolio toward the end of the quarter. We use a number of proactive risk mitigation initiatives to reduce adversely rated exposure in the commercial real estate portfolio, including transfers of deteriorating exposures to management by independent special asset officers and the pursuit of loan restructurings or asset sales to achieve the best results for our customers and the Corporation.

Table 33 presents outstanding commercial real estate loans by geographic region, based on the geographic location of the collateral, and by property type.

Table 33 Outstanding Commercial Real Estate Loans

(Dollars in millions)	March 31 2020	December 31 2019
By Geographic Region		
California	$ 15,337	$ 14,910
Northeast	12,649	12,408
Southwest	10,018	8,408
Southeast	6,600	5,937
Florida	4,519	3,984
Midwest	3,596	3,203
Illinois	3,458	3,349
Midsouth	2,830	2,468
Northwest	1,550	1,638
Non-U.S.	3,790	3,724
Other (1)	2,307	2,660
Total outstanding commercial real estate loans	$ 66,654	$ 62,689
By Property Type		
Non-residential		
Office	$ 17,847	$ 17,902
Industrial / Warehouse	9,664	8,677
Shopping centers / Retail	8,852	8,183
Multi-family rental	7,763	7,250
Hotels / Motels	7,687	6,982
Unsecured	3,248	3,438
Multi-use	2,026	1,788
Other	7,654	6,958
Total non-residential	64,741	61,178
Residential	1,913	1,511
Total outstanding commercial real estate loans	$ 66,654	$ 62,689

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

U.S. Small Business Commercial

The U.S. small business commercial loan portfolio is comprised of small business card loans and small business loans managed in *Consumer Banking*. Credit card-related products were 52 percent of the U.S. small business commercial portfolio at both March 31, 2020 and December 31, 2019. Of the U.S. small business commercial net charge-offs, 90 percent and 95 percent were credit card-related products for the three months ended March 31, 2020 and 2019.

Nonperforming Commercial Loans, Leases and Foreclosed Properties Activity

Table 34 presents the nonperforming commercial loans, leases and foreclosed properties activity during the three months ended March 31, 2020 and 2019. Nonperforming loans do not include loans accounted for under the fair value option. During the three months ended March 31, 2020, nonperforming commercial loans and leases increased $353 million to $1.9 billion, driven primarily by the impact of COVID-19. At March 31, 2020, 92 percent of commercial nonperforming loans, leases and foreclosed properties were secured and 63 percent were contractually current. Commercial nonperforming loans were carried at 86 percent of their unpaid principal balance before consideration of the allowance for loan and lease losses as the carrying value of these loans has been reduced to the estimated collateral value less costs to sell.

Table 34 Nonperforming Commercial Loans, Leases and Foreclosed Properties Activity (1, 2)

(Dollars in millions)	Three Months Ended March 31 2020	2019
Nonperforming loans and leases, January 1	**$ 1,499**	$ 1,102
Additions	**781**	640
Reductions:		
Paydowns	**(212)**	(108)
Sales	**(16)**	(43)
Returns to performing status (3)	**(16)**	(34)
Charge-offs	**(184)**	(97)
Transfers to foreclosed properties	**—**	(7)
Transfers to loans held-for-sale	**—**	(181)
Total net reductions to nonperforming loans and leases	**353**	170
Total nonperforming loans and leases, March 31	**1,852**	1,272
Foreclosed properties, March 31	**49**	59
Nonperforming commercial loans, leases and foreclosed properties, March 31	**$ 1,901**	$ 1,331
Nonperforming commercial loans and leases as a percentage of outstanding commercial loans and leases (4)	**0.32%**	0.26%
Nonperforming commercial loans, leases and foreclosed properties as a percentage of outstanding commercial loans, leases and foreclosed properties (4)	**0.33**	0.27

(1) Balances do not include nonperforming loans held-for-sale of $223 million and $457 million at March 31, 2020 and 2019.
(2) Includes U.S. small business commercial activity. Small business card loans are excluded as they are not classified as nonperforming.
(3) Commercial loans and leases may be returned to performing status when all principal and interest is current and full repayment of the remaining contractual principal and interest is expected, or when the loan otherwise becomes well-secured and is in the process of collection. TDRs are generally classified as performing after a sustained period of demonstrated payment performance.
(4) Outstanding commercial loans exclude loans accounted for under the fair value option.

Table 35 presents our commercial TDRs by product type and performing status. U.S. small business commercial TDRs are comprised of renegotiated small business card loans and small business loans. The renegotiated small business card loans are not classified as nonperforming as they are charged off no later than the end of the month in which the loan becomes 180 days past due. For more information on our loan modification programs offered in response to the COVID-19 pandemic, which are not TDRs, see Executive Summary - Recent Developments – COVID-19 Pandemic 2020 on page 3 and *Note 1 – Summary of Significant Accounting Principles* to the Consolidated Financial Statements.

Table 35 Commercial Troubled Debt Restructurings

(Dollars in millions)	March 31, 2020 Nonperforming	Performing	Total	December 31, 2019 Nonperforming	Performing	Total
Commercial and industrial:						
U.S. commercial	**$ 792**	**$ 989**	**$ 1,781**	$ 617	$ 999	$ 1,616
Non-U.S. commercial	**74**	**169**	**243**	41	193	234
Total commercial and industrial	**866**	**1,158**	**2,024**	658	1,192	1,850
Commercial real estate	**198**	**6**	**204**	212	14	226
Commercial lease financing	**—**	**30**	**30**	18	31	49
	1,064	**1,194**	**2,258**	888	1,237	2,125
U.S. small business commercial	**—**	**28**	**28**	—	27	27
Total commercial troubled debt restructurings	**$ 1,064**	**$ 1,222**	**$ 2,286**	$ 888	$ 1,264	$ 2,152

Industry Concentrations

Table 36 presents commercial committed and utilized credit exposure by industry and the total net credit default protection purchased to cover the funded and unfunded portions of certain credit exposures. Our commercial credit exposure is diversified across a broad range of industries. Total commercial committed exposure increased $18.4 billion, or two percent, during the three months ended March 31, 2020 to $1.1 trillion. The increase in commercial committed exposure was concentrated in the Financial markets infrastructure, Capital goods, and Transportation industry sectors. Increases were partially offset by decreased exposure to the Utilities, Consumer services, and Commercial services and supplies industry sectors.

For information on industry limits, see Commercial Portfolio Credit Risk Management - Industry Concentrations in the MD&A of the Corporation's 2019 Annual Report on Form 10-K.

Asset managers and funds, our largest industry concentration with committed exposure of $109.3 billion, decreased $693 million, or one percent, during the three months ended March 31, 2020.

Real estate, our second largest industry concentration with committed exposure of $95.5 billion, decreased $875 million, or one percent, during the three months ended March 31, 2020. For more information on the commercial real estate and related portfolios, see Commercial Portfolio Credit Risk Management – Commercial Real Estate on page 34.

Capital goods, our third largest industry concentration with committed exposure of $85.5 billion, increased $4.7 billion, or six percent, during the three months ended March 31, 2020 with the growth largely occurring in the aerospace and defense, and machinery and industrial conglomerates categories, partially offset by a decrease in building products.

Given the widespread impact the COVID-19 pandemic is having on the U.S. and global economy, a number of industries have been or will be adversely impacted. We continue to monitor all industries, particularly higher risk industries, that are experiencing or are expected to experience a more significant impact to their financial condition. In addition, we continue to assess potential mitigants such as the various stimulus programs designed to support these clients and industries through the COVID-19 pandemic. The impact of the COVID-19 pandemic has also placed significant stress on global demand for oil, resulting in a steep decline in prices. Our energy-related committed exposure increased $1.7 billion, or five percent, during the three months ended March 31, 2020 to $38.0

billion, driven by our integrated client exposure, partially offset by a decline in our higher risk exploration and production exposure.

For more information on COVID-19, see Executive Summary - Recent Developments – COVID-19 Pandemic 2020 on page 3.

Table 36 Commercial Credit Exposure by Industry (1)

(Dollars in millions)	Commercial Utilized March 31 2020	Commercial Utilized December 31 2019	Total Commercial Committed (2) March 31 2020	Total Commercial Committed (2) December 31 2019
Asset managers and funds	$ 73,372	$ 71,289	$ 109,279	$ 109,972
Real estate (3)	75,649	70,341	95,474	96,349
Capital goods	48,272	41,060	85,525	80,871
Finance companies	46,089	40,171	66,609	63,940
Healthcare equipment and services	40,241	34,353	58,237	55,918
Government and public education	44,403	41,889	55,527	53,566
Materials	30,712	26,663	53,332	52,128
Retailing	33,505	25,868	49,501	48,317
Food, beverage and tobacco	27,653	24,163	47,384	45,956
Consumer services	34,753	28,434	46,304	49,071
Energy	18,328	16,407	38,041	36,327
Commercial services and supplies	25,572	23,102	36,774	38,943
Transportation	27,775	23,448	36,091	33,027
Utilities	14,537	12,383	31,743	36,060
Global commercial banks	29,072	26,492	31,267	28,670
Individuals and trusts	20,052	18,926	28,657	27,815
Media	13,604	12,429	24,512	23,629
Technology hardware and equipment	12,837	10,645	23,799	24,071
Vehicle dealers	18,315	18,013	21,196	21,435
Consumer durables and apparel	12,648	10,193	20,541	21,245
Software and services	11,337	10,432	19,817	20,556
Pharmaceuticals and biotechnology	6,285	5,962	19,554	20,203
Financial markets infrastructure (clearinghouses)	14,935	9,351	17,352	11,851
Automobiles and components	11,272	7,345	16,714	14,910
Telecommunication services	10,082	9,144	15,919	16,103
Insurance	7,413	6,669	14,793	15,214
Food and staples retailing	6,797	6,290	10,667	10,392
Religious and social organizations	4,372	3,844	6,135	5,756
Total commercial credit exposure by industry	**$ 719,882**	$ 635,306	**$ 1,080,744**	$ 1,062,295
Net credit default protection purchased on total commitments (4)			**$ (6,450)**	$ (3,349)

(1) Includes U.S. small business commercial exposure.
(2) Includes the notional amount of unfunded legally binding lending commitments net of amounts distributed (i.e., syndicated or participated) to other financial institutions. The distributed amounts were $10.5 billion and $10.6 billion at March 31, 2020 and December 31, 2019.
(3) Industries are viewed from a variety of perspectives to best isolate the perceived risks. For purposes of this table, the real estate industry is defined based on the primary business activity of the borrowers or counterparties using operating cash flows and primary source of repayment as key factors.
(4) Represents net notional credit protection purchased to hedge funded and unfunded exposures for which we elected the fair value option, as well as certain other credit exposures. For more information, see Commercial Portfolio Credit Risk Management – Risk Mitigation.

Risk Mitigation

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

At March 31, 2020 and December 31, 2019, net notional credit default protection purchased in our credit derivatives portfolio to hedge our funded and unfunded exposures for which we elected the fair value option, as well as certain other credit exposures, was $6.5 billion and $3.3 billion. We recorded net gains on these positions of $229 million for the three months ended March 31, 2020 compared to net losses of $65 million for the same period in 2019. The gains and losses on these instruments were offset by gains and losses on the related exposures. The Value-at-Risk (VaR) results for these exposures are included in the fair value option portfolio information in Table 42. For more information, see Trading Risk Management on page 40.

Tables 37 and 38 present the maturity profiles and the credit exposure debt ratings of the net credit default protection portfolio at March 31, 2020 and December 31, 2019.

Table 37 Net Credit Default Protection by Maturity

	March 31 2020	December 31 2019
Less than or equal to one year	**32%**	54%
Greater than one year and less than or equal to five years	**43**	45
Greater than five years	**25**	1
Total net credit default protection	**100%**	100%

Table 38 Net Credit Default Protection by Credit Exposure Debt Rating

(Dollars in millions)	Net Notional (1) March 31, 2020	Percent of Total March 31, 2020	Net Notional (1) December 31, 2019	Percent of Total December 31, 2019
Ratings (2, 3)				
A	**$ (857)**	**13.3%**	$ (697)	20.8%
BBB	**(2,761)**	**42.8**	(1,089)	32.5
BB	**(863)**	**13.4**	(766)	22.9
B	**(522)**	**8.1**	(373)	11.1
CCC and below	**(114)**	**1.8**	(119)	3.6
NR (4)	**(1,333)**	**20.6**	(305)	9.1
Total net credit default protection	**$ (6,450)**	**100.0%**	$ (3,349)	100.0%

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

For more information on credit derivatives and counterparty credit risk valuation adjustments, see *Note 3 – Derivatives* to the Consolidated Financial Statements of the Corporation's 2019 Annual Report on Form 10-K.

Non-U.S. Portfolio

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

Table 39 presents our 20 largest non-U.S. country exposures at March 31, 2020. These exposures accounted for 90 percent and 88 percent of our total non-U.S. exposure at March 31, 2020 and December 31, 2019. Net country exposure for these 20 countries increased $43.9 billion in the three months ended March 31, 2020, primarily driven by increased sovereign and corporate exposure across multiple countries. The majority of the increase was due to higher deposits with non-U.S. central banks and increased counterparty exposure.

Table 39 Top 20 Non-U.S. Countries Exposure

(Dollars in millions)	Funded Loans and Loan Equivalents	Unfunded Loan Commitments	Net Counterparty Exposure	Securities/ Other Investments	Country Exposure at March 31 2020	Hedges and Credit Default Protection	**Net Country Exposure at March 31 2020**	Increase (Decrease) from December 31 2019
United Kingdom	$ 35,343	$ 14,564	$ 10,902	$ 3,081	$ 63,890	$ (2,086)	**$ 61,804**	$ 5,960
Germany	36,034	6,447	4,009	1,150	47,640	(2,706)	**44,934**	14,106
Japan	20,528	904	1,967	2,380	25,779	(938)	**24,841**	14,309
France	13,359	7,220	1,475	1,537	23,591	(1,858)	**21,733**	5,478
Canada	10,098	6,529	2,071	3,558	22,256	(568)	**21,688**	1,566
China	12,297	410	1,617	875	15,199	(353)	**14,846**	(741)
Australia	6,642	2,670	1,780	1,767	12,859	(447)	**12,412**	1,310
India	7,843	268	599	3,542	12,252	(151)	**12,101**	84
Brazil	7,602	234	372	3,301	11,509	(201)	**11,308**	(464)
Netherlands	6,834	2,489	959	488	10,770	(891)	**9,879**	(448)
Switzerland	5,561	2,769	400	477	9,207	(419)	**8,788**	1,403
Hong Kong	6,735	292	402	1,170	8,599	(33)	**8,566**	1,510
South Korea	5,692	828	529	1,433	8,482	(164)	**8,318**	(387)
Singapore	4,121	310	700	2,837	7,968	(50)	**7,918**	92
Belgium	5,248	865	653	1,158	7,924	(237)	**7,687**	1,180
Mexico	4,286	1,198	191	944	6,619	(424)	**6,195**	(1,616)
Spain	3,015	1,267	315	722	5,319	(464)	**4,855**	133
Italy	2,657	1,628	593	692	5,570	(976)	**4,594**	(783)
Ireland	2,756	930	326	445	4,457	(15)	**4,442**	1,075
United Arab Emirates	3,179	163	374	62	3,778	(43)	**3,735**	148
Total top 20 non-U.S. countries exposure	$ 199,830	$ 51,985	$ 30,234	$ 31,619	$ 313,668	$ (13,024)	**$ 300,644**	$ 43,915

Our largest emerging market country exposure at March 31, 2020 was China, with net exposure of $14.8 billion, concentrated in large state-owned companies, subsidiaries of multinational corporations and commercial banks.

Our largest non-U.S. country exposure at March 31, 2020 was the U.K. with net exposure of $61.8 billion, which represents a $6.0 billion increase from December 31, 2019. Our second largest non-U.S. country exposure was Germany with net exposure of $44.9 billion at March 31, 2020, a $14.1 billion increase from December 31, 2019. The increase in Germany was primarily driven by an increase in sovereign exposure.

In light of the COVID-19 global pandemic, we are monitoring our non-U.S. exposure closely, particularly in countries where restrictions on certain activities, in an attempt to contain the spread and impact of the virus, have affected and will continue to adversely affect economic activity. We are managing the impact to our international business operations as part of our overall response framework and are taking actions to manage exposure carefully in impacted regions while supporting the needs of our clients. The magnitude and duration of the COVID-19 pandemic and its full impact on the global economy is highly uncertain. The impact of the COVID-19 pandemic could have an adverse impact on the global economy for a prolonged period of time. For more information on how the COVID-19 pandemic may affect our operations, see Executive Summary - Recent Developments – COVID-19 Pandemic 2020 on page 3 and Part II, Item 1A. Risk Factors on page 96.

Allowance for Credit Losses

On January 1, 2020, the Corporation adopted the new accounting standard that requires the measurement of the allowance for credit losses to be based on management's best estimate of lifetime expected credit losses inherent in the Corporation's relevant financial assets. Upon adoption of the new accounting standard, the Corporation recorded a net increase of $3.3 billion in the allowance for credit losses on January 1, 2020 which was comprised of a net increase of $2.9 billion in the allowance for loan and lease losses and an increase of $310 million in the reserve for unfunded lending commitments. The net increase was primarily driven by a $3.1 billion increase related to the credit card portfolio. The allowance for credit losses further increased by $3.6 billion at March 31, 2020, which included a $2.2 billion increase in the commercial portfolio and a $774 million increase in the credit card portfolio. The increases were primarily due to the deterioration in the economic outlook resulting from the impact of COVID-19. The following table presents an allocation of the allowance for credit losses by product type for March 31, 2020, January 1, 2020 and December 31, 2019 (prior to the adoption of the CECL accounting standard).

Table 40 Allocation of the Allowance for Credit Losses by Product Type

(Dollars in millions)	Amount	Percent of Total	Percent of Loans and Leases Outstanding (1)	Amount	Percent of Total	Percent of Loans and Leases Outstanding (1)	Amount	Percent of Total	Percent of Loans and Leases Outstanding (1)
	March 31, 2020			January 1, 2020			December 31, 2019		
Allowance for loan and lease losses									
Residential mortgage	$ 430	2.73%	0.18%	$ 212	1.72%	0.09%	$ 325	3.45%	0.14%
Home equity	378	2.40	0.96	228	1.84	0.57	221	2.35	0.55
Credit card	7,583	48.10	8.25	6,809	55.10	6.98	3,710	39.39	3.80
Direct/Indirect consumer	623	3.95	0.69	566	4.58	0.62	234	2.49	0.26
Other consumer	52	0.32	n/m	55	0.45	n/m	52	0.55	n/m
Total consumer	9,066	57.50	1.95	7,870	63.69	1.69	4,542	48.23	0.98
U.S. commercial (2)	4,135	26.23	1.11	2,723	22.03	0.84	3,015	32.02	0.94
Non-U.S. commercial	1,041	6.60	0.89	668	5.41	0.64	658	6.99	0.63
Commercial real estate	1,439	9.13	2.16	1,036	8.38	1.65	1,042	11.07	1.66
Commercial lease financing	85	0.54	0.45	61	0.49	0.31	159	1.69	0.80
Total commercial	6,700	42.50	1.16	4,488	36.31	0.88	4,874	51.77	0.96
Allowance for loan and lease losses	15,766	100.00%	1.51	12,358	100.00%	1.27	9,416	100.00%	0.97
Reserve for unfunded lending commitments	1,360			1,123			813		
Allowance for credit losses	$ 17,126			$ 13,481			$ 10,229		

(1) Ratios are calculated as allowance for loan and lease losses as a percentage of loans and leases outstanding excluding loans accounted for under the fair value option. Consumer loans accounted for under the fair value option include residential mortgage loans of $231 million at March 31, 2020 and $257 million at January 1, 2020 and December 31, 2019 and home equity loans of $325 million at March 31, 2020 and $337 million at January 1, 2020 and December 31, 2019. Commercial loans accounted for under the fair value option include U.S. commercial loans of $5.1 billion at March 31, 2020 and January 1, 2020 and $4.7 billion at December 31, 2019 and non-U.S. commercial loans of $3.4 billion, $3.2 billion and $3.1 billion at March 31, 2020, January 1, 2020 and December 31, 2019, respectively.

(2) Includes allowance for loan and lease losses for U.S. small business commercial loans of $1.1 billion, $831 million and $523 million at March 31, 2020, January 1, 2020 and December 31, 2019.

n/m = not meaningful

Net charge-offs for the three months ended March 31, 2020 were $1.1 billion compared to $991 million for the same period in 2019 driven by increases in commercial losses. The provision for credit losses for the three months ended March 31, 2020 was $4.8 billion which was $3.7 billion higher than the same period in 2019. The provision for credit losses was $3.6 billion higher than net charge-offs for the three months ended March 31, 2020, which was primarily due to the deterioration in the economic outlook resulting from the impact of COVID-19 on both the consumer and commercial portfolios. The provision for credit losses for the consumer portfolio, including unfunded lending commitments, increased $1.3 billion to $2.1 billion for the three months ended March 31, 2020 compared to the same period in 2019. The provision for credit losses for the commercial portfolio, including unfunded lending commitments, increased $2.5 billion to $2.7 billion for the three months ended March 31, 2020 compared to the same period in 2019.

The following table presents a rollforward of the allowance for credit losses, including certain loan and allowance ratios for the three months ended March 31, 2020 and 2019, noting that measurement of the allowance for credit losses for 2019 was based on management's estimate of probable incurred losses. For more information on the Corporation's credit loss accounting policies and activity related to the allowance for credit losses, see *Note 1 – Summary of Significant Accounting Principles* and *Note 5 – Outstanding Loans and Leases and Allowance for Credit Losses* to the Consolidated Financial Statements.

Table 41 Allowance for Credit Losses

(Dollars in millions)	Three Months Ended March 31	
	2020	2019
Allowance for loan and lease losses, December 31	**$ 9,416**	$ 9,601
January 1, 2020 adoption of Current Expected Credit Losses	**2,942**	—
Allowance for loan and lease losses, January 1	**12,358**	9,601
Loans and leases charged off		
Residential mortgage	**(11)**	(24)
Home equity	**(24)**	(79)
Credit card	**(924)**	(887)
Direct/Indirect consumer	**(116)**	(124)
Other consumer	**(81)**	(46)
Total consumer charge-offs	**(1,156)**	(1,160)
U.S. commercial (1)	**(267)**	(170)
Non-U.S. commercial	**(1)**	—
Commercial real estate	**(7)**	(5)
Commercial lease financing	**(7)**	(2)
Total commercial charge-offs	**(282)**	(177)
Total loans and leases charged off	**(1,438)**	(1,337)
Recoveries of loans and leases previously charged off		
Residential mortgage	**12**	40
Home equity	**35**	68
Credit card	**154**	142
Direct/Indirect consumer	**76**	70
Other consumer	**7**	5
Total consumer recoveries	**284**	325
U.S. commercial (2)	**29**	19
Commercial real estate	**1**	—
Commercial lease financing	**2**	2
Total commercial recoveries	**32**	21
Total recoveries of loans and leases previously charged off	**316**	346
Net charge-offs	**(1,122)**	(991)
Provision for loan and lease losses	**4,525**	1,008
Other (3)	**5**	(41)
Allowance for loan and lease losses, March 31	**15,766**	9,577
Reserve for unfunded lending commitments, December 31	**813**	797
January 1, 2020 adoption of Current Expected Credit Losses	**310**	—
Reserve for unfunded lending commitments, January 1	**1,123**	**797**
Provision for unfunded lending commitments	**236**	5
Other (3)	**1**	—
Reserve for unfunded lending commitments, March 31	**1,360**	**802**
Allowance for credit losses, March 31	**$ 17,126**	$ 10,379
Loan and allowance ratios:		
Loans and leases outstanding at March 31 (4)	**$ 1,041,769**	$ 939,428
Allowance for loan and lease losses as a percentage of total loans and leases outstanding at March 31 (4)	**1.51%**	1.02%
Consumer allowance for loan and lease losses as a percentage of total consumer loans and leases outstanding at March 31 (5)	**1.95**	1.08
Commercial allowance for loan and lease losses as a percentage of total commercial loans and leases outstanding at March 31 (6)	**1.16**	0.97
Average loans and leases outstanding (4)	**$ 981,652**	$ 939,008
Annualized net charge-offs as a percentage of average loans and leases outstanding (4)	**0.46%**	0.43%
Allowance for loan and lease losses as a percentage of total nonperforming loans and leases at March 31	**389**	197
Ratio of the allowance for loan and lease losses at March 31 to net charge-offs	**3.49**	2.38
Amounts included in allowance for loan and lease losses for loans and leases that are excluded from nonperforming loans and leases at March 31 (7)	**$ 8,552**	$ 4,106
Allowance for loan and lease losses as a percentage of total nonperforming loans and leases, excluding the allowance for loan and lease losses for loans and leases that are excluded from nonperforming loans and leases at March 31 (7)	**178%**	113%

(1) Includes U.S. small business commercial charge-offs of $86 million and $79 million for the three months ended March 31, 2020 and 2019.
(2) Includes U.S. small business commercial recoveries of $11 million and $11 million for the three months ended March 31, 2020 and 2019.
(3) Primarily represents write-offs of purchased credit-impaired (PCI) loans in 2019, and the net impact of portfolio sales, transfers to held for sale and transfers to foreclosed properties.

(4) Outstanding loan and lease balances and ratios do not include loans accounted for under the fair value option of $9.0 billion and $6.2 billion at March 31, 2020 and 2019. Average loans accounted for under the fair value option were $8.6 billion and $5.0 billion in March 31, 2020 and 2019.

(5) Excludes consumer loans accounted for under the fair value option of $556 million and $668 million at March 31, 2020 and 2019.

(6) Excludes commercial loans accounted for under the fair value option of $8.5 billion and $5.5 billion at March 31, 2020 and 2019.

(7) Primarily includes amounts allocated to credit card and unsecured consumer lending portfolios in *Consumer Banking*.

Market Risk Management

For more information on our market risk management process, see Market Risk Management in the MD&A of the Corporation's 2019 Annual Report on Form 10-K.

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

We have been affected, and expect to continue to be affected, by market stress resulting from the COVID-19 pandemic that began in the first quarter of 2020. For more information on the effects of the pandemic, see Executive Summary - Recent Developments – COVID-19 Pandemic 2020 on page 3.

Trading Risk Management

To evaluate risks in our trading activities, we focus on the actual and potential volatility of revenues generated by individual positions as well as portfolios of positions. VaR is a common statistic used to measure market risk. Our primary VaR statistic is equivalent to a 99 percent confidence level, which means that for a VaR with a one-day holding period, there should not be losses in excess of VaR, on average, 99 out of 100 trading days.

Table 42 presents the total market-based portfolio VaR which is the combination of the total covered positions (and less liquid trading positions) portfolio and the fair value option portfolio. For more information on the market risk VaR for trading activities, see Trading Risk Management in the MD&A of the Corporation's 2019 Annual Report on Form 10-K.

The total market-based portfolio VaR results in Table 42 include market risk to which we are exposed from all business segments, excluding credit valuation adjustment (CVA), DVA and related hedges. The majority of this portfolio is within the *Global Markets* segment.

Table 42 presents year-end, average, high and low daily trading VaR for the three months ended March 31, 2020, December 31, 2019 and March 31, 2019 using a 99 percent confidence level. The amounts disclosed in Table 42 and Table 43 align to the view of covered positions used in the Basel 3 capital calculations. Foreign exchange and commodity positions are always considered covered positions, regardless of trading or banking treatment for the trade, except for structural foreign currency positions that are excluded with prior regulatory approval.

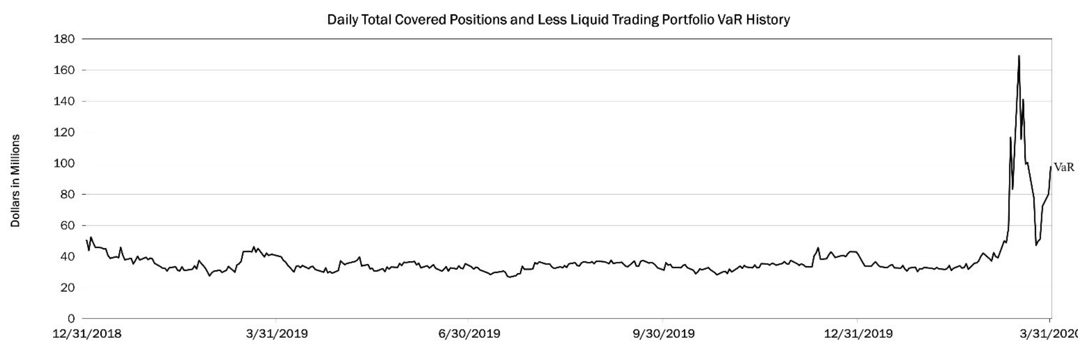
The average of total covered positions and less liquid trading positions portfolio VaR increased for the three months ended March 31, 2020 compared to the previous quarter primarily due to increased market volatility in March as a result of the effects of the COVID-19 pandemic, which heightened VaR for equity and credit risk factors.

Table 42 Market Risk VaR for Trading Activities

	Three Months Ended											
	March 31, 2020				December 31, 2019				March 31, 2019			
(Dollars in millions)	Period End	**Average**	**High (1)**	**Low (1)**	Period End	Average	High (1)	Low (1)	Period End	Average	High (1)	Low (1)
Foreign exchange	**$ 8**	**$ 6**	**$ 84**	**$ 2**	$ 4	$ 5	$ 13	$ 2	$ 8	$ 6	$ 10	$ 4
Interest rate	**13**	**21**	**39**	**13**	25	23	30	19	38	28	49	17
Credit	**86**	**35**	**86**	**25**	26	24	32	21	21	21	26	18
Equity	**26**	**36**	**162**	**19**	29	25	33	18	26	19	26	14
Commodities	**8**	**6**	**10**	**4**	4	5	8	4	5	7	13	4
Portfolio diversification	**(82)**	**(57)**	**—**	**—**	(47)	(49)	—	—	(61)	(48)	—	—
Total covered positions portfolio	**59**	**47**	**171**	**27**	41	33	41	26	37	33	47	25
Impact from less liquid exposures	**39**	**1**	**—**	**—**	—	2	—	—	4	4	—	—
Total covered positions and less liquid trading positions portfolio	**98**	**48**	**169**	**30**	41	35	46	28	41	37	53	28
Fair value option loans	**75**	**16**	**78**	**7**	8	10	13	7	7	8	10	7
Fair value option hedges	**13**	**11**	**16**	**9**	10	11	15	8	4	10	17	4
Fair value option portfolio diversification	**(13)**	**(11)**	**—**	**—**	(9)	(8)	—	—	(6)	(9)	—	—
Total fair value option portfolio	**75**	**16**	**75**	**9**	9	13	16	9	5	9	16	5
Portfolio diversification	**(21)**	**(11)**	**—**	**—**	(5)	(11)	—	—	(4)	(6)	—	—
Total market-based portfolio	**$ 152**	**$ 53**	**171**	**32**	$ 45	$ 37	46	29	$ 42	$ 40	56	30

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

The graph below presents the daily covered positions and less liquid trading positions portfolio VaR for the previous five quarters, corresponding to the data in Table 42. Peak VaR in mid-March was driven by increased market realized volatility and higher implied volatilities.



Additional VaR statistics produced within our single VaR model are provided in Table 43 at the same level of detail as in Table 42. Evaluating VaR with additional statistics allows for an increased understanding of the risks in the portfolio as the historical market data used in the VaR calculation does not necessarily follow a predefined statistical distribution. Table 43 presents average trading VaR statistics at 99 percent and 95 percent confidence levels for the three months ended March 31, 2020, December 31, 2019 and March 31, 2019.

Table 43 Average Market Risk VaR for Trading Activities – 99 percent and 95 percent VaR Statistics

	March 31, 2020		December 31, 2019		March 31, 2019	
(Dollars in millions)	**99 percent**	95 percent	99 percent	95 percent	99 percent	95 percent
Foreign exchange	**$ 6**	**$ 4**	$ 5	$ 3	$ 6	$ 3
Interest rate	**21**	**13**	23	14	28	18
Credit	**35**	**18**	24	16	21	14
Equity	**36**	**21**	25	13	19	10
Commodities	**6**	**4**	5	3	7	4
Portfolio diversification	**(57)**	**(34)**	(49)	(32)	(48)	(30)
Total covered positions portfolio	**47**	**26**	33	17	33	19
Impact from less liquid exposures	**1**	**1**	2	3	4	2
Total covered positions and less liquid trading positions portfolio	**48**	**27**	35	20	37	21
Fair value option loans	**16**	**7**	10	6	8	4
Fair value option hedges	**11**	**7**	11	7	10	6
Fair value option portfolio diversification	**(11)**	**(7)**	(8)	(6)	(9)	(4)
Total fair value option portfolio	**16**	**7**	13	7	9	6
Portfolio diversification	**(11)**	**(6)**	(11)	(6)	(6)	(5)
Total market-based portfolio	**$ 53**	**$ 28**	$ 37	$ 21	$ 40	$ 22

Backtesting

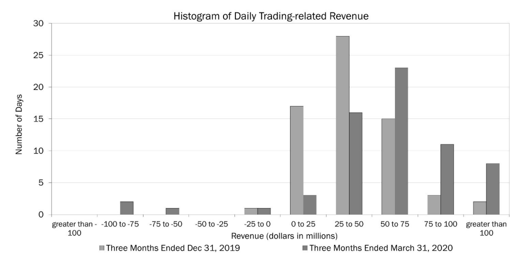
The accuracy of the VaR methodology is evaluated by backtesting, which compares the daily VaR results, utilizing a one-day holding period, against a comparable subset of trading revenue. For more information on our backtesting process, see Trading Risk Management – Backtesting in the MD&A of the Corporation's 2019 Annual Report on Form 10-K.

During the three months ended March 31, 2020, there were seven days where this subset of trading revenue had losses that exceeded our total covered portfolio VaR, utilizing a one-day holding period.

Total Trading-related Revenue

Total trading-related revenue, excluding brokerage fees, and CVA, DVA and funding valuation adjustment gains (losses), represents the total amount earned from trading positions, including market-based net interest income, which are taken in a diverse range of financial instruments and markets. For more information, see Trading Risk Management – Total Trading-related Revenue in the MD&A of the Corporation's 2019 Annual Report on Form 10-K.

The following histogram is a graphic depiction of trading volatility and illustrates the daily level of trading-related revenue for the three months ended March 31, 2020 compared to the three months ended December 31, 2019. During the three months ended March 31, 2020, positive trading-related revenue was recorded for 94 percent of the trading days, of which 89 percent were daily trading gains of over $25 million, and the largest loss was $90 million. This compares to the three months ended December 31, 2019 where positive trading-related revenue was recorded for 98 percent of the trading days, of which 73 percent were daily trading gains of over $25 million, and the largest loss was $4 million.



Trading Portfolio Stress Testing

Because the very nature of a VaR model suggests results can exceed our estimates and it is dependent on a limited historical window, we also stress test our portfolio using scenario analysis. This analysis estimates the change in the value of our trading portfolio that may result from abnormal market movements. For more information, see Trading Risk Management – Trading Portfolio Stress Testing in the MD&A of the Corporation's 2019 Annual Report on Form 10-K.

Interest Rate Risk Management for the Banking Book

The following discussion presents net interest income for banking book activities. For more information, see Interest Rate Risk Management for the Banking Book in the MD&A of the Corporation's 2019 Annual Report on Form 10-K.

Table 44 presents the spot and 12-month forward rates used in our baseline forecasts at March 31, 2020 and December 31, 2019.

Table 44 Forward Rates

	March 31, 2020		
	Federal Funds	**Three-month LIBOR**	**10-Year Swap**
Spot rates	**0.25%**	**1.45%**	**0.72%**
12-month forward rates	**0.25**	**0.28**	**0.76**
	December 31, 2019		
Spot rates	1.75%	1.91%	1.90%
12-month forward rates	1.50	1.62	1.92

Table 45 shows the pretax impact to forecasted net interest income over the next 12 months from March 31, 2020 and December 31, 2019 resulting from instantaneous parallel and non-parallel shocks to the market-based forward curve. Periodically we evaluate the scenarios presented so that they are meaningful in the context of the current rate environment. The interest rate scenarios also assume U.S. dollar rates are floored at zero.

In the three months ended March 31, 2020, the asset sensitivity of our balance sheet increased primarily due to decreases in interest rates. We continue to be asset sensitive to a parallel move in interest rates with the majority of that impact coming from the short end of the yield curve. Additionally, higher interest rates impact the fair value of debt securities and, accordingly, for debt securities classified as AFS, may adversely affect OCI and thus capital levels under the Basel 3 capital rules. Under instantaneous upward parallel shifts, the near-term adverse impact to Basel 3 capital is reduced over time by offsetting positive impacts to net interest income. For more information on Basel 3, see Capital Management – Regulatory Capital on page 19.

Table 45 Estimated Banking Book Net Interest Income Sensitivity to Curve Changes

(Dollars in millions)	Short Rate (bps)	Long Rate (bps)	**March 31 2020**	December 31 2019
Parallel Shifts				
+100 bps instantaneous shift	+100	+100	**$ 7,205**	$ 4,190
-25 bps instantaneous shift	-25	-25	**(2,285)**	(1,500)
Flatteners				
Short-end instantaneous change	+100	—	**4,533**	2,641
Long-end instantaneous change	—	-25	**(864)**	(653)
Steepeners				
Short-end instantaneous change	-25	—	**(1,418)**	(844)
Long-end instantaneous change	—	+100	**2,701**	1,561

The sensitivity analysis in Table 45 assumes that we take no action in response to these rate shocks and does not assume any change in other macroeconomic variables normally correlated with changes in interest rates. As part of our ALM activities, we use securities, certain residential mortgages, and interest rate and foreign exchange derivatives in managing interest rate sensitivity.

The behavior of our deposits portfolio in the baseline forecast and in alternate interest rate scenarios is a key assumption in our projected estimates of net interest income. The sensitivity analysis in Table 45 assumes no change in deposit portfolio size or mix from the baseline forecast in alternate rate environments. In higher rate scenarios, any customer activity resulting in the replacement of low-cost or noninterest-bearing deposits with higher yielding deposits or market-based funding would reduce our benefit in those scenarios.

Interest Rate and Foreign Exchange Derivative Contracts

Interest rate and foreign exchange derivative contracts are utilized in our ALM activities and serve as an efficient tool to manage our interest rate and foreign exchange risk. We use derivatives to hedge the variability in cash flows or changes in fair value on our balance sheet due to interest rate and foreign exchange components. For more information on our hedging activities, see *Note 3 – Derivatives* to the Consolidated Financial Statements. For more information on interest rate contracts and risk management, see Interest Rate Risk Management for the Banking Book in the MD&A of the Corporation's 2019 Annual Report on Form 10-K.

We use interest rate derivative instruments to hedge the variability in the cash flows of our assets and liabilities and other forecasted transactions (collectively referred to as cash flow hedges). The net results on both open and terminated cash flow hedge derivative instruments recorded in accumulated OCI were a gain of $39 million and a loss of $496 million, on a pretax basis, at March 31, 2020 and December 31, 2019. These gains (losses) are expected to be reclassified into earnings in the same period as the hedged cash flows affect earnings and will decrease income or increase expense on the respective hedged cash flows. Assuming no change in open cash flow derivative hedge positions and no changes in prices or interest rates beyond what is implied in forward yield curves at March 31, 2020, the after-tax net losses are expected to be reclassified into earnings as follows: a gain of $77 million within the next year, a gain of $104 million in years two through five, a loss of $100 million in years six through ten, with the remaining loss of $64 million thereafter. For more information on derivatives designated as cash flow hedges, see *Note 3 – Derivatives* to the Consolidated Financial Statements.

We hedge our net investment in non-U.S. operations determined to have functional currencies other than the U.S. dollar using forward foreign exchange contracts that typically settle in less than 180 days, cross-currency basis swaps and foreign exchange options. We recorded net after-tax losses on derivatives in accumulated OCI associated with net investment hedges which were offset by gains on our net investments in consolidated non-U.S. entities at March 31, 2020.

Table 46 presents derivatives utilized in our ALM activities and shows the notional amount, fair value, weighted-average receive-fixed and pay-fixed rates, expected maturity and average estimated durations of our open ALM derivatives at March 31, 2020 and December 31, 2019. These amounts do not include derivative hedges on our MSRs. During the three months ended March 31, 2020, the fair value of receive-fixed interest rate swaps increased while pay-fixed interest swaps decreased, primarily driven by lower swap rates on hedges of U.S. dollar long-term debt.

Table 46 Asset and Liability Management Interest Rate and Foreign Exchange Contracts

	March 31, 2020								
		Expected Maturity							
(Dollars in millions, average estimated duration in years)	Fair Value	Total	Remainder of 2020	2021	2022	2023	2024	Thereafter	Average Estimated Duration
Receive-fixed interest rate swaps (1)	**$ 30,267**								**8.32**
Notional amount		**$ 242,132**	**$ 14,107**	**$ 14,644**	**$ 21,616**	**$ 36,356**	**$ 23,143**	**$ 132,266**	
Weighted-average fixed-rate		**2.51%**	**2.82%**	**3.17%**	**2.48%**	**2.36%**	**2.36%**	**2.47%**	
Pay-fixed interest rate swaps (1)	**(9,755)**								**9.15**
Notional amount		**$ 90,537**	**$ 4,344**	**$ 2,117**	**$ 1**	**$ 13,993**	**$ 10,085**	**$ 59,997**	
Weighted-average fixed-rate		**2.09%**	**2.16%**	**2.15%**	**0.09%**	**2.52%**	**1.87%**	**2.02%**	
Same-currency basis swaps (2)	**(192)**								
Notional amount		**$ 157,023**	**$ 10,426**	**$ 18,232**	**$ 4,306**	**$ 2,017**	**$ 14,567**	**$ 107,475**	
Foreign exchange basis swaps (1, 3, 4)	**(1,748)**								
Notional amount		**109,627**	**13,904**	**25,318**	**14,444**	**7,329**	**3,415**	**45,217**	
Foreign exchange contracts (1, 4, 5)	**2,978**								
Notional amount (6)		**(101,198)**	**(127,678)**	**3,899**	**2,552**	**2,254**	**4,282**	**13,494**	
Option products	**—**								
Notional amount		**15**	**—**	**—**	**—**	**15**	**—**	**—**	
Futures and forward rate contracts	**(174)**								
Notional amount (6)		**(5,251)**	**(5,251)**	**—**	**—**	**—**	**—**	**—**	
Net ALM contracts	**$ 21,376**								

	December 31, 2019								
		Expected Maturity							
(Dollars in millions, average estimated duration in years)	Fair Value	Total	2020	2021	2022	2023	2024	Thereafter	Average Estimated Duration
Receive-fixed interest rate swaps (1)	$ 12,370								6.47
Notional amount		$ 215,123	$ 16,347	$ 14,642	$ 21,616	$ 36,356	$ 21,257	$ 104,905	
Weighted-average fixed-rate		2.68%	2.68%	3.17%	2.48%	2.36%	2.55%	2.79%	
Pay-fixed interest rate swaps (1)	(2,669)								6.99
Notional amount		$ 69,586	$ 4,344	$ 2,117	$ —	$ 13,993	$ 8,194	$ 40,938	
Weighted-average fixed-rate		2.36%	2.16%	2.15%	—%	2.52%	2.26%	2.35%	
Same-currency basis swaps (2)	(290)								
Notional amount		$ 152,160	$ 18,857	$ 18,590	$ 4,306	$ 2,017	$ 14,567	$ 93,823	
Foreign exchange basis swaps (1, 3, 4)	(1,258)								
Notional amount		113,529	23,639	24,215	14,611	7,111	3,521	40,432	
Foreign exchange contracts (1, 4, 5)	414								
Notional amount (6)		(53,106)	(79,315)	4,539	2,674	2,340	4,432	12,224	
Option products	—								
Notional amount		15	—	—	—	15	—	—	
Net ALM contracts	$ 8,567								

(1) Does not include basis adjustments on either fixed-rate debt issued by the Corporation or AFS debt securities, which are hedged using derivatives designated as fair value hedging instruments, that substantially offset the fair values of these derivatives.
(2) At March 31, 2020 and December 31, 2019, the notional amount of same-currency basis swaps included $157.0 billion and $152.2 billion in both foreign currency and U.S. dollar-denominated basis swaps in which both sides of the swap are in the same currency.
(3) Foreign exchange basis swaps consisted of cross-currency variable interest rate swaps used separately or in conjunction with receive-fixed interest rate swaps.
(4) Does not include foreign currency translation adjustments on certain non-U.S. debt issued by the Corporation that substantially offset the fair values of these derivatives.
(5) The notional amount of foreign exchange contracts of $(101.2) billion at March 31, 2020 was comprised of $30.9 billion in foreign currency-denominated and cross-currency receive-fixed swaps, $(129.7) billion in net foreign currency forward rate contracts, $(3.0) billion in foreign currency-denominated interest rate swaps and $588 million in net foreign currency futures contracts. Foreign exchange contracts of $(53.1) billion at December 31, 2019 were comprised of $29.0 billion in foreign currency-denominated and cross-currency receive-fixed swaps, $(82.4) billion in net foreign currency forward rate contracts, $(313) million in foreign currency-denominated interest rate swaps and $644 million in foreign currency futures contracts.
(6) Reflects the net of long and short positions. Amounts shown as negative reflect a net short position.

Mortgage Banking Risk Management

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

Changes in interest rates impact the value of interest rate lock commitments (IRLCs) and the related residential first mortgage loans held-for-sale (LHFS), as well as the value of the MSRs. Because the interest rate risks of these hedged items offset, we combine them into one overall hedged item with one combined economic hedge portfolio consisting of derivative contracts and securities. For more information on IRLCs and the related residential mortgage LHFS, see Mortgage Banking Risk Management in the MD&A of the Corporation's 2019 Annual Report on Form 10-K.

During the three months ended March 31, 2020 and 2019, we recorded gains of $163 million and $61 million related to the change in fair value of the MSRs, IRLCs and LHFS, net of gains and losses on the hedge portfolio.

Complex Accounting Estimates

Our significant accounting principles are essential in understanding the MD&A. Many of our significant accounting principles require complex judgments to estimate the values of assets and liabilities. We have procedures and processes in place to facilitate making these judgments. For more information, see Complex Accounting Estimates in the MD&A of the Corporation's 2019 Annual Report on Form 10-K and *Note 1 – Summary of Significant Accounting Principles* to the Consolidated Financial Statements of the Corporation's 2019 Annual Report on Form 10-K. Except as noted below under Allowance for Credit Losses, there have not been any material updates to our complex accounting estimates as disclosed in the MD&A of the Corporation's Annual Report on Form 10-K.

Allowance for Credit Losses

On January 1, 2020, the Corporation adopted the new accounting standard that requires the measurement of the allowance for credit losses, which includes the allowance for loan and lease losses and the reserve for unfunded lending commitments, to be based on management's best estimate of lifetime expected credit losses inherent in the Corporation's relevant financial assets.

The Corporation's estimate of lifetime expected credit losses includes the use of quantitative models that incorporate forward-looking macroeconomic scenarios that are applied over the contractual life of the loan portfolios, adjusted for expected prepayments and borrower controlled extension options. These macroeconomic scenarios include variables that have historically been key drivers of increases and decreases in credit losses. These variables include, but are not limited to, unemployment rates, real estate prices, gross domestic product levels, corporate bond spreads and long-term interest rate forecasts. As any one economic outlook is inherently uncertain, the Corporation leverages multiple scenarios. The scenarios that are chosen each quarter and the amount of weighting given to each scenario depend on a variety of factors including recent economic events, leading economic indicators, views of internal as well as third-party economists and industry trends.

The Corporation also includes qualitative reserves to cover losses that are expected but, in the Corporation's assessment, may not be adequately represented in the economic assumptions described above. For example, factors that the Corporation considers include changes in lending policies and procedures, business conditions, the nature and size of the portfolio, portfolio concentrations, the volume and severity of past due loans and nonaccrual loans, the effect of external factors such as competition, and legal and regulatory requirements, among others. Further, the Corporation considers the inherent uncertainty in quantitative models that are built on historical data.

The allowance for credit losses can also be impacted by unanticipated changes in asset quality of the portfolio, such as increases in risk rating downgrades in our commercial portfolio, deterioration in borrower delinquencies or credit scores in our credit card portfolio or increases in LTVs in our consumer real estate portfolio. In addition, while we have incorporated our estimated impact of COVID-19 into our allowance for credit losses, the ultimate impact of COVID-19 is still unknown, including how long economic activities will be impacted and what effect the unprecedented levels of government fiscal and monetary actions will have on the economy and our credit losses.

As described above, the process to determine the allowance for credit losses requires numerous estimates and assumptions, some of which require a high degree of judgment and are often interrelated. Changes in the estimates and assumptions can result in significant changes in the allowance for credit losses. Our process for determining the allowance for credit losses is further discussed in *Note 1 – Summary of Significant Accounting Principles* and *Note 5 – Outstanding Loans and Leases and Allowance for Credit Losses* to the Consolidated Financial Statements.

Non-GAAP Reconciliations

Table 47 provides reconciliations of certain non-GAAP financial measures to the most closely related GAAP financial measures.

Table 47 Period-end and Average Supplemental Financial Data and Reconciliations to GAAP Financial Measures (1)

	Period-end		Average	
			Three Months Ended March 31	
(Dollars in millions)	March 31 2020	December 31 2019	2020	2019
Shareholders' equity	**$ 264,918**	$ 264,810	**$ 264,534**	$ 266,217
Goodwill	**(68,951)**	(68,951)	**(68,951)**	(68,951)
Intangible assets (excluding MSRs)	**(1,646)**	(1,661)	**(1,655)**	(1,763)
Related deferred tax liabilities	**790**	713	**728**	841
Tangible shareholders' equity	**$ 195,111**	$ 194,911	**$ 194,656**	$ 196,344
Preferred stock	**(23,427)**	(23,401)	**(23,456)**	(22,326)
Tangible common shareholders' equity	**$ 171,684**	$ 171,510	**$ 171,200**	$ 174,018
Total assets	**$ 2,619,954**	$ 2,434,079		
Goodwill	**(68,951)**	(68,951)		
Intangible assets (excluding MSRs)	**(1,646)**	(1,661)		
Related deferred tax liabilities	**790**	713		
Tangible assets	**$ 2,550,147**	$ 2,364,180		

(1) Presents reconciliations of non-GAAP financial measures to the most closely related GAAP financial measures. For more information on non-GAAP financial measures and ratios we use in assessing the results of the Corporation, see Supplemental Financial Data on page 7.

Item 3. Quantitative and Qualitative Disclosures about Market Risk

See Market Risk Management on page 40 in the MD&A and the sections referenced therein for Quantitative and Qualitative Disclosures about Market Risk.

Item 4. Controls and Procedures

Disclosure Controls and Procedures

As of the end of the period covered by this report, the Corporation's management, including the Chief Executive Officer and Chief Financial Officer, conducted an evaluation of the effectiveness and design of the Corporation's disclosure controls and procedures (as that term is defined in Rule 13a-15(e) of the Exchange Act). Based upon that evaluation, the Corporation's Chief Executive Officer and Chief Financial Officer concluded that the Corporation's disclosure controls and procedures were effective, as of the end of the period covered by this report.

Changes in Internal Control Over Financial Reporting

There have been no changes in the Corporation's internal control over financial reporting (as defined in Rule 13a-15(f) of the Exchange Act) during the three months ended March 31, 2020, that have materially affected, or are reasonably likely to materially affect, the Corporation's internal control over financial reporting.

Part I. Financial Information
Item 1. Financial Statements
Bank of America Corporation and Subsidiaries

Consolidated Statement of Income

(In millions, except per share information)	Three Months Ended March 31 2020	2019
Net interest income		
Interest income	**$ 16,098**	$ 18,170
Interest expense	**3,968**	5,795
Net interest income	**12,130**	12,375
Noninterest income		
Fees and commissions	**8,321**	7,838
Market making and similar activities	**2,807**	2,768
Other income	**(491)**	23
Total noninterest income	**10,637**	10,629
Total revenue, net of interest expense	**22,767**	23,004
Provision for credit losses	**4,761**	1,013
Noninterest expense		
Compensation and benefits	**8,341**	8,249
Occupancy and equipment	**1,702**	1,605
Information processing and communications	**1,209**	1,164
Product delivery and transaction related	**777**	662
Marketing	**438**	442
Professional fees	**375**	360
Other general operating	**633**	742
Total noninterest expense	**13,475**	13,224
Income before income taxes	**4,531**	8,767
Income tax expense	**521**	1,456
Net income	**$ 4,010**	$ 7,311
Preferred stock dividends	**469**	442
Net income applicable to common shareholders	**$ 3,541**	$ 6,869
Per common share information		
Earnings	**$ 0.40**	$ 0.71
Diluted earnings	**0.40**	0.70
Average common shares issued and outstanding	**8,815.6**	9,725.9
Average diluted common shares issued and outstanding	**8,862.7**	9,787.3

Consolidated Statement of Comprehensive Income

(Dollars in millions)	Three Months Ended March 31 2020	2019
Net income	**$ 4,010**	$ 7,311
Other comprehensive income (loss), net-of-tax:		
Net change in debt securities	**4,795**	2,309
Net change in debit valuation adjustments	**1,346**	(363)
Net change in derivatives	**417**	229
Employee benefit plan adjustments	**43**	28
Net change in foreign currency translation adjustments	**(88)**	(34)
Other comprehensive income (loss)	**6,513**	2,169
Comprehensive income	**$ 10,523**	$ 9,480

See accompanying Notes to Consolidated Financial Statements.

Consolidated Balance Sheet

(Dollars in millions)	March 31 2020	December 31 2019 2019
Assets		
Cash and due from banks	**$ 30,052**	$ 30,152
Interest-bearing deposits with the Federal Reserve, non-U.S. central banks and other banks	**220,338**	131,408
Cash and cash equivalents	**250,390**	161,560
Time deposits placed and other short-term investments	**12,283**	7,107
Federal funds sold and securities borrowed or purchased under agreements to resell (includes **$49,033** and $50,364 measured at fair value)	**301,969**	274,597
Trading account assets (includes **$82,023** and $90,946 pledged as collateral)	**193,323**	229,826
Derivative assets	**57,654**	40,485
Debt securities:		
Carried at fair value	**221,104**	256,467
Held-to-maturity, at cost (fair value – **$266,595** and $219,821)	**254,748**	215,730
Total debt securities	**475,852**	472,197
Loans and leases (includes **$9,016** and $8,335 measured at fair value)	**1,050,785**	983,426
Allowance for loan and lease losses	**(15,766)**	(9,416)
Loans and leases, net of allowance	**1,035,019**	974,010
Premises and equipment, net	**10,792**	10,561
Goodwill	**68,951**	68,951
Loans held-for-sale (includes **$3,609** and $3,709 measured at fair value)	**7,862**	9,158
Customer and other receivables	**69,238**	55,937
Other assets (includes **$6,789** and $15,518 measured at fair value)	**136,621**	129,690
Total assets	**$ 2,619,954**	$ 2,434,079
Liabilities		
Deposits in U.S. offices:		
Noninterest-bearing	**$ 484,342**	$ 403,305
Interest-bearing (includes **$589** and $508 measured at fair value)	**1,008,922**	940,731
Deposits in non-U.S. offices:		
Noninterest-bearing	**13,695**	13,719
Interest-bearing	**76,366**	77,048
Total deposits	**1,583,325**	1,434,803
Federal funds purchased and securities loaned or sold under agreements to repurchase (includes **$17,192** and $16,008 measured at fair value)	**170,043**	165,109
Trading account liabilities	**77,151**	83,270
Derivative liabilities	**54,658**	38,229
Short-term borrowings (includes **$3,020** and $3,941 measured at fair value)	**30,118**	24,204
Accrued expenses and other liabilities (includes **$6,825** and $15,434 measured at fair value and **$1,360** and $813 of reserve for unfunded lending commitments)	**183,029**	182,798
Long-term debt (includes **$32,163** and $34,975 measured at fair value)	**256,712**	240,856
Total liabilities	**2,355,036**	2,169,269
Commitments and contingencies *(Note 6 – Securitizations and Other Variable Interest Entities* and *Note 10 – Commitments and Contingencies)*		
Shareholders' equity		
Preferred stock, $0.01 par value; authorized – **100,000,000** shares; issued and outstanding – **3,887,440** and 3,887,440 shares	**23,427**	23,401
Common stock and additional paid-in capital, $0.01 par value; authorized – **12,800,000,000** shares; issued and outstanding – **8,675,487,435** and 8,836,148,954 shares	**85,745**	91,723
Retained earnings	**155,866**	156,319
Accumulated other comprehensive income (loss)	**(120)**	(6,633)
Total shareholders' equity	**264,918**	264,810
Total liabilities and shareholders' equity	**$ 2,619,954**	$ 2,434,079

Assets of consolidated variable interest entities included in total assets above (isolated to settle the liabilities of the variable interest entities)		
Trading account assets	**$ 5,405**	$ 5,811
Loans and leases	**37,009**	38,837
Allowance for loan and lease losses	**(1,472)**	(807)
Loans and leases, net of allowance	**35,537**	38,030
All other assets	**536**	540

Total assets of consolidated variable interest entities	**$**	**41,478**	$	44,381
Liabilities of consolidated variable interest entities included in total liabilities above				
Short-term borrowings	**$**	**1,147**	$	2,175
Long-term debt (includes **$6,786** and $8,717 of non-recourse debt)		**6,787**		8,718
All other liabilities (includes **$37** and $19 of non-recourse liabilities)		**39**		22
Total liabilities of consolidated variable interest entities	**$**	**7,973**	$	10,915

See accompanying Notes to Consolidated Financial Statements.

Consolidated Statement of Changes in Shareholders' Equity

(In millions)	Preferred Stock	Common Stock and Additional Paid-in Capital Shares	Common Stock and Additional Paid-in Capital Amount	Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Total Shareholders' Equity
Balance, December 31, 2018	$ 22,326	9,669.3	$ 118,896	$ 136,314	$ (12,211)	$ 265,325
Cumulative adjustment for adoption of lease accounting standard				165		165
Net income				7,311		7,311
Net change in debt securities					2,309	2,309
Net change in debit valuation adjustments					(363)	(363)
Net change in derivatives					229	229
Employee benefit plan adjustments					28	28
Net change in foreign currency translation adjustments					(34)	(34)
Dividends declared:						
Common				(1,456)		(1,456)
Preferred				(442)		(442)
Common stock issued under employee plans, net, and other		119.1	205	(4)		201
Common stock repurchased		(220.0)	(6,263)			(6,263)
Balance, March 31, 2019	$ 22,326	9,568.4	$ 112,838	$ 141,888	$ (10,042)	$ 267,010
Balance, December 31, 2019	**$ 23,401**	**8,836.1**	**$ 91,723**	**$ 156,319**	**$ (6,633)**	**$ 264,810**
Cumulative adjustment for adoption of credit loss accounting standard				**(2,406)**		**(2,406)**
Net income				**4,010**		**4,010**
Net change in debt securities					**4,795**	**4,795**
Net change in debit valuation adjustments					**1,346**	**1,346**
Net change in derivatives					**417**	**417**
Employee benefit plan adjustments					**43**	**43**
Net change in foreign currency translation adjustments					**(88)**	**(88)**
Dividends declared:						
Common				**(1,579)**		**(1,579)**
Preferred				**(469)**		**(469)**
Issuance of preferred stock	**1,098**					**1,098**
Redemption of preferred stock	**(1,072)**					**(1,072)**
Common stock issued under employee plans, net, and other		**39.7**	**384**	**(9)**		**375**
Common stock repurchased		**(200.3)**	**(6,362)**			**(6,362)**
Balance, March 31, 2020	**$ 23,427**	**8,675.5**	**$ 85,745**	**$ 155,866**	**$ (120)**	**$ 264,918**

See accompanying Notes to Consolidated Financial Statements.

Consolidated Statement of Cash Flows

	Three Months Ended March 31	
(Dollars in millions)	**2020**	2019
Operating activities		
Net income	**$ 4,010**	$ 7,311
Adjustments to reconcile net income to net cash provided by operating activities:		
Provision for credit losses	**4,761**	1,013
Gains on sales of debt securities	**(315)**	(6)
Depreciation and amortization	**432**	418
Net amortization of premium/discount on debt securities	**482**	362
Deferred income taxes	**(229)**	763
Stock-based compensation	**543**	504
Loans held-for-sale:		
Originations and purchases	**(6,078)**	(3,566)
Proceeds from sales and paydowns of loans originally classified as held for sale and instruments from related securitization activities	**7,397**	7,848
Net change in:		
Trading and derivative assets/liabilities	**29,615**	(6,543)
Other assets	**(21,022)**	3,995
Accrued expenses and other liabilities	**(588)**	(346)
Other operating activities, net	**35**	3,348
Net cash provided by operating activities	**19,043**	15,101
Investing activities		
Net change in:		
Time deposits placed and other short-term investments	**(5,176)**	(1,986)
Federal funds sold and securities borrowed or purchased under agreements to resell	**(27,372)**	(5,886)
Debt securities carried at fair value:		
Proceeds from sales	**9,977**	31,136
Proceeds from paydowns and maturities	**16,708**	18,903
Purchases	**(18,131)**	(51,028)
Held-to-maturity debt securities:		
Proceeds from paydowns and maturities	**11,933**	5,284
Purchases	**(7,132)**	(416)
Loans and leases:		
Proceeds from sales of loans originally classified as held for investment and instruments from related securitization activities	**2,050**	2,952
Purchases	**(1,982)**	(1,060)
Other changes in loans and leases, net	**(69,667)**	(1,999)
Other investing activities, net	**(1,619)**	(667)
Net cash used in investing activities	**(90,411)**	(4,767)
Financing activities		
Net change in:		
Deposits	**148,522**	(2,139)
Federal funds purchased and securities loaned or sold under agreements to repurchase	**4,934**	1,463
Short-term borrowings	**5,904**	(6,181)
Long-term debt:		
Proceeds from issuance	**18,728**	14,716
Retirement	**(7,843)**	(14,292)
Preferred stock:		
Proceeds from issuance	**1,098**	—
Redemption	**(1,072)**	—
Common stock repurchased	**(6,362)**	(6,263)
Cash dividends paid	**(2,083)**	(1,926)
Other financing activities, net	**(679)**	(886)
Net cash provided by (used in) financing activities	**161,147**	(15,508)
Effect of exchange rate changes on cash and cash equivalents	**(949)**	(607)
Net increase (decrease) in cash and cash equivalents	**88,830**	(5,781)
Cash and cash equivalents at January 1	**161,560**	177,404

Cash and cash equivalents at March 31	**$**	**250,390**	$	171,623

See accompanying Notes to Consolidated Financial Statements.

NOTE 1 Summary of Significant Accounting Principles

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

Principles of Consolidation and Basis of Presentation

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

The preparation of the Consolidated Financial Statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect reported amounts and disclosures. Actual results could materially differ from those estimates and assumptions.

These unaudited Consolidated Financial Statements should be read in conjunction with the audited Consolidated Financial Statements of the Corporation's 2019 Annual Report on Form 10-K.

The nature of the Corporation's business is such that the results of any interim period are not necessarily indicative of results for a full year. In the opinion of management, all adjustments, which consist of normal recurring adjustments necessary for a fair statement of the interim period results, have been made. The Corporation evaluates subsequent events through the date of filing with the Securities and Exchange Commission. Certain prior-period amounts have been reclassified to conform to current period presentation.

New Accounting Standards

Reference Rate Reform

In March 2020, the FASB issued a new accounting standard related to contracts or hedging relationships that reference LIBOR or other reference rates that are expected to be discontinued due to reference rate reform. The new standard provides for optional expedients and other guidance regarding the accounting related to modifications of contracts, hedging relationships and other transactions affected by reference rate reform. The Corporation has elected to retrospectively adopt the new standard as of January 1, 2020 which resulted in no immediate impact. While reference rate reform is not expected to have a material accounting impact on the Corporation's consolidated financial position or results of operations, the standard will ease the administrative burden in accounting for the future effects of reference rate reform.

Accounting for Financial Instruments – Credit Losses

On January 1, 2020, the Corporation adopted the new accounting standard that requires the measurement of the allowance for credit losses to be based on management's best estimate of lifetime expected credit losses (ECL) inherent in the Corporation's relevant financial assets. Upon adoption of the standard on January 1, 2020, the Corporation recorded a $3.3 billion, or 32 percent, increase to the allowance for credit losses. After adjusting for deferred taxes and other adoption effects, a $2.4 billion decrease was recorded in retained earnings through a cumulative-effect adjustment.

Accounting Policies for Credit Losses

The following summarizes the Corporation's accounting policies for certain credit loss activities.

Allowance for Credit Losses

The allowance for credit losses includes both the allowance for loan and lease losses and the reserve for unfunded lending commitments and represents management's estimate of the ECL in the Corporation's loan and lease portfolio, excluding loans and unfunded lending commitments accounted for under the fair value option. The ECL on funded consumer and commercial loans and leases is referred to as the allowance for loan and lease losses and is reported separately as a contra-asset to loans and leases on the Consolidated Balance Sheet. The ECL for unfunded lending commitments, including home equity lines of credit (HELOCs), standby letters of credit (SBLCs) and binding unfunded loan commitments is reported on the Consolidated Balance Sheet in accrued expenses and other liabilities. The provision for credit losses related to the loan and lease portfolio and unfunded lending commitments is reported in the Consolidated Statement of Income.

For loans and leases, the ECL is typically estimated using quantitative methods that consider a variety of factors such as historical loss experience, the current credit quality of the portfolio as well as an economic outlook over the life of the loan. The life of the loan for closed-ended products is based on the contractual maturity of the loan adjusted for any expected prepayments. The contractual maturity includes any extension options that are at the sole discretion of the borrower. For open-ended products (e.g., lines of credit), the ECL is determined based on the maximum repayment term associated with future draws from credit lines unless those lines of credit are unconditionally cancellable (e.g., credit cards) in which case the Corporation does not record any allowance.

In its loss forecasting framework, the Corporation incorporates forward-looking information through the use of macroeconomic scenarios applied over the forecasted life of the assets. These macroeconomic scenarios include variables that have historically been key drivers of increases and decreases in credit losses. These variables include, but are not limited to, unemployment rates, real estate prices, gross domestic product levels, corporate bond spreads and long-term interest rate forecasts. As any one economic outlook is inherently uncertain, the Corporation leverages multiple scenarios. The scenarios that are chosen each quarter and the amount of weighting given to each scenario depend on a variety of factors including recent economic events, leading economic indicators, views of internal as well as third-party economists and industry trends.

The estimate of credit losses includes expected recoveries of amounts previously charged off (i.e., negative allowance). If a loan has been charged off, the expected cash flows on the loan are not limited by the current amortized cost balance. Instead, expected cash flows can be assumed up to the unpaid principal balance immediately prior to the charge-off.

The allowance for loan and lease losses for troubled debt restructurings (TDR) is measured based on the present value of projected future lifetime principal and interest cash flows discounted at the loan's original effective interest rate, or in cases where foreclosure is probable or the loan is collateral dependent, at the loan's collateral value or its observable market price, if available. The measurement of expected credit losses for the renegotiated consumer credit card TDR portfolio is based on the present value of projected cash flows discounted using the average TDR portfolio contractual interest rate, excluding promotionally priced loans, in effect prior to restructuring. Projected cash flows for TDRs use the same economic outlook as discussed above. For purposes of computing this specific loss component of the allowance, larger impaired loans are evaluated individually and smaller impaired loans are evaluated as a pool.

Also included in the allowance for loan and lease losses are qualitative reserves to cover losses that are expected but, in the Corporation's assessment, may not be adequately represented in the quantitative methods or the economic assumptions described above. For example, factors that the Corporation considers include changes in lending policies and procedures, business conditions, the nature and size of the portfolio, portfolio concentrations, the volume and severity of past due loans and nonaccrual loans, the effect of external factors such as competition, and legal and regulatory requirements, among others. Further, the Corporation considers the inherent uncertainty in quantitative models that are built on historical data.

With the exception of the Corporation's credit card portfolio, the Corporation does not include reserves for interest receivable in the measurement of the allowance for credit losses as the Corporation generally classifies consumer loans as nonperforming at 90 days past due and reverses interest income for these loans at that time. For credit card loans, the Corporation reserves for interest and fees as part of the allowance for loan and lease losses. Upon charge-off of a credit card loan, the Corporation reverses the interest and fee income against the income statement line item where it was originally recorded.

The Corporation has identified the following three portfolio segments and measures the allowance for credit losses using the following methods.

Consumer Real Estate

To estimate ECL for consumer loans secured by residential real estate, the Corporation estimates the number of loans that will default over the life of the existing portfolio, after factoring in estimated prepayments, using quantitative modeling methodologies. The attributes that are most significant in estimating the Corporation's ECL include refreshed loan-to-value (LTV) or, in the case of a subordinated lien, refreshed combined LTV (CLTV), borrower credit score, months since origination and geography, all of which are further broken down by present collection status (whether the loan is current, delinquent, in default, or in bankruptcy). The estimates are based on the Corporation's historical experience with the loan portfolio, adjusted to reflect the economic outlook. The outlook on the unemployment rate and consumer real estate prices are key factors that impact the frequency and severity of loss estimates. The Corporation does not reserve for credit losses on the unpaid principal balance of loans insured by the Federal Housing Administration (FHA) and long-term standby loans, as these loans are fully insured. The Corporation records a reserve for unfunded lending commitments for the ECL associated with the undrawn portion of the Corporation's HELOCs, which can only be canceled by the Corporation if certain criteria are met. The ECL associated with these unfunded lending commitments is calculated using the same models and methodologies noted above and incorporate utilization assumptions at time of default.

For loans that are more than 180 days past due and collateral-dependent TDRs, the Corporation bases the allowance on the estimated fair value of the underlying collateral as of the reporting date less costs to sell. The fair value of the collateral securing these loans is generally determined using an automated valuation model (AVM) that estimates the value of a property by reference to market data including sales of comparable properties and price trends specific to the Metropolitan Statistical Area in which the property being valued is located. In the event that an AVM value is not available, the Corporation utilizes publicized indices or if these methods provide less reliable valuations, the Corporation uses appraisals or broker price opinions to estimate the fair value of the collateral. While there is inherent imprecision in these valuations, the Corporation believes that they are representative of this portfolio in the aggregate.

For loans that are more than 180 days past due and collateral-dependent TDRs, with the exception of the Corporation's fully insured portfolio, the outstanding balance of loans that is in excess of the estimated property value after adjusting for costs to sell is charged off. If the estimated property value decreases in periods subsequent to the initial charge-off, the Corporation will record an additional charge-off; however, if the value increases in periods subsequent to the charge-off, the Corporation will adjust the allowance to account for the increase but not to a level above the cumulative charge-off amount.

Credit Cards and Other Consumer

Credit cards are revolving lines of credit without a defined maturity date. The estimated life of a credit card receivable is determined by estimating the amount and timing of expected future payments (e.g., borrowers making full payments, minimum payments or somewhere in between) that it will take for a receivable balance to pay off. The ECL on the future payments incorporates the spending behavior of a borrower through time using key borrower-specific factors and the economic outlook described above. The Corporation applies all expected payments in accordance with the Credit Card Accountability Responsibility and Disclosure Act of 2009 (i.e., paying down the highest interest rate bucket first). Then forecasted future payments are prioritized to pay off the oldest balance until it is brought to zero or an expected charge-off amount. Unemployment rate outlook, borrower credit score, delinquency status and historical payment behavior are all key inputs into the credit card receivable loss forecasting model. Future draws on the credit card lines are excluded from the ECL as they are unconditionally cancellable.

The ECL for the consumer vehicle lending portfolio is also determined using quantitative methods supplemented with qualitative analysis. The quantitative model estimates expected credit losses giving consideration to key borrower and loan characteristics such as delinquency status, borrower credit score, LTV ratio, underlying collateral type and collateral value.

Commercial

The ECL on commercial loans is forecasted using models that estimate credit losses over the loan's contractual life at an individual loan level. The models use the contractual terms to forecast future principal cash flows while also considering expected prepayments. For open-ended commitments such as revolving lines of credit, changes in funded balance are captured by forecasting a borrower's draw and payment behavior over the remaining life of the commitment. For loans collateralized with commercial real estate and for which the underlying asset is the primary source of repayment, the loss forecasting models consider key loan and customer attributes such as LTV ratio, net operating income and debt service coverage, and captures variations in behavior according to property type and region. The commercial real estate model also utilizes key economic variables to forecast market indicators such as rent levels and vacancy rates, which impact the expected credit loss estimate. For all other commercial loans and leases, the loss forecasting model determines the probabilities of transition to different credit risk ratings or default at each point over the life of the asset based on the borrower's current credit risk rating, industry sector, size of the exposure and the geographic market. The severity of loss is determined based on the type of collateral securing the exposure, the size of the exposure, the borrower's industry sector, any guarantors and the geographic market. Assumptions of expected loss are conditioned to the economic outlook and the model considers key economic variables such as unemployment rate, gross domestic product, credit risk spreads, asset prices and equity market returns.

In addition to the allowance for loan and lease losses, the Corporation also estimates ECL related to unfunded lending commitments such as letters of credit, financial guarantees, unfunded bankers acceptances and binding loan commitments, excluding commitments accounted for under the fair value option. Reserves are estimated for the unfunded exposure using the same models and methodologies as the funded exposure and are reported as reserves for unfunded lending commitments.

Securities

The Corporation evaluates each available-for-sale (AFS) security where the value has declined below amortized cost. If the Corporation intends to sell or believes it is more likely than not that it will be required to sell the debt security, it is written down to fair value through earnings. For AFS debt securities the Corporation intends to hold, the Corporation evaluates the debt securities for expected credit losses except for debt securities that are guaranteed by the U.S. Treasury, U.S. government agencies or sovereign entities of high credit quality where the Corporation applies a zero credit loss assumption. For the remaining AFS debt securities, the Corporation considers qualitative parameters such as internal and external credit ratings and the value of underlying collateral. If an AFS debt security fails any of the qualitative parameters, a discounted cash flow analysis is used by the Corporation to determine if a portion of the unrealized loss is a result of a credit loss. Any credit losses determined are recognized as an increase to the allowance for credit losses through provision expense recorded in other income. Cash flows expected to be collected are estimated using all relevant information available such as, remaining payment terms, prepayment speeds, the financial condition of the issuer, expected defaults and the value of the underlying collateral. If any of the decline in fair value is related to market factors, that amount is recognized in accumulated other comprehensive income (OCI). In certain instances, the credit loss may exceed the total decline in fair value, in which case, the allowance recorded is limited to the difference between the amortized cost and the fair value of the asset.

The Corporation separately evaluates its held-to-maturity (HTM) debt securities for any credit losses, of which substantially all qualify for the zero loss assumption. For the remaining securities, the Corporation performs a discounted cash flow analysis to estimate any credit losses which are then recognized as part of the allowance for credit losses.

Other Assets

For the Corporation's financial assets that are measured at amortized cost and are not included in debt securities or loans and leases on the Consolidated Balance Sheet, the Corporation evaluates these assets for expected credit losses using various techniques. For assets that are subject to collateral maintenance provisions, including federal funds sold and securities borrowed or purchased under agreements to resell, where the collateral consists of daily margining of liquid and marketable assets where the margining is expected to be maintained into the foreseeable future, the expected losses are assumed to be zero. For all other assets, the Corporation performs qualitative analyses, including consideration of historical losses and current economic conditions, to estimate any expected credit losses which are then included in a valuation account that is recorded as a contra-asset against the amortized cost basis of the financial asset.

Troubled Debt Restructurings

The Corporation has implemented various consumer and commercial loan modification programs to provide its borrowers relief from the economic impacts of COVID-19. In accordance with the Coronavirus Aid, Relief, and Economic Security Act (CARES Act), the Corporation has elected to not apply troubled debt restructuring classification to any COVID-19 related loan modifications that were performed after March 1, 2020 to borrowers who were current as of December 31, 2019. Accordingly, these restructurings are not classified as TDRs. In addition, for loans modified in response to the COVID-19 pandemic that do not meet the above criteria (e.g., current payment status at December 31, 2019), the Corporation is applying the guidance included in an interagency statement issued by the bank regulatory agencies. This guidance states that loan modifications performed in light of the COVID-19 pandemic, including loan payment deferrals that are up to six months in duration, that were granted to borrowers who were current as of the implementation date of a loan modification program or modifications granted under government mandated modification programs, are not TDRs. For loan modifications that include a payment deferral and are not TDRs, the borrower's past due and nonaccrual status will not be impacted during the deferral period. Interest income will continue to be recognized over the contractual life of the loan. For more information on the Corporation's TDR accounting, see *Note 1 – Summary of Significant Accounting Principles* to the Consolidated Financial Statements of the Corporation's 2019 Annual Report on Form 10-K.

NOTE 2 Net Interest Income and Noninterest Income

The table below presents the Corporation's net interest income and noninterest income disaggregated by revenue source for the three months ended March 31, 2020 and 2019. For more information, see *Note 1 – Summary of Significant Accounting Principles* to the Consolidated Financial Statements of the Corporation's 2019 Annual Report on Form 10-K. For a disaggregation of noninterest income by business segment and *All Other*, see *Note 17 – Business Segment Information*.

	Three Months Ended March 31	
(Dollars in millions)	**2020**	2019
Net interest income		
Interest income		
Loans and leases	**$ 9,963**	$ 10,885
Debt securities	**2,843**	3,119
Federal funds sold and securities borrowed or purchased under agreements to resell	**819**	1,195
Trading account assets	**1,247**	1,322
Other interest income	**1,226**	1,649
Total interest income	**16,098**	18,170
Interest expense		
Deposits	**1,184**	1,795
Short-term borrowings	**1,120**	1,852
Trading account liabilities	**329**	345
Long-term debt	**1,335**	1,803
Total interest expense	**3,968**	5,795
Net interest income	**$ 12,130**	$ 12,375
Noninterest income		
Fees and commissions		
Card income		
Interchange fees (1)	**$ 792**	$ 896
Other card income	**480**	479
Total card income	**1,272**	1,375
Service charges		
Deposit-related fees	**1,627**	1,580
Lending-related fees	**276**	259
Total service charges	**1,903**	1,839
Investment and brokerage services		
Asset management fees	**2,682**	2,440
Brokerage fees	**1,076**	920
Total investment and brokerage services	**3,758**	3,360
Investment banking fees		
Underwriting income	**848**	666
Syndication fees	**271**	255
Financial advisory services	**269**	343
Total investment banking fees	**1,388**	1,264
Total fees and commissions	**8,321**	7,838
Market making and similar activities	**2,807**	2,768
Other income	**(491)**	23
Total noninterest income	**$ 10,637**	$ 10,629

(1) Gross interchange fees were $2.3 billion for both the three months ended March 31, 2020 and 2019, and are presented net of $1.5 billion and $1.4 billion of expenses for rewards and partner payments for the same periods.

NOTE 3 Derivatives

Derivative Balances

Derivatives are entered into on behalf of customers, for trading or to support risk management activities. Derivatives used in risk management activities include derivatives that may or may not be designated in qualifying hedge accounting relationships. Derivatives that are not designated in qualifying hedge accounting relationships are referred to as other risk management derivatives. For more information on the Corporation's derivatives and hedging activities, see *Note 1 – Summary of Significant Accounting Principles* to the Consolidated Financial Statements of the Corporation's 2019 Annual Report on Form 10-K. The following tables present derivative instruments included on the Consolidated Balance Sheet in derivative assets and liabilities at March 31, 2020 and December 31, 2019. Balances are presented on a gross basis, prior to the application of counterparty and cash collateral netting. Total derivative assets and liabilities are adjusted on an aggregate basis to take into consideration the effects of legally enforceable master netting agreements and have been reduced by cash collateral received or paid.

		March 31, 2020					
		Gross Derivative Assets			Gross Derivative Liabilities		
(Dollars in billions)	Contract/ Notional (1)	Trading and Other Risk Management Derivatives	Qualifying Accounting Hedges	Total	Trading and Other Risk Management Derivatives	Qualifying Accounting Hedges	Total
Interest rate contracts							
Swaps	$ 19,058.4	$ 199.6	$ 21.0	$ 220.6	$ 217.2	$ 0.5	$ 217.7
Futures and forwards	6,585.6	13.4	—	13.4	13.0	—	13.0
Written options	1,782.9	—	—	—	56.3	—	56.3
Purchased options	1,768.8	60.6	—	60.6	—	—	—
Foreign exchange contracts							
Swaps	1,617.0	47.9	1.2	49.1	53.6	1.5	55.1
Spot, futures and forwards	4,566.2	68.5	1.0	69.5	66.8	0.2	67.0
Written options	314.1	—	—	—	6.8	—	6.8
Purchased options	309.6	7.5	—	7.5	—	—	—
Equity contracts							
Swaps	241.8	22.0	—	22.0	19.8	—	19.8
Futures and forwards	95.8	1.2	0.1	1.3	0.4	—	0.4
Written options	601.7	—	—	—	50.0	—	50.0
Purchased options	576.1	56.4	—	56.4	—	—	—
Commodity contracts							
Swaps	41.3	5.9	—	5.9	6.3	—	6.3
Futures and forwards	48.2	1.9	—	1.9	0.6	—	0.6
Written options	33.0	—	—	—	5.6	—	5.6
Purchased options	37.0	5.2	—	5.2	—	—	—
Credit derivatives (2)							
Purchased credit derivatives:							
Credit default swaps	354.2	8.1	—	8.1	2.1	—	2.1
Total return swaps/options	98.3	2.1	—	2.1	1.5	—	1.5
Written credit derivatives:							
Credit default swaps	332.0	1.7	—	1.7	6.5	—	6.5
Total return swaps/options	97.8	1.0	—	1.0	1.9	—	1.9
Gross derivative assets/liabilities		$ 503.0	$ 23.3	$ 526.3	$ 508.4	$ 2.2	$ 510.6
Less: Legally enforceable master netting agreements				(415.2)			(415.2)
Less: Cash collateral received/paid				(53.4)			(40.7)
Total derivative assets/liabilities				$ 57.7			$ 54.7

(1) Represents the total contract/notional amount of derivative assets and liabilities outstanding.
(2) The net derivative asset (liability) and notional amount of written credit derivatives for which the Corporation held purchased credit derivatives with identical underlying referenced names were $(4.5) billion and $279.4 billion at March 31, 2020.

(Dollars in billions)	Contract/ Notional (1)	December 31, 2019 Gross Derivative Assets Trading and Other Risk Management Derivatives	Qualifying Accounting Hedges	Total	Gross Derivative Liabilities Trading and Other Risk Management Derivatives	Qualifying Accounting Hedges	Total
Interest rate contracts							
Swaps	$ 15,074.4	$ 162.0	$ 9.7	$ 171.7	$ 168.5	$ 0.4	$ 168.9
Futures and forwards	3,279.8	1.0	—	1.0	1.0	—	1.0
Written options	1,767.7	—	—	—	32.5	—	32.5
Purchased options	1,673.6	37.4	—	37.4	—	—	—
Foreign exchange contracts							
Swaps	1,657.7	30.3	0.7	31.0	31.7	0.9	32.6
Spot, futures and forwards	3,792.7	35.9	0.1	36.0	38.7	0.3	39.0
Written options	274.3	—	—	—	3.8	—	3.8
Purchased options	261.6	4.0	—	4.0	—	—	—
Equity contracts							
Swaps	315.0	6.5	—	6.5	8.1	—	8.1
Futures and forwards	125.1	0.3	—	0.3	1.1	—	1.1
Written options	731.1	—	—	—	34.6	—	34.6
Purchased options	668.6	42.4	—	42.4	—	—	—
Commodity contracts							
Swaps	42.0	2.1	—	2.1	4.4	—	4.4
Futures and forwards	61.3	1.7	—	1.7	0.4	—	0.4
Written options	33.2	—	—	—	1.4	—	1.4
Purchased options	37.9	1.4	—	1.4	—	—	—
Credit derivatives (2)							
Purchased credit derivatives:							
Credit default swaps	321.6	2.7	—	2.7	5.6	—	5.6
Total return swaps/options	86.6	0.4	—	0.4	1.3	—	1.3
Written credit derivatives:							
Credit default swaps	300.2	5.4	—	5.4	2.0	—	2.0
Total return swaps/options	86.2	0.8	—	0.8	0.4	—	0.4
Gross derivative assets/liabilities		$ 334.3	$ 10.5	$ 344.8	$ 335.5	$ 1.6	$ 337.1
Less: Legally enforceable master netting agreements				(270.4)			(270.4)
Less: Cash collateral received/paid				(33.9)			(28.5)
Total derivative assets/liabilities				$ 40.5			$ 38.2

(1) Represents the total contract/notional amount of derivative assets and liabilities outstanding.
(2) The net derivative asset (liability) and notional amount of written credit derivatives for which the Corporation held purchased credit derivatives with identical underlying referenced names were $2.8 billion and $309.7 billion at December 31, 2019.

Offsetting of Derivatives

The Corporation enters into International Swaps and Derivatives Association, Inc. (ISDA) master netting agreements or similar agreements with substantially all of the Corporation's derivative counterparties. For more information, see *Note 3 – Derivatives* to the Consolidated Financial Statements of the Corporation's 2019 Annual Report on Form 10-K.

The following table presents derivative instruments included in derivative assets and liabilities on the Consolidated Balance Sheet at March 31, 2020 and December 31, 2019 by primary risk (e.g., interest rate risk) and the platform, where applicable, on which these derivatives are transacted. Balances are presented on a gross basis, prior to the application of counterparty and cash collateral netting. Total gross derivative assets and liabilities are adjusted on an aggregate basis to take into consideration the effects of legally enforceable master netting agreements which include reducing the balance for counterparty netting and cash collateral received or paid.

For more information on offsetting of securities financing agreements, see *Note 9 – Federal Funds Sold or Purchased, Securities Financing Agreements, Short-term Borrowings and Restricted Cash*.

Offsetting of Derivatives (1)

(Dollars in billions)	Derivative Assets	Derivative Liabilities	Derivative Assets	Derivative Liabilities
	March 31, 2020		December 31, 2019	
Interest rate contracts				
Over-the-counter	**$ 277.6**	**$ 271.1**	$ 203.1	$ 196.6
Exchange-traded	**0.3**	**0.3**	0.1	0.1
Over-the-counter cleared	**15.2**	**13.4**	6.0	5.3
Foreign exchange contracts				
Over-the-counter	**121.5**	**124.4**	69.2	73.1
Over-the-counter cleared	**2.1**	**2.1**	0.5	0.5
Equity contracts				
Over-the-counter	**32.3**	**24.4**	21.3	17.8
Exchange-traded	**43.7**	**42.2**	26.4	22.8
Commodity contracts				
Over-the-counter	**9.0**	**9.1**	2.8	4.2
Exchange-traded	**2.5**	**2.2**	0.8	0.8
Over-the-counter cleared	**—**	**0.1**	—	0.1
Credit derivatives				
Over-the-counter	**11.5**	**10.6**	6.4	6.6
Over-the-counter cleared	**1.2**	**1.2**	2.5	2.2
Total gross derivative assets/liabilities, before netting				
Over-the-counter	**451.9**	**439.6**	302.8	298.3
Exchange-traded	**46.5**	**44.7**	27.3	23.7
Over-the-counter cleared	**18.5**	**16.8**	9.0	8.1
Less: Legally enforceable master netting agreements and cash collateral received/paid				
Over-the-counter	**(413.4)**	**(400.7)**	(274.7)	(269.3)
Exchange-traded	**(40.5)**	**(40.5)**	(21.5)	(21.5)
Over-the-counter cleared	**(14.7)**	**(14.7)**	(8.1)	(8.1)
Derivative assets/liabilities, after netting	**48.3**	**45.2**	34.8	31.2
Other gross derivative assets/liabilities (2)	**9.4**	**9.5**	5.7	7.0
Total derivative assets/liabilities	**57.7**	**54.7**	40.5	38.2
Less: Financial instruments collateral (3)	**(16.7)**	**(21.4)**	(14.6)	(16.1)
Total net derivative assets/liabilities	**$ 41.0**	**$ 33.3**	$ 25.9	$ 22.1

(1) Over-the-counter derivatives include bilateral transactions between the Corporation and a particular counterparty. Over-the-counter-cleared derivatives include bilateral transactions between the Corporation and a counterparty where the transaction is cleared through a clearinghouse. Exchange-traded derivatives include listed options transacted on an exchange.
(2) Consists of derivatives entered into under master netting agreements where the enforceability of these agreements is uncertain under bankruptcy laws in some countries or industries.
(3) Amounts are limited to the derivative asset/liability balance and, accordingly, do not include excess collateral received/pledged. Financial instruments collateral includes securities collateral received or pledged and cash securities held and posted at third-party custodians that are not offset on the Consolidated Balance Sheet but shown as a reduction to derive net derivative assets and liabilities.

ALM and Risk Management Derivatives

The Corporation's asset and liability management (ALM) and risk management activities include the use of derivatives to mitigate risk to the Corporation including derivatives designated in qualifying hedge accounting relationships and derivatives used in other risk management activities. For more information on ALM and risk management derivatives, see *Note 3 – Derivatives* to the Consolidated Financial Statements of the Corporation's 2019 Annual Report on Form 10-K.

Derivatives Designated as Accounting Hedges

The Corporation uses various types of interest rate and foreign exchange derivative contracts to protect against changes in the fair value of its assets and liabilities due to fluctuations in interest rates and exchange rates (fair value hedges). The Corporation also uses these types of contracts to protect against changes in the cash flows of its assets and liabilities, and other forecasted transactions (cash flow hedges). The Corporation hedges its net investment in consolidated non-U.S. operations determined to have functional currencies other than the U.S. dollar using forward exchange contracts and cross-currency basis swaps, and by issuing foreign currency-denominated debt (net investment hedges).

Fair Value Hedges

The table below summarizes information related to fair value hedges for the three months ended March 31, 2020 and 2019.

Gains and Losses on Derivatives Designated as Fair Value Hedges

	Three Months Ended March 31, 2020			
	2020		2019	
(Dollars in millions)	**Derivative**	**Hedged Item**	Derivative	Hedged Item
Interest rate risk on long-term debt (1)	**$ 10,334**	**$ (10,276)**	$ 1,913	$ (1,929)
Interest rate and foreign currency risk on long-term debt (2)	**505**	**(491)**	57	(48)
Interest rate risk on available-for-sale securities (3)	**(350)**	**342**	(45)	43
Total	**$ 10,489**	**$ (10,425)**	$ 1,925	$ (1,934)

(1) Amounts are recorded in interest expense in the Consolidated Statement of Income.
(2) For the three months ended March 31, 2020 and 2019, the derivative amount includes gains (losses) of $734 million and $170 million in interest expense, $(241) million and $(121) million in market making and similar activities, and $12 million and $8 million in accumulated OCI. Line item totals are in the Consolidated Statement of Income and on the Consolidated Balance Sheet.
(3) Amounts are recorded in interest income in the Consolidated Statement of Income.

The table below summarizes the carrying value of hedged assets and liabilities that are designated and qualifying in fair value hedging relationships along with the cumulative amount of fair value hedging adjustments included in the carrying value that have been recorded in the current hedging relationships. These fair value hedging adjustments are open basis adjustments that are not subject to amortization as long as the hedging relationship remains designated.

Designated Fair Value Hedged Assets (Liabilities)

	March 31, 2020		December 31, 2019	
(Dollars in millions)	**Carrying Value**	**Cumulative Fair Value Adjustments (1)**	Carrying Value	Cumulative Fair Value Adjustments (1)
Long-term debt (2)	**$ (186,490)**	**$ (19,542)**	$ (162,389)	$ (8,685)
Available-for-sale debt securities (2, 3)	**4,157**	**314**	1,654	64

(1) For assets, increase (decrease) to carrying value and for liabilities, (increase) decrease to carrying value.
(2) At March 31, 2020 and December 31, 2019, the cumulative fair value adjustments remaining on long-term debt and AFS debt securities from discontinued hedging relationships resulted in a decrease in the related liability of $1.2 billion and $1.3 billion and an increase in the related asset of $22 million and $8 million, which are being amortized over the remaining contractual life of the de-designated hedged items.
(3) Carrying value represents amortized cost.

Cash Flow and Net Investment Hedges

The following table summarizes certain information related to cash flow hedges and net investment hedges for the three months ended March 31, 2020 and 2019. Of the $17 million after-tax net gain ($23 million pretax) on derivatives in accumulated OCI at March 31, 2020, gains of $77 million after-tax ($102 million pretax) related to open cash flow hedges are expected to be reclassified into earnings in the next 12 months. These net gains reclassified into earnings are expected to primarily increase net interest income related to the respective hedged items. For terminated cash flow hedges, the time period over which the majority of the forecasted transactions are hedged is approximately three years, with a maximum length of time for certain forecasted transactions of 16 years.

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

	Three Months Ended March 31			
	2020		2019	
(Dollars in millions, amounts pretax)	**Gains (Losses) Recognized in Accumulated OCI on Derivatives**	**Gains (Losses) in Income Reclassified from Accumulated OCI**	Gains (Losses) Recognized in Accumulated OCI on Derivatives	Gains (Losses) in Income Reclassified from Accumulated OCI
Cash flow hedges				
Interest rate risk on variable-rate assets (1)	**$ 591**	**$ (26)**	$ 254	$ (23)
Price risk on certain compensation plans (2)	**(82)**	**—**	—	—
Total	**$ 509**	**$ (26)**	$ 254	$ (23)
Net investment hedges				
Foreign exchange risk (3)	**$ 1,368**	**$ —**	$ 6	$ 1

(1) Amounts reclassified from accumulated OCI are recorded in interest income in the Consolidated Statement of Income.
(2) Amounts reclassified from accumulated OCI are recorded in compensation and benefits expense in the Consolidated Statement of Income.
(3) Amounts reclassified from accumulated OCI are recorded in other income in the Consolidated Statement of Income. For the three months ended March 31, 2020 and 2019, amounts excluded from effectiveness testing and recognized in market making and similar activities were gains of $30 million and $53 million.

Other Risk Management Derivatives

Other risk management derivatives are used by the Corporation to reduce certain risk exposures by economically hedging various assets and liabilities. The following table presents gains (losses) on these derivatives for the three months ended March 31, 2020 and 2019. These gains (losses) are largely offset by the income or expense recorded on the hedged item.

Gains and Losses on Other Risk Management Derivatives

	Three Months Ended March 31	
(Dollars in millions)	**2020**	2019
Interest rate risk on mortgage activities (1, 2)	**$ 379**	$ 104
Credit risk on loans (2)	**88**	(26)
Interest rate and foreign currency risk on ALM activities (3)	**1,528**	1,229
Price risk on certain compensation plans (4)	**(757)**	511

(1) Primarily related to hedges of interest rate risk on mortgage servicing rights and interest rate lock commitments to originate mortgage loans that will be held for sale. The net gains on interest rate lock commitments which are not included in the table but are considered derivative instruments, were $48 million and $12 million for the three months ended March 31, 2020 and 2019.
(2) Gains (losses) on these derivatives are recorded in other income.
(3) Gains (losses) on these derivatives are recorded in market making and similar activities.
(4) Gains (losses) on these derivatives are recorded in compensation and benefits expense.

Transfers of Financial Assets with Risk Retained through Derivatives

The Corporation enters into certain transactions involving the transfer of financial assets that are accounted for as sales where substantially all of the economic exposure to the transferred financial assets is retained through derivatives (e.g., interest rate and/or credit), but the Corporation does not retain control over the assets transferred. As of March 31, 2020 and December 31, 2019, the Corporation had transferred $4.9 billion and $5.2 billion of non-U.S. government-guaranteed mortgage-backed securities (MBS) to a third-party trust and retained economic exposure to the transferred assets through derivative contracts. In connection with these transfers, the Corporation received gross cash proceeds of $4.9 billion and $5.2 billion at the transfer dates. At March 31, 2020 and December 31, 2019, the fair value of the transferred securities was $4.6 billion and $5.3 billion.

Sales and Trading Revenue

The Corporation enters into trading derivatives to facilitate client transactions and to manage risk exposures arising from trading account assets and liabilities. It is the Corporation's policy to include these derivative instruments in its trading activities which include derivatives and non-derivative cash instruments. The resulting risk from these derivatives is managed on a portfolio basis as part of the Corporation's *Global Markets* business segment. For more information on sales and trading revenue, see *Note 3 – Derivatives* to the Consolidated Financial Statements of the Corporation's 2019 Annual Report on Form 10-K.

The following table, which includes both derivatives and non-derivative cash instruments, identifies the amounts in the respective income statement line items attributable to the Corporation's sales and trading revenue in *Global Markets*, categorized by primary risk, for the three months ended March 31, 2020 and 2019. This table includes debit valuation adjustment (DVA) and funding valuation adjustment (FVA) gains (losses). *Global Markets* results in *Note 17 – Business Segment Information* are presented on a fully taxable-equivalent (FTE) basis. The table below is not presented on an FTE basis.

Sales and Trading Revenue

	Market making and similar activities	**Net Interest Income**	**Other (1)**	**Total**
(Dollars in millions)	**Three Months Ended March 31, 2020**			
Interest rate risk	**$ 1,568**	**$ 619**	**$ 68**	**$ 2,255**
Foreign exchange risk	**446**	**5**	**5**	**456**
Equity risk	**1,261**	**(123)**	**519**	**1,657**
Credit risk	**(406)**	**441**	**39**	**74**
Other risk	**103**	**21**	**7**	**131**
Total sales and trading revenue	**$ 2,972**	**$ 963**	**$ 638**	**$ 4,573**
	Three Months Ended March 31, 2019			
Interest rate risk	$ 300	$ 410	$ 86	$ 796
Foreign exchange risk	318	19	6	343
Equity risk	969	(175)	396	1,190
Credit risk	487	430	134	1,051
Other risk	7	18	10	35
Total sales and trading revenue	$ 2,081	$ 702	$ 632	$ 3,415

(1) Represents amounts in investment and brokerage services and other income that are recorded in *Global Markets* and included in the definition of sales and trading revenue. Includes investment and brokerage services revenue of $557 million and $433 million for the three months ended March 31, 2020 and 2019.

Credit Derivatives

The Corporation enters into credit derivatives primarily to facilitate client transactions and to manage credit risk exposures. Credit derivatives are classified as investment and non-investment grade based on the credit quality of the underlying referenced obligation. The Corporation considers ratings of BBB- or higher as investment grade. Non-investment grade includes non-rated credit derivative instruments. The Corporation discloses internal categorizations of investment grade and non-investment grade consistent with how risk is managed for these instruments. For more information on credit derivatives, see *Note 3 – Derivatives* to the Consolidated Financial Statements of the Corporation's 2019 Annual Report on Form 10-K.

Credit derivative instruments where the Corporation is the seller of credit protection and their expiration at March 31, 2020 and December 31, 2019 are summarized in the following table.

Credit Derivative Instruments

(Dollars in millions)	Less than One Year	One to Three Years	Three to Five Years	Over Five Years	Total
	March 31, 2020				
	Carrying Value				
Credit default swaps:					
Investment grade	**$ 9**	**$ 87**	**$ 620**	**$ 532**	**$ 1,248**
Non-investment grade	**192**	**1,021**	**1,945**	**2,054**	**5,212**
Total	**201**	**1,108**	**2,565**	**2,586**	**6,460**
Total return swaps/options:					
Investment grade	**578**	**—**	**—**	**—**	**578**
Non-investment grade	**1,301**	**10**	**—**	**—**	**1,311**
Total	**1,879**	**10**	**—**	**—**	**1,889**
Total credit derivatives	**$ 2,080**	**$ 1,118**	**$ 2,565**	**$ 2,586**	**$ 8,349**
Credit-related notes:					
Investment grade	**$ —**	**$ —**	**$ —**	**$ 1,156**	**$ 1,156**
Non-investment grade	**6**	**2**	**—**	**1,075**	**1,083**
Total credit-related notes	**$ 6**	**$ 2**	**$ —**	**$ 2,231**	**$ 2,239**
	Maximum Payout/Notional				
Credit default swaps:					
Investment grade	**$ 48,868**	**$ 75,071**	**$ 77,467**	**$ 26,226**	**$ 227,632**
Non-investment grade	**19,106**	**30,941**	**39,604**	**14,694**	**104,345**
Total	**67,974**	**106,012**	**117,071**	**40,920**	**331,977**
Total return swaps/options:					
Investment grade	**65,869**	**—**	**126**	**—**	**65,995**
Non-investment grade	**27,272**	**4,476**	**6**	**5**	**31,759**
Total	**93,141**	**4,476**	**132**	**5**	**97,754**
Total credit derivatives	**$ 161,115**	**$ 110,488**	**$ 117,203**	**$ 40,925**	**$ 429,731**
	December 31, 2019				
	Carrying Value				
Credit default swaps:					
Investment grade	$ —	$ 5	$ 60	$ 164	$ 229
Non-investment grade	70	292	561	808	1,731
Total	70	297	621	972	1,960
Total return swaps/options:					
Investment grade	35	—	—	—	35
Non-investment grade	344	—	—	—	344
Total	379	—	—	—	379
Total credit derivatives	$ 449	$ 297	$ 621	$ 972	$ 2,339
Credit-related notes:					
Investment grade	$ —	$ 3	$ 1	$ 639	$ 643
Non-investment grade	6	2	1	1,125	1,134
Total credit-related notes	$ 6	$ 5	$ 2	$ 1,764	$ 1,777
	Maximum Payout/Notional				
Credit default swaps:					
Investment grade	$ 55,827	$ 67,838	$ 71,320	$ 17,708	$ 212,693
Non-investment grade	19,049	26,521	29,618	12,337	87,525
Total	74,876	94,359	100,938	30,045	300,218
Total return swaps/options:					
Investment grade	56,488	—	62	76	56,626
Non-investment grade	28,707	657	104	60	29,528
Total	85,195	657	166	136	86,154
Total credit derivatives	$ 160,071	$ 95,016	$ 101,104	$ 30,181	$ 386,372

The notional amount represents the maximum amount payable by the Corporation for most credit derivatives. However, the Corporation does not monitor its exposure to credit derivatives based solely on the notional amount because this measure does not take into consideration the probability of occurrence. As such, the notional amount is not a reliable indicator of the Corporation's exposure to these contracts. Instead, a risk framework is used to define risk tolerances and establish limits so that certain credit risk-related losses occur within acceptable, predefined limits.

Credit-related notes in the table above include investments in securities issued by collateralized debt obligation (CDO), collateralized loan obligation and credit-linked note vehicles. These instruments are primarily classified as trading securities. The carrying value of these instruments equals the Corporation's maximum exposure to loss. The Corporation is not obligated to make any payments to the entities under the terms of the securities owned.

Credit-related Contingent Features and Collateral

Certain of the Corporation's derivative contracts contain credit risk-related contingent features, primarily in the form of ISDA master netting agreements and credit support documentation that enhance the creditworthiness of these instruments compared to other obligations of the respective counterparty with whom the Corporation has transacted. These contingent features may be for the benefit of the Corporation as well as its counterparties with respect to changes in the Corporation's creditworthiness and the mark-to-market exposure under the derivative transactions. At March 31, 2020 and December 31, 2019, the Corporation held cash and securities collateral of $108.0 billion and $84.3 billion and posted cash and securities collateral of $95.6 billion and $69.1 billion in the normal course of business under derivative agreements, excluding cross-product margining agreements where clients are permitted to margin on a net basis for both derivative and secured financing arrangements.

In connection with certain over-the-counter derivative contracts and other trading agreements, the Corporation can be required to provide additional collateral or to terminate transactions with certain counterparties in the event of a downgrade of the senior debt ratings of the Corporation or certain subsidiaries. The amount of additional collateral required depends on the contract and is usually a fixed incremental amount and/or the market value of the exposure. For more information on credit-related contingent features and collateral, see *Note 3 – Derivatives* to the Consolidated Financial Statements of the Corporation's 2019 Annual Report on Form 10-K.

At March 31, 2020, the amount of collateral, calculated based on the terms of the contracts, that the Corporation and certain subsidiaries could be required to post to counterparties but had not yet posted to counterparties was $2.8 billion, including $1.2 billion for Bank of America, National Association.

Some counterparties are currently able to unilaterally terminate certain contracts, or the Corporation or certain subsidiaries may be required to take other action such as find a suitable replacement or obtain a guarantee. At March 31, 2020 and December 31, 2019, the liability recorded for these derivative contracts was not significant.

The following table presents the amount of additional collateral that would have been contractually required by derivative contracts and other trading agreements at March 31, 2020 if the rating agencies had downgraded their long-term senior debt ratings for the Corporation or certain subsidiaries by one incremental notch and by an additional second incremental notch.

Additional Collateral Required to be Posted Upon Downgrade at March 31, 2020

(Dollars in millions)	One incremental notch	Second incremental notch
Bank of America Corporation	$ 519	$ 724
Bank of America, N.A. and subsidiaries (1)	257	495

(1) Included in Bank of America Corporation collateral requirements in this table.

The following table presents the derivative liabilities that would be subject to unilateral termination by counterparties and the amounts of collateral that would have been contractually required at March 31, 2020 if the long-term senior debt ratings for the Corporation or certain subsidiaries had been lower by one incremental notch and by an additional second incremental notch.

Derivative Liabilities Subject to Unilateral Termination Upon Downgrade at March 31, 2020

(Dollars in millions)	One incremental notch	Second incremental notch
Derivative liabilities	$ 161	$ 1,498
Collateral posted	144	1,098

Valuation Adjustments on Derivatives

The table below presents credit valuation adjustment (CVA), DVA and FVA gains (losses) on derivatives (excluding the effect of any related hedge activities), which are recorded in market making and similar activities, for the three months ended March 31, 2020 and 2019. For more information on the valuation adjustments on derivatives, see *Note 3 – Derivatives* to the Consolidated Financial Statements of the Corporation's 2019 Annual Report on Form 10-K.

Valuation Adjustments Gains (Losses) on Derivatives (1)

	Three Months Ended March 31	
	2020	2019
Derivative assets (CVA)	**$ (784)**	$ 66
Derivative assets/liabilities (FVA)	**(156)**	7
Derivative liabilities (DVA)	**414**	(81)

(1) At March 31, 2020 and December 31, 2019, cumulative CVA reduced the derivative assets balance by $1.3 billion and $528 million, cumulative FVA reduced the net derivatives balance by $309 million and $153 million, and cumulative DVA reduced the derivative liabilities balance by $699 million and $285 million, respectively.

NOTE 4 Securities

The table below presents the amortized cost, gross unrealized gains and losses, and fair value of AFS debt securities, other debt securities carried at fair value and HTM debt securities at March 31, 2020 and December 31, 2019.

Debt Securities

(Dollars in millions)	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
	March 31, 2020			
Available-for-sale debt securities				
Mortgage-backed securities:				
Agency	**$ 76,599**	**$ 2,863**	**$ (1)**	**$ 79,461**
Agency-collateralized mortgage obligations	**4,348**	**212**	**(9)**	**4,551**
Commercial	**14,800**	**814**	**(12)**	**15,602**
Non-agency residential (1)	**882**	**130**	**(80)**	**932**
Total mortgage-backed securities	**96,629**	**4,019**	**(102)**	**100,546**
U.S. Treasury and agency securities	**64,353**	**4,352**	**(9)**	**68,696**
Non-U.S. securities	**12,248**	**10**	**(11)**	**12,247**
Other taxable securities, substantially all asset-backed securities	**6,016**	**80**	**(204)**	**5,892**
Total taxable securities	**179,246**	**8,461**	**(326)**	**187,381**
Tax-exempt securities	**18,752**	**163**	**(75)**	**18,840**
Total available-for-sale debt securities (3)	**197,998**	**8,624**	**(401)**	**206,221**
Other debt securities carried at fair value (2)	**14,791**	**317**	**(225)**	**14,883**
Total debt securities carried at fair value	**212,789**	**8,941**	**(626)**	**221,104**
Held-to-maturity debt securities, substantially all U.S. agency mortgage-backed securities (3)	**254,764**	**11,848**	**(17)**	**266,595**
Total debt securities (4, 5)	**$ 467,553**	**$ 20,789**	**$ (643)**	**$ 487,699**
	December 31, 2019			
Available-for-sale debt securities				
Mortgage-backed securities:				
Agency	$ 121,698	$ 1,013	$ (183)	$ 122,528
Agency-collateralized mortgage obligations	4,587	78	(24)	4,641
Commercial	14,797	249	(25)	15,021
Non-agency residential (1)	948	138	(9)	1,077
Total mortgage-backed securities	142,030	1,478	(241)	143,267
U.S. Treasury and agency securities	67,700	1,023	(195)	68,528
Non-U.S. securities	11,987	6	(2)	11,991
Other taxable securities, substantially all asset-backed securities	3,874	67	—	3,941
Total taxable securities	225,591	2,574	(438)	227,727
Tax-exempt securities	17,716	202	(6)	17,912
Total available-for-sale debt securities	243,307	2,776	(444)	245,639
Other debt securities carried at fair value (2)	10,596	255	(23)	10,828
Total debt securities carried at fair value	253,903	3,031	(467)	256,467
Held-to-maturity debt securities, substantially all U.S. agency mortgage-backed securities	215,730	4,433	(342)	219,821
Total debt securities (4, 5)	$ 469,633	$ 7,464	$ (809)	$ 476,288

(1) At both March 31, 2020 and December 31, 2019, the underlying collateral type included approximately 49 percent prime, six percent Alt-A and 45 percent subprime.
(2) Primarily includes non-U.S. securities used to satisfy certain international regulatory requirements. Any changes in value are reported in other income. For detail on the components, see *Note 14 – Fair Value Measurements*.
(3) During the three months ended March 31, 2020, the Corporation reclassified AFS debt securities with a fair value of $44.4 billion to HTM. Additionally, the Corporation transferred $11.1 billion of debt securities from its trading account inventory to its Banking Book with $5.2 billion subsequently classified as AFS securities and $5.9 billion classified in other debt securities carried at fair value.
(4) Includes securities pledged as collateral of $71.4 billion and $67.0 billion at March 31, 2020 and December 31, 2019.
(5) The Corporation held debt securities from Fannie Mae and Freddie Mac that each exceeded 10 percent of shareholders' equity, with an amortized cost of $153.3 billion and $58.8 billion, and a fair value of $161.2 billion and $61.7 billion at March 31, 2020, and an amortized cost of $157.2 billion and $54.1 billion, and a fair value of $160.6 billion and $55.1 billion at December 31, 2019.

At March 31, 2020, the accumulated net unrealized gain on AFS debt securities, excluding the amount related to debt securities previously transferred to held to maturity, included in accumulated OCI was $6.2 billion, net of the related income tax expense of $2.0 billion. The Corporation had nonperforming AFS debt securities of $8 million and $9 million at March 31, 2020 and December 31, 2019.

Effective January 1, 2020, the Corporation adopted the new accounting standard for credit losses that requires evaluation of AFS and HTM debt securities for any expected losses with recognition of an allowance for credit losses, when applicable. For more information, see *Note 1 – Summary of Significant Accounting Principles*. At March 31, 2020, the Corporation had $168.3 billion in AFS debt securities, which were primarily U.S. agency and U.S. Treasury securities that have a zero credit loss assumption. For the remaining $37.9 billion in AFS debt securities, the amount of expected credit losses was insignificant. Substantially all of the Corporation's HTM debt securities are U.S. agency and U.S. Treasury securities and have a zero credit loss assumption.

At March 31, 2020, the Corporation held equity securities at an aggregate fair value of $835 million and other equity securities, as valued under the measurement alternative, at cost of $222 million, both of which are included in other assets. At March 31, 2020, the Corporation also held equity securities at fair value of $1.1 billion included in time deposits placed and other short-term investments.

In the three months ended March 31, 2020, the Corporation recorded gross realized gains on sales of AFS debt securities of $316 million and gross realized losses of $1 million, resulting in a net gain of $315 million, with $79 million of income taxes

attributable to the realized net gain on sales of these AFS debt securities. For the same period in 2019, the Corporation recorded gross realized gains of $117 million and gross realized losses of $111 million, resulting in a net gain of $6 million with income taxes attributable to the realized net gain on sales of these AFS debt securities not being significant.

The table below presents the fair value and the associated gross unrealized losses on AFS debt securities and whether these securities have had gross unrealized losses for less than 12 months or for 12 months or longer at March 31, 2020 and December 31, 2019.

Total AFS Debt Securities in a Continuous Unrealized Loss Position

(Dollars in millions)	Less than Twelve Months Fair Value	Less than Twelve Months Gross Unrealized Losses	Twelve Months or Longer Fair Value	Twelve Months or Longer Gross Unrealized Losses	Total Fair Value	Total Gross Unrealized Losses
			March 31, 2020			
Continuously unrealized loss-positioned AFS debt securities						
Mortgage-backed securities:						
Agency	**$ —**	**$ —**	**$ 704**	**$ (1)**	**$ 704**	**$ (1)**
Agency-collateralized mortgage obligations	**6**	**—**	**582**	**(9)**	**588**	**(9)**
Commercial	**652**	**(9)**	**348**	**(3)**	**1,000**	**(12)**
Non-agency residential	**455**	**(67)**	**38**	**(13)**	**493**	**(80)**
Total mortgage-backed securities	**1,113**	**(76)**	**1,672**	**(26)**	**2,785**	**(102)**
U.S. Treasury and agency securities	**(495)**	**(7)**	**523**	**(2)**	**28**	**(9)**
Non-U.S. securities	**2,733**	**(10)**	**513**	**(1)**	**3,246**	**(11)**
Other taxable securities, substantially all asset-backed securities	**2,950**	**(191)**	**293**	**(13)**	**3,243**	**(204)**
Total taxable securities	**6,301**	**(284)**	**3,001**	**(42)**	**9,302**	**(326)**
Tax-exempt securities	**6,075**	**(46)**	**3,090**	**(29)**	**9,165**	**(75)**
Total AFS debt securities in a continuous unrealized loss position	**$ 12,376**	**$ (330)**	**$ 6,091**	**$ (71)**	**$ 18,467**	**$ (401)**
			December 31, 2019			
Continuously unrealized loss-positioned AFS debt securities						
Mortgage-backed securities:						
Agency	$ 17,641	$ (41)	$ 17,238	$ (142)	$ 34,879	$ (183)
Agency-collateralized mortgage obligations	255	(1)	925	(23)	1,180	(24)
Commercial	2,180	(22)	442	(3)	2,622	(25)
Non-agency residential	122	(6)	22	(3)	144	(9)
Total mortgage-backed securities	20,198	(70)	18,627	(171)	38,825	(241)
U.S. Treasury and agency securities	12,836	(71)	18,866	(124)	31,702	(195)
Non-U.S. securities	851	—	837	(2)	1,688	(2)
Other taxable securities, substantially all asset-backed securities	938	—	222	—	1,160	—
Total taxable securities	34,823	(141)	38,552	(297)	73,375	(438)
Tax-exempt securities	4,286	(5)	190	(1)	4,476	(6)
Total AFS debt securities in a continuous unrealized loss position	$ 39,109	$ (146)	$ 38,742	$ (298)	$ 77,851	$ (444)

(1) Includes continuously unrealized loss-positioned AFS debt securities on which an unrealized loss, primarily related to changes in interest rates, remains in accumulated OCI.

The remaining contractual maturity distribution and yields of the Corporation's debt securities carried at fair value and HTM debt securities at March 31, 2020 are summarized in the table below. Actual duration and yields may differ as prepayments on the loans underlying the mortgages or other asset-backed securities (ABS) are passed through to the Corporation.

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

	Due in One Year or Less		Due after One Year through Five Years		Due after Five Years through Ten Years		Due after Ten Years		Total	
(Dollars in millions)	Amount	Yield [1]	Amount	Yield [1]	Amount	Yield [1]	Amount	Yield [1]	Amount	Yield [1]
Amortized cost of debt securities carried at fair value										
Mortgage-backed securities:										
Agency	$ —	—%	$ 9	5.42%	$ 65	4.47%	$ 82,426	3.42%	$ 82,500	3.42%
Agency-collateralized mortgage obligations	—	—	—	—	26	2.50	4,322	3.16	4,348	3.16
Commercial	22	1.68	4,956	2.45	8,821	2.56	1,014	2.86	14,813	2.54
Non-agency residential	—	—	—	—	12	—	2,069	9.01	2,081	8.96
Total mortgage-backed securities	22	1.68	4,965	2.45	8,924	2.57	89,831	3.53	103,742	3.40
U.S. Treasury and agency securities	6,401	1.25	30,295	1.73	27,622	2.21	38	2.45	64,356	1.89
Non-U.S. securities	18,332	0.87	1,478	1.47	11	2.97	102	7.02	19,923	0.95
Other taxable securities, substantially all asset-backed securities	1,474	2.13	2,011	2.66	1,237	3.31	1,294	3.22	6,016	2.78
Total taxable securities	26,229	1.04	38,749	1.86	37,794	2.33	91,265	3.53	194,037	2.63
Tax-exempt securities	2,612	1.82	7,882	3.28	5,035	2.18	3,223	4.00	18,752	2.90
Total amortized cost of debt securities carried at fair value	**$ 28,841**	**1.11**	**$ 46,631**	**2.10**	**$ 42,829**	**2.32**	**$ 94,488**	**3.54**	**$212,789**	**2.65**
Amortized cost of HTM debt securities [2]	**$ 595**	**2.66**	**$ 46**	**3.62**	**$ 1,096**	**2.56**	**$253,027**	**3.14**	**$254,764**	**3.14**
Debt securities carried at fair value										
Mortgage-backed securities:										
Agency	$ —		$ 9		$ 69		$ 85,472		$ 85,550	
Agency-collateralized mortgage obligations	—		—		26		4,525		4,551	
Commercial	22		5,154		9,352		1,087		15,615	
Non-agency residential	—		—		23		2,031		2,054	
Total mortgage-backed securities	22		5,163		9,470		93,115		107,770	
U.S. Treasury and agency securities	6,464		31,645		30,551		39		68,699	
Non-U.S. securities	18,307		1,481		11		100		19,899	
Other taxable securities, substantially all asset-backed securities	1,460		1,880		1,234		1,322		5,896	
Total taxable securities	26,253		40,169		41,266		94,576		202,264	
Tax-exempt securities	2,610		7,875		5,100		3,255		18,840	
Total debt securities carried at fair value	**$ 28,863**		**$ 48,044**		**$ 46,366**		**$ 97,831**		**$221,104**	
Fair value of HTM debt securities [2]	**$ 595**		**$ 46**		**$ 1,164**		**$264,790**		**$266,595**	

(1) The weighted-average yield is computed based on a constant effective interest rate over the contractual life of each security. The average yield considers the contractual coupon and the amortization of premiums and accretion of discounts, excluding the effect of related hedging derivatives.
(2) Substantially all U.S. agency MBS.

NOTE 5 Outstanding Loans and Leases and Allowance for Credit Losses

The following tables present total outstanding loans and leases and an aging analysis for the Consumer Real Estate, Credit Card and Other Consumer, and Commercial portfolio segments, by class of financing receivables, at March 31, 2020 and December 31, 2019.

(Dollars in millions)	30-59 Days Past Due (1)	60-89 Days Past Due (1)	90 Days or More Past Due (1)	Total Past Due 30 Days or More	Total Current or Less Than 30 Days Past Due (1)	Loans Accounted for Under the Fair Value Option	Total Outstandings
				March 31, 2020			
Consumer real estate							
Core portfolio							
Residential mortgage	$ 1,348	$ 262	$ 580	$ 2,190	$ 231,445		$ 233,635
Home equity	129	59	215	403	34,470		34,873
Non-core portfolio							
Residential mortgage	434	172	1,109	1,715	8,195		9,910
Home equity	34	15	67	116	4,578		4,694
Credit card and other consumer							
Credit card	541	368	991	1,900	89,990		91,890
Direct/Indirect consumer (2)	288	77	32	397	89,849		90,246
Other consumer	—	—	—	—	150		150
Total consumer	2,774	953	2,994	6,721	458,677		465,398
Consumer loans accounted for under the fair value option (3)						$ 556	556
Total consumer loans and leases	2,774	953	2,994	6,721	458,677	556	465,954
Commercial							
U.S. commercial	715	378	504	1,597	356,907		358,504
Non-U.S. commercial	29	41	1	71	116,541		116,612
Commercial real estate (4) (4)	188	25	137	350	66,304		66,654
Commercial lease financing	119	25	68	212	18,968		19,180
U.S. small business commercial	123	51	108	282	15,139		15,421
Total commercial	1,174	520	818	2,512	573,859		576,371
Commercial loans accounted for under the fair value option (3)						8,460	8,460
Total commercial loans and leases	1,174	520	818	2,512	573,859	8,460	584,831
Total loans and leases (5)	$ 3,948	$ 1,473	$ 3,812	$ 9,233	$ 1,032,536	$ 9,016	$ 1,050,785
Percentage of outstandings	0.38%	0.14%	0.36%	0.88%	98.26%	0.86%	100.00%

(1) Consumer real estate loans 30-59 days past due includes fully-insured loans of $474 million and nonperforming loans of $138 million. Consumer real estate loans 60-89 days past due includes fully-insured loans of $174 million and nonperforming loans of $123 million. Consumer real estate loans 90 days or more past due includes fully-insured loans of $1.0 billion. Consumer real estate loans current or less than 30 days past due includes $878 million and direct/indirect consumer includes $43 million of nonperforming loans. For information on the Corporation's interest accrual policies and delinquency status for loan modifications related to the COVID-19 pandemic, see *Note 1 – Summary of Significant Accounting Principles*.

(2) Total outstandings primarily includes auto and specialty lending loans and leases of $50.0 billion, U.S. securities-based lending loans of $36.4 billion and non-U.S. consumer loans of $3.0 billion.

(3) Consumer loans accounted for under the fair value option includes residential mortgage loans of $231 million and home equity loans of $325 million. Commercial loans accounted for under the fair value option includes U.S. commercial loans of $5.1 billion and non-U.S. commercial loans of $3.4 billion. For more information, see *Note 14 – Fair Value Measurements* and *Note 15 – Fair Value Option*.

(4) Total outstandings includes U.S. commercial real estate loans of $62.9 billion and non-U.S. commercial real estate loans of $3.8 billion.

(5) Total outstandings includes loans and leases pledged as collateral of $32.7 billion. The Corporation also pledged $217.6 billion of loans with no related outstanding borrowings to secure potential borrowing capacity with the Federal Reserve Bank and Federal Home Loan Bank.

(Dollars in millions)	30-59 Days Past Due (1)	60-89 Days Past Due (1)	90 Days or More Past Due (1)	Total Past Due 30 Days or More	Total Current or Less Than 30 Days Past Due (1)	Loans Accounted for Under the Fair Value Option	Total Outstandings
	December 31, 2019						
Consumer real estate							
Core portfolio							
Residential mortgage	$ 1,378	$ 261	$ 565	$ 2,204	$ 223,566		$ 225,770
Home equity	135	70	198	403	34,823		35,226
Non-core portfolio							
Residential mortgage	458	209	1,263	1,930	8,469		10,399
Home equity	34	16	72	122	4,860		4,982
Credit card and other consumer							
Credit card	564	429	1,042	2,035	95,573		97,608
Direct/Indirect consumer (2)	297	85	35	417	90,581		90,998
Other consumer	—	—	—	—	192		192
Total consumer	2,866	1,070	3,175	7,111	458,064		465,175
Consumer loans accounted for under the fair value option (3)						$ 594	594
Total consumer loans and leases	2,866	1,070	3,175	7,111	458,064	594	465,769
Commercial							
U.S. commercial	788	279	371	1,438	305,610		307,048
Non-U.S. commercial	35	23	8	66	104,900		104,966
Commercial real estate (4)	144	19	119	282	62,407		62,689
Commercial lease financing	100	56	39	195	19,685		19,880
U.S. small business commercial	119	56	107	282	15,051		15,333
Total commercial	1,186	433	644	2,263	507,653		509,916
Commercial loans accounted for under the fair value option (3)						7,741	7,741
Total commercial loans and leases	1,186	433	644	2,263	507,653	7,741	517,657
Total loans and leases (5)	$ 4,052	$ 1,503	$ 3,819	$ 9,374	$ 965,717	$ 8,335	$ 983,426
Percentage of outstandings	0.41%	0.15%	0.39%	0.95%	98.20%	0.85%	100.00%

(1) Consumer real estate loans 30-59 days past due includes fully-insured loans of $517 million and nonperforming loans of $139 million. Consumer real estate loans 60-89 days past due includes fully-insured loans of $206 million and nonperforming loans of $114 million. Consumer real estate loans 90 days or more past due includes fully-insured loans of $1.1 billion. Consumer real estate loans current or less than 30 days past due includes $856 million and direct/indirect consumer includes $45 million of nonperforming loans.
(2) Total outstandings primarily includes auto and specialty lending loans and leases of $50.4 billion, U.S. securities-based lending loans of $36.7 billion and non-U.S. consumer loans of $2.8 billion.
(3) Consumer loans accounted for under the fair value option includes residential mortgage loans of $257 million and home equity loans of $337 million. Commercial loans accounted for under the fair value option includes U.S. commercial loans of $4.7 billion and non-U.S. commercial loans of $3.1 billion. For more information, see *Note 14 – Fair Value Measurements* and *Note 15 – Fair Value Option*.
(4) Total outstandings includes U.S. commercial real estate loans of $59.0 billion and non-U.S. commercial real estate loans of $3.7 billion.
(5) Total outstandings includes loans and leases pledged as collateral of $25.9 billion. The Corporation also pledged $168.2 billion of loans with no related outstanding borrowings to secure potential borrowing capacity with the Federal Reserve Bank and Federal Home Loan Bank.

The Corporation categorizes consumer real estate loans as core and non-core based on loan and customer characteristics such as origination date, product type, LTV, Fair Isaac Corporation (FICO) score and delinquency status consistent with its current consumer and mortgage servicing strategy. Generally, loans that were originated after January 1, 2010, qualified under government-sponsored enterprise (GSE) underwriting guidelines, or otherwise met the Corporation's underwriting guidelines in place in 2015 are characterized as core loans. All other loans are generally characterized as non-core loans and represent runoff portfolios.

The Corporation has entered into long-term credit protection agreements with Fannie Mae and Freddie Mac on loans totaling $8.0 billion and $7.5 billion at March 31, 2020 and December 31, 2019, providing full credit protection on residential mortgage loans that become severely delinquent. All of these loans are individually insured and therefore the Corporation does not record an allowance for credit losses related to these loans.

Nonperforming Loans and Leases

Commercial nonperforming loans increased to $1.9 billion at March 31, 2020 from $1.5 billion at December 31, 2019 with broad-based increases across multiple industries. Weakness in consumer delinquencies and nonperforming loans was less observable in the three months ended March 31, 2020 as meaningful impacts from the COVID-19 pandemic were not experienced until late in the quarter and were mitigated to some extent by payment deferrals.

The table below presents the Corporation's nonperforming loans and leases including nonperforming TDRs, and loans accruing past due 90 days or more at March 31, 2020 and December 31, 2019. Nonperforming loans held-for-sale (LHFS) are excluded from nonperforming loans and leases as they are recorded at either fair value or the lower of cost or fair value. For information on the Corporation's interest accrual policies and delinquency status for loan modifications related to the COVID-19 pandemic, see *Note 1 – Summary of Significant Accounting Principles*. For more information on the criteria for classification as nonperforming, see *Note 1 – Summary of Significant Accounting Principles* to the Consolidated Financial Statements of the Corporation's 2019 Annual Report on Form 10-K.

Credit Quality

(Dollars in millions)	Nonperforming Loans and Leases March 31 2020	Nonperforming Loans and Leases December 31 2019	Accruing Past Due 90 Days or More (1) March 31 2020	Accruing Past Due 90 Days or More (1) December 31 2019
Residential mortgage (2)	**$ 1,580**	$ 1,470	**$ 951**	$ 1,088
With negative allowance (3)	**482**	—		
Home equity (2)	**578**	536	**—**	—
With negative allowance (3)	**123**	—		
Credit Card	**n/a**	n/a	**991**	1,042
Direct/indirect consumer	**46**	47	**30**	33
Total consumer	**2,204**	2,053	**1,972**	2,163
U.S. commercial	**1,240**	1,094	**188**	106
Non-U.S. commercial	**90**	43	**1**	8
Commercial real estate	**408**	280	**39**	19
Commercial lease financing	**44**	32	**31**	20
U.S. small business commercial	**70**	50	**95**	97
Total commercial	**1,852**	1,499	**354**	250
Total nonperforming loans	**$ 4,056**	$ 3,552	**$ 2,326**	$ 2,413
Percentage of outstanding loans and leases	**0.39%**	0.36%	**0.22%**	0.25%

(1) For information on the Corporation's interest accrual policies and delinquency status for loan modifications related to the COVID-19 pandemic, see *Note 1 – Summary of Significant Accounting Principles*.
(2) Residential mortgage loans accruing past due 90 days or more are fully-insured loans. At March 31, 2020 and December 31, 2019 residential mortgage includes $637 million and $740 million of loans on which interest had been curtailed by the FHA, and therefore were no longer accruing interest, although principal was still insured, and $314 million and 348 million of loans on which interest was still accruing.
(3) At March 31, 2020, Residential Mortgage and Home Equity include negative allowance on nonperforming loans of $145 million and $107 million.
n/a = not applicable

Nonperforming consumer loans now include certain loans that were previously classified as purchased credit-impaired loans and accounted for under a pool basis. Upon adoption of the new credit
loss standard, these loans are accounted for on an individual basis and, if applicable, included in nonperforming loans.

As a result, an additional $130 million and $20 million of residential mortgage and home equity loans were added to nonperforming loans as of March 31, 2020.

Credit Quality Indicators

The Corporation monitors credit quality within its Consumer Real Estate, Credit Card and Other Consumer, and Commercial portfolio segments based on primary credit quality indicators. For more information on the portfolio segments, see *Note 1 – Summary of Significant Accounting Principles*. Within the Consumer Real Estate portfolio segment, the primary credit quality indicators are refreshed LTV and refreshed FICO score. Refreshed LTV measures the carrying value of the loan as a percentage of the value of the property securing the loan, refreshed quarterly. Home equity loans are evaluated using CLTV which measures the carrying value of the Corporation's loan and available line of credit combined with any outstanding senior liens against the property as a percentage of the value of the property securing the loan, refreshed quarterly. FICO score measures the creditworthiness of the borrower based on the financial obligations of the borrower and the borrower's credit history. FICO scores are typically refreshed quarterly or more frequently. Certain borrowers (e.g., borrowers that have had debts discharged in a bankruptcy proceeding) may not have their FICO scores updated. FICO scores are also a primary credit quality indicator for the Credit Card and Other Consumer portfolio segment and the business card portfolio within U.S. small business commercial. Within the Commercial portfolio segment, loans are evaluated using the internal classifications of pass rated or reservable criticized as the primary credit quality indicators. The term reservable criticized refers to those commercial loans that are internally classified or listed by the Corporation as Special Mention, Substandard or Doubtful, which are asset quality categories defined by regulatory authorities. These assets have an elevated level of risk and may have a high probability of default or total loss. Pass rated refers to all loans not considered reservable criticized. In addition to these primary credit quality indicators, the Corporation uses other credit quality indicators for certain types of loans.

The following tables present certain credit quality indicators for the Corporation's Consumer Real Estate, Credit Card and Other Consumer, and Commercial portfolio segments, by class of financing receivables and year of origination for term loan balances at March 31, 2020, including revolving loans that converted to term loans without an additional credit decision after origination or through a troubled debt restructuring.

Residential Mortgage – Credit Quality Indicators By Vintage

(Dollars in millions)	Total as of March 31, 2020	2020	2019	2018	2017	2016	Prior
Total Residential Mortgage							
Refreshed LTV							
Less than or equal to 90 percent	**$ 219,592**	$ 16,686	$ 61,053	$ 23,539	$ 31,947	$ 32,310	$ 54,057
Greater than 90 percent but less than or equal to 100 percent	**3,735**	528	1,714	592	221	140	540
Greater than 100 percent	**1,393**	175	437	159	79	66	477
Fully-insured loans	**18,825**	564	2,789	591	456	2,660	11,765
Total Residential Mortgage	**$ 243,545**	$ 17,953	$ 65,993	$ 24,881	$ 32,703	$ 35,176	$ 66,839
Total Residential Mortgage							
Refreshed FICO score							
Less than 620	**$ 3,288**	$ 59	$ 279	$ 252	$ 247	$ 267	$ 2,184
Greater than or equal to 620 and less than 680	**5,948**	172	1,083	689	672	502	2,830
Greater than or equal to 680 and less than 740	**28,591**	1,638	7,262	3,426	3,728	3,311	9,226
Greater than or equal to 740	**186,893**	15,520	54,580	19,923	27,600	28,436	40,834
Fully-insured loans	**18,825**	564	2,789	591	456	2,660	11,765
Total Residential Mortgage	**$ 243,545**	$ 17,953	$ 65,993	$ 24,881	$ 32,703	$ 35,176	$ 66,839

Home Equity - Credit Quality Indicators

(Dollars in millions)	Total	Home Equity Loans and Reverse Mortgages (1)	Revolving Loans	Revolving Loans Converted to Term Loans
	March 31, 2020			
Total Home Equity				
Refreshed LTV				
Less than or equal to 90 percent	**$ 38,277**	**$ 2,169**	**$ 25,653**	**$ 10,455**
Greater than 90 percent but less than or equal to 100 percent	**562**	**159**	**159**	**244**
Greater than 100 percent	**728**	**229**	**150**	**349**
Total Home Equity	**$ 39,567**	**$ 2,557**	**$ 25,962**	**$ 11,048**
Total Home Equity				
Refreshed FICO score				
Less than 620	**$ 1,283**	**$ 268**	**$ 290**	**$ 725**
Greater than or equal to 620 and less than 680	**2,214**	**308**	**692**	**1,214**
Greater than or equal to 680 and less than 740	**7,153**	**647**	**3,713**	**2,793**
Greater than or equal to 740	**28,917**	**1,334**	**21,267**	**6,316**
Total Home Equity	**$ 39,567**	**$ 2,557**	**$ 25,962**	**$ 11,048**

(1) Includes reverse mortgages of $1.4 billion and home equity loans of $1.2 billion which are no longer originated.

Credit Card and Direct/Indirect Consumer – Credit Quality Indicators By Vintage

	Direct/Indirect Term Loans by Origination Year							Credit Card		
(Dollars in millions)	Total Direct/Indirect as of March 31, 2020	2020	2019	2018	2017	2016	Prior	Total Credit Card as of March 31, 2020	Revolving Loans	Revolving Loans Converted to Term Loans (3)
Refreshed FICO score										
Less than 620	**$ 1,369**	$ 26	$ 231	$ 255	$ 404	$ 288	$ 165	**$ 5,017**	$ 4,766	$ 251
Greater than or equal to 620 and less than 680	**2,663**	234	863	512	516	317	221	**11,874**	11,670	204
Greater than or equal to 680 and less than 740	**8,362**	946	3,046	1,639	1,308	758	665	**34,088**	33,919	169
Greater than or equal to 740	**37,863**	3,971	13,845	8,313	5,756	3,115	2,863	**40,911**	40,872	39
Other internal credit metrics (1, 2)	**39,989**	2,821	4,311	4,037	3,182	3,362	22,276	**—**	—	—
Total credit card and other consumer	**$ 90,246**	$ 7,998	$ 22,296	$ 14,756	$ 11,166	$ 7,840	$ 26,190	**$ 91,890**	$ 91,227	$ 663

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

(2) Direct/indirect consumer includes $39.3 billion and $39.6 billion of securities-based lending which is typically supported by highly liquid collateral with market value greater than or equal to the outstanding loan balance and therefore has minimal credit risk at March 31, 2020 and December 31, 2019.

(3) Represents troubled debt restructurings that were modified into term loans.

Commercial – Credit Quality Indicators By Vintage (1, 2)

		Term Loans						
		Amortized Cost Basis by Origination Year						
(Dollars in millions)	Total as of March 31, 2020	2020	2019	2018	2017	2016	Prior	Revolving Loans
U.S. Commercial								
Risk ratings								
Pass rated	**$ 346,042**	$ 17,797	$ 48,441	$ 24,019	$ 18,227	$ 10,092	$ 24,445	$ 203,021
Reservable criticized	**12,462**	578	999	872	635	377	978	8,023
Total U.S. Commercial	**$ 358,504**	$ 18,375	$ 49,440	$ 24,891	$ 18,862	$ 10,469	$ 25,423	$ 211,044
Non-U.S. Commercial								
Risk ratings								
Pass rated	**$ 115,233**	$ 6,026	$ 18,591	$ 12,245	$ 7,510	$ 1,810	$ 7,269	$ 61,782
Reservable criticized	**1,379**	46	216	86	98	74	6	853
Total Non-U.S. Commercial	**$ 116,612**	$ 6,072	$ 18,807	$ 12,331	$ 7,608	$ 1,884	$ 7,275	$ 62,635
Commercial Real Estate								
Risk ratings								
Pass rated	**$ 65,133**	$ 3,384	$ 17,481	$ 12,594	$ 7,586	$ 4,358	$ 9,309	$ 10,421
Reservable criticized	**1,521**	1	306	213	467	69	302	163
Total Commercial Real Estate	**$ 66,654**	$ 3,385	$ 17,787	$ 12,807	$ 8,053	$ 4,427	$ 9,611	$ 10,584
Commercial Lease Financing								
Risk ratings								
Pass rated	**$ 18,768**	$ 944	$ 4,165	$ 4,138	$ 3,264	$ 2,204	$ 4,053	$ —
Reservable criticized	**412**	54	15	68	37	41	197	—
Total Commercial Lease Financing	**$ 19,180**	$ 998	$ 4,180	$ 4,206	$ 3,301	$ 2,245	$ 4,250	$ —
U.S. Small Business Commercial (3)								
Risk ratings								
Pass rated	**$ 7,280**	$ 359	$ 1,412	$ 1,056	$ 902	$ 655	$ 2,653	$ 243
Reservable criticized	**604**	1	16	86	121	93	279	8
Total U.S. Small Business Commercial	**$ 7,884**	$ 360	$ 1,428	$ 1,142	$ 1,023	$ 748	$ 2,932	$ 251
Total (1, 2)	**$ 568,834**	$ 29,190	$ 91,642	$ 55,377	$ 38,847	$ 19,773	$ 49,491	$ 284,514

(1) Excludes $8.5 billion and $7.7 billion of loans accounted for under the fair value option at March 31, 2020 and December 31, 2019.
(2) Includes $41 million of loans that converted from revolving to term loans.
(3) Excludes U.S. Small Business Card loans of $7.5 billion. Refreshed FICO scores for this portfolio are $319 million for less than 620; $749 million for greater than or equal to 620 and less than 680; $2.2 billion for greater than or equal to 680 and less than 740; and $4.3 billion greater than or equal to 740.

As a result of the economic impact of COVID-19, commercial asset quality weakened during the three months ended March 31, 2020. Commercial reservable criticized utilized exposure increased to $17.4 billion at March 31, 2020 from $11.5 billion (to 2.84 percent from 2.09 percent of total commercial reservable utilized exposure) at December 31, 2019 with increases spread across multiple industries including the energy sector, which was also impacted by the weakness in oil prices and oil price volatility in the quarter.

Troubled Debt Restructurings

The Corporation began entering into loan modifications with borrowers in response to the COVID-19 pandemic, which have not been classified as TDRs, and therefore are not included in the discussion below. For more information on the criteria for classifying loans as TDRs, see *Note 1 – Summary of Significant Accounting Principles*.

Consumer Real Estate

Most modifications of consumer real estate loans meet the definition of a TDR and are classified as TDRs when a binding offer is extended to a borrower. Modifications of consumer real estate loans are done in accordance with government programs or the Corporation's proprietary programs. Concessions may include reductions in interest rates, capitalization of past due amounts, principal and/or interest forbearance, payment extensions, principal and/or interest forgiveness, or combinations thereof. Prior to permanently modifying a loan, the Corporation may enter into trial modifications with certain borrowers under both government and proprietary programs. Trial modifications generally represent a three- to four-month period during which the borrower makes monthly payments under the anticipated modified payment terms. Upon successful completion of the trial period, the Corporation and the borrower enter into a permanent modification. Binding trial modifications are classified as TDRs when the trial offer is made and continue to be classified as TDRs regardless of whether the borrower enters into a permanent modification.

Consumer real estate loans of $597 million that have been discharged in Chapter 7 bankruptcy with no change in repayment terms and not reaffirmed by the borrower were included in TDRs at March 31, 2020, of which $99 million were classified as nonperforming and $255 million were loans fully insured by the FHA.

Consumer real estate TDRs are measured primarily based on the net present value of the estimated cash flows discounted at the loan's original effective interest rate. If the carrying value of a TDR exceeds this amount, a specific allowance is recorded as a component of the allowance for loan and lease losses. Alternatively, consumer real estate TDRs that are considered to be dependent solely on the collateral for repayment (e.g., due to the lack of income verification) are measured based on the estimated fair value of the collateral and a charge-off is recorded if the carrying value exceeds the fair value of the collateral. Consumer real estate loans that reach 180 days past due prior to modification are charged off to their net realizable value, less costs to sell, before they are modified as TDRs in accordance with established policy. Subsequent declines in the fair value of the collateral after a loan has reached 180 days past due are recorded as charge-offs. Fully-insured loans are protected against principal loss, and therefore, the Corporation does not record an allowance for loan and lease losses on the outstanding principal balance, even after they have been modified in a TDR.

At March 31, 2020 and December 31, 2019, remaining commitments to lend additional funds to debtors whose terms have been modified in a consumer real estate TDR were not significant. Consumer real estate foreclosed properties totaled $226 million and $229 million at March 31, 2020 and December 31, 2019. The carrying value of consumer real estate loans, including fully-insured loans, for which formal foreclosure proceedings were in process at March 31, 2020 was $1.4 billion. During the three months ended March 31, 2020 and 2019, the Corporation reclassified $138 million and $164 million of consumer real estate loans to foreclosed properties or, for properties acquired upon foreclosure of certain government-guaranteed loans (principally FHA-insured loans), to other assets. The reclassifications represent non-cash investing activities and, accordingly, are not reflected in the Consolidated Statement of Cash Flows.

The table below presents the March 31, 2020 and 2019 unpaid principal balance, carrying value, and average pre- and post-modification interest rates of consumer real estate loans that were modified in TDRs during the three months ended March 31, 2020 and 2019. The following Consumer Real Estate portfolio segment tables include loans that were initially classified as TDRs during the period and also loans that had previously been classified as TDRs and were modified again during the period.

Consumer Real Estate – TDRs Entered into During The Three Months Ended March 31, 2020 and 2019 (1)

(Dollars in millions)	Unpaid Principal Balance	Carrying Value	Pre-Modification Interest Rate	Post-Modification Interest Rate (2)
	March 31, 2020			
Residential mortgage	**$ 122**	**$ 103**	**4.04%**	**3.94%**
Home equity	**23**	**20**	**4.69**	**4.68**
Total	**$ 145**	**$ 123**	**4.15**	**4.06**
	March 31, 2019			
Residential mortgage	$ 135	$ 112	4.19%	4.27%
Home equity	63	48	5.23	4.86
Total	$ 198	$ 160	4.52	4.46

(1) For more information on the Corporation's loan modification programs offered in response to the COVID-19 pandemic, which are not TDRs, see *Note 1 – Summary of Significant Accounting Principles*.
(2) The post-modification interest rate reflects the interest rate applicable only to permanently completed modifications, which exclude loans that are in a trial modification period.

The table below presents the March 31, 2020 and 2019 carrying value for consumer real estate loans that were modified in a TDR during the three months ended March 31, 2020 and 2019, by type of modification.

Consumer Real Estate – Modification Programs (1)

(Dollars in millions)	TDRs Entered into During the Three Months Ended March 31 2020	2019
Modifications under government programs	**$ 1**	$ 3
Modifications under proprietary programs	**28**	26
Loans discharged in Chapter 7 bankruptcy (2)	**15**	28
Trial modifications	**79**	103
Total modifications	**$ 123**	$ 160

(1) For more information on the Corporation's loan modification programs offered in response to the COVID-19 pandemic, which are not TDRs, see *Note 1 – Summary of Significant Accounting Principles*.
(2) Includes loans discharged in Chapter 7 bankruptcy with no change in repayment terms that are classified as TDRs.

The table below presents the carrying value of consumer real estate loans that entered into payment default during the three months ended March 31, 2020 and 2019 that were modified in a TDR during the 12 months preceding payment default. A payment default for consumer real estate TDRs is recognized when a borrower has missed three monthly payments (not necessarily consecutively) since modification.

Consumer Real Estate – TDRs Entering Payment Default that were Modified During the Preceding 12 Months (1)

(Dollars in millions)	Three Months Ended March 31 2020	2019
Modifications under government programs	**$ 6**	$ 7
Modifications under proprietary programs	**14**	29
Loans discharged in Chapter 7 bankruptcy (2)	**7**	9
Trial modifications (3)	**18**	16
Total modifications	**$ 45**	$ 61

(1) For more information on the Corporation's loan modification programs offered in response to the COVID-19 pandemic, which are not TDRs, see *Note 1 – Summary of Significant Accounting Principles*.
(2) Includes loans discharged in Chapter 7 bankruptcy with no change in repayment terms that are classified as TDRs.
(3) Includes trial modification offers to which the customer did not respond.

Credit Card and Other Consumer

The Corporation seeks to assist customers that are experiencing financial difficulty by modifying loans while ensuring compliance with federal and local laws and guidelines. Credit card and other consumer loan modifications generally involve reducing the interest rate on the account, placing the customer on a fixed payment plan not exceeding 60 months and canceling the customer's available line of credit, all of which are considered TDRs. The Corporation makes loan modifications directly with borrowers for debt held only by the Corporation (internal programs). Additionally, the Corporation makes loan modifications for borrowers working with third-party renegotiation agencies that provide solutions to customers' entire unsecured debt structures (external programs). The Corporation classifies other secured consumer loans that have been discharged in Chapter 7 bankruptcy as TDRs which are written down to collateral value and placed on nonaccrual status no later than the time of discharge.

The table below provides information on the Corporation's Credit Card and Other Consumer TDR portfolio including the March 31, 2020 and 2019 unpaid principal balance, carrying value, and average pre- and post-modification interest rates of loans that were modified in TDRs during the three months ended March 31, 2020 and 2019.

Credit Card and Other Consumer – TDRs Entered into During the Three Months Ended March 31, 2020 and 2019 (1)

(Dollars in millions)	Unpaid Principal Balance	Carrying Value (2)	Pre-Modification Interest Rate	Post-Modification Interest Rate
	March 31, 2020			
Credit card	**$ 94**	**$ 101**	**18.52%**	**5.30%**
Direct/Indirect consumer	**17**	**9**	**5.34**	**5.34**
Total	**$ 111**	**$ 110**	**17.40**	**5.30**
	March 31, 2019			
Credit card	$ 98	$ 105	19.86%	5.21%
Direct/Indirect consumer	18	10	4.96	4.96
Total	$ 116	$ 115	18.56	5.19

(1) For more information on the Corporation's loan modification programs offered in response to the COVID-19 pandemic, which are not TDRs, see *Note 1 – Summary of Significant Accounting Principles.*
(2) Includes accrued interest and fees.

The table below presents the March 31, 2020 and 2019 carrying value for Credit Card and Other Consumer loans that were modified in a TDR during the three months ended March 31, 2020 and 2019, by program type.

Credit Card and Other Consumer – TDRs by Program Type (1)

(Dollars in millions)	TDRs Entered into During the Three Months Ended March 31 2020	2019
Internal programs	**$ 74**	$ 75
External programs	**27**	30
Other	**9**	10
Total	**$ 110**	$ 115

(1) Includes accrued interest and fees. For more information on the Corporation's loan modification programs offered in response to the COVID-19 pandemic, which are not TDRs, see *Note 1 – Summary of Significant Accounting Principles.*

Credit card and other consumer loans are deemed to be in payment default during the quarter in which a borrower misses the second of two consecutive payments. Payment defaults are one of the factors considered when projecting future cash flows in the calculation of the allowance for loan and lease losses for credit card and other consumer. Based on historical experience, the Corporation estimates that 14 percent of new credit card TDRs and 20 percent of new direct/indirect consumer TDRs may be in payment default within 12 months after modification.

Commercial Loans

Modifications of loans to commercial borrowers that are experiencing financial difficulty are designed to reduce the Corporation's loss exposure while providing the borrower with an opportunity to work through financial difficulties, often to avoid foreclosure or bankruptcy. Each modification is unique and reflects the individual circumstances of the borrower. Modifications that result in a TDR may include extensions of maturity at a concessionary (below market) rate of interest, payment forbearances or other actions designed to benefit the borrower while mitigating the Corporation's risk exposure. Reductions in interest rates are rare. Instead, the interest rates are typically increased, although the increased rate may not represent a market rate of interest. Infrequently, concessions may also include principal forgiveness in connection with foreclosure, short sale or other settlement agreements leading to termination or sale of the loan.

At the time of restructuring, the loans are remeasured to reflect the impact, if any, on projected cash flows resulting from the modified terms. If a portion of the loan is deemed to be uncollectible, a charge-off may be recorded at the time of restructuring. Alternatively, a charge-off may have already been recorded in a previous period such that no charge-off is required at the time of modification. For more information on modifications for the U.S. small business commercial portfolio, see Credit Card and Other Consumer in this Note.

At March 31, 2020 and December 31, 2019, remaining commitments to lend additional funds to debtors whose terms have been modified in a commercial loan TDR were $486 million and $445 million. The balance of commercial TDRs in payment default was not significant at March 31, 2020 and December 31, 2019.

Loans Held-for-sale

The Corporation had LHFS of $7.9 billion and $9.2 billion at March 31, 2020 and December 31, 2019. Cash and non-cash proceeds from sales and paydowns of loans originally classified as LHFS were $7.5 billion and $7.9 billion for the three months ended March 31, 2020 and 2019. Cash used for originations and purchases of LHFS totaled $6.1 billion and $3.6 billion for the three months ended March 31, 2020 and 2019.

Accrued Interest Receivable

Accrued interest receivable for loans and leases and loans held-for-sale at March 31, 2020 and December 31, 2019 was $2.5 billion and $2.6 billion and is reported in customer and other receivables on the Consolidated Balance Sheet.

Outstanding credit card loan balances include unpaid principal, interest and fees. Credit card loans are not classified as nonperforming but are charged-off no later than the end of the month in which the account becomes 180 days past due, within 60 days after receipt of notification of death or bankruptcy, or upon confirmation of fraud. During the three months ended March 31, 2020, the Corporation reversed $165 million of interest and fee income against the income statement line item in which it was originally recorded upon charge-off of the principal balance of the loan.

For the outstanding residential mortgage, home equity, direct/indirect consumer and commercial loan balances classified as nonperforming during the three months ended March 31, 2020, the Corporation reversed $10 million of interest and fee income at the time the loans were classified as nonperforming against the income statement line item in which it was originally recorded. For more information on the Corporation's nonperforming loan policies, see *Note 1 – Summary of Significant Accounting Principles* to the Consolidated Financial Statements of the Corporation's 2019 Annual Report on Form 10-K.

Allowance for Credit Losses

On January 1, 2020, the Corporation adopted the new accounting standard that requires the measurement of the allowance for credit losses to be based on management's best estimate of lifetime expected credit losses inherent in the Corporation's relevant financial assets. Upon adoption of the new accounting standard, the Corporation recorded a $3.3 billion, or 32 percent, increase in the allowance for credit losses on January 1, 2020, which was comprised of a net increase of $2.9 billion in the allowance for loan and lease losses and a $310 million increase in the reserve for unfunded lending commitments. The net increase in the allowance for loan and lease losses was primarily driven by a $3.1 billion increase in credit card as the Corporation now reserves for the life of these receivables.

The reserve for unfunded lending commitments increased $310 million to $1.1 billion compared to $813 million at December 31, 2019. The increase included $119 million in the consumer portfolio for the undrawn portion of home equity lines of credit and $191 million in the commercial portfolio.

The allowance for loan and lease losses at March 31, 2020 was $15.8 billion, an increase of $3.4 billion compared to January 1, 2020. The increase in the allowance for loan and lease losses was primarily driven by deterioration in the economic outlook resulting from the impact of COVID-19. The increase in the allowance for loan and lease losses was $368 million in the consumer real estate portfolio, $828 million in the credit card and other consumer portfolio, and $2.2 billion in the commercial portfolio. The reserve for unfunded lending commitments increased $237 million from January 1, 2020 to $1.4 billion at March 31, 2020.

The allowance for credit losses is estimated using quantitative methods that consider a variety of factors such as historical loss experience, the current credit quality of the portfolio as well as an economic outlook over the life of the loan. Also included in the allowance for loan and lease losses are qualitative reserves to cover losses that are expected but, in the Corporation's assessment, may not be adequately represented in the quantitative methods or the economic assumptions. In its loss forecasting framework, the Corporation incorporates forward-looking information through the use of macroeconomic scenarios applied over the forecasted life of the assets. The scenarios that are chosen each quarter and the amount of weighting given to each scenario depend on a variety of factors including recent economic events, leading economic indicators, views of internal as well as third-party economists and industry trends. For more information on the Corporation's credit loss accounting policies, including the allowance for credit losses, see *Note 1 – Summary of Significant Accounting Principles*.

The lifetime estimate considers several traditional protracted recessionary scenarios that include deterioration in key economic variables such as gross domestic product, unemployment rate and home price index over longer time horizons. As of January 1, 2020, the Corporation's economic outlook was weighted to include a moderate potential of a recession with some expectation of tail risk similar to the severely adverse scenario used in stress testing. For the three months ended March 31, 2020, there was a significant change in the economic outlook impacting the allowance for credit losses, with key economic factors such as the unemployment rate and gross domestic product projected to deteriorate sharply in the second quarter of 2020 driven by the impact of COVID-19. In response to these changes, the Corporation reassessed the selection and probability weightings of the traditional protracted recessionary scenarios as well as analyzed various scenarios with immediate deterioration in economic variables followed by different recovery assumptions as part of the process for setting the allowance for credit loss reserve. Based on these analyses, the Corporation is now effectively fully weighted to a recessionary environment with an increased weighting for the expectation of a tail risk event. In addition, the allowance for credit losses at March 31, 2020 included qualitative reserves for certain segments that the Corporation views as higher risk that may not be fully recognized through its quantitative models such as leveraged loans and the energy portfolio. There are still many unknowns including the duration of the impact of COVID-19 on the economy and the results of the government fiscal and monetary actions along with recently implemented payment deferral programs, and the Corporation will continue to evaluate the allowance for credit losses and the related economic outlook each quarter.

Outstanding loans and leases excluding loans accounted for under the fair value option increased $66.7 billion in the three months ended March 31, 2020, primarily driven by a significant increase in commercial draws from existing unfunded commitments, as many business operations were economically impacted by COVID-19. The draws were primarily domestic and well diversified across industries with approximately 90 percent either investment grade or collateralized. As these were draws on committed facilities, a portion of the expected loss content was already provided for as part of the Corporation's January 1, 2020 reserve for unfunded lending commitments and did not result in a significant increase in the allowance for credit losses as of March 31, 2020. Outstanding consumer loans and leases excluding loans accounted for under the fair value option increased slightly as growth in residential mortgage was partially offset by a decline in credit card. The growth in the residential mortgage portfolio was well collateralized and therefore did not result in a meaningful increase in the allowance for credit losses as of March 31, 2020.

The table below summarizes the changes in the allowance for credit losses by portfolio segment for the three months ended March 31, 2020 and 2019.

(Dollars in millions)	Consumer Real Estate	Credit Card and Other Consumer	Commercial	Total
	Three Months Ended March 31, 2020			
Allowance for loan and lease losses, January 1	**$ 440**	**$ 7,430**	**$ 4,488**	**$ 12,358**
Loans and leases charged off	**(35)**	**(1,121)**	**(282)**	**(1,438)**
Recoveries of loans and leases previously charged off	**47**	**237**	**32**	**316**
Net charge-offs	**12**	**(884)**	**(250)**	**(1,122)**
Provision for loan and lease losses	**351**	**1,712**	**2,462**	**4,525**
Other (1)	**5**	**—**	**—**	**5**
Allowance for loan and lease losses, March 31	**808**	**8,258**	**6,700**	**15,766**
Reserve for unfunded lending commitments, January 1	**119**	**—**	**1,004**	**1,123**
Provision for unfunded lending commitments	**30**	**—**	**206**	**236**
Other (1)	**—**	**—**	**1**	**1**
Reserve for unfunded lending commitments, March 31	**149**	**—**	**1,211**	**1,360**
Allowance for credit losses, March 31	**$ 957**	**$ 8,258**	**$ 7,911**	**$ 17,126**
	Three Months Ended March 31, 2019			
Allowance for loan and lease losses, January 1	$ 928	$ 3,874	$ 4,799	$ 9,601
Loans and leases charged off	(103)	(1,057)	(177)	(1,337)
Recoveries of loans and leases previously charged off	108	217	21	346
Net charge-offs	5	(840)	(156)	(991)
Provision for loan and lease losses	(70)	900	178	1,008
Other (1)	(41)	—	—	(41)
Allowance for loan and lease losses, March 31	822	3,934	4,821	9,577
Reserve for unfunded lending commitments, January 1	—	—	797	797
Provision for unfunded lending commitments	—	—	5	5
Reserve for unfunded lending commitments, March 31	—	—	802	802
Allowance for credit losses, March 31	$ 822	$ 3,934	$ 5,623	$ 10,379

(1) Primarily represents write-offs of purchased credit-impaired loans in 2019, and the net impact of portfolio sales, transfers to held-for-sale and transfers to foreclosed properties.

The provision for credit losses, including unfunded lending commitments, increased $3.7 billion to $4.8 billion for the three months ended March 31, 2020 compared to the same period in 2019 driven by deterioration in the economic outlook resulting from the impact of COVID-19. At March 31, 2020, the allowance for credit losses for the Corporation's other relevant assets was insignificant.

NOTE 6 Securitizations and Other Variable Interest Entities

The Corporation utilizes VIEs in the ordinary course of business to support its own and its customers' financing and investing needs. The tables in this Note present the assets, liabilities and maximum loss exposure of consolidated and unconsolidated VIEs at March 31, 2020 and December 31, 2019 in situations where the Corporation has continuing involvement with transferred assets or if the Corporation otherwise has a variable interest in the VIE. For more information on the Corporation's use of VIEs and related maximum loss exposure, see *Note 1 – Summary of Significant Accounting Principles* and *Note 7 – Securitizations and Other Variable Interest Entities* to the Consolidated Financial Statements of the Corporation's 2019 Annual Report on Form 10-K.

The Corporation invests in ABS issued by third-party VIEs with which it has no other form of involvement and enters into certain commercial lending arrangements that may also incorporate the use of VIEs, for example to hold collateral. These securities and loans are included in *Note 4 – Securities* or *Note 5 – Outstanding Loans and Leases and Allowance for Credit Losses.*

The Corporation did not provide financial support to consolidated or unconsolidated VIEs during the three months ended March 31, 2020 or the year ended December 31, 2019 that it was not previously contractually required to provide, nor does it intend to do so.

The Corporation had liquidity commitments, including written put options and collateral value guarantees, with certain unconsolidated VIEs of $933 million and $1.1 billion at March 31, 2020 and December 31, 2019.

First-lien Mortgage Securitizations

As part of its mortgage banking activities, the Corporation securitizes a portion of the first-lien residential mortgage loans it originates or purchases from third parties. Except as described in *Note 10 – Commitments and Contingencies*, the Corporation does not provide guarantees or recourse to the securitization trusts other than standard representations and warranties.

The table below summarizes select information related to first-lien mortgage securitizations for the three months ended March 31, 2020 and 2019.

First-lien Mortgage Securitizations

	Residential Mortgage - Agency		Commercial Mortgage	
	Three Months Ended March 31			
(Dollars in millions)	**2020**	2019	**2020**	2019
Proceeds from loan sales (1)	**$ 1,552**	$ 1,096	**$ 2,072**	$ 987
Gains on securitizations (2)	**6**	7	**41**	17
Repurchases from securitization trusts (3)	**128**	244	**—**	—

(1) The Corporation transfers residential mortgage loans to securitizations sponsored primarily by the GSEs or Government National Mortgage Association (GNMA) in the normal course of business and primarily receives residential mortgage-backed securities in exchange. Substantially all of these securities are classified as Level 2 within the fair value hierarchy and are sold shortly after receipt.
(2) A majority of the first-lien residential mortgage loans securitized are initially classified as LHFS and accounted for under the fair value option. Gains recognized on these LHFS prior to securitization, which totaled $27 million and $8 million, net of hedges, during the three months ended March 31, 2020 and 2019, are not included in the table above.
(3) The Corporation may have the option to repurchase delinquent loans out of securitization trusts, which reduces the amount of servicing advances it is required to make. The Corporation may also repurchase loans from securitization trusts to perform modifications. Repurchased loans include FHA-insured mortgages collateralizing GNMA securities.

The Corporation recognizes consumer mortgage servicing rights (MSRs) from the sale or securitization of consumer real estate loans. The unpaid principal balance of loans serviced for investors, including residential mortgage and home equity loans, totaled $182.9 billion and $219.5 billion at March 31, 2020 and 2019. Servicing fee and ancillary fee income on serviced loans was $128 million and $148 million during the three months ended March 31, 2020 and 2019. Servicing advances on serviced loans, including loans serviced for others and loans held for investment, were $2.1 billion and $2.4 billion at March 31, 2020 and December 31, 2019. For more information on MSRs, see *Note 14 – Fair Value Measurements*.

During the three months ended March 31, 2019, the Corporation deconsolidated agency residential mortgage securitization trusts with total assets of $705 million. There were no significant deconsolidations during the three months ended March 31, 2020.

The following table summarizes select information related to first-lien mortgage securitization trusts in which the Corporation held a variable interest at March 31, 2020 and December 31, 2019.

First-lien Mortgage VIEs

	Residential Mortgage									
			Non-agency							
	Agency		Prime		Subprime		Alt-A		Commercial Mortgage	
(Dollars in millions)	**March 31 2020**	December 31 2019	**March 31 2020**	December 31 2019	**March 31 2020**	December 31 2019	**March 31 2020**	December 31 2019	**March 31 2020**	December 31 2019
Unconsolidated VIEs										
Maximum loss exposure (1)	**$ 12,228**	$ 12,554	**$ 317**	$ 340	**$ 1,381**	$ 1,622	**$ 86**	$ 98	**$ 1,102**	$ 1,036
On-balance sheet assets										
Senior securities:										
Trading account assets	**$ 641**	$ 627	**$ 12**	$ 5	**$ 23**	$ 54	**$ 26**	$ 24	**$ 73**	$ 65
Debt securities carried at fair value	**5,419**	6,392	**165**	193	**996**	1,178	**59**	72	**—**	—
Held-to-maturity securities	**6,168**	5,535	**—**	—	**—**	—	**—**	—	**867**	809
All other assets	**—**	—	**7**	2	**31**	49	**1**	2	**50**	38
Total retained positions	**$ 12,228**	$ 12,554	**$ 184**	$ 200	**$ 1,050**	$ 1,281	**$ 86**	$ 98	**$ 990**	$ 912
Principal balance outstanding (2)	**$ 153,421**	$ 160,226	**$ 7,400**	$ 7,268	**$ 7,687**	$ 8,594	**$ 18,997**	$ 19,878	**$ 60,748**	$ 60,129
Consolidated VIEs										
Maximum loss exposure (1)	**$ 10,852**	$ 10,857	**$ —**	$ 5	**$ 45**	$ 44	**$ —**	$ —	**$ —**	$ —
On-balance sheet assets										
Trading account assets	**$ 1,210**	$ 780	**$ 100**	$ 116	**$ 216**	$ 149	**$ —**	$ —	**$ —**	$ —
Loans and leases, net	**9,478**	9,917	**—**	—	**—**	—	**—**	—	**—**	—
All other assets	**164**	161	**—**	—	**—**	—	**—**	—	**—**	—
Total assets	**$ 10,852**	$ 10,858	**$ 100**	$ 116	**$ 216**	$ 149	**$ —**	$ —	**$ —**	$ —
Total liabilities	**$ 2**	$ 4	**$ 100**	$ 111	**$ 171**	$ 105	**$ —**	$ —	**$ —**	$ —

(1) Maximum loss exposure includes obligations under loss-sharing reinsurance and other arrangements for non-agency residential mortgage and commercial mortgage securitizations, but excludes the reserve for representations and warranties obligations and corporate guarantees and also excludes servicing advances and other servicing rights and obligations. For more information, see *Note 10 – Commitments and Contingencies* and *Note 14 – Fair Value Measurements*.
(2) Principal balance outstanding includes loans where the Corporation was the transferor to securitization VIEs with which it has continuing involvement, which may include servicing the loans.

Other Asset-backed Securitizations

The following table summarizes select information related to home equity, credit card and other asset-backed VIEs in which the Corporation held a variable interest at March 31, 2020 and December 31, 2019.

Home Equity Loan, Credit Card and Other Asset-backed VIEs

(Dollars in millions)	Home Equity [1] March 31 2020	Home Equity [1] December 31 2019	Credit Card [2, 3] March 31 2020	Credit Card [2, 3] December 31 2019	Resecuritization Trusts March 31 2020	Resecuritization Trusts December 31 2019	Municipal Bond Trusts March 31 2020	Municipal Bond Trusts December 31 2019
Unconsolidated VIEs								
Maximum loss exposure	**$ 386**	$ 412	**$ —**	$ —	**$ 6,409**	$ 7,526	**$ 3,412**	$ 3,701
On-balance sheet assets								
Senior securities [4]:								
Trading account assets	**$ —**	$ —	**$ —**	$ —	**$ 1,262**	$ 2,188	**$ 213**	$ —
Debt securities carried at fair value	**10**	11	**—**	—	**1,097**	1,126	**—**	—
Held-to-maturity securities	**—**	—	**—**	—	**4,050**	4,212	**—**	—
Total retained positions	**$ 10**	$ 11	**$ —**	$ —	**$ 6,409**	$ 7,526	**$ 213**	$ —
Total assets of VIEs [5]	**$ 961**	$ 1,023	**$ —**	$ —	**$ 15,082**	$ 21,234	**$ 3,960**	$ 4,395
Consolidated VIEs								
Maximum loss exposure	**$ 73**	$ 64	**$ 17,392**	$ 17,915	**$ 196**	$ 54	**$ 1,966**	$ 2,656
On-balance sheet assets								
Trading account assets	**$ —**	$ —	**$ —**	$ —	**$ 214**	$ 73	**$ 1,790**	$ 2,480
Loans and leases	**111**	122	**25,156**	26,985	**—**	—	**—**	—
Allowance for loan and lease losses	**17**	(2)	**(1,483)**	(800)	**—**	—	**—**	—
All other assets	**4**	3	**103**	119	**—**	—	**176**	176
Total assets	**$ 132**	$ 123	**$ 23,776**	$ 26,304	**$ 214**	$ 73	**$ 1,966**	$ 2,656
On-balance sheet liabilities								
Short-term borrowings	**$ —**	$ —	**$ —**	$ —	**$ —**	$ —	**$ 1,147**	$ 2,175
Long-term debt	**59**	64	**6,371**	8,372	**18**	19	**—**	—
All other liabilities	**—**	—	**13**	17	**—**	—	**—**	—
Total liabilities	**$ 59**	$ 64	**$ 6,384**	$ 8,389	**$ 18**	$ 19	**$ 1,147**	$ 2,175

(1) For unconsolidated home equity loan VIEs, the maximum loss exposure includes outstanding trust certificates issued by trusts in rapid amortization, net of recorded reserves. For both consolidated and unconsolidated home equity loan VIEs, the maximum loss exposure excludes the reserve for representations and warranties obligations and corporate guarantees. For more information, see *Note 10 – Commitments and Contingencies*.
(2) At March 31, 2020 and December 31, 2019, loans and leases in the consolidated credit card trust included $11.0 billion and $10.5 billion of seller's interest.
(3) At March 31, 2020 and December 31, 2019, all other assets in the consolidated credit card trust included unbilled accrued interest and fees.
(4) The retained senior securities were valued using quoted market prices or observable market inputs (Level 2 of the fair value hierarchy).
(5) Total assets of VIEs includes loans the Corporation transferred with which it has continuing involvement, which may include servicing the loan.

Home Equity Loans

The Corporation retains interests, primarily senior securities, in home equity securitization trusts to which it transferred home equity loans. In addition, the Corporation may be obligated to provide subordinate funding to the trusts during a rapid amortization event. This obligation is included in the maximum loss exposure in the table above. The charges that will ultimately be recorded as a result of the rapid amortization events depend on the undrawn portion of the HELOCs, performance of the loans, the amount of subsequent draws and the timing of related cash flows.

Credit Card Securitizations

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

No new senior debt securities were issued to third-party investors from the credit card securitization trust during the three months ended March 31, 2020 and 2019.

At March 31, 2020 and December 31, 2019, the Corporation held subordinate securities issued by the credit card securitization trust with a notional principal amount of $7.0 billion and $7.4 billion. These securities serve as a form of credit enhancement to the senior debt securities and have a stated interest rate of zero percent. No subordinate securities were issued by the credit card securitization trust during the three months ended March 31, 2020 and 2019.

Resecuritization Trusts

The Corporation transfers securities, typically MBS, into resecuritization VIEs at the request of customers seeking securities with specific characteristics. Generally, there are no significant ongoing activities performed in a resecuritization trust, and no single investor has the unilateral ability to liquidate the trust.

The Corporation resecuritized $7.4 billion and $4.4 billion of securities during the three months ended March 31, 2020 and 2019. Securities transferred into resecuritization VIEs were measured at fair value with changes in fair value recorded in market making and similar activities prior to the resecuritization and, accordingly, no gain or loss on sale was recorded. During the three months ended March 31, 2020 and 2019, resecuritization proceeds included securities with an initial fair value of $526 million and $1.3 billion. Substantially all of the other securities received as resecuritization proceeds were classified as trading securities and were categorized as Level 2 within the fair value hierarchy.

Municipal Bond Trusts

The Corporation administers municipal bond trusts that hold highly-rated, long-term, fixed-rate municipal bonds. The trusts obtain financing by issuing floating-rate trust certificates that reprice on a weekly or other short-term basis to third-party investors.

The Corporation's liquidity commitments to unconsolidated municipal bond trusts, including those for which the Corporation was transferor, totaled $3.2 billion and $3.7 billion at March 31, 2020 and December 31, 2019. The weighted-average remaining life of bonds held in the trusts at March 31, 2020 was 7.5 years. There were no significant write-downs or downgrades of assets or issuers during the three months ended March 31, 2020 and 2019.

Other Variable Interest Entities

The table below summarizes select information related to other VIEs in which the Corporation held a variable interest at March 31, 2020 and December 31, 2019.

Other VIEs

	Consolidated	Unconsolidated	Total	Consolidated	Unconsolidated	Total
(Dollars in millions)		March 31, 2020			December 31, 2019	
Maximum loss exposure	**$ 4,131**	**$ 25,448**	**$ 29,579**	$ 4,055	$ 26,326	$ 30,381
On-balance sheet assets						
Trading account assets	**$ 1,875**	**$ 577**	**$ 2,452**	$ 2,213	$ 549	$ 2,762
Debt securities carried at fair value	**—**	**71**	**71**	—	74	74
Loans and leases	**2,261**	**3,031**	**5,292**	1,810	3,214	5,024
Allowance for loan and lease losses	**(3)**	**(66)**	**(69)**	(2)	(38)	(40)
All other assets	**89**	**20,416**	**20,505**	81	20,547	20,628
Total	**$ 4,222**	**$ 24,029**	**$ 28,251**	$ 4,102	$ 24,346	$ 28,448
On-balance sheet liabilities						
Long-term debt	**$ 68**	**$ —**	**$ 68**	$ 46	$ —	$ 46
All other liabilities	**24**	**4,931**	**4,955**	2	5,087	5,089
Total	**$ 92**	**$ 4,931**	**$ 5,023**	$ 48	$ 5,087	$ 5,135
Total assets of VIEs	**$ 4,222**	**$ 99,229**	**$ 103,451**	$ 4,102	$ 98,491	$ 102,593

Customer VIEs

Customer VIEs include credit-linked, equity-linked and commodity-linked note VIEs, repackaging VIEs and asset acquisition VIEs, which are typically created on behalf of customers who wish to obtain market or credit exposure to a specific company, index, commodity or financial instrument.

The Corporation's maximum loss exposure to consolidated and unconsolidated customer VIEs totaled $1.9 billion and $2.2 billion at March 31, 2020 and December 31, 2019, including the notional amount of derivatives to which the Corporation is a counterparty, net of losses previously recorded, and the Corporation's investment, if any, in securities issued by the VIEs.

Collateralized Debt Obligation VIEs

The Corporation receives fees for structuring CDO VIEs, which hold diversified pools of fixed-income securities, typically corporate debt or ABS, which the CDO VIEs fund by issuing multiple tranches of debt and equity securities. CDOs are generally managed by third-party portfolio managers. The Corporation typically transfers assets to these CDOs, holds securities issued by the CDOs and may be a derivative counterparty to the CDOs. The Corporation's maximum loss exposure to consolidated and unconsolidated CDOs totaled $209 million and $304 million at March 31, 2020 and December 31, 2019.

Investment VIEs

The Corporation sponsors, invests in or provides financing, which may be in connection with the sale of assets, to a variety of investment VIEs that hold loans, real estate, debt securities or other financial instruments and are designed to provide the desired investment profile to investors or the Corporation. At March 31, 2020 and December 31, 2019, the Corporation's consolidated investment VIEs had total assets of $595 million and $104 million. The Corporation also held investments in unconsolidated VIEs with total assets of $35.0 billion and $32.4 billion at March 31, 2020 and December 31, 2019. The Corporation's maximum loss exposure associated with both consolidated and unconsolidated investment VIEs totaled $6.6 billion and $6.4 billion at March 31, 2020 and December 31, 2019 comprised primarily of on-balance sheet assets less non-recourse liabilities.

Leveraged Lease Trusts

The Corporation's net investment in consolidated leveraged lease trusts totaled $1.7 billion at both March 31, 2020 and December 31, 2019. The trusts hold long-lived equipment such as rail cars, power generation and distribution equipment, and commercial
aircraft. The Corporation structures the trusts and holds a significant residual interest. The net investment represents the Corporation's maximum loss exposure to the trusts in the unlikely event that the leveraged lease investments become worthless. Debt issued by the leveraged lease trusts is non-recourse to the Corporation.

Tax Credit VIEs

The Corporation holds investments in unconsolidated limited partnerships and similar entities that construct, own and operate affordable housing, wind and solar projects. An unrelated third party is typically the general partner or managing member and has control over the significant activities of the VIE. The Corporation earns a return primarily through the receipt of tax credits allocated to the projects. The maximum loss exposure included in the Other VIEs table was $19.0 billion and $18.9 billion at March 31, 2020 and December 31, 2019. The Corporation's risk of loss is generally mitigated by policies requiring that the project qualify for the expected tax credits prior to making its investment.

The Corporation's investments in affordable housing partnerships, which are reported in other assets on the Consolidated Balance Sheet, totaled $10.0 billion, including unfunded commitments to provide capital contributions of $4.3 billion at both March 31, 2020 and December 31, 2019. The unfunded commitments are expected to be paid over the next five years. During the three months ended March 31, 2020 and 2019, the Corporation recognized tax credits and other tax benefits from investments in affordable housing partnerships of $268 million and $280 million and reported pretax losses in other income of $272 million and $248 million. Tax credits are recognized as part of the Corporation's annual effective tax rate used to determine tax expense in a given quarter. Accordingly, the portion of a year's expected tax benefits recognized in any given quarter may differ from 25 percent. The Corporation may from time to time be asked to invest additional amounts to support a troubled affordable housing project. Such additional investments have not been and are not expected to be significant.

NOTE 7 Goodwill and Intangible Assets

Goodwill

The table below presents goodwill balances by business segment and *All Other* at March 31, 2020 and December 31, 2019. The reporting units utilized for goodwill impairment testing are the operating segments or one level below. For more information, see *Note 7 – Goodwill and Intangible Assets* to the Consolidated Financial Statements of the Corporation's 2019 Annual Report on Form 10-K.

Goodwill

(Dollars in millions)		March 31 2020		December 31 2019
Consumer Banking	**$**	**30,123**	$	30,123
Global Wealth & Investment Management		**9,677**		9,677
Global Banking		**23,923**		23,923
Global Markets		**5,182**		5,182
All Other		**46**		46
Total goodwill	**$**	**68,951**	$	68,951

Intangible Assets

At March 31, 2020 and December 31, 2019, the net carrying value of intangible assets was $1.6 billion and $1.7 billion. At March 31, 2020 and December 31, 2019, intangible assets included $1.6 billion of intangible assets associated with trade names, substantially all of which had an indefinite life and, accordingly, are not being amortized. Amortization of intangibles expense was $16 million and $26 million for the three months ended March 31, 2020 and 2019.

NOTE 8 Leases

The Corporation enters into both lessor and lessee arrangements. For more information on lease accounting, see *Note 1 – Summary of Significant Accounting Principles* and *Note 9 – Leases* to the Consolidated Financial Statements of the Corporation's 2019 Annual Report on Form 10-K. For more information on lease financing receivables, see *Note 5 – Outstanding Loans and Leases and Allowance for Credit Losses*.

Lessor Arrangements

The Corporation's lessor arrangements primarily consist of operating, sales-type and direct financing leases for equipment. Lease agreements may include options to renew and for the lessee to purchase the leased equipment at the end of the lease term.

At March 31, 2020 and December 31, 2019, the total net investment in sales-type and direct financing leases was $21.3 billion and $21.9 billion, comprised of $18.8 billion and $19.3 billion in lease receivables and $2.5 billion and $2.6 billion in unguaranteed residuals. In certain cases, the Corporation obtains third-party residual value insurance to reduce its residual asset risk. The carrying value of residual assets with third-party residual value insurance for at least a portion of the asset value was $6.2 billion and $5.8 billion at March 31, 2020 and December 31, 2019.

For the three months ended March 31, 2020 and 2019, total lease income was $440 million and $426 million, consisting of $197 million and $205 million from sales-type and direct financing leases and $243 million and $221 million from operating leases.

Lessee Arrangements

The Corporation's lessee arrangements predominantly consist of operating leases for premises and equipment; the Corporation's financing leases are not significant. Right-of-use assets were $10.1 billion and $9.7 billion and lease liabilities were $10.4 billion and $10.1 billion at March 31, 2020 and December 31, 2019.

NOTE 9 Federal Funds Sold or Purchased, Securities Financing Agreements, Short-term Borrowings and Restricted Cash

The table below presents federal funds sold or purchased, securities financing agreements (which include securities borrowed or purchased under agreements to resell and securities loaned or sold under agreements to repurchase) and short-term borrowings. The Corporation elects to account for certain securities financing agreements and short-term borrowings under the fair value option. For more information on the fair value option, see *Note 15 – Fair Value Option*.

		Amount	**Rate**		Amount	Rate
	Three Months Ended March 31					
(Dollars in millions)		**2020**			2019	
Federal funds sold and securities borrowed or purchased under agreements to resell						
Average during period	**$**	**278,794**	**1.18%**	$	274,308	1.77%
Maximum month-end balance during period		**301,969**	**n/a**		280,562	n/a
Federal funds purchased and securities loaned or sold under agreements to repurchase						
Average during period	**$**	**199,539**	**1.60%**	$	200,154	2.44%
Maximum month-end balance during period		**206,493**	**n/a**		200,486	n/a
Short-term borrowings						
Average during period		**26,430**	**1.62**		15,432	2.95
Maximum month-end balance during period		**30,118**	**n/a**		14,848	n/a

n/a = not applicable

Offsetting of Securities Financing Agreements

The Corporation enters into securities financing agreements to accommodate customers (also referred to as "matched-book transactions"), obtain securities to cover short positions and finance inventory positions. For more information on the securities financing agreements and the offsetting of securities financing transactions, see *Note 11 – Federal Funds Sold or Purchased, Securities Financing Agreements, Short-term Borrowings and Restricted Cash* to the Consolidated Financial Statements of the Corporation's 2019 Annual Report on Form 10-K.

The Securities Financing Agreements table presents securities financing agreements included on the Consolidated Balance Sheet in federal funds sold and securities borrowed or purchased under agreements to resell, and in federal funds purchased and securities loaned or sold under agreements to repurchase at March 31, 2020 and December 31, 2019. Balances are presented on a gross basis, prior to the application of counterparty netting. Gross assets and liabilities are adjusted on an aggregate basis to take into consideration the effects of legally enforceable master netting agreements. For more information on the offsetting of derivatives, see *Note 3 – Derivatives*.

Securities Financing Agreements

(Dollars in millions)	Gross Assets/Liabilities (1)	Amounts Offset	Net Balance Sheet Amount	Financial Instruments (2)	Net Assets/Liabilities
			March 31, 2020		
Securities borrowed or purchased under agreements to resell (3)	**$ 461,366**	**$ (159,397)**	**$ 301,969**	**$ (266,713)**	**$ 35,256**
Securities loaned or sold under agreements to repurchase	**$ 329,440**	**$ (159,397)**	**$ 170,043**	**$ (147,064)**	**$ 22,979**
Other (4)	**6,618**	**—**	**6,618**	**(6,618)**	**—**
Total	**$ 336,058**	**$ (159,397)**	**$ 176,661**	**$ (153,682)**	**$ 22,979**
			December 31, 2019		
Securities borrowed or purchased under agreements to resell (3)	$ 434,257	$ (159,660)	$ 274,597	$ (244,486)	$ 30,111
Securities loaned or sold under agreements to repurchase	$ 324,769	$ (159,660)	$ 165,109	$ (141,482)	$ 23,627
Other (4)	15,346	—	15,346	(15,346)	—
Total	$ 340,115	$ (159,660)	$ 180,455	$ (156,828)	$ 23,627

(1) Includes activity where uncertainty exists as to the enforceability of certain master netting agreements under bankruptcy laws in some countries or industries.
(2) Includes securities collateral received or pledged under repurchase or securities lending agreements where there is a legally enforceable master netting agreement. These amounts are not offset on the Consolidated Balance Sheet, but are shown as a reduction to derive a net asset or liability. Securities collateral received or pledged where the legal enforceability of the master netting agreements is uncertain is excluded from the table.
(3) Excludes repurchase activity of $13.1 billion and $12.9 billion reported in loans and leases on the Consolidated Balance Sheet at March 31, 2020 and December 31, 2019.
(4) Balance is reported in accrued expenses and other liabilities on the Consolidated Balance Sheet and relates to transactions where the Corporation acts as the lender in a securities lending agreement and receives securities that can be pledged as collateral or sold. In these transactions, the Corporation recognizes an asset at fair value, representing the securities received, and a liability, representing the obligation to return those securities.

Repurchase Agreements and Securities Loaned Transactions Accounted for as Secured Borrowings

The following tables present securities sold under agreements to repurchase and securities loaned by remaining contractual term to maturity and class of collateral pledged. Included in "Other" are transactions where the Corporation acts as the lender in a securities lending agreement and receives securities that can be pledged as collateral or sold. Certain agreements contain a right to substitute collateral and/or terminate the agreement prior to maturity at the option of the Corporation or the counterparty. Such agreements are included in the table below based on the remaining contractual term to maturity. For more information on collateral requirements, see *Note 11 – Federal Funds Sold or Purchased, Securities Financing Agreements, Short-term Borrowings and Restricted Cash* to the Consolidated Financial Statements of the Corporation's 2019 Annual Report on Form 10-K.

Remaining Contractual Maturity

(Dollars in millions)	Overnight and Continuous	30 Days or Less	After 30 Days Through 90 Days	Greater than 90 Days (1)	Total
			March 31, 2020		
Securities sold under agreements to repurchase	**$ 142,680**	**$ 104,485**	**$ 29,017**	**$ 33,127**	**$ 309,309**
Securities loaned	**16,658**	**523**	**779**	**2,171**	**20,131**
Other	**6,618**	**—**	**—**	**—**	**6,618**
Total	**$ 165,956**	**$ 105,008**	**$ 29,796**	**$ 35,298**	**$ 336,058**
			December 31, 2019		
Securities sold under agreements to repurchase	$ 129,455	$ 122,685	$ 25,322	$ 21,922	$ 299,384
Securities loaned	18,766	3,329	1,241	2,049	25,385
Other	15,346	—	—	—	15,346
Total	$ 163,567	$ 126,014	$ 26,563	$ 23,971	$ 340,115

(1) No agreements have maturities greater than three years.

Class of Collateral Pledged

(Dollars in millions)	Securities Sold Under Agreements to Repurchase	Securities Loaned	Other	Total
	March 31, 2020			
U.S. government and agency securities	**$ 174,900**	**$ —**	**$ —**	**$ 174,900**
Corporate securities, trading loans and other	**10,801**	**2,394**	**241**	**13,436**
Equity securities	**11,252**	**15,872**	**6,324**	**33,448**
Non-U.S. sovereign debt	**107,565**	**1,865**	**53**	**109,483**
Mortgage trading loans and ABS	**4,791**	**—**	**—**	**4,791**
Total	**$ 309,309**	**$ 20,131**	**$ 6,618**	**$ 336,058**
	December 31, 2019			
U.S. government and agency securities	$ 173,533	$ 1	$ —	$ 173,534
Corporate securities, trading loans and other	10,467	2,014	258	12,739
Equity securities	14,933	20,026	15,024	49,983
Non-U.S. sovereign debt	96,576	3,344	64	99,984
Mortgage trading loans and ABS	3,875	—	—	3,875
Total	$ 299,384	$ 25,385	$ 15,346	$ 340,115

Restricted Cash

At March 31, 2020 and December 31, 2019, the Corporation held restricted cash included within cash and cash equivalents on the Consolidated Balance Sheet of $7.4 billion and $24.4 billion, predominantly related to cash held on deposit with the Federal Reserve Bank and non-U.S. central banks to meet reserve requirements and cash segregated in compliance with securities regulations.

NOTE 10 Commitments and Contingencies

In the normal course of business, the Corporation enters into a number of off-balance sheet commitments. These commitments expose the Corporation to varying degrees of credit and market risk and are subject to the same credit and market risk limitation reviews as those instruments recorded on the Consolidated Balance Sheet. For more information on commitments and contingencies, see *Note 13 – Commitments and Contingencies* to the Consolidated Financial Statements of the Corporation's 2019 Annual Report on Form 10-K.

Credit Extension Commitments

The Corporation enters into commitments to extend credit such as loan commitments, SBLCs and commercial letters of credit to meet the financing needs of its customers. The following table includes the notional amount of unfunded legally binding lending commitments net of amounts distributed (i.e., syndicated or participated) to other financial institutions. The distributed amounts were $10.5 billion and $10.6 billion at March 31, 2020 and December 31, 2019. At March 31, 2020, the carrying value of these commitments, excluding commitments accounted for under the fair value option, was $1.4 billion, including deferred revenue of $18 million and a reserve for unfunded lending commitments of $1.4 billion. At December 31, 2019, the comparable amounts were $829 million, $16 million and $813 million, respectively. The carrying value of these commitments is classified in accrued expenses and other liabilities on the Consolidated Balance Sheet.

Legally binding commitments to extend credit generally have specified rates and maturities. Certain of these commitments have adverse change clauses that help to protect the Corporation against deterioration in the borrower's ability to pay.

The table below includes the notional amount of commitments of $3.8 billion and $4.4 billion at March 31, 2020 and December 31, 2019 that are accounted for under the fair value option. However, the table excludes cumulative net fair value of $207 million and $90 million at March 31, 2020 and December 31, 2019 on these commitments, which is classified in accrued expenses and other liabilities. For more information regarding the Corporation's loan commitments accounted for under the fair value option, see *Note 15 – Fair Value Option.*

Credit Extension Commitments

(Dollars in millions)		Expire in One Year or Less		Expire After One Year Through Three Years		Expire After Three Years Through Five Years		Expire After Five Years		Total
						March 31, 2020				
Notional amount of credit extension commitments										
Loan commitments (1)	**$**	**91,682**	**$**	**126,412**	**$**	**142,815**	**$**	**17,232**	**$**	**378,141**
Home equity lines of credit		**948**		**2,085**		**7,109**		**33,530**		**43,672**
Standby letters of credit and financial guarantees (2)		**23,695**		**9,201**		**3,346**		**375**		**36,617**
Letters of credit (3)		**978**		**147**		**58**		**53**		**1,236**
Legally binding commitments		**117,303**		**137,845**		**153,328**		**51,190**		**459,666**
Credit card lines (4)		**385,893**		**—**		**—**		**—**		**385,893**
Total credit extension commitments	**$**	**503,196**	**$**	**137,845**	**$**	**153,328**	**$**	**51,190**	**$**	**845,559**
						December 31, 2019				
Notional amount of credit extension commitments										
Loan commitments (1)	$	97,454	$	148,000	$	173,699	$	24,487	$	443,640
Home equity lines of credit		1,137		1,948		6,351		34,134		43,570
Standby letters of credit and financial guarantees (2)		21,311		11,512		3,712		408		36,943
Letters of credit (3)		1,156		254		65		25		1,500
Legally binding commitments		121,058		161,714		183,827		59,054		525,653
Credit card lines (4)		376,067		—		—		—		376,067
Total credit extension commitments	$	497,125	$	161,714	$	183,827	$	59,054	$	901,720

(1) At March 31, 2020 and December 31, 2019, $4.4 billion and $5.1 billion of these loan commitments are held in the form of a security.
(2) The notional amounts of SBLCs and financial guarantees classified as investment grade and non-investment grade based on the credit quality of the underlying reference name within the instrument were $27.2 billion and $9 billion at March 31, 2020, and $27.9 billion and $8.6 billion at December 31, 2019. Amounts in the table include consumer SBLCs of $439 million and $413 million at March 31, 2020 and December 31, 2019.
(3) At March 31, 2020 and December 31, 2019, included are letters of credit of $1.7 billion and $1.4 billion related to certain liquidity commitments of VIEs. For more information, see *Note 6 – Securitizations and Other Variable Interest Entities*.
(4) Includes business card unused lines of credit.

Other Commitments

At March 31, 2020 and December 31, 2019, the Corporation had commitments to purchase loans (e.g., residential mortgage and commercial real estate) of $141 million and $86 million, which upon settlement will be included in loans or LHFS, and commitments to purchase commercial loans of $1.1 billion in both periods, which upon settlement will be included in trading account assets.

At March 31, 2020 and December 31, 2019, the Corporation had commitments to purchase commodities, primarily liquefied natural gas, of $488 million and $830 million, which upon settlement will be included in trading account assets.

At March 31, 2020 and December 31, 2019, the Corporation had commitments to enter into resale and forward-dated resale and securities borrowing agreements of $81.6 billion and $97.2 billion, and commitments to enter into forward-dated repurchase and securities lending agreements of $33.3 billion and $24.9 billion. These commitments expire primarily within the next 12 months.

At March 31, 2020 and December 31, 2019, the Corporation had a commitment to originate or purchase up to $3.4 billion and $3.3 billion on a rolling 12-month basis, of auto loans and leases from a strategic partner. This commitment extends through November 2022 and can be terminated with 12 months prior notice.

Other Guarantees

Bank-owned Life Insurance Book Value Protection

The Corporation sells products that offer book value protection to insurance carriers who offer group life insurance policies to corporations, primarily banks. At both March 31, 2020 and December 31, 2019, the notional amount of these guarantees totaled $7.3 billion. At both March 31, 2020 and December 31, 2019, the Corporation’s maximum exposure related to these guarantees totaled $1.1 billion, with estimated maturity dates between 2033 and 2039.

Merchant Services

In accordance with credit and debit card association rules, the Corporation sponsors merchant processing servicers that process credit and debit card transactions on behalf of various merchants. If a merchant processor fails to meet its obligation regarding disputed transactions, then the Corporation could be held liable. For the three months ended March 31, 2020 and 2019, the sponsored entities processed $203.7 billion and $205.6 billion of transactions and recorded losses of $7 million and $4 million.

At March 31, 2020 and December 31, 2019, the maximum potential exposure for sponsored transactions totaled $365.7 billion and $384.2 billion. However, the Corporation believes that the maximum potential exposure is not representative of the actual potential loss exposure.

A significant portion of the Corporation's merchant processing activity is performed by a joint venture, formed in 2009, in which the Corporation holds a 49 percent ownership interest. The carrying value of the Corporation’s investment was $649 million and $640 million at March 31, 2020 and December 31, 2019. The joint venture is accounted for as an equity method investment and reported in *All Other*. On July 29, 2019, the Corporation gave notice to the joint venture partner of the termination of the joint venture upon the conclusion of its current term in June 2020. As a result, the Corporation incurred a non-cash, pretax impairment charge in 2019 of $2.1 billion, included in other general operating expense.

Representations and Warranties Obligations and Corporate Guarantees

For more information on representations and warranties obligations and corporate guarantees, see *Note 13 – Commitments and Contingencies* to the Consolidated Financial Statements of the Corporation’s 2019 Annual Report on Form 10-K.

The reserve for representations and warranties obligations and corporate guarantees was $1.4 billion and $1.8 billion at March 31, 2020 and December 31, 2019 and is included in accrued expenses and other liabilities on the Consolidated Balance Sheet and the related provision is included in other income in the Consolidated Statement of Income. The representations and warranties reserve represents the Corporation's best estimate of probable incurred losses, is based on our experience in previous negotiations, and is subject to judgment, a variety of assumptions, and known or unknown uncertainties. Future representations and warranties losses may occur in excess of the amounts recorded for these exposures; however, the Corporation does not expect such amounts to be material to the Corporation's financial condition and liquidity. See Litigation and Regulatory Matters below for the Corporation's combined range of possible loss in excess of the reserve for representations and warranties and the accrued liability for litigation.

Fixed Income Clearing Corporation Sponsored Member Repo Program

The Corporation acts as a sponsoring member in a repo program whereby the Corporation clears certain eligible resale and repurchase agreements through the Government Securities Division of the Fixed Income Clearing Corporation on behalf of clients that are sponsored members in accordance with the Fixed Income Clearing Corporation's rules. As part of this program, the Corporation guarantees the payment and performance of its sponsored members to the Fixed Income Clearing Corporation. The Corporation's guarantee obligation is secured by a security interest in cash or high-quality securities collateral placed by clients with the clearinghouse and therefore, the potential for the Corporation to incur significant losses under this arrangement is remote. The Corporation's maximum potential exposure, without taking into consideration the related collateral, was $5.4 billion and $9.3 billion at March 31, 2020 and December 31, 2019.

Other Guarantees

The Corporation has entered into additional guarantee agreements and commitments, including sold risk participation swaps, liquidity facilities, lease-end obligation agreements, partial credit guarantees on certain leases, real estate joint venture guarantees, divested business commitments and sold put options that require gross settlement. The maximum potential future payments under these agreements are approximately $8.8 billion and $8.7 billion at March 31, 2020 and December 31, 2019. The estimated maturity dates of these obligations extend up to 2048. The Corporation has made no material payments under these guarantees. For more information on maximum potential future payments under VIE-related liquidity commitments, see *Note 6 – Securitizations and Other Variable Interest Entities*.

In the normal course of business, the Corporation periodically guarantees the obligations of its affiliates in a variety of transactions including ISDA-related transactions and non-ISDA related transactions such as commodities trading, repurchase agreements, prime brokerage agreements and other transactions.

Guarantees of Certain Long-term Debt

The Corporation, as the parent company, fully and unconditionally guarantees the securities issued by BofA Finance LLC, a 100 percent owned finance subsidiary of the Corporation, and effectively provides for the full and unconditional guarantee of trust securities issued by certain statutory trust companies that are 100 percent owned finance subsidiaries of the Corporation.

Litigation and Regulatory Matters

The following disclosure supplements the disclosure in *Note 13 – Commitments and Contingencies* to the Consolidated Financial Statements of the Corporation's 2019 Annual Report on Form 10-K (the prior commitments and contingencies disclosure).

In the ordinary course of business, the Corporation and its subsidiaries are routinely defendants in or parties to many pending and threatened legal, regulatory and governmental actions and proceedings. In view of the inherent difficulty of predicting the outcome of such matters, particularly where the claimants seek very large or indeterminate damages or where the matters present novel legal theories or involve a large number of parties, the Corporation generally cannot predict the eventual outcome of the pending matters, the timing of the ultimate resolution of these matters, or any eventual loss, fines or penalties related to each pending matter.

In accordance with applicable accounting guidance, the Corporation establishes an accrued liability when those matters present loss contingencies that are both probable and estimable. In such cases, there may be an exposure to loss in excess of any amounts accrued. As a matter develops, the Corporation, in conjunction with any outside counsel handling the matter, evaluates on an ongoing basis whether such matter presents a loss contingency that is probable and estimable. Once the loss contingency is deemed to be both probable and estimable, the Corporation will establish an accrued liability and record a corresponding amount of litigation-related expense. The Corporation continues to monitor the matter for further developments that could affect the amount of the accrued liability that has been previously established. Excluding expenses of internal and external legal service providers, litigation-related expense of $24 million and $73 million was recognized for the three months ended March 31, 2020 and 2019.

For a limited number of the matters disclosed in this Note, and in the prior commitments and contingencies disclosure, for which a loss, whether in excess of a related accrued liability or where there is no accrued liability, is reasonably possible in future periods, the Corporation is able to estimate a range of possible loss. In determining whether it is possible to estimate a range of possible loss, the Corporation reviews and evaluates these matters on an ongoing basis, in conjunction with any outside counsel handling the matter, in light of potentially relevant factual and legal developments. With respect to such matters, in cases in which the Corporation possesses sufficient appropriate information to estimate a range of possible loss, that estimate is aggregated and disclosed below. There may be other disclosed matters for which a loss is probable or reasonably possible but such an estimate of the range of possible loss may not be possible. For those disclosed matters where an estimate of the range of possible loss is possible, as well as for representations and warranties exposures, management currently estimates the aggregate range of reasonably possible loss for these exposures is $0 to $1.6 billion in excess of the accrued liability, if any.

The estimated range of possible loss, as well as the Corporation's accrued liability, is based upon currently available information and is subject to significant judgment, a variety of assumptions and known and unknown uncertainties. The matters underlying the estimated range of possible loss and liability accrual are unpredictable and will change from time to time, and actual losses may vary significantly from the current estimate or accrual. Therefore, this estimated range of possible loss represents what the Corporation believes to be an estimate of possible loss only for certain matters meeting these criteria. It does not represent the Corporation's maximum loss exposure.

Information is provided below, or in the prior commitments and contingencies disclosure regarding the nature of the litigation and, where specified, associated claimed damages. Based on current knowledge, and taking into account accrued liabilities, management does not believe that loss contingencies arising from pending matters, including the matter described below, and in the prior commitments and contingencies disclosure, will have a material adverse effect on the consolidated financial condition or liquidity of the Corporation. However, in light of the significant judgment, variety of assumptions and uncertainties involved in these matters, some of which are beyond the Corporation's control, and the very large or indeterminate damages sought in some of these matters, an adverse outcome in one or more of these matters could be material to the Corporation's business or results of operations for any particular reporting period, or cause significant reputational harm.

Mortgage Appraisal Litigation

On March 30, 2020, the District Court granted preliminary approval of the settlement.

NOTE 11 Shareholders' Equity

Common Stock

Declared Quarterly Cash Dividends on Common Stock (1)

Declaration Date	Record Date	Payment Date	Dividend Per Share
April 22, 2020	June 5, 2020	June 26, 2020	$ 0.18
January 29, 2020	March 6, 2020	March 27, 2020	0.18

(1) In 2020, and through May 1, 2020.

During the three months ended March 31, 2020, the Corporation repurchased 200 million shares of common stock in connection with the Board's 2019 repurchase authorizations, which reduced shareholders' equity by $6.4 billion.

During the three months ended March 31, 2020, in connection with employee stock plans, the Corporation issued 63 million shares of its common stock and, to satisfy tax withholding obligations, repurchased 24 million shares of its common stock. At March 31, 2020, the Corporation had reserved 517 million unissued shares of common stock for future issuances under employee stock plans, convertible notes and preferred stock.

Preferred Stock

During the three months ended March 31, 2020, the Corporation declared $469 million of cash dividends on preferred stock. On January 24, 2020, the Corporation issued 44,000 shares of Fixed-to-Floating Rate Non-Cumulative Preferred Stock, Series MM for $1.1 billion. Dividends are paid semi-annually during the fixed-rate period commencing on July 28, 2020, then quarterly during the floating-rate period commencing April 28, 2025. The Series MM preferred stock has a liquidation preference of $25,000 per share and is subject to certain restrictions in the event the Corporation fails to declare and pay full dividends. During the three months ended March 31, 2020, the Corporation fully redeemed Series Y preferred stock for $1.1 billion. For more information on the Corporation's preferred stock, including liquidation preference, dividend requirements and redemption period, see *Note 14 – Shareholders' Equity* to the Consolidated Financial Statements of the Corporation's 2019 Annual Report on Form 10-K.

Restricted Stock Units

During the three months ended March 31, 2020, the Corporation granted 86 million restricted stock unit (RSU) awards to certain employees under the Bank of America Corporation Key Employee Equity Plan. These RSUs were authorized to settle predominantly in shares of common stock of the Corporation. Certain RSUs will be settled in cash or contain settlement provisions that subject these awards to variable accounting whereby compensation expense is adjusted to fair value based on changes in the share price of the Corporation's common stock up to the settlement date. Of the RSUs granted during the three months ended March 31, 2020, 61 million will vest predominantly over three years with most vesting occurring in one-third increments on each of the first three anniversaries of the grant date provided that the employee remains continuously employed with the Corporation during that time, and will be expensed ratably over the vesting period, net of estimated forfeitures, for non-retirement eligible employees based on the grant-date fair value of the shares. For RSUs granted to employees who are retirement eligible, the awards are deemed authorized as of the beginning of the year preceding the grant date when the incentive award plans are generally approved. As a result, the estimated value is expensed ratably over the year preceding the grant date. Additionally, 25 million of the RSUs will vest predominantly over four years with most vesting occurring in one-fourth increments on each of the first four anniversaries of the grant date provided that the employee remains continuously employed with the Corporation during that time, and will be expensed ratably over the vesting period, net of estimated forfeitures, based on the grant-date fair value of the shares. For more information, see *Note 19 – Stock-based Compensation Plans* to the Consolidated Financial Statements of the Corporation's 2019 Annual Report on Form 10-K.

NOTE 12 Earnings Per Common Share

The calculation of earnings per common share (EPS) and diluted EPS for the three months ended March 31, 2020 and 2019 is presented below. For more information on the calculation of EPS, see *Note 1 – Summary of Significant Accounting Principles* to the Consolidated Financial Statements of the Corporation's 2019 Annual Report on Form 10-K.

	Three Months Ended March 31	
(In millions, except per share information)	**2020**	2019
Earnings per common share		
Net income	**$ 4,010**	$ 7,311
Preferred stock dividends	**(469)**	(442)
Net income applicable to common shareholders	**$ 3,541**	$ 6,869
Average common shares issued and outstanding	**8,815.6**	9,725.9
Earnings per common share	**$ 0.40**	$ 0.71
Diluted earnings per common share		
Net income applicable to common shareholders	**$ 3,541**	$ 6,869
Average common shares issued and outstanding	**8,815.6**	9,725.9
Dilutive potential common shares (1)	**47.1**	61.4
Total diluted average common shares issued and outstanding	**8,862.7**	9,787.3
Diluted earnings per common share	**$ 0.40**	$ 0.70

(1) Includes incremental dilutive shares from RSUs, restricted stock and warrants.

For both the three months ended March 31, 2020 and 2019, 62 million average dilutive potential common shares associated with the Series L preferred stock were not included in the diluted share count because the result would have been antidilutive under the "if-converted" method. For the three months ended March 31, 2019, average warrants to purchase 14 million shares of common stock, were included in the diluted EPS calculation under the treasury stock method. Substantially all of these warrants were exercised on or before their expiration date of January 16, 2019.

NOTE 13 Accumulated Other Comprehensive Income (Loss)

The table below presents the changes in accumulated OCI after-tax for the three months ended March 31, 2020 and 2019.

(Dollars in millions)	Debt Securities	Debit Valuation Adjustments	Derivatives	Employee Benefit Plans	Foreign Currency	Total
Balance, December 31, 2018	$ (5,552)	$ (531)	$ (1,016)	$ (4,304)	$ (808)	$ (12,211)
Net change	2,309	(363)	229	28	(34)	2,169
Balance, March 31, 2019	$ (3,243)	$ (894)	$ (787)	$ (4,276)	$ (842)	$ (10,042)
Balance, December 31, 2019	$ 323	$ (1,494)	$ (400)	$ (4,168)	$ (894)	$ (6,633)
Net change	**4,795**	**1,346**	**417**	**43**	**(88)**	**6,513**
Balance, March 31, 2020	**$ 5,118**	**$ (148)**	**$ 17**	**$ (4,125)**	**$ (982)**	**$ (120)**

The table below presents the net change in fair value recorded in accumulated OCI, net realized gains and losses reclassified into earnings and other changes for each component of OCI pre- and after-tax for the three months ended March 31, 2020 and 2019.

(Dollars in millions)	Pretax	Tax effect	After-tax	Pretax	Tax effect	After-tax
	Three Months Ended March 31					
	2020			2019		
Debt securities:						
Net increase in fair value	**$ 6,701**	**$ (1,670)**	**$ 5,031**	$ 3,075	$ (763)	$ 2,312
Net realized (gains) reclassified into earnings (1)	**(315)**	**79**	**(236)**	(4)	1	(3)
Net change	**6,386**	**(1,591)**	**4,795**	3,071	(762)	2,309
Debit valuation adjustments:						
Net increase (decrease) in fair value	**1,751**	**(408)**	**1,343**	(475)	110	(365)
Net realized losses reclassified into earnings (1)	**4**	**(1)**	**3**	3	(1)	2
Net change	**1,755**	**(409)**	**1,346**	(472)	109	(363)
Derivatives:						
Net increase in fair value	**520**	**(125)**	**395**	264	(52)	212
Reclassifications into earnings:						
Net interest income	**29**	**(7)**	**22**	23	(6)	17
Net realized losses reclassified into earnings	**29**	**(7)**	**22**	23	(6)	17
Net change	**549**	**(132)**	**417**	287	(58)	229
Employee benefit plans:						
Net actuarial losses and other reclassified into earnings (2)	**57**	**(14)**	**43**	35	(7)	28
Net change	**57**	**(14)**	**43**	35	(7)	28
Foreign currency:						
Net (decrease) in fair value	**228**	**(316)**	**(88)**	5	(39)	(34)
Net change	**228**	**(316)**	**(88)**	5	(39)	(34)
Total other comprehensive income (loss)	**$ 8,975**	**$ (2,462)**	**$ 6,513**	$ 2,926	$ (757)	$ 2,169

(1) Reclassifications of pretax debt securities, DVA and foreign currency (gains) losses are recorded in other income in the Consolidated Statement of Income.
(2) Reclassifications of pretax employee benefit plan costs are recorded in other general operating expense in the Consolidated Statement of Income.

NOTE 14 Fair Value Measurements

Under applicable accounting standards, fair value is defined as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. The Corporation determines the fair values of its financial instruments under applicable accounting standards and conducts a review of its fair value hierarchy classifications on a quarterly basis. Transfers into or out of fair value hierarchy classifications are made if the significant inputs used in the financial models measuring the fair values of the assets and liabilities become unobservable or observable in the current marketplace. During the three months ended March 31, 2020, there were no changes to valuation approaches or techniques that had, or are expected to have, a material impact on the Corporation's consolidated financial position or results of operations.

For more information regarding the fair value hierarchy, how the Corporation measures fair value and valuation techniques, see *Note 1 – Summary of Significant Accounting Principles* and *Note 21 – Fair Value Measurements* to the Consolidated Financial Statements of the Corporation's 2019 Annual Report on Form 10-K. The Corporation accounts for certain financial instruments under the fair value option. For more information, see *Note 15 – Fair Value Option*.

Recurring Fair Value

Assets and liabilities carried at fair value on a recurring basis at March 31, 2020 and December 31, 2019, including financial instruments that the Corporation accounts for under the fair value option, are summarized in the following tables.

	March 31, 2020				
	Fair Value Measurements				
(Dollars in millions)	Level 1	Level 2	Level 3	Netting Adjustments (1)	Assets/Liabilities at Fair Value
Assets					
Time deposits placed and other short-term investments	$ 1,084	$ —	$ —	$ —	$ 1,084
Federal funds sold and securities borrowed or purchased under agreements to resell	—	49,033	—	—	49,033
Trading account assets:					
U.S. Treasury and agency securities	37,646	4,172	—	—	41,818
Corporate securities, trading loans and other	—	27,504	1,640	—	29,144
Equity securities	41,486	25,454	249	—	67,189
Non-U.S. sovereign debt	7,871	22,653	250	—	30,774
Mortgage trading loans, MBS and ABS:					
U.S. government-sponsored agency guaranteed (2)	—	14,605	—	—	14,605
Mortgage trading loans, ABS and other MBS	—	8,060	1,733	—	9,793
Total trading account assets (3)	87,003	102,448	3,872	—	193,323
Derivative assets	26,134	498,231	1,856	(468,567)	57,654
AFS debt securities:					
U.S. Treasury and agency securities	67,763	933	—	—	68,696
Mortgage-backed securities:					
Agency	—	79,461	—	—	79,461
Agency-collateralized mortgage obligations	—	4,551	—	—	4,551
Non-agency residential	—	408	524	—	932
Commercial	—	15,602	—	—	15,602
Non-U.S. securities	1	12,245	1	—	12,247
Other taxable securities	—	5,824	68	—	5,892
Tax-exempt securities	—	18,740	100	—	18,840
Total AFS debt securities	67,764	137,764	693	—	206,221
Other debt securities carried at fair value:					
U.S. Treasury and agency securities	4	—	—	—	4
Agency MBS	—	6,089	—	—	6,089
Non-agency residential MBS	—	853	269	—	1,122
Non-U.S. and other securities	3,685	3,983	—	—	7,668
Total other debt securities carried at fair value	3,689	10,925	269	—	14,883
Loans and leases	—	8,458	558	—	9,016
Loans held-for-sale	—	2,532	1,077	—	3,609
Other assets (4)	3,864	965	1,960	—	6,789
Total assets (5)	**$ 189,538**	**$ 810,356**	**$ 10,285**	**$ (468,567)**	**$ 541,612**
Liabilities					
Interest-bearing deposits in U.S. offices	$ —	$ 589	$ —	$ —	$ 589
Federal funds purchased and securities loaned or sold under agreements to repurchase	—	17,192	—	—	17,192
Trading account liabilities:					
U.S. Treasury and agency securities	12,276	401	—	—	12,677
Equity securities	36,692	5,462	1	—	42,155
Non-U.S. sovereign debt	7,026	9,834	—	—	16,860
Corporate securities and other	—	5,439	20	—	5,459
Total trading account liabilities	55,994	21,136	21	—	77,151
Derivative liabilities	25,638	480,153	4,765	(455,898)	54,658
Short-term borrowings	—	3,020	—	—	3,020
Accrued expenses and other liabilities	5,541	1,284	—	—	6,825
Long-term debt	—	31,442	721	—	32,163
Total liabilities (5)	**$ 87,173**	**$ 554,816**	**$ 5,507**	**$ (455,898)**	**$ 191,598**

(1) Amounts represent the impact of legally enforceable master netting agreements and also cash collateral held or placed with the same counterparties.
(2) Includes $16.0 billion of GSE obligations.
(3) Includes securities with a fair value of $11.0 billion that were segregated in compliance with securities regulations or deposited with clearing organizations. This amount is included in the parenthetical disclosure on the Consolidated Balance Sheet.
(4) Includes MSRs of $1.2 billion which are classified as Level 3 assets.
(5) Total recurring Level 3 assets were 0.39 percent of total consolidated assets, and total recurring Level 3 liabilities were 0.23 percent of total consolidated liabilities.

	December 31, 2019				
	Fair Value Measurements				
(Dollars in millions)	Level 1	Level 2	Level 3	Netting Adjustments (1)	Assets/Liabilities at Fair Value
Assets					
Time deposits placed and other short-term investments	$ 1,000	$ —	$ —	$ —	$ 1,000
Federal funds sold and securities borrowed or purchased under agreements to resell	—	50,364	—	—	50,364
Trading account assets:					
U.S. Treasury and agency securities	49,517	4,157	—	—	53,674
Corporate securities, trading loans and other	—	25,226	1,507	—	26,733
Equity securities	53,597	32,619	239	—	86,455
Non-U.S. sovereign debt	3,965	23,854	482	—	28,301
Mortgage trading loans, MBS and ABS:					
U.S. government-sponsored agency guaranteed (2)	—	24,324	—	—	24,324
Mortgage trading loans, ABS and other MBS	—	8,786	1,553	—	10,339
Total trading account assets (3)	107,079	118,966	3,781	—	229,826
Derivative assets	14,079	328,442	2,226	(304,262)	40,485
AFS debt securities:					
U.S. Treasury and agency securities	67,332	1,196	—	—	68,528
Mortgage-backed securities:					
Agency	—	122,528	—	—	122,528
Agency-collateralized mortgage obligations	—	4,641	—	—	4,641
Non-agency residential	—	653	424	—	1,077
Commercial	—	15,021	—	—	15,021
Non-U.S. securities	—	11,989	2	—	11,991
Other taxable securities	—	3,876	65	—	3,941
Tax-exempt securities	—	17,804	108	—	17,912
Total AFS debt securities	67,332	177,708	599	—	245,639
Other debt securities carried at fair value:					
U.S. Treasury and agency securities	3	—	—	—	3
Agency MBS	—	3,003	—	—	3,003
Non-agency residential MBS	—	1,035	299	—	1,334
Non-U.S. and other securities	400	6,088	—	—	6,488
Total other debt securities carried at fair value	403	10,126	299	—	10,828
Loans and leases	—	7,642	693	—	8,335
Loans held-for-sale	—	3,334	375	—	3,709
Other assets (4)	11,782	1,376	2,360	—	15,518
Total assets (5)	$ 201,675	$ 697,958	$ 10,333	$ (304,262)	$ 605,704
Liabilities					
Interest-bearing deposits in U.S. offices	$ —	$ 508	$ —	$ —	$ 508
Federal funds purchased and securities loaned or sold under agreements to repurchase	—	16,008	—	—	16,008
Trading account liabilities:					
U.S. Treasury and agency securities	13,140	282	—	—	13,422
Equity securities	38,148	4,144	2	—	42,294
Non-U.S. sovereign debt	10,751	11,310	—	—	22,061
Corporate securities and other	—	5,478	15	—	5,493
Total trading account liabilities	62,039	21,214	17	—	83,270
Derivative liabilities	11,904	320,479	4,764	(298,918)	38,229
Short-term borrowings	—	3,941	—	—	3,941
Accrued expenses and other liabilities	13,927	1,507	—	—	15,434
Long-term debt	—	33,826	1,149	—	34,975
Total liabilities (5)	$ 87,870	$ 397,483	$ 5,930	$ (298,918)	$ 192,365

(1) Amounts represent the impact of legally enforceable master netting agreements and also cash collateral held or placed with the same counterparties.
(2) Includes $26.7 billion of GSE obligations.
(3) Includes securities with a fair value of $14.7 billion that were segregated in compliance with securities regulations or deposited with clearing organizations. This amount is included in the parenthetical disclosure on the Consolidated Balance Sheet.
(4) Includes MSRs of $1.5 billion which are classified as Level 3 assets.
(5) Total recurring Level 3 assets were 0.42 percent of total consolidated assets, and total recurring Level 3 liabilities were 0.27 percent of total consolidated liabilities.

The following tables present a reconciliation of all assets and liabilities measured at fair value on a recurring basis using significant unobservable inputs (Level 3) during the three months ended March 31, 2020 and 2019, including net realized and unrealized gains (losses) included in earnings and accumulated OCI. Transfers into Level 3 occur primarily due to decreased price observability, and transfers out of Level 3 occur primarily due to increased price observability. Transfers occur on a regular basis for long-term debt instruments due to changes in the impact of unobservable inputs on the value of the embedded derivative in relation to the instrument as a whole.

Level 3 – Fair Value Measurements (1)

				Gross							
(Dollars in millions)	Balance January 1	Total Realized/Unrealized Gains (Losses) in Net Income (2)	Gains (Losses) in OCI (3)	Purchases	Sales	Issuances	Settlements	Gross Transfers into Level 3	Gross Transfers out of Level 3	Balance March 31	Change in Unrealized Gains (Losses) in Net Income Related to Financial Instruments Still Held (2)
Three Months Ended March 31, 2020											
Trading account assets:											
Corporate securities, trading loans and other	**$ 1,507**	**$ (103)**	**$ (1)**	**$ 216**	**$ (90)**	**$ 8**	**$ (32)**	**$ 237**	**$ (102)**	**$ 1,640**	**$ (108)**
Equity securities	**239**	**(26)**	**—**	**26**	**(11)**	**—**	**—**	**25**	**(4)**	**249**	**(27)**
Non-U.S. sovereign debt	**482**	**2**	**(53)**	**73**	**(48)**	**—**	**(10)**	**17**	**(213)**	**250**	**3**
Mortgage trading loans, ABS and other MBS	**1,553**	**(125)**	**(2)**	**362**	**(245)**	**—**	**(19)**	**233**	**(24)**	**1,733**	**(129)**
Total trading account assets	**3,781**	**(252)**	**(56)**	**677**	**(394)**	**8**	**(61)**	**512**	**(343)**	**3,872**	**(261)**
Net derivative assets (liabilities) (4)	**(2,538)**	**346**	**—**	**40**	**(148)**	**—**	**12**	**(528)**	**(93)**	**(2,909)**	**279**
AFS debt securities:											
Non-agency residential MBS	**424**	**(3)**	**(13)**	**—**	**—**	**—**	**(12)**	**128**	**—**	**524**	**—**
Non-U.S. securities	**2**	**—**	**—**	**—**	**(1)**	**—**	**—**	**—**	**—**	**1**	**—**
Other taxable securities	**65**	**—**	**—**	**3**	**—**	**—**	**—**	**—**	**—**	**68**	**—**
Tax-exempt securities	**108**	**(10)**	**2**	**—**	**—**	**—**	**—**	**—**	**—**	**100**	**—**
Total AFS debt securities	**599**	**(13)**	**(11)**	**3**	**(1)**	**—**	**(12)**	**128**	**—**	**693**	**—**
Other debt securities carried at fair value – Non-agency residential MBS	**299**	**(49)**	**—**	**—**	**—**	**—**	**(4)**	**26**	**(3)**	**269**	**(49)**
Loans and leases (5,6)	**693**	**(119)**	**—**	**—**	**—**	**—**	**(16)**	**—**	**—**	**558**	**(107)**
Loans held-for-sale (5,6)	**375**	**(9)**	**(28)**	**—**	**—**	**691**	**(45)**	**93**	**—**	**1,077**	**(15)**
Other assets (6,7)	**2,360**	**(251)**	**(30)**	**—**	**1**	**20**	**(142)**	**2**	**—**	**1,960**	**(287)**
Trading account liabilities – Equity securities	**(2)**	**1**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**(1)**	**1**
Trading account liabilities – Corporate securities and other	**(15)**	**1**	**—**	**(6)**	**—**	**—**	**—**	**—**	**—**	**(20)**	**1**
Long-term debt (5)	**(1,149)**	**127**	**187**	**8**	**—**	**(13)**	**141**	**(23)**	**1**	**(721)**	**126**
Three Months Ended March 31, 2019											
Trading account assets:											
Corporate securities, trading loans and other	$ 1,558	$ 3	$ —	$ 54	$ (73)	$ —	$ (60)	$ 139	$ (193)	$ 1,428	$ (8)
Equity securities	276	2	—	18	(1)	—	(3)	2	(6)	288	2
Non-U.S. sovereign debt	465	8	(1)	—	—	—	—	—	—	472	8
Mortgage trading loans, ABS and other MBS	1,635	38	(1)	230	(337)	—	(9)	89	(135)	1,510	27
Total trading account assets	3,934	51	(2)	302	(411)	—	(72)	230	(334)	3,698	29
Net derivative assets (liabilities) (4)	(935)	(25)	—	111	(245)	—	(55)	122	9	(1,018)	(25)
AFS debt securities:											
Non-agency residential MBS	597	—	93	—	—	—	(7)	159	(261)	581	—
Non-U.S. securities	2	—	—	—	—	—	—	—	—	2	—
Other taxable securities	7	—	—	—	—	—	(4)	—	—	3	—
Total AFS debt securities	606	—	93	—	—	—	(11)	159	(261)	586	—
Other debt securities carried at fair value – Non-agency residential MBS	172	47	—	—	—	—	(1)	38	(32)	224	47
Loans and leases (5,6)	338	4	—	—	(15)	—	(10)	—	—	317	4
Loans held-for-sale (5,6)	542	12	(2)	10	(21)	11	(53)	59	—	558	4
Other assets (6,7)	2,932	(74)	8	—	—	41	(158)	—	—	2,749	(128)
Trading account liabilities – Corporate securities and other	(18)	—	—	—	(3)	—	—	—	—	(21)	—
Long-term debt (5)	(817)	(46)	(1)	—	—	(3)	38	(61)	—	(890)	(46)

(1) Assets (liabilities). For assets, increase (decrease) to Level 3 and for liabilities, (increase) decrease to Level 3.
(2) Includes gains (losses) reported in earnings in the following income statement line items: Trading account assets/liabilities - predominantly market making and similar activities; Net derivative assets (liabilities) - market making and similar activities and other income; Other debt securities carried at fair value - other income; Loans and leases - predominantly other income; Loans held-for-sale - other income; Other assets - primarily other income related to MSRs; Long-term debt - market making and similar activities.
(3) Includes unrealized gains (losses) in OCI on AFS debt securities, foreign currency translation adjustments and the impact of changes in the Corporation's credit spreads on long-term debt accounted for under the fair value option. Amounts include net unrealized gains of $67 million and $96 million related to financial instruments still held at March 31, 2020 and 2019.
(4) Net derivative assets (liabilities) include derivative assets of $1.9 billion and $3.5 billion and derivative liabilities of $4.8 billion and $4.5 billion at March 31, 2020 and 2019.
(5) Amounts represent instruments that are accounted for under the fair value option.
(6) Issuances represent loan originations and MSRs recognized following securitizations or whole-loan sales.
(7) Settlements primarily represent the net change in fair value of the MSR asset due to the recognition of modeled cash flows and the passage of time.

The following tables present information about significant unobservable inputs related to the Corporation's material categories of Level 3 financial assets and liabilities at March 31, 2020 and December 31, 2019.

Quantitative Information about Level 3 Fair Value Measurements at March 31, 2020

(Dollars in millions)

Financial Instrument	Fair Value	Valuation Technique	Inputs: Significant Unobservable Inputs	Inputs: Ranges of Inputs	Inputs: Weighted Average [1]
Loans and Securities [2]					
Instruments backed by residential real estate assets	$ 1,567	Discounted cash flow, Market comparables	Yield	0% to 25%	7%
Trading account assets – Mortgage trading loans, ABS and other MBS	456		Prepayment speed	1% to 32% CPR	21% CPR
Loans and leases	253		Default rate	0% to 3% CDR	1% CDR
Loans held-for-sale	1		Loss severity	0% to 47%	14%
AFS debt securities, primarily non-agency residential	525		Price	$0 to $160	$98
AFS debt securities – Other taxable securities	63				
Other debt securities carried at fair value - Non-agency residential	269				
Instruments backed by commercial real estate assets	$ 1,224	Discounted cash flow	Yield	0% to 25%	3%
Trading account assets – Corporate securities, trading loans and other	250		Price	$0 to $103	$60
Trading account assets – Mortgage trading loans, ABS and other MBS	172				
Loans held-for-sale	802				
Commercial loans, debt securities and other	$ 3,429	Discounted cash flow, Market comparables	Yield	1% to 25%	7%
Trading account assets – Corporate securities, trading loans and other	1,390		Prepayment speed	10% to 20%	15%
Trading account assets – Non-U.S. sovereign debt	250		Default rate	3% to 4%	4%
Trading account assets – Mortgage trading loans, ABS and other MBS	1,105		Loss severity	35% to 40%	38%
AFS debt securities – Other taxable securities	5		Price	$0 to $142	$68
AFS debt securities – Tax-exempt securities	100		Long-dated equity volatilities	78%	n/a
Loans and leases	305				
Loans held-for-sale	274				
Other assets, primarily auction rate securities	$ 796	Discounted cash flow, Market comparables	Price	$10 to $99	$95
MSRs	$ 1,164	Discounted cash flow	Weighted-average life, fixed rate [5]	0 to 14 years	4 years
			Weighted-average life, variable rate [5]	0 to 9 years	3 years
			Option-adjusted spread, fixed rate	7% to 14%	9%
			Option-adjusted spread, variable rate	9% to 15%	11%
Structured liabilities					
Long-term debt	$ (721)	Discounted cash flow, Market comparables, Industry standard derivative pricing [3]	Yield	2% to 7%	7%
			Equity correlation	6% to 100%	68%
			Long-dated equity volatilities	12% to 290%	34%
			Price	$0 to $115	$74
			Natural gas forward price	$1/MMBtu to $5/MMBtu	$3/MMBtu
Net derivative assets (liabilities)					
Credit derivatives	$ (12)	Discounted cash flow, Stochastic recovery correlation model	Yield	5%	n/a
			Upfront points	0 to 100 points	74 points
			Prepayment speed	15% to 100% CPR	26% CPR
			Default rate	2% CDR	n/a
			Price	$0 to $122	$41
Equity derivatives	$ (1,007)	Industry standard derivative pricing [3]	Equity correlation	6% to 100%	68%
			Long-dated equity volatilities	12% to 290%	34%
Commodity derivatives	$ (1,725)	Discounted cash flow, Industry standard derivative pricing [3]	Natural gas forward price	$1/MMBtu to $5/MMBtu	$2/MMBtu
			Correlation	54% to 73%	73%
			Volatilities	16% to 293%	119%
Interest rate derivatives	$ (165)	Industry standard derivative pricing [4]	Correlation (IR/IR)	15% to 94%	43%
			Correlation (FX/IR)	0% to 46%	2%
			Long-dated inflation rates	-28% to 59%	15%
			Long-dated inflation volatilities	0% to 1%	1%
Total net derivative assets (liabilities)	$ (2,909)				

(1) For loans and securities, structured liabilities and net derivative assets (liabilities), the weighted average is calculated based upon the absolute fair value of the instruments.
(2) The categories are aggregated based upon product type which differs from financial statement classification. The following is a reconciliation to the line items in the table on page 84: Trading account assets – Corporate securities, trading loans and other of $1.6 billion, Trading account assets – Non-U.S. sovereign debt of $250 million, Trading account assets – Mortgage trading loans, ABS and other MBS of $1.7 billion, AFS debt securities of $693 million, Other debt securities carried at fair value - Non-agency residential of $269 million, Other assets, including MSRs, of $2.0 billion, Loans and leases of $558 million and LHFS of $1.1 billion.
(3) Includes models such as Monte Carlo simulation and Black-Scholes.
(4) Includes models such as Monte Carlo simulation, Black-Scholes and other methods that model the joint dynamics of interest, inflation and foreign exchange rates.
(5) The weighted-average life is a product of changes in market rates of interest, prepayment rates and other model and cash flow assumptions.
CPR = Constant Prepayment Rate
CDR = Constant Default Rate
MMBtu = Million British thermal units
IR = Interest Rate
FX = Foreign Exchange
n/a = not applicable

Quantitative Information about Level 3 Fair Value Measurements at December 31, 2019

(Dollars in millions)			Inputs		
Financial Instrument	Fair Value	Valuation Technique	Significant Unobservable Inputs	Ranges of Inputs	Weighted Average [1]
Loans and Securities [2]					
Instruments backed by residential real estate assets	**$ 1,407**	Discounted cash flow, Market comparables	Yield	0% to 25%	6%
Trading account assets – Mortgage trading loans, ABS and other MBS	332		Prepayment speed	1% to 27% CPR	17% CPR
Loans and leases	281		Default rate	0% to 3% CDR	1% CDR
Loans held-for-sale	4		Loss severity	0% to 47%	14%
AFS debt securities, primarily non-agency residential	491		Price	$0 to $160	$94
Other debt securities carried at fair value - Non-agency residential	299				
Instruments backed by commercial real estate assets	**$ 303**	Discounted cash flow	Yield	0% to 30%	14%
Trading account assets – Corporate securities, trading loans and other	201		Price	$0 to $100	$55
Trading account assets – Mortgage trading loans, ABS and other MBS	85				
Loans held-for-sale	17				
Commercial loans, debt securities and other	**$ 3,798**	Discounted cash flow, Market comparables	Yield	1% to 20%	6%
Trading account assets – Corporate securities, trading loans and other	1,306		Prepayment speed	10% to 20%	13%
Trading account assets – Non-U.S. sovereign debt	482		Default rate	3% to 4%	4%
Trading account assets – Mortgage trading loans, ABS and other MBS	1,136		Loss severity	35% to 40%	38%
AFS debt securities – Tax-exempt securities	108		Price	$0 to $142	$72
Loans and leases	412		Long-dated equity volatilities	35%	n/a
Loans held-for-sale	354				
Other assets, primarily auction rate securities	**$ 815**	Discounted cash flow, Market comparables	Price	$10 to $100	$96
MSRs	**$ 1,545**	Discounted cash flow	Weighted-average life, fixed rate [5]	0 to 14 years	5 years
			Weighted-average life, variable rate [5]	0 to 9 years	3 years
			Option-adjusted spread, fixed rate	7% to 14%	9%
			Option-adjusted spread, variable rate	9% to 15%	11%
Structured liabilities					
Long-term debt	**$ (1,149)**	Discounted cash flow, Market comparables, Industry standard derivative pricing [3]	Yield	2% to 6%	5%
			Equity correlation	9% to 100%	63%
			Long-dated equity volatilities	4% to 101%	32%
			Price	$0 to $116	$74
			Natural gas forward price	$1/MMBtu to $5/MMBtu	$3/MMBtu
Net derivative assets (liabilities)					
Credit derivatives	**$ 13**	Discounted cash flow, Stochastic recovery correlation model	Yield	5%	n/a
			Upfront points	0 to 100 points	63 points
			Prepayment speed	15% to 100% CPR	22% CPR
			Default rate	1% to 4% CDR	2% CDR
			Loss severity	35%	n/a
			Price	$0 to $104	$73
Equity derivatives	**$ (1,081)**	Industry standard derivative pricing [3]	Equity correlation	9% to 100%	63%
			Long-dated equity volatilities	4% to 101%	32%
Commodity derivatives	**$ (1,357)**	Discounted cash flow, Industry standard derivative pricing [3]	Natural gas forward price	$1/MMBtu to $5/MMBtu	$3/MMBtu
			Correlation	30% to 69%	68%
			Volatilities	14% to 54%	27%
Interest rate derivatives	**$ (113)**	Industry standard derivative pricing [4]	Correlation (IR/IR)	15% to 94%	52%
			Correlation (FX/IR)	0% to 46%	2%
			Long-dated inflation rates	-23% to 56%	16%
			Long-dated inflation volatilities	0% to 1%	1%
Total net derivative assets (liabilities)	**$ (2,538)**				

(1) For loans and securities, structured liabilities and net derivative assets (liabilities), the weighted average is calculated based upon the absolute fair value of the instruments.
(2) The categories are aggregated based upon product type which differs from financial statement classification. The following is a reconciliation to the line items in the table on page 85: Trading account assets – Corporate securities, trading loans and other of $1.5 billion, Trading account assets – Non-U.S. sovereign debt of $482 million, Trading account assets – Mortgage trading loans, ABS and other MBS of $1.6 billion, AFS debt securities of $599 million, Other debt securities carried at fair value - Non-agency residential of $299 million, Other assets, including MSRs, of $2.4 billion, Loans and leases of $693 million and LHFS of $375 million.
(3) Includes models such as Monte Carlo simulation and Black-Scholes.
(4) Includes models such as Monte Carlo simulation, Black-Scholes and other methods that model the joint dynamics of interest, inflation and foreign exchange rates.
(5) The weighted-average life is a product of changes in market rates of interest, prepayment rates and other model and cash flow assumptions.
CPR = Constant Prepayment Rate
CDR = Constant Default Rate
MMBtu = Million British thermal units
IR = Interest Rate
FX = Foreign Exchange
n/a = not applicable

Uncertainty of Fair Value Measurements from Unobservable Inputs

For information on the types of instruments, valuation approaches and the impact of changes in unobservable inputs used in Level 3 measurements, see *Note 21 – Fair Value Measurements* to the Consolidated Financial Statements of the Corporation's 2019 Annual Report on Form 10-K.

Nonrecurring Fair Value

The Corporation holds certain assets that are measured at fair value only in certain situations (e.g., the impairment of an asset), and these measurements are referred to herein as nonrecurring. The amounts below represent assets still held as of the reporting date for which a nonrecurring fair value adjustment was recorded during the three months ended March 31, 2020 and 2019.

Assets Measured at Fair Value on a Nonrecurring Basis

(Dollars in millions)	March 31, 2020		Three Months Ended March 31, 2020
	Level 2	**Level 3**	**Gains (Losses)**
Assets			
Loans held-for-sale	**$ 1,017**	**$ 628**	**$ (78)**
Loans and leases (1)	**—**	**117**	**(27)**
Foreclosed properties (2, 3)	**—**	**15**	**(6)**
Other assets	**27**	**24**	**(2)**
	March 31, 2019		Three Months Ended March 31, 2019
Assets			
Loans held-for-sale	$ 55	$ —	$ (1)
Loans and leases (1)	—	120	(40)
Foreclosed properties (2, 3)	—	40	(13)
Other assets	61	6	(11)

(1) Includes $12 million and $18 million of losses on loans that were written down to a collateral value of zero during the three months ended March 31, 2020 and 2019.
(2) Amounts are included in other assets on the Consolidated Balance Sheet and represent the carrying value of foreclosed properties that were written down subsequent to their initial classification as foreclosed properties. Losses on foreclosed properties include losses recorded during the first 90 days after transfer of a loan to foreclosed properties.
(3) Excludes $224 million and $400 million of properties acquired upon foreclosure of certain government-guaranteed loans (principally FHA-insured loans) at March 31, 2020 and 2019.

The table below presents information about significant unobservable inputs at March 31, 2020 and December 31, 2019.

Quantitative Information about Nonrecurring Level 3 Fair Value Measurements

Financial Instrument	Fair Value	Valuation Technique	Significant Unobservable Inputs	Ranges of Inputs	Weighted Average (1)
(Dollars in millions)			**March 31, 2020**		
Loans held-for-sale	**$ 628**	Discounted cash flow	Price	$9 to $99	$95
Loans and leases (2)	**117**	Market comparables	OREO discount	13% to 59%	24%
			Costs to sell	8% to 26%	9%
			December 31, 2019		
Loans held-for-sale	$ 102	Discounted cash flow	Price	$85 to $97	$88
Loans and leases (2)	257	Market comparables	OREO discount	13% to 59%	24%
			Costs to sell	8% to 26%	9%
Other assets (3)	640	Discounted cash flow	Customer attrition	0% to 19%	5%
			Costs to service	11% to 19%	15%

(1) The weighted average is calculated based upon the fair value of the loans.
(2) Represents residential mortgages where the loan has been written down to the fair value of the underlying collateral.
(3) Reflects the measurement of the Corporation's merchant services equity method investment on which the Corporation recorded an impairment charge in 2019. For more information, see *Note 13 – Commitments and Contingencies* to the Consolidated Financial Statements of the Corporation's 2019 Annual Report on Form 10-K. The fair value of the merchant services joint venture was measured using a discounted cash flow method in which the two primary drivers of fair value were the customer attrition rate and certain costs to service the customers. The weighted averages are calculated based on variations of the attrition rates and costs to service the customers.

NOTE 15 Fair Value Option

The Corporation elects to account for certain financial instruments under the fair value option. For more information on the primary financial instruments for which the fair value option elections have been made, see *Note 22 – Fair Value Option* to the Consolidated Financial Statements of the Corporation's 2019 Annual Report on Form 10-K. The following tables provide information about the fair value carrying amount and the contractual principal outstanding of assets and liabilities accounted for under the fair value option at March 31, 2020 and December 31, 2019, and information about where changes in the fair value of assets and liabilities accounted for under the fair value option are included in the Consolidated Statement of Income for the three months ended March 31, 2020 and 2019.

Fair Value Option Elections

(Dollars in millions)	March 31, 2020 Fair Value Carrying Amount	March 31, 2020 Contractual Principal Outstanding	March 31, 2020 Fair Value Carrying Amount Less Unpaid Principal	December 31, 2019 Fair Value Carrying Amount	December 31, 2019 Contractual Principal Outstanding	December 31, 2019 Fair Value Carrying Amount Less Unpaid Principal
Federal funds sold and securities borrowed or purchased under agreements to resell	**$ 49,033**	**$ 49,016**	**$ 17**	$ 50,364	$ 50,318	$ 46
Loans reported as trading account assets (1)	**7,652**	**16,542**	**(8,890)**	6,989	14,703	(7,714)
Trading inventory – other	**16,780**	**n/a**	**n/a**	19,574	n/a	n/a
Consumer and commercial loans	**9,016**	**9,358**	**(342)**	8,335	8,372	(37)
Loans held-for-sale (1)	**3,609**	**4,564**	**(955)**	3,709	4,879	(1,170)
Other assets	**4**	**n/a**	**n/a**	4	n/a	n/a
Long-term deposits	**589**	**541**	**48**	508	496	12
Federal funds purchased and securities loaned or sold under agreements to repurchase	**17,192**	**17,184**	**8**	16,008	16,029	(21)
Short-term borrowings	**3,020**	**3,265**	**(245)**	3,941	3,930	11
Unfunded loan commitments	**207**	**n/a**	**n/a**	90	n/a	n/a
Long-term debt (2)	**32,163**	**35,714**	**(3,551)**	34,975	35,730	(755)

(1) A significant portion of the loans reported as trading account assets and LHFS are distressed loans that were purchased at a deep discount to par, and the remainder are loans with a fair value near contractual principal outstanding.
(2) Includes structured liabilities with a fair value of $31.8 billion and $34.6 billion at March 31, 2020 and December 31, 2019, and contractual principal outstanding of $35.3 billion at both periods.
n/a = not applicable

Gains (Losses) Relating to Assets and Liabilities Accounted for Under the Fair Value Option

(Dollars in millions)	Three Months Ended March 31 2020 Market making and similar activities	2020 Other Income	2020 Total	2019 Market making and similar activities	2019 Other Income	2019 Total
Loans reported as trading account assets	**$ (387)**	**$ —**	**$ (387)**	$ 91	$ —	$ 91
Trading inventory – other (1)	**(2,793)**	**—**	**(2,793)**	2,544	—	2,544
Consumer and commercial loans	**(83)**	**(358)**	**(441)**	1	18	19
Short-term borrowings	**517**	**—**	**517**	—	—	—
Unfunded loan commitments	**—**	**(116)**	**(116)**	—	63	63
Long-term debt (2)	**916**	**(16)**	**900**	(1,080)	(23)	(1,103)
Other (3)	**13**	**(51)**	**(38)**	11	23	34
Total	**$ (1,817)**	**$ (541)**	**$ (2,358)**	$ 1,567	$ 81	$ 1,648

(1) The gains in market making and similar activities are primarily offset by losses on trading liabilities that hedge these assets.
(2) The net gains (losses) in market making and similar activities relate to the embedded derivatives in structured liabilities and are typically offset by (losses) gains on derivatives and securities that hedge these liabilities. For the cumulative impact of changes in the Corporation's own credit spreads and the amount recognized in accumulated OCI, see *Note 13 – Accumulated Other Comprehensive Income (Loss)*. For more information on how the Corporation's own credit spread is determined, see *Note 21 – Fair Value Measurements* to the Consolidated Financial Statements of the Corporation's 2019 Annual Report on Form 10-K.
(3) Includes gains (losses) on federal funds sold and securities borrowed or purchased under agreements to resell, LHFS, long-term deposits and federal funds purchased and securities loaned or sold under agreements to repurchase.

Gains (Losses) Related to Borrower-specific Credit Risk for Assets Accounted for Under the Fair Value Option

(Dollars in millions)	Three Months Ended March 31 2020	2019
Loans reported as trading account assets	**$ (389)**	$ 12
Consumer and commercial loans	**(349)**	19
Loans held-for-sale	**(74)**	11
Unfunded loan commitments	**(116)**	63

NOTE 16 Fair Value of Financial Instruments

The following disclosures include financial instruments that are not carried at fair value or only a portion of the ending balance is carried at fair value on the Consolidated Balance Sheet. Certain loans, deposits, long-term debt and unfunded lending commitments are accounted for under the fair value option. For more information, see *Note 22 – Fair Value Option* to the Consolidated Financial Statements of the Corporation's 2019 Annual Report on Form 10-K.

Fair Value of Financial Instruments

The carrying values and fair values by fair value hierarchy of certain financial instruments where only a portion of the ending balance was carried at fair value at March 31, 2020 and December 31, 2019 are presented in the following table.

Fair Value of Financial Instruments

(Dollars in millions)	Carrying Value	Fair Value Level 2	Fair Value Level 3	Fair Value Total
	March 31, 2020			
Financial assets				
Loans	**$ 1,011,597**	**$ 64,762**	**$ 975,625**	**$ 1,040,387**
Loans held-for-sale	**7,862**	**5,556**	**2,308**	**$ 7,864**
Financial liabilities				
Deposits (1)	**1,583,325**	**1,583,659**	**—**	**1,583,659**
Long-term debt	**256,712**	**248,324**	**721**	**249,045**
Commercial unfunded lending commitments (2)	**1,567**	**207**	**6,318**	**6,525**
	December 31, 2019			
Financial assets				
Loans	$ 950,093	$ 63,633	$ 914,597	$ 978,230
Loans held-for-sale	9,158	8,439	719	9,158
Financial liabilities				
Deposits (1)	1,434,803	1,434,809	—	1,434,809
Long-term debt	240,856	247,376	1,149	248,525
Commercial unfunded lending commitments (2)	903	90	4,777	4,867

(1) Includes demand deposits of $650.9 billion and $545.5 billion with no stated maturities at March 31, 2020 and December 31, 2019.
(2) The carrying value of commercial unfunded lending commitments is included in accrued expenses and other liabilities on the Consolidated Balance Sheet. The Corporation does not estimate the fair value of consumer unfunded lending commitments because, in many instances, the Corporation can reduce or cancel these commitments by providing notice to the borrower. For more information on commitments, see *Note 10 – Commitments and Contingencies*.

NOTE 17 Business Segment Information

The Corporation reports its results of operations through the following four business segments: *Consumer Banking*, *Global Wealth & Investment Management*, *Global Banking* and *Global Markets*, with the remaining operations recorded in *All Other*. For more information, see *Note 24 – Business Segment Information* to the Consolidated Financial Statements of the Corporation's 2019 Annual Report on Form 10-K. The following table presents net income (loss) and the components thereto (with net interest income on an FTE basis for the business segments, *All Other* and the total Corporation) for the three months ended March 31, 2020 and 2019, and total assets at March 31, 2020 and 2019 for each business segment, as well as *All Other*, including a reconciliation of the four business segments' total revenue, net of interest expense, on an FTE basis, and net income to the Consolidated Statement of Income, and total assets to the Consolidated Balance Sheet.

Results of Business Segments and All Other

At and for the three months ended March 31	**Total Corporation (1)**		**Consumer Banking**		**Global Wealth & Investment Management**	
(Dollars in millions)	**2020**	2019	**2020**	2019	**2020**	2019
Net interest income	**$ 12,274**	$ 12,528	**$ 6,862**	$ 7,106	**$ 1,571**	$ 1,684
Noninterest income	**10,637**	10,629	**2,267**	2,526	**3,365**	3,136
Total revenue, net of interest expense	**22,911**	23,157	**9,129**	9,632	**4,936**	4,820
Provision for credit losses	**4,761**	1,013	**2,258**	974	**189**	5
Noninterest expense	**13,475**	13,224	**4,495**	4,367	**3,600**	3,434
Income before income taxes	**4,675**	8,920	**2,376**	4,291	**1,147**	1,381
Income tax expense	**665**	1,609	**582**	1,051	**281**	338
Net income	**$ 4,010**	$ 7,311	**$ 1,794**	$ 3,240	**$ 866**	$ 1,043
Period-end total assets	**$ 2,619,954**	$ 2,377,164	**$ 837,522**	$ 794,586	**$ 323,866**	$ 296,799

	Global Banking		**Global Markets**		**All Other**	
	2020	2019	**2020**	2019	**2020**	2019
Net interest income	**$ 2,612**	$ 2,790	**$ 1,153**	$ 953	**$ 76**	$ (5)
Noninterest income	**1,988**	2,365	**4,072**	3,228	**(1,055)**	(626)
Total revenue, net of interest expense	**4,600**	5,155	**5,225**	4,181	**(979)**	(631)
Provision for credit losses	**2,093**	111	**107**	(23)	**114**	(54)
Noninterest expense	**2,321**	2,266	**2,813**	2,755	**246**	402
Income before income taxes	**186**	2,778	**2,305**	1,449	**(1,339)**	(979)
Income tax expense	**50**	750	**599**	413	**(847)**	(943)
Net income	**$ 136**	$ 2,028	**$ 1,706**	$ 1,036	**$ (492)**	$ (36)
Period-end total assets	**$ 562,529**	$ 436,066	**$ 654,735**	$ 671,123	**$ 241,302**	$ 178,590

(1) There were no material intersegment revenues.

The table below presents noninterest income and the components thereto for the three months ended March 31, 2020 and 2019 for each business segment, *All Other* and the total Corporation. For more information, see *Note 2 – Net Interest Income and Noninterest Income.*

Noninterest Income by Business Segment and All Other

	Total Corporation		Consumer Banking		Global Wealth & Investment Management	
	Three Months Ended March 31					
(Dollars in millions)	**2020**	2019	**2020**	2019	**2020**	2019
Fees and commissions:						
Card income						
Interchange fees	**$ 792**	$ 896	**$ 644**	$ 728	**$ 8**	$ 17
Other card income	**480**	479	**466**	469	**9**	9
Total card income	**1,272**	1,375	**1,110**	1,197	**17**	26
Service charges						
Deposit-related fees	**1,627**	1,580	**995**	1,020	**17**	18
Lending-related fees	**276**	259	**—**	—	**—**	—
Total service charges	**1,903**	1,839	**995**	1,020	**17**	18
Investment and brokerage services						
Asset management fees	**2,682**	2,440	**37**	35	**2,652**	2,414
Brokerage fees	**1,076**	920	**33**	38	**470**	428
Total investment and brokerage services	**3,758**	3,360	**70**	73	**3,122**	2,842
Investment banking fees						
Underwriting income	**848**	666	**—**	—	**115**	80
Syndication fees	**271**	255	**—**	—	**—**	—
Financial advisory services	**269**	343	**—**	—	**—**	—
Total investment banking fees	**1,388**	1,264	**—**	—	**115**	80
Total fees and commissions	**8,321**	7,838	**2,175**	2,290	**3,271**	2,966
Market making and similar activities	**2,807**	2,768	**1**	2	**21**	34
Other income (loss)	**(491)**	23	**91**	234	**73**	136
Total noninterest income	**$ 10,637**	$ 10,629	**$ 2,267**	$ 2,526	**$ 3,365**	$ 3,136

	Global Banking		Global Markets		All Other (1)	
	Three Months Ended March 31					
	2020	2019	**2020**	2019	**2020**	2019
Fees and commissions:						
Card income						
Interchange fees	**$ 119**	$ 129	**$ 21**	$ 21	**$ —**	$ 1
Other card income	**4**	2	**—**	(1)	**1**	—
Total card income	**123**	131	**21**	20	**1**	1
Service charges						
Deposit-related fees	**572**	498	**35**	38	**8**	6
Lending-related fees	**224**	215	**52**	44	**—**	—
Total service charges	**796**	713	**87**	82	**8**	6
Investment and brokerage services						
Asset management fees	**—**	—	**—**	—	**(7)**	(9)
Brokerage fees	**7**	9	**567**	444	**(1)**	1
Total investment and brokerage services	**7**	9	**567**	444	**(8)**	(8)
Investment banking fees						
Underwriting income	**369**	279	**455**	368	**(91)**	(61)
Syndication fees	**145**	127	**125**	129	**1**	(1)
Financial advisory services	**247**	303	**22**	40	**—**	—
Total investment banking fees	**761**	709	**602**	537	**(90)**	(62)
Total fees and commissions	**1,687**	1,562	**1,277**	1,083	**(89)**	(63)
Market making and similar activities	**87**	50	**2,973**	2,082	**(275)**	600
Other income (loss)	**214**	753	**(178)**	63	**(691)**	(1,163)
Total noninterest income	**$ 1,988**	$ 2,365	**$ 4,072**	$ 3,228	**$ (1,055)**	$ (626)

(1) *All Other* includes eliminations of intercompany transactions.

Business Segment Reconciliations

(Dollars in millions)	Three Months Ended March 31 2020	2019
Segments' total revenue, net of interest expense	**$ 23,890**	$ 23,788
Adjustments (1):		
ALM activities	**(85)**	12
Liquidating businesses, eliminations and other	**894**	643
FTE basis adjustment	**(144)**	(153)
Consolidated revenue, net of interest expense	**$ 22,767**	$ 23,004
Segments' total net income	**4,502**	7,347
Adjustments, net-of-tax (1):		
ALM activities	**(77)**	18
Liquidating businesses, eliminations and other	**(415)**	(54)
Consolidated net income	**$ 4,010**	$ 7,311

	March 31 2020	2019
Segments' total assets	**$ 2,378,652**	$ 2,198,574
Adjustments (1):		
ALM activities, including securities portfolio	**840,187**	671,751
Elimination of segment asset allocations to match liabilities	**(665,795)**	(566,812)
Other	**66,910**	73,651
Consolidated total assets	**$ 2,619,954**	$ 2,377,164

(1) Adjustments include consolidated income, expense and asset amounts not specifically allocated to individual business segments.

Glossary

Alt-A Mortgage – A type of U.S. mortgage that is considered riskier than A-paper, or "prime," and less risky than "subprime," the riskiest category. Typically, Alt-A mortgages are characterized by borrowers with less than full documentation, lower credit scores and higher LTVs.

Assets Under Management (AUM) – The total market value of assets under the investment advisory and/or discretion of *GWIM* which generate asset management fees based on a percentage of the assets' market values. AUM reflects assets that are generally managed for institutional, high net worth and retail clients, and are distributed through various investment products including mutual funds, other commingled vehicles and separate accounts.

Banking Book – All on- and off-balance sheet financial instruments of the Corporation except for those positions that are held for trading purposes.

Brokerage and Other Assets – Non-discretionary client assets which are held in brokerage accounts or held for safekeeping.

Committed Credit Exposure – Any funded portion of a facility plus the unfunded portion of a facility on which the lender is legally bound to advance funds during a specified period under prescribed conditions.

Credit Derivatives – Contractual agreements that provide protection against a specified credit event on one or more referenced obligations.

Credit Valuation Adjustment (CVA) – A portfolio adjustment required to properly reflect the counterparty credit risk exposure as part of the fair value of derivative instruments.

Debit Valuation Adjustment (DVA) – A portfolio adjustment required to properly reflect the Corporation's own credit risk exposure as part of the fair value of derivative instruments and/or structured liabilities.

Funding Valuation Adjustment (FVA) – A portfolio adjustment required to include funding costs on uncollateralized derivatives and derivatives where the Corporation is not permitted to use the collateral it receives.

Interest Rate Lock Commitment (IRLC) – Commitment with a loan applicant in which the loan terms are guaranteed for a designated period of time subject to credit approval.

Letter of Credit – A document issued on behalf of a customer to a third party promising to pay the third party upon presentation of specified documents. A letter of credit effectively substitutes the issuer's credit for that of the customer.

Loan-to-value (LTV) – A commonly used credit quality metric. LTV is calculated as the outstanding carrying value of the loan divided by the estimated value of the property securing the loan.

Margin Receivable – An extension of credit secured by eligible securities in certain brokerage accounts.

Matched Book – Repurchase and resale agreements or securities borrowed and loaned transactions where the overall asset and liability position is similar in size and/or maturity. Generally, these are entered into to accommodate customers where the Corporation earns the interest rate spread.

Mortgage Servicing 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.

Nonperforming Loans and Leases – Includes loans and leases that have been placed on nonaccrual status, including nonaccruing loans whose contractual terms have been restructured in a manner that grants a concession to a borrower experiencing financial difficulties.

Prompt Corrective Action (PCA) – A framework established by the U.S. banking regulators requiring banks to maintain certain levels of regulatory capital ratios, comprised of five categories of capitalization: "well capitalized," "adequately capitalized," "undercapitalized," "significantly undercapitalized" and "critically undercapitalized." Insured depository institutions that fail to meet certain of these capital levels are subject to increasingly strict limits on their activities, including their ability to make capital distributions, pay management compensation, grow assets and take other actions.

Subprime Loans – Although a standard industry definition for subprime loans (including subprime mortgage loans) does not exist, the Corporation defines subprime loans as specific product offerings for higher risk borrowers.

Troubled Debt Restructurings (TDRs) – Loans whose contractual terms have been restructured in a manner that grants a concession to a borrower experiencing financial difficulties. Certain consumer loans for which a binding offer to restructure has been extended are also classified as TDRs.

Value-at-Risk (VaR) – VaR is a model that simulates the value of a portfolio under a range of hypothetical scenarios in order to generate a distribution of potential gains and losses. VaR represents the loss the portfolio is expected to experience with a given confidence level based on historical data. A VaR model is an effective tool in estimating ranges of potential gains and losses on our trading portfolios.

Key Metrics

Active Digital Banking Users – Mobile and/or online users with activity over the last three months.

Active Mobile Banking Users – Mobile users with activity over the last three months.

Book Value – Ending common shareholders' equity divided by ending common shares outstanding.

Deposit Spread – Annualized net interest income divided by average deposits.

Efficiency Ratio – Noninterest expense divided by total revenue, net of interest expense.

Financial advisor productivity – Adjusted MLGWM annualized revenue divided by average financial advisors.

Gross Interest Yield – Effective annual percentage rate divided by average loans.

Net Interest Yield – Net interest income divided by average total interest-earning assets.

Operating Margin – Income before income taxes divided by total revenue, net of interest expense.

Risk-adjusted Margin – Difference between total revenue, net of interest expense, and net credit losses divided by average loans.

Return on Average Allocated Capital – Adjusted net income divided by allocated capital.

Return on Average Assets – Net income divided by total average assets.

Return on Average Common Shareholders' Equity – Net income applicable to common shareholders divided by average common shareholders' equity.

Return on Average Shareholders' Equity – Net income divided by average shareholders' equity.

Acronyms

ABS	Asset-backed securities
AFS	Available-for-sale
ALM	Asset and liability management
ARR	Alternative reference rates
AUM	Assets under management
AVM	Automated valuation model
BANA	Bank of America, National Association
BHC	Bank holding company
BofAS	BofA Securities, Inc.
BofASE	BofA Securities Europe SA
bps	basis points
CCAR	Comprehensive Capital Analysis and Review
CDO	Collateralized debt obligation
CECL	Current expected credit losses
CET1	Common equity tier 1
CFTC	Commodity Futures Trading Commission
CLTV	Combined loan-to-value
CVA	Credit valuation adjustment
DVA	Debit valuation adjustment
ECL	Expected credit losses
EPS	Earnings per common share
FDIC	Federal Deposit Insurance Corporation
FHA	Federal Housing Administration
FHLB	Federal Home Loan Bank
FICC	Fixed-income, currencies and commodities
FICO	Fair Isaac Corporation (credit score)
FTE	Fully taxable-equivalent
FVA	Funding valuation adjustment
GAAP	Accounting principles generally accepted in the United States of America
GLS	Global Liquidity Sources
GNMA	Government National Mortgage Association
GSE	Government-sponsored enterprise
G-SIB	Global systemically important bank
GWIM	Global Wealth & Investment Management
HELOC	Home equity line of credit
HQLA	High Quality Liquid Assets
HTM	Held-to-maturity
IBOR	Interbank Offered Rates
IRLC	Interest rate lock commitment
ISDA	International Swaps and Derivatives Association, Inc.
LCR	Liquidity Coverage Ratio
LHFS	Loans held-for-sale
LIBOR	London Interbank Offered Rate
LTV	Loan-to-value
MBS	Mortgage-backed securities
MD&A	Management's Discussion and Analysis of Financial Condition and Results of Operations
MLGWM	Merrill Lynch Global Wealth Management
MLI	Merrill Lynch International
MLPCC	Merrill Lynch Professional Clearing Corp
MLPF&S	Merrill Lynch, Pierce, Fenner & Smith Incorporated
MSA	Metropolitan Statistical Area
MSR	Mortgage servicing right
OCC	Office of the Comptroller of the Currency
OCI	Other comprehensive income
OREO	Other real estate owned
PCA	Prompt Corrective Action
PPP	Paycheck Protection Program
RSU	Restricted stock unit
SBA	Small Business Administration
SBLC	Standby letter of credit
SEC	Securities and Exchange Commission
SLR	Supplementary leverage ratio
TDR	Troubled debt restructurings
TLAC	Total loss-absorbing capacity
VaR	Value-at-Risk
VIE	Variable interest entity

Part II. Other Information

Bank of America Corporation and Subsidiaries

Item 1. Legal Proceedings

See Litigation and Regulatory Matters in *Note 10 – Commitments and Contingencies* to the Consolidated Financial Statements, which is incorporated by reference in this Item 1, for litigation and regulatory disclosure that supplements the disclosure in *Note 13 – Commitments and Contingencies* to the Consolidated Financial Statements of the Corporation's 2019 Annual Report on Form 10-K.

Item 1A. Risk Factors

Our Annual Report on Form 10-K for the year ended December 31, 2019 (2019 Form 10-K) describes market, credit, geopolitical and business operations risk factors that could affect our businesses, results of operations or financial condition due to, among other things, "widespread health emergencies or pandemics." On March 11, 2020, the World Health Organization declared the outbreak of a strain of novel coronavirus disease, COVID-19, a global pandemic. As conditions and circumstances related to the COVID-19 pandemic have evolved subsequent to our 2019 Form 10-K filing, the following supplements the risk factors described in our 2019 Form 10-K.

Coronavirus Disease 2019

The COVID-19 pandemic has caused a significant global economic downturn which has adversely affected, and is expected to continue to adversely affect, the Corporation's business and results of operations, and the future impacts of the COVID-19 pandemic on the U.S. and/or global economy and the Corporation's business, results of operations and financial condition remain uncertain.

The COVID-19 pandemic has resulted in authorities implementing numerous measures attempting to contain the spread and impact of COVID-19, such as travel bans and restrictions, quarantines, shelter in place orders, and limitations on business activity, including closures. These measures are, among other things, severely restricting global economic activity, which is disrupting global supply chains, lowering asset valuations, significantly increasing unemployment and underemployment levels, decreasing liquidity in markets for certain securities and causing significant volatility and disruptions in the financial, energy and commodity markets. These measures have also negatively impacted, and could continue to negatively impact, businesses, market participants, our counterparties and clients, and the U.S. and/or global economy for a prolonged period of time.

Should current economic conditions persist or continue to deteriorate, we expect that this macroeconomic environment will have a continued adverse effect on our business and results of operations, which could include, but not be limited to: decreased demand for our products and services; protracted periods of lower interest rates; lower asset management fees; lower sales and trading revenue due to decreased market liquidity resulting from heightened volatility; increased noninterest expenses, including operational losses, and increased credit losses due to deterioration in the financial condition of our consumer and commercial borrowers, including declining asset and collateral values, which may continue to increase our provision for credit losses and net charge-offs. Our provision for credit losses and net charge-offs could also be impacted by continued volatility in the energy and commodity markets. Additionally, our liquidity and/or regulatory capital could be adversely impacted by customers' withdrawal of deposits, volatility and disruptions in the capital and credit markets, volatility in foreign exchange rates and continued customer draws on lines of credit and potential downgrades to our credit ratings. If we become unable to successfully operate our business from remote locations including, for example, failure of our internal or external information technology infrastructure, increased rates of employee illness, or governmental restrictions placed on our employees or operations, this could also have an adverse effect on our business continuity status and result in disruption to our business. To the extent the COVID-19 pandemic continues to adversely affect the U.S. and/or global economy and/or adversely affects our business, results of operations or financial condition, it may also have the effect of increasing the likelihood and/or magnitude of other risks described in the section captioned "Risk Factors" in our 2019 Form 10-K or risks described in our other filings with the Securities and Exchange Commission.

In response to the economic and market conditions resulting from the COVID-19 pandemic, governments and regulatory authorities, including central banks, have acted to provide fiscal and monetary stimuli to support the global economy. In the U.S., the Board of Governors of the Federal Reserve System (Federal Reserve) has, among other things: lowered the federal funds rate and the interest rate on the Federal Reserve's discount window; implemented programs to promote liquidity in certain securities markets, including money markets, repurchase agreements, commercial paper, corporate debt securities, U.S. Treasury securities, and agency mortgage-backed securities; clarified supervisory expectations regarding loan modifications due to COVID-19 related non-payment; announced a program for lending directly to U.S. businesses; and clarified expectations for certain bank regulations related to counterparty credit risk and the current expected credit loss accounting standard. In addition, the President has signed into law four economic stimulus packages, including the Paycheck Protection Program and Health Care Enhancement Act, the $2 trillion Coronavirus Aid, Relief, and Economic Security Act, the Families First Coronavirus Response Act, and the Coronavirus Preparedness and Response Supplemental Appropriations Act. Similar actions have been taken or enacted by governments and central banks outside the U.S. However, there can be no assurance that these measures will stimulate the global economy or avert continued recessionary conditions in markets or economies in which we conduct operations. Our participation in and execution of these and other measures taken by governments and regulatory authorities could result in reputational harm and has resulted in, and may continue to result in, litigation, including class actions, or regulatory and government actions and proceedings. Such actions may result in judgments, settlements, penalties, and fines adverse to the Corporation.

We continue to closely monitor the COVID-19 pandemic and related risks as they evolve globally. The magnitude and duration of the current outbreak of COVID-19, the likelihood of further outbreaks of COVID-19, future actions taken by governmental authorities and/or other third parties in response to the COVID-19 pandemic, and its future direct and indirect effects on the global economy and our business and results of operation are highly uncertain. The COVID-19 pandemic may cause prolonged global or national recessionary economic conditions or longer lasting effects on economic conditions than currently exist, which could have a material adverse effect on our business, results of operations and financial condition.

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

The table below presents share repurchase activity for the three months ended March 31, 2020. The primary source of funds for cash distributions by the Corporation to its shareholders is dividends received from its banking subsidiaries. Each of the banking subsidiaries is subject to various regulatory policies and requirements relating to the payment of dividends, including requirements to maintain capital above regulatory minimums. All of the Corporation's preferred stock outstanding has preference over the Corporation's common stock with respect to payment of dividends.

(Dollars in millions, except per share information; shares in thousands)	**Total Common Shares Repurchased (1)**	**Weighted-Average Per Share Price**	**Total Shares Purchased as Part of Publicly Announced Programs**	**Remaining Buyback Authority Amounts (2)**
January 1 - 31, 2020	70,677	$ 35.09	70,668	$ 13,091
February 1 - 29, 2020	95,679	34.10	72,704	10,626
March 1 - 31, 2020	56,969	25.57	55,602	9,209
Three months ended March 31, 2020	**223,325**	**32.24**	**198,974**	

(1) Includes 24.4 million shares of the Corporation's common stock acquired by the Corporation in connection with satisfaction of tax withholding obligations on vested restricted stock or restricted stock units and certain forfeitures and terminations of employment-related awards and for potential re-issuance to certain employees under equity incentive plans.

(2) On June 27, 2019, following the Board of Governors of the Federal Reserve System's non-objection to the Corporation's 2019 Comprehensive Capital Analysis and Review capital plan, the Board of Directors (Board) authorized the repurchase of approximately $30.9 billion in common stock from July 1, 2019 through June 30, 2020, which includes approximately $900 million to offset shares awarded under equity-based compensation plans during the same period. During the three months ended March 31, 2020, pursuant to the Board's authorization, the Corporation repurchased $6.4 billion of common stock, which included common stock to offset equity-based compensation awards. For more information, see Capital Management - CCAR and Capital Planning in the MD&A on page 18 and *Note 11 – Shareholders' Equity* to the Consolidated Financial Statements.

The Corporation did not have any unregistered sales of equity securities during the three months ended March 31, 2020.

Item 6. Exhibits

			Incorporated by Reference			
Exhibit No.	**Description**	**Notes**	**Form**	**Exhibit**	**Filing Date**	**File No.**
3.1	Restated Certificate of Incorporation, as amended and in effect on the date hereof		10-K	3.1	2/19/20	1-6523
3.2	Amended Bylaws of the Corporation as in effect on the date hereof		10-Q	3(b)	10/28/19	1-6523
10.1	Form of Time-Based Restricted Stock Units Award Agreement (February 2020) between the Corporation and certain executive officers of the Corporation, including certain Named Executive Officers	1,2				
10.2	Form of Performance Restricted Stock Units Award Agreement (February 2020) between the Corporation and certain executive officers of the Corporation, including certain Named Executive Officers	1,2				
31.1	Certification of the Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002	1				
31.2	Certification of the Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002	1				
32.1	Certification of the Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	1				
32.2	Certification of the Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	1				
101.INS	Inline XBRL Instance Document	3				
101.SCH	Inline XBRL Taxonomy Extension Schema Document	1				
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document	1				
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document	1				
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document	1				
101.DEF	Inline XBRL Taxonomy Extension Definitions Linkbase Document	1				
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101)					

(1) Filed herewith.
(2) Exhibit is a management contract or compensatory plan or arrangement.
(3) The instance document does not appear in the interactive data file because its XBRL tags are embedded within the inline XBRL document.

Signature

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

Bank of America Corporation
Registrant

Date: May 1, 2020

/s/ Rudolf A. Bless

Rudolf A. Bless
Chief Accounting Officer