

**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 June 30, 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
Depository 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
Depository Shares, each representing a 1/1,000th interest in a share of 6.200% Non-Cumulative Preferred Stock, Series OC	BAC PrC	New York Stock Exchange
Depository 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
Depository 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
Depository 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
Depository 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
Depository 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
Depository 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
Depository 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
Depository 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
Depository Shares, each representing a 1/1,000th interest in a share of 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 July 29, 2020, there were 8,664,097,768 shares of Bank of America Corporation Common Stock outstanding.

INDEX

Part I. Financial Information

Item 1. Financial Statements

	Page
Consolidated Statement of Income	52
Consolidated Statement of Comprehensive Income	52
Consolidated Balance Sheet	53
Consolidated Statement of Changes in Shareholders' Equity	54
Consolidated Statement of Cash Flows	55
Notes to Consolidated Financial Statements	56
Note 1 – Summary of Significant Accounting Principles	56
Note 2 – Net Interest Income and Noninterest Income	59
Note 3 – Derivatives	60
Note 4 – Securities	67
Note 5 – Outstanding Loans and Leases and Allowance for Credit Losses	70
Note 6 – Securitizations and Other Variable Interest Entities	79
Note 7 – Goodwill and Intangible Assets	82
Note 8 – Leases	82
Note 9 – Federal Funds Sold or Purchased, Securities Financing Agreements, Short-term Borrowings and Restricted Cash	83
Note 10 – Commitments and Contingencies	84
Note 11 – Shareholders' Equity	87
Note 12 – Earnings Per Common Share	87
Note 13 – Accumulated Other Comprehensive Income (Loss)	88
Note 14 – Fair Value Measurements	88
Note 15 – Fair Value Option	95
Note 16 – Fair Value of Financial Instruments	97
Note 17 – Business Segment Information	97
Glossary	102
Acronyms	103

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

Executive Summary	3
Recent Developments	3
Financial Highlights	6
Supplemental Financial Data	8
Business Segment Operations	12
Consumer Banking	12
Global Wealth & Investment Management	16
Global Banking	18
Global Markets	20
All Other	22
Off-Balance Sheet Arrangements and Contractual Obligations	23
Managing Risk	23
Capital Management	23
Liquidity Risk	28
Credit Risk Management	31
Consumer Portfolio Credit Risk Management	31
Commercial Portfolio Credit Risk Management	37
Non-U.S. Portfolio	43
Allowance for Credit Losses	44
Market Risk Management	46
Trading Risk Management	46
Interest Rate Risk Management for the Banking Book	47
Mortgage Banking Risk Management	49
Complex Accounting Estimates	49
Non-GAAP Reconciliations	51

<u>Item 3. Quantitative and Qualitative Disclosures about Market Risk</u>	51
--	-----------

<u>Item 4. Controls and Procedures</u>	51
---	-----------

1 Bank of America

Part II. Other Information

Item 1. Legal Proceedings	104
Item 1A. Risk Factors	104
Item 2. Unregistered Sales of Equity Securities and Use of Proceeds	105
Item 6. Exhibits	106
Signature	106

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 Coronavirus Disease 2019 (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, stress capital buffer 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 or changes to the U.S. presidential administration and Congress; 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 June 30, 2020, the Corporation had \$2.7 trillion in assets and a headcount of approximately 213,000 employees.

As of June 30, 2020, we served clients through operations across the U.S., its territories and approximately 35 countries. Our retail banking footprint covers 100 percent of major markets in the U.S., 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 households. Our wealth management businesses, with client balances of \$2.9 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

In June 2020, the Board of Governors of the Federal Reserve System (Federal Reserve) notified BHCs of their 2020 Comprehensive Capital Analysis and Review (CCAR) supervisory stress test results. Based on our results, we will be subject to a preliminary 2.5 percent stress capital buffer (SCB) for the period beginning October 1, 2020 and ending on September 30, 2021. The Federal Reserve plans to finalize the SCB for all BHCs by August 31, 2020. For more information on SCB, see Capital Management on page 23.

The Federal Reserve also announced that due to economic uncertainty resulting from the Coronavirus Disease 2019 (COVID-19) pandemic, all large banks will be required to suspend share repurchase programs in the third quarter of 2020, except for repurchases to offset shares awarded under equity-based compensation plans, and limit dividends to existing rates that do not exceed the average of the last four quarters’ net income. Large banks will also be required to resubmit and update their capital plans later this year based on instructions that the Federal Reserve will provide. The Federal Reserve plans to conduct additional analysis to assess the Corporation’s capital plans and will review capital preservation measures on a quarter-by-quarter basis.

The Federal Reserve’s directive regarding share repurchases aligns with our decision to voluntarily suspend repurchases in the first quarter of 2020 from the date of the announcement on March 15, 2020 through the end of the second quarter of 2020. The suspension of our repurchases did not include repurchases to offset shares awarded under our equity-based compensation plans, for which we repurchased \$286 million of common stock during the second quarter of 2020 pursuant to the Board’s repurchase authorization under our 2019 CCAR capital plan.

On July 22, 2020, the Board of Directors (the Board) declared a quarterly common stock dividend at the existing rate of \$0.18 per share. We intend to maintain the quarterly common stock dividend at this rate until further notice, subject to approval by the Board. We will also continue our current suspension of common stock repurchases in the third quarter of 2020, except for repurchases to offset shares awarded under equity-based compensation plans.

For more information on our capital resources, see Capital Management on page 23.

COVID-19 Pandemic

In the first quarter of 2020, the World Health Organization declared the outbreak of COVID-19 a pandemic. In an attempt to contain the spread and impact of the COVID-19 pandemic, travel bans and restrictions, quarantines, shelter-in-place orders and limitations on business activity have been implemented. Additionally, there has been a sharp decline in global economic activity, reduced U.S. and global economic output and a significant deterioration in macroeconomic conditions in the U.S. and globally. This has resulted in, among other things, high rates of unemployment and underemployment and caused volatility and disruptions in the global financial markets, including the energy and commodity markets. Although some restrictive measures have been eased in certain areas, many of the restrictive measures remain in place or have been reinstated, and in some cases additional restrictive measures are being implemented. Businesses, market participants, our counterparties and clients, and the U.S. and global economies have been negatively impacted and are likely to be so for an extended period of time, as there remains significant uncertainty about the timing and strength of an economic recovery.

In response to the pandemic, the Corporation has implemented protocols and processes to execute its business continuity plans and help protect its employees and support its clients. The Corporation is managing its response to the COVID-19 pandemic according to its Enterprise Response Framework, which invokes centralized management of the crisis event and the integration of its response. The CEO and key members of the Corporation’s management team meet daily with co-leaders of the Executive Response Team, which is composed of senior executives across the Corporation, to help drive decisions, communications, and consistency of response across all businesses and functions. We are also coordinating with global, regional and local authorities and health experts, including the U.S. Centers for Disease Control and Prevention (CDC) and the World Health Organization.

Additionally, we have implemented a number of measures to assist our employees, clients and the communities we serve, including the following:

Employees

We are providing support to our teammates to help promote the health and safety of our employees, including:

- Monitoring guidance from the CDC, medical boards and health authorities and sharing such guidance with our employees.
- Operating our businesses from remote locations and leveraging our business continuity plans and capabilities. The Corporation has globally implemented a work-from-home posture, which has resulted in a substantial majority of our employees working from home, and pre-planned contingency strategies for site-based operations for our remaining employees. We continue to evaluate our continuity plans and work-from-home strategy in an effort to best protect the health and safety of our employees.
- Providing access to various benefits and resources related to the COVID-19 pandemic.

Clients

We have taken measures to leverage our business continuity plans and capabilities to continue to service our clients and meet our clients' financial needs, including:

- 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, and continuing to provide access to credit and the important financial services on which our clients rely. For more information on payment deferrals, see *Note 1 – Summary of Significant Accounting Principles* to the Consolidated Financial Statements.
- Participating in the programs created by the Coronavirus Aid, Relief and Economic Security (CARES Act) and Federal Reserve lending programs for businesses, including originating Paycheck Protection Program (PPP) loans. Through the second quarter of 2020, we funded approximately 334,000 PPP loans totaling \$25.1 billion, which were recorded in the *Consumer, GWM and Global Banking* segments. For more information, see *Credit Risk Management* on page 31 and *Note 1 – Summary of Significant Accounting Principles* to the Consolidated Financial Statements.
- Providing access to important financial resources, including 24/7 access to mobile and online banking, with no limits on cash withdrawals, and virtual connection to advisors.

Community partners

We have supported the communities where we live and work by engaging to help those affected through initiatives, including:

- Committed \$100 million to local communities to purchase medical supplies, food and other priorities.
- Committed \$250 million in capital to community development financial institutions to fund loans they extend through the PPP.
- Issued a \$1 billion, four-year corporate social bond to support the fight against COVID-19, the first such offering by a U.S. commercial bank.
- Made a \$1 billion, four-year pledge of additional support to address economic and racial inequality accelerated by the global pandemic. The programs will be focused on assisting people and communities of color who have experienced a greater impact from the health crisis.

We will continue to manage the increased operational risk related to the execution of our business continuity plans in accordance with our Enterprise Response Framework, Risk Framework and Operational Risk Management Program. For more information, see *Managing Risk* on page 23.

Loan Modifications

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 following table provides a summary of the percentage of our loans and loan balances with modifications in place as of July 23, 2020. The modifications were made in response to COVID-19 under payment deferral or forbearance programs, none of which are classified as TDRs. As of the date presented, loan balances of deferred consumer and small business accounts totaled \$28.5 billion. Deferred commercial accounts, excluding small business, totaled \$7.7 billion.

Table 1 **Client Loan Modifications**

July 23, 2020			
	% of Accounts with Completed Modifications	% of Balances with Completed Modifications	Program Details
Consumer card	4%	7%	Initial deferral up to 60 days, with automatic extensions for payments due through August 15.
Small Business card	13	20	Initial deferral up to 90 days, with automatic extensions for payments due through August 15.
Small Business non-credit card lending	10	14	Initial deferral of 90 days; deferral extension available for an additional 90 days.
Mortgage and home equity lines of credit (1)	5	6	Initial deferral or forbearance of up to 90 days; additional 90-day extension available.
Consumer vehicle lending (2)	2	3	Initial extension of 60 days for Consumer and 90 days for Small Business, with up to three extensions available in matching increments.
Commercial loans (3)	2	2	Primarily deferral of up to 90 days; interest continues to accrue with various repayment options; may include short-term covenant waivers.

(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.

We have processed 1.8 million consumer deferral requests, of which 1.4 million were in place as of July 23, 2020. The largest number of processed deferrals has been for consumer and small business credit card holders, of which 85 percent were initiated in late March and April 2020. At the time the deferrals were requested, more than 95 percent of these customers were current. During the second quarter of 2020, approximately 61 percent of these customers have made at least one payment, and 33 percent have made a payment each month since being placed on deferral.

Other Related Matters

As part of our ongoing review of our financial condition in light of the pandemic, we evaluated goodwill and other intangibles and equity investments for potential impairment. Based upon our review as of June 30, 2020, no impairments have been recorded. For more information on goodwill, see Complex Accounting Estimates – Goodwill and Intangible Assets on page 50 and Note 7 – Goodwill and Intangible Assets to the Consolidated Financial Statements.

Given the significant uncertainty regarding the duration and further spread of COVID-19 and rapidly evolving economic effects and social impacts of the COVID-19 pandemic, the future direct and indirect impact on our businesses, results of operations and financial condition remain 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 businesses and results of operations and could have an effect on our financial condition. For more information on how the risks related to the COVID-19 pandemic may adversely affect our businesses, results of operations and financial condition, see Part II, Item 1A. Risk Factors on page 104.

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 may mature after LIBOR is no longer deemed a representative benchmark 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, the Corporation continues to monitor the impact of COVID-19 on the market and industry transition to ARRs, including the readiness of other market participants and third-party vendors, and 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 104.

Merchant Services Joint Venture

Prior to the third quarter of 2020, a significant portion of our merchant processing activity was performed by a joint venture in which we hold a 49 percent ownership interest. In 2019, we delivered notice of termination of the joint venture at the conclusion of its term in June 2020 to the joint venture partner. For more information, see Note 10 – Commitments and Contingencies to the Consolidated Financial Statements.

Effective July 1, 2020, the Corporation received its share of the joint venture's merchant contracts and began providing merchant services for the customer relationships received. Beginning in the third quarter of 2020, merchant revenue and the related noninterest expense will be recorded in the Consolidated Statement of Income and are not expected to be material.

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 (ECL). Prior-year 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 June 30		Six Months Ended June 30	
	2020	2019	2020	2019
(Dollars in millions, except per share information)				
Income statement				
Net interest income	\$ 10,848	\$ 12,189	\$ 22,978	\$ 24,564
Noninterest income	11,478	10,895	22,115	21,524
Total revenue, net of interest expense	22,326	23,084	45,093	46,088
Provision for credit losses	5,117	857	9,878	1,870
Noninterest expense	13,410	13,268	26,885	26,492
Income before income taxes	3,799	8,959	8,330	17,726
Income tax expense	266	1,611	787	3,067
Net income	3,533	7,348	7,543	14,659
Preferred stock dividends	249	239	718	681
Net income applicable to common shareholders	\$ 3,284	\$ 7,109	\$ 6,825	\$ 13,978
Per common share information				
Earnings	\$ 0.38	\$ 0.75	\$ 0.78	\$ 1.45
Diluted earnings	0.37	0.74	0.77	1.45
Dividends paid	0.18	0.15	0.36	0.30
Performance ratios				
Return on average assets (1)	0.53%	1.23%	0.58%	1.24%
Return on average common shareholders' equity (1)	5.44	11.62	5.67	11.52
Return on average tangible common shareholders' equity (2)	7.63	16.24	7.97	16.13
Efficiency ratio (1)	60.06	57.48	59.62	57.48
Balance sheet				
Total loans and leases			\$ 998,944	\$ 983,426
Total assets			2,741,688	2,434,079
Total deposits			1,718,666	1,434,803
Total liabilities			2,476,051	2,169,269
Total common shareholders' equity			242,210	241,409
Total shareholders' equity			265,637	264,810

(1) For definitions, see Key Metrics on page 103.

(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 51.

Net income was \$3.5 billion and \$7.5 billion, or \$0.37 and \$0.77 per diluted share, for the three and six months ended June 30, 2020 compared to \$7.3 billion and \$14.7 billion, or \$0.74 and \$1.45 per diluted share, for the same periods in 2019. The decline in net income was largely due to an increase in the provision for credit losses primarily due to the weaker economic outlook related to COVID-19, and to a lesser extent, lower revenue and an increase in noninterest expense.

Total assets increased \$307.6 billion from December 31, 2019 to \$2.7 trillion primarily driven by higher federal funds sold and securities borrowed or purchased under agreements to resell and higher cash and cash equivalents as a result of elevated deposit balances being deployed as short-term investments.

Total liabilities increased \$306.8 billion from December 31, 2019 to \$2.5 trillion primarily driven by higher deposit inflows resulting from government stimulus actions, lower consumer spending, and client responses to market volatility as clients improved their liquidity positions. Additionally, long-term debt

increased due to debt issuances and a debt basis adjustment primarily due to lower interest rates.

Shareholders' equity increased \$827 million from December 31, 2019 primarily due to net income and market value increases on debt securities, 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 \$1.3 billion to \$10.8 billion, and \$1.6 billion to \$23.0 billion for the three and six months ended June 30, 2020 compared to the same periods in 2019. Net interest yield on a fully taxable-equivalent (FTE) basis decreased 57 basis points (bps) to 1.87 percent, and 39 bps to 2.09 percent for the same periods. The decrease in net interest income was primarily driven by lower asset yields from the decline in interest rates, partially offset by reduced deposit and funding costs as well as

loan and deposit growth. Based on the forward interest rate curve and other relevant assumptions as of June 30, 2020, we expect net interest income to decline modestly in the third quarter of 2020 as compared to the second quarter of 2020. For more

information on net interest yield and the FTE basis, see Supplemental Financial Data on page 8, and for more information on interest rate risk management, see Interest Rate Risk Management for the Banking Book on page 47.

Noninterest Income

Table 3 Noninterest Income

	Three Months Ended June 30		Six Months Ended June 30	
	2020	2019	2020	2019
(Dollars in millions)				
Fees and commissions:				
Card income	\$ 1,249	\$ 1,446	\$ 2,521	\$ 2,821
Service charges	1,562	1,903	3,465	3,742
Investment and brokerage services	3,422	3,470	7,180	6,830
Investment banking fees	2,159	1,371	3,547	2,635
Total fees and commissions	8,392	8,190	16,713	16,028
Market making and similar activities	2,487	2,381	5,294	5,149
Other income	599	324	108	347
Total noninterest income	\$ 11,478	\$ 10,895	\$ 22,115	\$ 21,524

Noninterest income increased \$583 million to \$11.5 billion, and \$591 million to \$22.1 billion for the three and six months ended June 30, 2020 compared to the same periods in 2019. The following highlights the significant changes.

- Card income decreased \$197 million and \$300 million primarily driven by lower levels of consumer spending due to the impact of COVID-19.
- Service charges decreased \$341 million and \$277 million primarily due to lower overdraft charge rates and client activity due to the impact of COVID-19.
- Investment and brokerage services income decreased \$48 million for the three-month period primarily due to lower market valuations and assets under management (AUM) pricing, partially offset by the benefit of positive AUM flows. For the six-month period, there was an increase of \$350 million primarily due to higher client transactional activity, higher market valuations and AUM flows, partially offset by declines in AUM pricing.
- Investment banking fees increased \$788 million and \$912 million due to higher debt and equity underwriting fees and higher advisory fees.

- Market making and similar activities increased \$106 million and \$145 million. For the three-month period the improvement was primarily due to increased client activity and market recoveries from the end of the prior quarter, partially offset by lower income in equity derivatives from a weaker trading performance. The increase in the six-month period was primarily driven by higher client activity, partially offset by valuation adjustments in credit-sensitive products.
- Other income increased \$275 million for the three-month period and decreased \$239 million for the six-month period. The increase was primarily due to a \$704 million gain on sales of certain mortgage loans, partially offset by certain valuation adjustments. The decrease in the six-month period was primarily due to net unrealized losses in the fair value option and leveraged finance portfolios.

Provision for Credit Losses

The provision for credit losses increased \$4.3 billion to \$5.1 billion, and \$8.0 billion to \$9.9 billion for the three and six months ended June 30, 2020 compared to the same periods in 2019, primarily driven by increased ECL due to a weaker economic outlook related to COVID-19. For more information on the provision for credit losses, see Allowance for Credit Losses on page 44.

Noninterest Expense

Table 4 Noninterest Expense

	Three Months Ended June 30		Six Months Ended June 30	
	2020	2019	2020	2019
(Dollars in millions)				
Compensation and benefits	\$ 7,994	\$ 7,972	\$ 16,335	\$ 16,221
Occupancy and equipment	1,802	1,640	3,504	3,245
Information processing and communications	1,265	1,157	2,474	2,321
Product delivery and transaction related	811	709	1,588	1,371
Marketing	492	528	930	970
Professional fees	381	409	756	769
Other general operating	665	853	1,298	1,595
Total noninterest expense	\$ 13,410	\$ 13,268	\$ 26,885	\$ 26,492

Noninterest expense increased \$142 million to \$13.4 billion, and \$393 million to \$26.9 billion for the three and six months ended June 30, 2020 compared to the same periods in 2019. The increase was primarily due to the net impact of COVID-19 expense after considering related savings, partially offset by other cost reductions.

Income Tax Expense

Table 5 Income Tax Expense

(Dollars in millions)

Income before income taxes
Income tax expense
Effective tax rate

Three Months Ended June 30		Six Months Ended June 30	
2020	2019	2020	2019
\$ 3,799	\$ 8,959	\$ 8,330	\$ 17,726
266	1,611	787	3,067
7.0%	18.0%	9.4%	17.3%

The effective tax rates for the three and six months ended June 30, 2020 and 2019 were driven by our recurring tax preference benefits, primarily consisting of tax credits from investments in affordable housing and renewable energy, aligning with our responsible growth strategy to address global sustainability challenges. The six-month effective rates also included tax benefits from deductions associated with share-based compensation. The declines in the effective tax rates for the three and six months ended June 30, 2020 were driven by the impact of our recurring tax preference benefits on the lower levels of pretax income. We expect the effective tax rate for the rest of 2020 to be approximately 11 percent, excluding the change in U.K. tax law discussed below and other unusual items. Absent these tax credits, we would expect the effective tax rate to be approximately 25 percent.

On July 22, 2020, the U.K. enacted a change in its tax rates under which the Corporation will record an income tax benefit of approximately \$700 million in the third quarter of 2020. For more information, see *Note 1 - Summary of Significant Accounting Principles* to the Consolidated Financial Statements.

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 objectives. 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 51.

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 103.

Our consolidated key performance indicators, which include various equity and credit metrics, are presented in Table 2 on page 6 and/or Table 6 on page 9.

For information on key segment performance metrics, see Business Segment Operations on page 12.

Table 6 Selected Financial Data

	2020 Quarters		2019 Quarters			Six Months Ended June 30	
	Second	First	Fourth	Third	Second	2020	2019
(In millions, except per share information)							
Income statement							
Net interest income	\$ 10,848	\$ 12,130	\$ 12,140	\$ 12,187	\$ 12,189	\$ 22,978	\$ 24,564
Noninterest income	11,478	10,637	10,209	10,620	10,895	22,115	21,524
Total revenue, net of interest expense	22,326	22,767	22,349	22,807	23,084	45,093	46,088
Provision for credit losses	5,117	4,761	941	779	857	9,878	1,870
Noninterest expense	13,410	13,475	13,239	15,169	13,268	26,885	26,492
Income before income taxes	3,799	4,531	8,169	6,859	8,959	8,330	17,726
Income tax expense	266	521	1,175	1,082	1,611	787	3,067
Net income	3,533	4,010	6,994	5,777	7,348	7,543	14,659
Net income applicable to common shareholders	3,284	3,541	6,748	5,272	7,109	6,825	13,978
Average common shares issued and outstanding	8,739.9	8,815.6	9,017.1	9,303.6	9,523.2	8,777.6	9,624.0
Average diluted common shares issued and outstanding	8,768.1	8,862.7	9,079.5	9,353.0	9,559.6	8,813.3	9,672.4
Performance ratios							
Return on average assets ⁽¹⁾	0.53%	0.65%	1.13%	0.95%	1.23%	0.58%	1.24%
Four-quarter trailing return on average assets ⁽²⁾	0.81	0.99	1.14	1.17	1.24	n/a	n/a
Return on average common shareholders' equity ⁽¹⁾	5.44	5.91	11.00	8.48	11.62	5.67	11.52
Return on average tangible common shareholders' equity ⁽¹⁾	7.63	8.32	15.43	11.84	16.24	7.97	16.13
Return on average shareholders' equity ⁽¹⁾	5.34	6.10	10.40	8.48	11.00	5.71	11.07
Return on average tangible shareholders' equity ⁽³⁾	7.23	8.29	14.09	11.43	14.88	7.76	14.99
Total ending equity to total ending assets	9.69	10.11	10.88	11.06	11.33	9.69	11.33
Total average equity to total average assets	9.85	10.60	10.89	11.21	11.17	10.21	11.22
Dividend payout	47.87	44.57	23.90	31.48	19.95	46.16	20.57
Per common share data							
Earnings	\$ 0.38	\$ 0.40	\$ 0.75	\$ 0.57	\$ 0.75	\$ 0.78	\$ 1.45
Diluted earnings	0.37	0.40	0.74	0.56	0.74	0.77	1.45
Dividends paid	0.18	0.18	0.18	0.18	0.15	0.36	0.30
Book value ⁽¹⁾	27.96	27.84	27.32	26.96	26.41	27.96	26.41
Tangible book value ⁽³⁾	19.90	19.79	19.41	19.26	18.92	19.90	18.92
Market capitalization	\$ 205,772	\$ 184,181	\$ 311,209	\$ 264,842	\$ 270,935	\$ 205,772	\$ 270,935
Average balance sheet							
Total loans and leases	\$ 1,031,387	\$ 990,283	\$ 973,986	\$ 964,733	\$ 950,525		
Total assets	2,704,186	2,494,928	2,450,005	2,412,223	2,399,051		
Total deposits	1,658,197	1,439,336	1,410,439	1,375,052	1,375,450		
Long-term debt	221,167	210,816	206,026	202,620	201,007		
Common shareholders' equity	242,889	241,078	243,439	246,630	245,438		
Total shareholders' equity	266,316	264,534	266,900	270,430	267,975		
Asset quality							
Allowance for credit losses ⁽⁴⁾	\$ 21,091	\$ 17,126	\$ 10,229	\$ 10,242	\$ 10,333		
Nonperforming loans, leases and foreclosed properties ⁽⁵⁾	4,611	4,331	3,837	3,723	4,452		
Allowance for loan and lease losses as a percentage of total loans and leases outstanding ⁽⁵⁾	1.96%	1.51%	0.97%	0.98%	1.00%		
Allowance for loan and lease losses as a percentage of total nonperforming loans and leases ⁽⁵⁾	441	389	265	271	228		
Net charge-offs	\$ 1,146	\$ 1,122	\$ 959	\$ 811	\$ 887		
Annualized net charge-offs as a percentage of average loans and leases outstanding ⁽⁵⁾	0.45%	0.46%	0.39%	0.34%	0.38%		
Capital ratios at period end ⁽⁶⁾							
Common equity tier 1 capital	11.4%	10.8%	11.2%	11.4%	11.7%		
Tier 1 capital	12.9	12.3	12.6	12.9	13.3		
Total capital	14.8	14.6	14.7	15.1	15.4		
Tier 1 leverage	7.4	7.9	7.9	8.2	8.4		
Supplementary leverage ratio	7.1	6.4	6.4	6.6	6.8		
Tangible equity ⁽³⁾	7.3	7.7	8.2	8.4	8.7		
Tangible common equity ⁽³⁾	6.5	6.7	7.3	7.4	7.6		
Total loss-absorbing capacity and long-term debt metrics							
Total loss-absorbing capacity to risk-weighted assets	26.0%	24.6%	24.6%	24.8%	25.5%		
Total loss-absorbing capacity to supplementary leverage exposure	14.2	12.8	12.5	12.7	13.0		

Eligible long-term debt to risk-weighted assets	12.4	11.6	11.5	11.4	11.8
Eligible long-term debt to supplementary leverage exposure	6.7	6.1	5.8	5.8	6.0

(1) For definitions, see Key Metrics on page 103.

(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 8 and Non-GAAP Reconciliations on page 51.

(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 36 and corresponding Table 28 and Commercial Portfolio Credit Risk Management – Nonperforming Commercial Loans, Leases and Foreclosed Properties Activity on page 41 and corresponding Table 35.

(6) For more information, including which approach is used to assess capital adequacy, see Capital Management on page 23.

Table 7 Quarterly Average Balances and Interest Rates - FTE Basis

	Average Balance	Interest Income/ Expense (1)	Yield/ Rate	Average Balance	Interest Income/ Expense (1)	Yield/ Rate
(Dollars in millions)	Second Quarter 2020			Second Quarter 2019		
Earning assets						
Interest-bearing deposits with the Federal Reserve, non-U.S. central banks and other banks	\$ 314,661	\$ 33	0.04 %	\$ 122,395	\$ 495	1.62%
Time deposits placed and other short-term investments	8,644	5	0.25	9,798	61	2.51
Federal funds sold and securities borrowed or purchased under agreements to resell	312,404	26	0.03	281,085	1,309	1.87
Trading account assets	143,370	1,021	2.86	146,865	1,337	3.65
Debt securities	476,060	2,462	2.10	446,447	3,047	2.72
Loans and leases (2):						
Residential mortgage	241,486	1,880	3.11	215,822	1,899	3.52
Home equity	39,308	308	3.15	45,944	587	5.12
Credit card	86,191	2,140	9.99	93,627	2,511	10.76
Direct/Indirect and other consumer (3)	88,962	623	2.81	90,453	830	3.68
Total consumer	455,947	4,951	4.36	445,846	5,827	5.24
U.S. commercial	374,965	2,462	2.64	318,243	3,382	4.26
Non-U.S. commercial	116,040	642	2.22	103,844	894	3.45
Commercial real estate (4)	65,515	430	2.64	61,778	720	4.67
Commercial lease financing	18,920	128	2.71	20,814	172	3.32
Total commercial	575,440	3,662	2.56	504,679	5,168	4.11
Total loans and leases	1,031,387	8,613	3.35	950,525	10,995	4.64
Other earning assets	72,256	508	2.82	66,607	1,129	6.79
Total earning assets	2,358,782	12,668	2.16	2,023,722	18,373	3.64
Cash and due from banks	31,256			25,951		
Other assets, less allowance for loan and lease losses	314,148			349,378		
Total assets	\$ 2,704,186			\$ 2,399,051		
Interest-bearing liabilities						
U.S. interest-bearing deposits:						
Savings	\$ 56,931	\$ 2	0.01 %	\$ 52,987	\$ 2	0.01%
NOW and money market deposit accounts	850,274	152	0.07	737,095	1,228	0.67
Consumer CDs and IRAs	50,882	123	0.97	45,375	105	0.93
Negotiable CDs, public funds and other deposits	81,532	56	0.29	69,966	408	2.35
Total U.S. interest-bearing deposits	1,039,619	333	0.13	905,423	1,743	0.77
Non-U.S. interest-bearing deposits:						
Banks located in non-U.S. countries	1,807	—	0.04	2,033	5	0.96
Governments and official institutions	183	—	—	179	—	0.05
Time, savings and other	74,158	40	0.21	68,706	217	1.26
Total non-U.S. interest-bearing deposits	76,148	40	0.21	70,918	222	1.25
Total interest-bearing deposits	1,115,767	373	0.13	976,341	1,965	0.81
Federal funds purchased, securities loaned or sold under agreements to repurchase, short-term borrowings and other interest-bearing liabilities	295,465	(72)	(0.10)	278,198	1,997	2.89
Trading account liabilities	40,717	223	2.20	47,022	319	2.72
Long-term debt	221,167	1,168	2.12	201,007	1,754	3.49
Total interest-bearing liabilities	1,673,116	1,692	0.41	1,502,568	6,035	1.61
Noninterest-bearing sources:						
Noninterest-bearing deposits	542,430			399,109		
Other liabilities (5)	222,324			229,399		
Shareholders' equity	266,316			267,975		
Total liabilities and shareholders' equity	\$ 2,704,186			\$ 2,399,051		
Net interest spread			1.75 %			2.03%
Impact of noninterest-bearing sources			0.12			0.41
Net interest income/yield on earning assets (6)		\$ 10,976	1.87 %		\$ 12,338	2.44%

(1) Includes the impact of interest rate risk management contracts. For more information, see Interest Rate Risk Management for the Banking Book on page 47.

(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 \$2.8 billion and \$2.9 billion for the second quarter of 2020 and 2019.

(4) Includes U.S. commercial real estate loans of \$61.8 billion and \$57.0 billion, and non-U.S. commercial real estate loans of \$3.7 billion and \$4.8 billion for the second quarter of 2020 and 2019.

(5) Includes \$35.5 billion and \$35.0 billion of structured notes and liabilities for the second quarter of 2020 and 2019.

(6) Net interest income includes FTE adjustments of \$128 million and \$149 million for the second quarter of 2020 and 2019.

Table 8 **Year-to-Date Average Balances and Interest Rates - FTE Basis**

	Average Balance	Interest Income/ Expense ⁽¹⁾	Yield/ Rate	Average Balance	Interest Income/ Expense ⁽¹⁾	Yield/ Rate
	Six Months Ended June 30					
(Dollars in millions)	2020			2019		
Earning assets						
Interest-bearing deposits with the Federal Reserve, non-U.S. central banks and other banks	\$ 222,472	\$ 301	0.27%	\$ 128,644	\$ 1,001	1.57%
Time deposits placed and other short-term investments	9,769	35	0.73	9,129	120	2.65
Federal funds sold and securities borrowed or purchased under agreements to resell	295,599	845	0.57	277,715	2,504	1.82
Trading account assets	150,028	2,287	3.06	143,565	2,678	3.76
Debt securities	470,638	5,330	2.29	444,077	6,195	2.78
Loans and leases (2):						
Residential mortgage	240,740	3,867	3.21	213,014	3,761	3.53
Home equity	39,674	729	3.69	46,812	1,180	5.07
Credit card	90,331	4,604	10.25	94,313	5,041	10.78
Direct/Indirect and other consumer (3)	89,958	1,369	3.06	90,442	1,651	3.68
Total consumer	460,703	10,569	4.60	444,581	11,633	5.26
U.S. commercial	352,692	5,308	3.03	317,173	6,731	4.28
Non-U.S. commercial	113,714	1,444	2.55	102,925	1,780	3.49
Commercial real estate (4)	64,467	1,013	3.16	61,321	1,422	4.68
Commercial lease financing	19,259	289	3.00	21,291	368	3.46
Total commercial	550,132	8,054	2.94	502,710	10,301	4.13
Total loans and leases	1,010,835	18,623	3.70	947,291	21,934	4.66
Other earning assets	80,065	1,489	3.74	67,134	2,264	6.79
Total earning assets	2,239,406	28,910	2.59	2,017,555	36,696	3.66
Cash and due from banks	29,626			25,888		
Other assets, less allowance for loan and lease losses	330,525			336,684		
Total assets	\$ 2,599,557			\$ 2,380,127		
Interest-bearing liabilities						
U.S. interest-bearing deposits:						
Savings	\$ 53,765	\$ 3	0.01%	\$ 53,278	\$ 3	0.01%
NOW and money market deposit accounts	810,374	805	0.20	734,077	2,385	0.66
Consumer CDs and IRAs	52,123	274	1.06	43,593	179	0.83
Negotiable CDs, public funds and other deposits	74,759	265	0.72	67,981	775	2.30
Total U.S. interest-bearing deposits	991,021	1,347	0.27	898,929	3,342	0.75
Non-U.S. interest-bearing deposits:						
Banks located in non-U.S. countries	1,855	3	0.33	2,209	11	0.99
Governments and official institutions	172	—	0.02	178	—	0.08
Time, savings and other	74,891	207	0.55	66,472	407	1.23
Total non-U.S. interest-bearing deposits	76,918	210	0.55	68,859	418	1.22
Total interest-bearing deposits	1,067,939	1,557	0.29	967,788	3,760	0.78
Federal funds purchased, securities loaned or sold under agreements to repurchase, short-term borrowings and other interest-bearing liabilities	299,984	1,048	0.70	271,716	3,849	2.86
Trading account liabilities	44,430	552	2.50	46,312	664	2.89
Long-term debt	215,992	2,503	2.33	198,878	3,557	3.59
Total interest-bearing liabilities	1,628,345	5,660	0.70	1,484,694	11,830	1.61
Noninterest-bearing sources:						
Noninterest-bearing deposits	480,827			399,912		
Other liabilities (5)	224,960			228,420		
Shareholders' equity	265,425			267,101		
Total liabilities and shareholders' equity	\$ 2,599,557			\$ 2,380,127		
Net interest spread			1.89%			2.05%
Impact of noninterest-bearing sources			0.20			0.43
Net interest income/yield on earning assets (6)	\$ 23,250		2.09%	\$ 24,866		2.48%

⁽¹⁾ Includes the impact of interest rate risk management contracts. For more information, see Interest Rate Risk Management for the Banking Book on page 47.⁽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 for both the six months ended June 30, 2020 and 2019.⁽⁴⁾ Includes U.S. commercial real estate loans of \$60.7 billion and \$56.7 billion, and non-U.S. commercial real estate loans of \$3.7 billion and \$4.6 billion for the six months ended June 30, 2020 and 2019.⁽⁵⁾ Includes \$35.6 billion and \$33.2 billion of structured notes and liabilities for the six months ended June 30, 2020 and 2019.

(6) Net interest income includes FTE adjustments of \$272 million and \$302 million for the six months ended June 30, 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 23. 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 8, 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 June 30						
(Dollars in millions)	2020	2019	2020	2019	2020	2019	%Change
Net interest income	\$ 3,299	\$ 4,363	\$ 2,692	\$ 2,753	\$ 5,991	\$ 7,116	(16)%
Noninterest income:							
Card income	(4)	(6)	1,057	1,274	1,053	1,268	(17)
Service charges	705	1,045	1	—	706	1,045	(32)
All other income	62	209	39	79	101	288	(65)
Total noninterest income	763	1,248	1,097	1,353	1,860	2,601	(28)
Total revenue, net of interest expense	4,062	5,611	3,789	4,106	7,851	9,717	(19)
Provision for credit losses	154	44	2,870	903	3,024	947	n/m
Noninterest expense	2,868	2,674	1,865	1,738	4,733	4,412	7
Income (loss) before income taxes	1,040	2,893	(946)	1,465	94	4,358	(98)
Income tax expense (benefit)	255	709	(232)	359	23	1,068	(98)
Net income (loss)	\$ 785	\$ 2,184	\$ (714)	\$ 1,106	\$ 71	\$ 3,290	(98)
Effective tax rate (1)					24.5%	24.5%	
Net interest yield	1.66%	2.49%	3.42 %	3.79%	2.85	3.87	
Return on average allocated capital	26	73	(11)	18	1	36	
Efficiency ratio	70.62	47.68	49.23	42.31	60.30	45.41	

Balance Sheet

Average	Three Months Ended June 30						%Change
	2020	2019	2020	2019	2020	2019	
Total loans and leases	\$ 5,314	\$ 5,333	\$ 316,244	\$ 291,055	\$ 321,558	\$ 296,388	8%
Total earning assets (2)	801,391	702,698	316,622	291,492	845,236	737,714	15
Total assets (2)	837,367	734,183	320,978	301,743	885,568	779,450	14
Total deposits	804,418	701,853	6,282	5,238	810,700	707,091	15
Allocated capital	12,000	12,000	26,500	25,000	38,500	37,000	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.

n/m = not meaningful

	Deposits		Consumer Lending		Total Consumer Banking		
	Six Months Ended June 30						
(Dollars in millions)	2020	2019	2020	2019	2020	2019	% Change
Net interest income	\$ 7,247	\$ 8,670	\$ 5,606	\$ 5,552	\$ 12,853	\$ 14,222	(10)%
Noninterest income:							
Card income	(12)	(13)	2,175	2,478	2,163	2,465	(12)
Service charges	1,700	2,064	1	1	1,701	2,065	(18)
All other income	159	442	104	155	263	597	(56)
Total noninterest income	1,847	2,493	2,280	2,634	4,127	5,127	(20)
Total revenue, net of interest expense	9,094	11,163	7,886	8,186	16,980	19,349	(12)
Provision for credit losses	269	90	5,013	1,831	5,282	1,921	n/m
Noninterest expense	5,593	5,329	3,635	3,450	9,228	8,779	5
Income (loss) before income taxes	3,232	5,744	(762)	2,905	2,470	8,649	(71)
Income tax expense (benefit)	792	1,407	(187)	712	605	2,119	(71)
Net income (loss)	\$ 2,440	\$ 4,337	\$ (575)	\$ 2,193	\$ 1,865	\$ 6,530	(71)
Effective tax rate (1)					24.5%	24.5%	
Net interest yield	1.90%	2.51%	3.59 %	3.87%	3.19	3.91	
Return on average allocated capital	41	73	(4)	18	10	36	
Efficiency ratio	61.50	47.74	46.10	42.15	54.35	45.37	

Balance Sheet

Average	Six Months Ended June 30						%Change
	2020	2019	2020	2019	2020	2019	
	2020	2019	2020	2019	2020	2019	
Total loans and leases	\$ 5,374	\$ 5,322	\$ 313,878	\$ 289,017	\$ 319,252	\$ 294,339	8%
Total earning assets (2)	766,660	697,921	314,375	289,387	809,436	732,580	10
Total assets (2)	800,742	729,397	319,279	299,748	848,422	774,417	10
Total deposits	767,848	697,071	5,837	5,003	773,685	702,074	10
Allocated capital	12,000	12,000	26,500	25,000	38,500	37,000	4
Period end	June 30	December 31	June 30	December 31	June 30	December 31	%Change
	2020	2019	2020	2019	2020	2019	
	2020	2019	2020	2019	2020	2019	
Total loans and leases	\$ 5,146	\$ 5,467	\$ 319,959	\$ 311,942	\$ 325,105	\$ 317,409	2%
Total earning assets (2)	843,131	724,573	320,461	312,684	890,244	760,174	17
Total assets (2)	879,641	758,459	322,900	322,717	929,193	804,093	16
Total deposits	846,622	725,665	7,395	5,080	854,017	730,745	17

See page 12 for footnotes
n/m = not meaningful

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

Three-Month Comparison

Net income for *Consumer Banking* decreased \$3.2 billion to \$71 million primarily due to higher provision for credit losses and lower revenue.

Net interest income decreased \$1.1 billion to \$6.0 billion primarily due to lower interest rates, partially offset by higher deposit and loan balances. Noninterest income decreased \$741 million to \$1.9 billion driven by a decline in service charges and card income primarily due to fewer overdrafts and lower client activity, as well as lower other income driven by the allocation of asset and liability management (ALM) results.

The provision for credit losses increased \$2.1 billion to \$3.0 billion primarily due to the weaker economic outlook related to COVID-19. Noninterest expense increased \$321 million to \$4.7 billion primarily driven by incremental expense to support customers and employees during COVID-19, as well as the cost

of increased client activity and continued investments for business growth.

The return on average allocated capital was one 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 12.

Six-Month Comparison

Net income for *Consumer Banking* decreased \$4.7 billion to \$1.9 billion primarily due to higher provision for credit losses and lower revenue.

Net interest income decreased \$1.4 billion to \$12.9 billion and noninterest income decreased \$1.0 billion to \$4.1 billion. The declines were primarily driven by the same factors as described in the three-month discussion.

The provision for credit losses increased \$3.4 billion to \$5.3 billion primarily due to the weaker economic outlook related to COVID-19. Noninterest expense increased \$449 million to \$9.2 billion primarily driven by incremental expense to support customers and employees during COVID-19, the cost of increased client activity, and continued investments for business growth, partially offset by improved productivity.

The return on average allocated capital was 10 percent, down from 36 percent, driven by lower net income and, to a lesser extent, an increase in allocated capital.

Deposits

Three-Month Comparison

Net income for Deposits decreased \$1.4 billion to \$785 million driven by lower revenue. Net interest income declined \$1.1 billion to \$3.3 billion primarily due to lower interest rates, partially offset by growth in deposits. Noninterest income decreased \$485 million to \$763 million. The decline in noninterest income was primarily driven by lower service charges due to fewer overdrafts, fee waivers and lower client activity related to the impact of COVID-19 as well as lower other income due to the allocation of ALM results.

The provision for credit losses increased \$110 million to \$154 million primarily due to the weaker economic outlook related to COVID-19. Noninterest expense increased \$194 million to \$2.9 billion driven by continued investments in the business and incremental expense to support customers and employees during the COVID-19 pandemic.

Average deposits increased \$102.6 billion to \$804.4 billion. The increase was driven by strong organic growth of \$76.1 billion in checking and time deposits and \$26.5 billion in traditional savings and money market savings.

Six-Month Comparison

Net income for Deposits decreased \$1.9 billion to \$2.4 billion driven by lower revenue. Net interest income declined \$1.4 billion to \$7.2 billion primarily driven by the same factors as described in the three-month discussion. Noninterest income decreased \$646 million to \$1.8 billion primarily due to the same factors as described in the three-month discussion.

The provision for credit losses increased \$179 million to \$269 million primarily due to the weaker economic outlook related to COVID-19. Noninterest expense increased \$264 million to \$5.6 billion due to the same factors as described in the three-month discussion.

Average deposits increased \$70.8 billion to \$767.8 billion. The increase was driven by strong organic growth of \$56.2 billion in checking and time deposits and \$14.6 billion in traditional savings and money market savings.

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 June 30		Six Months Ended June 30	
	2020	2019	2020	2019
Total deposit spreads (excludes noninterest costs) (1)	1.94%	2.40%	2.05%	2.39%
Period End				
Consumer investment assets (in millions) (2)			\$ 246,146	\$ 219,732
Active digital banking users (units in thousands) (3)			39,294	37,292
Active mobile banking users (units in thousands) (4)			30,307	27,818
Financial centers			4,298	4,349
ATMs			16,862	16,561

(1) Includes deposits held in Consumer Lending.

(2) Includes client brokerage assets, deposit sweep balances and ALM 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 \$26.4 billion driven by client flows and market performance. Active mobile banking users increased 2.5 million reflecting continuing changes in our customers' banking preferences. The number of financial centers declined by a net 51 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

Three-Month Comparison

Net loss for Consumer Lending was \$714 million, a decrease of \$1.8 billion primarily due to higher provision for credit losses. Net interest income decreased \$61 million to \$2.7 billion driven by the allocation of ALM results, partially offset by loan growth. Noninterest income decreased \$256 million to \$1.1 billion primarily driven by lower card income due to lower client activity.

The provision for credit losses increased \$2.0 billion to \$2.9 billion primarily due to the weaker economic outlook related to COVID-19. Noninterest expense increased \$127 million to \$1.9 billion primarily driven by investments in the business and

incremental expense to support customers and employees during the COVID-19 pandemic.

Average loans increased \$25.2 billion to \$316.2 billion primarily driven by an increase in residential mortgages.

Six-Month Comparison

Net loss for Consumer Lending was \$575 million, a decrease of \$2.8 billion primarily due to higher provision for credit losses. Net interest income increased \$54 million to \$5.6 billion driven by loan growth, and noninterest income decreased \$354 million to \$2.3 billion primarily driven by the same factors as described in the three-month discussion.

The provision for credit losses increased \$3.2 billion to \$5.0 billion primarily due to the weaker economic outlook related to COVID-19. Noninterest expense increased \$185 million to \$3.6 billion primarily driven by the same factors as described in the three-month discussion.

Average loans increased \$24.9 billion to \$313.9 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 June 30		Six Months Ended June 30	
	2020	2019	2020	2019
(Dollars in millions)				
Total credit card (1)				
Gross interest yield (2)	9.95%	10.76%	10.23%	10.78%
Risk-adjusted margin (3)	8.49	7.93	8.20	7.98
New accounts (in thousands)	449	1,068	1,504	2,102
Purchase volumes	\$ 53,694	\$ 70,288	\$ 118,073	\$ 133,039
Debit card purchase volumes	\$ 89,631	\$ 91,232	\$ 178,219	\$ 176,262

(1) Includes GWM'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 and six months ended June 30, 2020, the total credit card risk-adjusted margin increased 56 bps and 22 bps compared to the same periods in 2019 primarily due to a decrease in the proportion of customers who pay their balances in full each month. During the three and six months ended June 30, 2020, total credit card purchase volumes declined \$16.6 billion to \$53.7 billion, and \$15.0 billion to \$118.1 billion compared to the same periods in 2019. Debit card purchase volumes declined \$1.6 billion to \$89.6 billion during the three months ended June 30, 2020 compared to the same period in

2019. The declines in credit card and debit card purchase volumes were driven by lower levels of consumer spending due to the impact of COVID-19. Debit card purchase volumes began to improve late in the second quarter of 2020 as businesses reopened and consumers used their cards for more essential spending, as well as retail, services and restaurant spending. For the six months ended June 30, 2020, debit card purchase volumes increased \$2.0 billion to \$178.2 billion, driven by higher levels of consumer spending in the first quarter and again in June 2020.

Key Statistics – Loan Production (1)

	Three Months Ended June 30		Six Months Ended June 30	
	2020	2019	2020	2019
(Dollars in millions)				
Consumer Banking:				
First mortgage	\$ 15,049	\$ 12,757	\$ 27,930	\$ 20,912
Home equity	\$ 3,176	\$ 2,405	\$ 5,817	\$ 4,890
Total (2):				
First mortgage	\$ 23,124	\$ 18,229	\$ 42,062	\$ 29,689
Home equity	3,683	2,768	6,707	5,593

(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 GWM.

First mortgage loan originations in Consumer Banking and for the total Corporation increased \$2.3 billion and \$4.9 billion for the three months ended June 30, 2020 compared to the same period in 2019 primarily due to a lower interest rate environment driving higher first-lien mortgage refinances. First mortgage loan originations in Consumer Banking and for the total Corporation increased \$7.0 billion and \$12.4 billion for the six months ended June 30, 2020 compared to the same period in 2019 primarily

driven by the same factor as described in the three-month discussion.

Home equity production in Consumer Banking and for the total Corporation increased \$771 million and \$915 million for the three months ended June 30, 2020 and \$927 million and \$1.1 billion for the six months ended June 30, 2020, primarily driven by higher demand.

Global Wealth & Investment Management

(Dollars in millions)	Three Months Ended June 30			Six Months Ended June 30		
	2020	2019	%Change	2020	2019	%Change
Net interest income	\$ 1,378	\$ 1,624	(15)%	\$ 2,949	\$ 3,308	(11)%
Noninterest income:						
Investment and brokerage services	2,854	2,962	(4)	5,976	5,805	3
All other income	193	314	(39)	436	607	(28)
Total noninterest income	3,047	3,276	(7)	6,412	6,412	—
Total revenue, net of interest expense	4,425	4,900	(10)	9,361	9,720	(4)
Provision for credit losses	136	21	n/m	325	26	n/m
Noninterest expense	3,463	3,454	—	7,063	6,887	3
Income before income taxes	826	1,425	(42)	1,973	2,807	(30)
Income tax expense	202	349	(42)	483	688	(30)
Net income	\$ 624	\$ 1,076	(42)	\$ 1,490	\$ 2,119	(30)
Effective tax rate	24.5%	24.5%		24.5%	24.5%	
Net interest yield	1.76	2.35		1.96	2.37	
Return on average allocated capital	17	30		20	30	
Efficiency ratio	78.25	70.47		75.45	70.86	

Balance Sheet

Average	Three Months Ended June 30			Six Months Ended June 30		
	2020	2019	%Change	2020	2019	%Change
Total loans and leases	\$ 182,150	\$ 166,324	10%	\$ 180,395	\$ 165,369	9%
Total earning assets	315,258	277,038	14	303,089	281,025	8
Total assets	327,594	289,835	13	315,383	293,464	7
Total deposits	287,109	253,940	13	275,260	257,868	7
Allocated capital	15,000	14,500	3	15,000	14,500	3

Period end

	June 30 2020	December 31 2019	%Change
Total loans and leases	\$ 184,293	\$ 176,600	4%
Total earning assets	321,846	287,201	12
Total assets	334,190	299,770	11
Total deposits	291,740	263,113	11

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.

Three-Month Comparison

Net income for GWIM decreased \$452 million to \$624 million for the three months ended June 30, 2020 compared to the same period in 2019 due to lower revenue and higher provision for credit losses. The operating margin was 19 percent compared to 29 percent a year ago.

Net interest income decreased \$246 million to \$1.4 billion due to the impact of lower interest rates, partially offset by the benefit of strong deposit and loan growth.

Noninterest income, which primarily includes investment and brokerage services income, decreased \$229 million to \$3.0 billion. The decrease was primarily driven by lower transactional revenue, lower market valuations, and declines in AUM pricing, partially offset by the benefit of positive AUM flows.

The provision for credit losses increased \$115 million to \$136 million primarily due to the weaker economic outlook related to COVID-19. Noninterest expense remained relatively unchanged at \$3.5 billion.

The return on average allocated capital was 17 percent, down from 30 percent, due to lower net income and, to a lesser extent, a small increase in allocated capital.

MLGWM revenue of \$3.6 billion decreased ten percent primarily driven by the impact of lower interest rates, transactional

revenue and market valuations, as well as declines in AUM pricing, partially offset by the benefit of positive AUM flows.

Bank of America Private Bank revenue of \$800 million decreased six percent primarily driven by the impact of lower interest rates and lower market valuations.

Six-Month Comparison

Net income for GWIM decreased \$629 million to \$1.5 billion for the six months ended June 30, 2020 compared to the same period in 2019 due to lower revenue, higher provision for credit losses and higher noninterest expense. The operating margin was 21 percent compared to 29 percent a year ago.

Net interest income decreased \$359 million to \$2.9 billion due to the same factors as described in the three-month discussion.

Noninterest income, which primarily includes investment and brokerage services income, remained relatively unchanged at \$6.4 billion as the benefits of higher market valuations and positive AUM flows were offset by declines in AUM pricing and lower transactional revenue compared to the same period in 2019.

The provision for credit losses increased \$299 million to \$325 million primarily due to the weaker economic outlook related to COVID-19. Noninterest expense increased \$176 million to \$7.1 billion, primarily due to investments for business growth along with higher revenue-related incentives.

The return on average allocated capital was 20 percent, down from 30 percent, due to lower net income and, to a lesser extent, a small increase in allocated capital.

MLGWM revenue of \$7.7 billion decreased four percent primarily driven by the impact of lower interest rates and AUM pricing, partially offset by higher market valuations, positive AUM flows and increased transactional revenue.

Bank of America Private Bank revenue of \$1.7 billion decreased three percent primarily driven by the impact of lower interest rates.

Key Indicators and Metrics

	Three Months Ended June 30		Six Months Ended June 30	
	2020	2019	2020	2019
(Dollars in millions, except as noted)				
Revenue by Business				
Merrill Lynch Global Wealth Management	\$ 3,625	\$ 4,047	\$ 7,698	\$ 8,012
Bank of America Private Bank	800	853	1,663	1,708
Total revenue, net of interest expense	\$ 4,425	\$ 4,900	\$ 9,361	\$ 9,720
Client Balances by Business, at period end				
Merrill Lynch Global Wealth Management			\$ 2,449,305	\$ 2,440,710
Bank of America Private Bank			478,521	458,081
Total client balances			\$ 2,927,826	\$ 2,898,791
Client Balances by Type, at period end				
Assets under management			\$ 1,219,748	\$ 1,203,783
Brokerage and other assets			1,282,044	1,314,457
Deposits			291,740	251,818
Loans and leases (1)			187,004	172,265
Less: Managed deposits in assets under management			(52,710)	(43,532)
Total client balances			\$ 2,927,826	\$ 2,898,791
Assets Under Management Rollforward				
Assets under management, beginning of period	\$ 1,092,482	\$ 1,169,713	\$ 1,275,555	\$ 1,072,234
Net client flows	3,573	5,274	10,608	11,192
Market valuation/other	123,693	28,796	(66,415)	120,357
Total assets under management, end of period	\$ 1,219,748	\$ 1,203,783	\$ 1,219,748	\$ 1,203,783
Associates, at period end				
Number of financial advisors			17,888	17,508
Total wealth advisors, including financial advisors			19,851	19,512
Total primary sales professionals, including financial advisors and wealth advisors			21,198	20,611
Merrill Lynch Global Wealth Management Metric				
Financial advisor productivity (2) (in thousands)	\$ 1,069	\$ 1,082	\$ 1,103	\$ 1,061
Bank of America Private Bank Metric, at period end				
Primary sales professionals			1,781	1,808

(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 103.

Client Balances

Client balances increased \$29.0 billion, or one percent, to \$2.9 trillion at June 30, 2020 compared to June 30, 2019. The increase in client balances was primarily driven by client flows.

(Dollars in millions)	Three Months Ended June 30			Six Months Ended June 30		
	2020	2019	%Change	2020	2019	%Change
Net interest income	\$ 2,363	\$ 2,709	(13%)	\$ 4,975	\$ 5,499	(10)%
Noninterest income:						
Service charges	737	749	(2)	1,533	1,462	5
Investment banking fees	1,181	717	65	1,942	1,426	36
All other income	810	800	1	1,241	1,743	(29)
Total noninterest income	2,728	2,266	20	4,716	4,631	2
Total revenue, net of interest expense	5,091	4,975	2	9,691	10,130	(4)
Provision for credit losses	1,873	125	n/m	3,966	236	n/m
Noninterest expense	2,223	2,211	1	4,544	4,478	1
Income before income taxes	995	2,639	(62)	1,181	5,416	(78)
Income tax expense	269	713	(62)	319	1,462	(78)
Net income	\$ 726	\$ 1,926	(62)	\$ 862	\$ 3,954	(78)
Effective tax rate	27.0%	27.0%		27.0%	27.0%	
Net interest yield	1.82	2.80		2.15	2.91	
Return on average allocated capital	7	19		4	19	
Efficiency ratio	43.68	44.45		46.89	44.20	

Balance Sheet

Average	Three Months Ended June 30			Six Months Ended June 30		
	2020	2019	%Change	2020	2019	%Change
Total loans and leases	\$ 423,625	\$ 372,531	14%	\$ 405,054	\$ 371,326	9%
Total earning assets	521,930	387,819	35	465,491	381,111	22
Total assets	578,106	442,591	31	522,016	435,803	20
Total deposits	493,918	362,619	36	438,145	355,866	23
Allocated capital	42,500	41,000	4	42,500	41,000	4
Period end	June 30		%Change	December 31		%Change
	2020	2019		2020	2019	
Total loans and leases	\$ 390,108	\$ 379,268	3%			
Total earning assets	531,649	407,180	31			
Total assets	586,078	464,032	26			
Total deposits	500,918	383,180	31			

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.

Three-Month Comparison

Net income for Global Banking decreased \$1.2 billion to \$726 million primarily driven by higher provision for credit losses, partially offset by higher revenue.

Revenue increased \$116 million to \$5.1 billion driven by higher noninterest income, partially offset by lower net interest income. Net interest income decreased \$346 million to \$2.4 billion primarily due to the allocation of ALM results and spread compression, partially offset by loan and deposit growth.

Noninterest income increased \$462 million to \$2.7 billion primarily due to higher investment banking fees and valuation adjustments on leveraged loans and the fair value option loan portfolio.

The provision for credit losses increased \$1.7 billion to \$1.9 billion primarily due to the weaker economic outlook related to

COVID-19. Noninterest expense remained relatively unchanged at \$2.2 billion.

The return on average allocated capital was seven percent in 2020 compared to 19 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 12.

Six-Month Comparison

Net income for Global Banking decreased \$3.1 billion to \$862 million primarily driven by higher provision for credit losses as well as lower revenue.

Revenue decreased \$439 million to \$9.7 billion driven by lower net interest income, partially offset by higher noninterest income. Net interest income decreased \$524 million to \$5.0 billion primarily driven by the same factors as described in the three-month discussion.

Noninterest income increased \$85 million to \$4.7 billion primarily due to higher investment banking fees, partially offset by valuation adjustments on the fair value option loan portfolio, debt securities and leveraged loans and the allocation of ALM results.

The provision for credit losses increased \$3.7 billion to \$4.0 billion primarily due to the weaker economic outlook related to COVID-19. Noninterest expense increased \$66 million primarily due to continued investments in the business, partially offset by lower revenue-related incentives.

The return on average allocated capital was four percent in 2020 compared to 19 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 12.

Global Corporate, Global Commercial and Business Banking

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

Global Corporate, Global Commercial and Business Banking

	Global Corporate Banking		Global Commercial Banking		Business Banking		Total	
	Three Months Ended June 30							
(Dollars in millions)	2020	2019	2020	2019	2020	2019	2020	2019
Revenue								
Business Lending	\$ 916	\$ 923	\$ 881	\$ 1,046	\$ 66	\$ 90	\$ 1,863	\$ 2,059
Global Transaction Services	785	1,005	809	889	217	267	1,811	2,161
Total revenue, net of interest expense	\$ 1,701	\$ 1,928	\$ 1,690	\$ 1,935	\$ 283	\$ 357	\$ 3,674	\$ 4,220

Balance Sheet

Average

Total loans and leases	\$ 201,852	\$ 175,701	\$ 200,463	\$ 181,741	\$ 15,018	\$ 15,119	\$ 417,333	\$ 372,561
Total deposits	236,421	181,591	209,263	141,611	48,231	39,430	493,915	362,632

	Global Corporate Banking		Global Commercial Banking		Business Banking		Total	
	Six Months Ended June 30							
(Dollars in millions)	2020	2019	2020	2019	2020	2019	2020	2019
Revenue								
Business Lending	\$ 1,867	\$ 1,968	\$ 1,862	\$ 2,080	\$ 148	\$ 184	\$ 3,877	\$ 4,232
Global Transaction Services	1,656	2,012	1,687	1,780	473	533	3,816	4,325
Total revenue, net of interest expense	\$ 3,523	\$ 3,980	\$ 3,549	\$ 3,860	\$ 621	\$ 717	\$ 7,693	\$ 8,557

Balance Sheet

Average

Total loans and leases	\$ 192,278	\$ 175,993	\$ 194,522	\$ 180,105	\$ 15,100	\$ 15,230	\$ 401,900	\$ 371,328
Total deposits	212,170	174,895	181,572	142,070	44,401	38,920	438,143	355,885

Period end

Total loans and leases	\$ 182,374	\$ 179,517	\$ 183,869	\$ 182,417	\$ 14,378	\$ 15,000	\$ 380,621	\$ 376,934
Total deposits	238,862	179,656	210,853	139,312	51,195	39,932	500,910	358,900

Business Lending revenue decreased \$196 million and \$355 million for the three and six months ended June 30, 2020 compared to the same periods in 2019. The decrease was primarily driven by the allocation of ALM results, partially offset by the impact of higher loan and lease balances.

Global Transaction Services revenue decreased \$350 million and \$509 million for the three and six months ended June 30, 2020 driven by the allocation of ALM results, partially offset by the impact of higher deposit balances.

Average loans and leases increased 12 percent and 8 percent for the three and six months ended June 30, 2020 compared to the same periods in 2019 driven by growth in the commercial and industrial loan portfolio. Average deposits increased 36 percent and 23 percent for the three and six months ended June 30, 2020 primarily due to client responses to market volatility, government stimulus and placement of credit draws.

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

	Global Banking		Total Corporation		Global Banking		Total Corporation	
	Three Months Ended June 30				Six Months Ended June 30			
(Dollars in millions)	2020	2019	2020	2019	2020	2019	2020	2019
Products								
Advisory	\$ 345	\$ 254	\$ 406	\$ 288	\$ 592	\$ 557	\$ 675	\$ 631
Debt issuance	503	324	1,058	746	927	651	1,985	1,494
Equity issuance	333	139	740	395	423	218	1,023	629
Gross investment banking fees	1,181	717	2,204	1,429	1,942	1,426	3,683	2,754
Self-led deals	(18)	(23)	(45)	(58)	(61)	(44)	(136)	(119)
Total investment banking fees	\$ 1,163	\$ 694	\$ 2,159	\$ 1,371	\$ 1,881	\$ 1,382	\$ 3,547	\$ 2,635

Total Corporation investment banking fees, excluding self-led deals, of \$2.2 billion and \$3.5 billion, which are primarily included within *Global Banking* and *Global Markets*, increased 57 percent and 35 percent for the three and six months ended June 30, 2020 compared to the same periods in 2019 primarily driven by higher debt and equity issuance fees as well as advisory fees.

Global Markets

(Dollars in millions)	Three Months Ended June 30			Six Months Ended June 30		
	2020	2019	%Change	2020	2019	%Change
Net interest income	\$ 1,297	\$ 811	60%	\$ 2,450	\$ 1,764	39%
Noninterest income:						
Investment and brokerage services	481	433	11	1,048	877	19
Investment banking fees	940	585	61	1,542	1,121	38
Market making and similar activities	2,361	1,961	20	5,334	4,043	32
All other income	270	354	(24)	201	521	(61)
Total noninterest income	4,052	3,333	22	8,125	6,562	24
Total revenue, net of interest expense	5,349	4,144	29	10,575	8,326	27
Provision for credit losses	105	5	n/m	212	(18)	n/m
Noninterest expense	2,682	2,675	—	5,494	5,432	1
Income before income taxes	2,562	1,464	75	4,869	2,912	67
Income tax expense	666	417	60	1,266	830	53
Net income	\$ 1,896	\$ 1,047	81	\$ 3,603	\$ 2,082	73
Effective tax rate	26.0%	28.5%		26.0%	28.5%	
Return on average allocated capital	21	12		20	12	
Efficiency ratio	50.15	64.55		51.96	65.23	

Balance Sheet

Average	Three Months Ended June 30			Six Months Ended June 30		
	2020	2019	%Change	2020	2019	%Change
Trading-related assets:						
Trading account securities	\$ 216,157	\$ 251,402	(14)%	\$ 236,704	\$ 238,399	(1)%
Reverse repurchases	104,883	117,730	(11)	110,291	120,228	(8)
Securities borrowed	96,448	83,374	16	89,860	83,856	7
Derivative assets	49,502	43,700	13	48,199	42,832	13
Total trading-related assets	466,990	496,206	(6)	485,054	485,315	—
Total loans and leases	74,131	70,587	5	72,896	70,335	4
Total earning assets	478,648	474,061	1	490,132	473,242	4
Total assets	663,072	685,413	(3)	688,062	674,791	2
Total deposits	45,083	31,128	45	39,203	31,246	25
Allocated capital	36,000	35,000	3	36,000	35,000	3
Period end						
Total trading-related assets	\$ 468,309	\$ 452,499	3%			
Total loans and leases	74,342	72,993	2			
Total earning assets	462,184	471,701	(2)			

Total assets	652,068	641,809	2
Total deposits	52,842	34,676	52

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 8.

Three-Month Comparison

Net income for *Global Markets* increased \$849 million to \$1.9 billion. Net DVA losses were \$261 million compared to losses of \$31 million. Excluding net DVA, net income increased \$1.0 billion to \$2.1 billion. These increases were primarily driven by higher revenue, partially offset by higher provision for credit losses.

Revenue increased \$1.2 billion to \$5.3 billion as sales and trading revenue increased \$909 million, and excluding net DVA, increased \$1.1 billion. These increases were driven by higher revenue across Fixed Income, Currencies and Commodities (FICC) and Equities. The prior-year period included a \$199 million gain on the sale of an equity investment.

The provision for credit losses increased \$100 million primarily due to the weaker economic outlook related to COVID-19. Noninterest expense remained relatively unchanged at \$2.7 billion.

Average total assets decreased \$22.3 billion to \$663.1 billion driven by lower average client balances and increased balance sheet efficiency in *Global Equities*.

The return on average allocated capital was 21 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 12.

Six-Month Comparison

Net income for *Global Markets* increased \$1.5 billion to \$3.6 billion. Net DVA gains were \$39 million compared to losses of \$121 million. Excluding net DVA, net income increased \$1.4 billion to \$3.6 billion. These increases were primarily driven by an increase in revenue, partially offset by higher provision for credit losses and noninterest expense.

Revenue increased \$2.2 billion to \$10.6 billion as sales and trading revenue increased \$2.1 billion, and excluding net DVA, increased \$1.9 billion. These increases were driven by higher revenue across FICC and Equities.

The provision for credit losses increased \$230 million primarily due to the weaker economic outlook related to COVID-19. Noninterest expense increased \$62 million to \$5.5 billion primarily driven by higher revenue-related expenses.

Average total assets increased \$13.3 billion to \$688.1 billion primarily due to increased levels of inventory in FICC to facilitate expected client demand. Period-end total assets increased \$10.3 billion since December 31, 2019 to \$652.1 billion primarily driven by Equities resulting from a change in composition of equity hedges for client activity versus year end.

The return on average allocated capital was 20 percent, up from 12 percent, reflecting higher net income, partially offset by a small increase in allocated capital.

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 8.

Sales and Trading Revenue (1, 2, 3)

	Three Months Ended June 30		Six Months Ended June 30	
	2020	2019	2020	2019
(Dollars in millions)				
Sales and trading revenue (2)				
Fixed income, currencies and commodities	\$ 2,941	\$ 2,098	\$ 5,886	\$ 4,379
Equities	1,210	1,144	2,900	2,326
Total sales and trading revenue	\$ 4,151	\$ 3,242	\$ 8,786	\$ 6,705
Sales and trading revenue, excluding net DVA (4)				
Fixed income, currencies and commodities	\$ 3,186	\$ 2,128	\$ 5,857	\$ 4,488
Equities	1,226	1,145	2,890	2,338
Total sales and trading revenue, excluding net DVA	\$ 4,412	\$ 3,273	\$ 8,747	\$ 6,826

(1) For more information on sales and trading revenue, see Note 3 – Derivatives to the Consolidated Financial Statements.

(2) Includes FTE adjustments of \$38 million and \$100 million for the three and six months ended June 30, 2020 compared to \$31 million and \$79 million for the same periods in 2019.

(3) Includes *Global Banking* sales and trading revenue of \$67 million and \$294 million for the three and six months ended June 30, 2020 compared to \$130 million and \$246 million for the same periods in 2019.

(4) FICC and Equities sales and trading revenue, excluding net DVA, is a non-GAAP financial measure. FICC net DVA losses were \$245 million and gains of \$29 million for the three and six months ended June 30, 2020 compared to losses of \$30 million and \$109 million for the same periods in 2019. Equities net DVA losses were \$16 million and gains of \$10 million for the three and six months ended June 30, 2020 compared to losses of \$1 million and \$12 million for the same periods in 2019.

Three-Month Comparison

FICC revenue increased \$1.1 billion driven by strong results across credit-related products, especially in the Americas, as prices recovered from the first quarter of 2020, combined with solid market-making conditions across macro products. Equities revenue increased \$81 million driven by a strong performance in cash and client financing, partially offset by a weaker performance in derivatives.

Six-Month Comparison

FICC revenue increased \$1.4 billion driven by increased client activity and improved market making conditions across macro products, partially offset by weaker performances in credit-sensitive businesses. Equities revenue increased \$552 million driven by increased client activity and a strong trading performance in a more volatile market environment.

All Other

(Dollars in millions)	Three Months Ended June 30			Six Months Ended June 30		
	2020	2019	% Change	2020	2019	% Change
Net interest income	\$ (53)	\$ 78	n/m	\$ 23	\$ 73	(68)%
Noninterest income (loss)	(209)	(581)	(64)%	(1,265)	(1,208)	5
Total revenue, net of interest expense	(262)	(503)	(48)	(1,242)	(1,135)	9
Provision for credit losses	(21)	(241)	(91)	93	(295)	(132)
Noninterest expense	309	516	(40)	556	916	(39)
Loss before income taxes	(550)	(778)	(29)	(1,891)	(1,756)	8
Income tax benefit	(766)	(787)	(3)	(1,614)	(1,730)	(7)
Net income (loss)	\$ 216	\$ 9	n/m	\$ (277)	\$ (26)	n/m

Balance Sheet

Average	Three Months Ended June 30			Six Months Ended June 30		
	2020	2019	% Change	2020	2019	% Change
Total loans and leases	\$ 29,923	\$ 44,695	(33)%	\$ 33,238	\$ 45,922	(28)%
Total assets (1)	249,846	201,762	24	225,674	201,652	12
Total deposits	21,387	20,672	3	22,473	20,646	9

Period end	June 30 2020		December 31 2019		% Change
Total loans and leases	\$ 25,096	\$ 37,156			(32)%
Total assets (1)	240,159	224,375			7
Total deposits	19,149	23,089			(17)

(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 \$740.7 billion and \$656.5 billion for the three and six months ended June 30, 2020 compared to \$549.5 billion and \$543.0 billion for the same periods in 2019, and period-end allocated assets were \$829.1 billion and \$565.4 billion at June 30, 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 Executive Summary – Recent Developments – Merchant Services Joint Venture on page 5 and 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 six months ended June 30, 2020, residential mortgage loans held for ALM activities decreased \$10.6 billion to \$11.1 billion due primarily to loan sales. Non-core residential mortgage and home equity loans, which are principally runoff portfolios, are also held in All Other. During the six months ended June 30, 2020, total non-core loans decreased \$1.6 billion to \$14.1 billion due primarily to payoffs and paydowns, as well as Federal Housing Administration (FHA) loan conveyances and sales, 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 31.

Three-Month Comparison

Net income for All Other increased \$207 million primarily driven

by higher revenue and lower noninterest expense, partially offset by a decrease in the benefit in the provision for credit losses.

Revenue increased \$241 million primarily due to a \$704 million gain on sales of certain mortgage loans, partially offset by lower net interest income and equity investment income.

Noninterest expense decreased \$207 million to \$309 million reflecting a decrease in compensation and benefits, lower non-core mortgage costs, primarily due to lower volume, and lower technology costs.

The benefit in the provision for credit losses decreased \$220 million to \$21 million from the prior period, which included higher recoveries from the sales of previously charged-off consumer real estate loans.

The income tax benefit decreased \$21 million reflecting the impact of lower pretax losses. Both periods included income tax benefit adjustments to eliminate the FTE treatment of certain tax credits recorded in Global Banking.

Six-Month Comparison

The net loss for All Other increased \$251 million, driven by higher provision for credit losses and lower revenue, partially offset by lower noninterest expense.

Revenue decreased \$107 million primarily due to certain valuation adjustments on securities and derivatives and extinguishment losses on certain structured liabilities, partially offset by a gain on sales of mortgage loans.

The provision for credit losses increased \$388 million to \$93 million due to the same factor as described in the three-month discussion.

Noninterest expense decreased \$360 million to \$556 million due to the same factors as described in the three-month discussion.

The income tax benefit decreased \$116 million reflecting lower discrete tax benefits. 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 104. 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

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 June 2020, the Federal Reserve notified BHCs of their 2020 CCAR supervisory stress test results. Based on our results, we will be subject to a preliminary 2.5 percent SCB for the period beginning October 1, 2020 and ending on September 30, 2021. Our Common equity tier 1 (CET1) capital ratio under the Standardized approach must remain above 9.5 percent during this period (the sum of our CET1 capital ratio minimum of 4.5 percent, global systemically important bank (G-SIB) surcharge of 2.5 percent and our preliminary SCB of 2.5 percent) in order to avoid restrictions on capital distributions and discretionary bonus payments. The Federal Reserve plans to finalize the SCB for all BHCs by August 31, 2020.

The Federal Reserve also announced that due to economic uncertainty resulting from the COVID-19 pandemic, all large banks will be required to suspend share repurchase programs in the third quarter of 2020, except for repurchases to offset shares issued under equity compensation plans, and limit dividends to existing rates that do not exceed the average of the last four quarters' net income. Large banks will also be required to resubmit and update their capital plans later this year based on instructions that the Federal Reserve will provide. The Federal Reserve plans to conduct additional analysis to assess the Corporation's capital plans and will review capital preservation measures on a quarter-by-quarter basis.

The Federal Reserve's directive regarding share repurchases aligns with our decision to voluntarily suspend repurchases in the first quarter of 2020 from the date of the announcement on March 15, 2020 through the end of the second quarter of 2020. The suspension of our repurchases did not include repurchases to offset shares issued under our equity compensation plans, for which we repurchased \$286 million of common stock during the second quarter of 2020 pursuant to the Board's repurchase authorization under our 2019 CCAR capital plan. 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.

We intend to maintain the quarterly common stock dividend at the current rate of \$0.18 per share until further notice, subject to approval by the Board. We will also continue our current suspension of common stock repurchases in the third quarter of 2020, except for repurchases to offset shares issued under equity compensation plans.

Our repurchase program is subject to the Board's approval, and 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. Such 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). 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 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 9 presents Bank of America Corporation's capital ratios and related information in accordance with Basel 3 Standardized and Advanced approaches as measured at June 30, 2020 and December 31, 2019. For the periods presented herein, the Corporation met the definition of well capitalized under current regulatory requirements.

	Standardized Approach (1, 2)	Advanced Approaches (1)	Regulatory Minimum (3)
		June 30, 2020	

(1) As of June 30, 2020, capital ratios are calculated using the regulatory capital rule that allows a five-year transition period related to the adoption of CECL.
(2) Derivative exposure amounts are calculated using the standardized approach for measuring counterparty credit risk at June 30, 2020 and the current exposure method at December 31, 2019.
(3) The capital conservation buffer and GSIB surcharge were 2.5 percent at both June 30, 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.
(4) 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.
(5) Reflects total average assets adjusted for certain Tier 1 capital deductions.
(6) Supplementary leverage exposure at June 30, 2020 reflects the temporary exclusion of U.S. Treasury Securities and deposits at Federal Reserve Banks.

issuance of preferred stock. Risk-weighted assets under the Advanced approaches, which yielded the lower CET1 capital ratio at June 30, 2020, increased \$57.0 billion during the six months ended June 30, 2020 to \$1,504 billion primarily due to changes in corporate risk ratings, increased counterparty credit risk and market risk RWATable 10 shows the capital composition at June 30, 2020 and December 31, 2019.

Table 10 Capital Composition under Basel 3

	June 30 2020	December 31 2019
(Dollars in millions)		
Total common shareholders' equity	\$ 242,210	\$ 241,409
CECL transitional amount (1)	4,302	—
Goodwill, net of related deferred tax liabilities	(68,570)	(68,570)
Deferred tax assets arising from net operating loss and tax credit carryforwards	(5,263)	(5,193)
Intangibles, other than mortgage servicing rights and goodwill, net of related deferred tax liabilities	(1,221)	(1,328)
Defined benefit pension plan net assets	(1,025)	(1,003)
Cumulative unrealized net (gain) loss related to changes in fair value of financial liabilities attributable to own creditworthiness, net-of-tax	1,108	1,278
Other	(521)	167
Common equity tier 1 capital	171,020	166,760
Qualifying preferred stock, net of issuance cost	23,426	22,329
Other	(5)	(597)
Tier 1 capital	194,441	188,492
Tier 2 capital instruments	23,424	22,538
Eligible credit reserves included in Tier 2 capital (2)	5,378	2,097
Other	(18)	(29)
Total capital under the Advanced approaches	\$ 223,225	\$ 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 June 30, 2020. For more information, see Regulatory Developments on page 27.

(2) The balance at June 30, 2020 includes the impact of transition provisions related to the new CECL accounting standard.

Table 11 shows the components of risk-weighted assets as measured under Basel 3 at June 30, 2020 and December 31, 2019.

Table 11 Risk-weighted Assets under Basel 3

	Standardized Approach (1)	Advanced Approaches	Standardized Approach (1)	Advanced Approaches
(Dollars in billions)				
	June 30, 2020		December 31, 2019	
Credit risk	\$ 1,404	\$ 892	\$ 1,437	\$ 888
Market risk	71	71	56	55
Operational risk	n/a	500	n/a	500
Risks related to credit valuation adjustments	n/a	41	n/a	34
Total risk-weighted assets	\$ 1,475	\$ 1,504	\$ 1,493	\$ 1,447

(1) Derivative exposure amounts are calculated using the standardized approach for measuring counterparty credit risk at June 30, 2020 and the current exposure method at December 31, 2019.

n/a = not applicable

Bank of America, N.A. Regulatory Capital

Table 12 presents regulatory capital information for BANA in accordance with Basel 3 Standardized and Advanced approaches as measured at June 30, 2020 and December 31, 2019. BANA met the definition of well capitalized under the PCA framework for both periods.

Table 12 Bank of America, N.A. Regulatory Capital under Basel 3

	Standardized Approach (1, 2)	Advanced Approaches (1)	Regulatory Minimum (3)
(Dollars in millions, except as noted)			
Risk-based capital metrics:			
June 30, 2020			
Common equity tier 1 capital	\$ 156,513	\$ 156,513	
Tier 1 capital	156,513	156,513	
Total capital (4)	173,492	163,028	
Risk-weighted assets (in billions)	1,235	1,033	
Common equity tier 1 capital ratio	12.7%	15.1%	7.0%
Tier 1 capital ratio	12.7	15.1	8.5
Total capital ratio	14.1	15.8	10.5
Leverage-based metrics:			
Adjusted quarterly average assets (in billions) (5)	\$ 2,057	\$ 2,057	
Tier 1 leverage ratio	7.6%	7.6%	5.0
Supplementary leverage exposure (in billions)		\$ 2,422	
Supplementary leverage ratio		6.5%	6.0
Risk-based capital metrics:			
December 31, 2019			
Common equity tier 1 capital	\$ 154,626	\$ 154,626	
Tier 1 capital	154,626	154,626	
Total capital (4)	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) (5)	\$ 1,780	\$ 1,780	
Tier 1 leverage ratio	8.7%	8.7%	5.0
Supplementary leverage exposure (in billions)		\$ 2,177	
Supplementary leverage ratio		7.1%	6.0

(1) As of June 30, 2020, capital ratios are calculated using the regulatory capital rule that allows a five-year transition period related to the adoption of CECL.

(2) Derivative exposure amounts are calculated using the standardized approach for measuring counterparty credit risk at June 30, 2020 and the current exposure method at December 31, 2019.

(3) Risk-based capital regulatory minimums at June 30, 2020 and December 31, 2019 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 are the percent required to be considered well capitalized under the PCA framework.

(4) 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.

(5) 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 13 presents the Corporation's TLAC and long-term debt ratios and related information as of June 30, 2020 and December 31, 2019.

Table 13 Bank of America Corporation Total Loss-Absorbing Capacity and Long-Term Debt

	TLAC (1)	Regulatory Minimum (2)	Long-term Debt	Regulatory Minimum (3)
(Dollars in millions)				
June 30, 2020				
Total eligible balance	\$ 391,076		\$ 185,794	
Percentage of risk-weighted assets (4)	26.0%	22.0%	12.4%	8.5%
Percentage of supplementary leverage exposure (5, 6)	14.2	9.5	6.7	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 supplementary leverage exposure (6)	12.5	9.5	5.8	4.5

(1) As of June 30, 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 supplementary 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 were the Advanced approaches as of June 30, 2020 and the Standardized approach as of December 31, 2019.

(5) Supplementary leverage exposure at June 30, 2020 reflects the temporary exclusion of U.S. Treasury Securities and deposits at Federal Reserve Banks.

⁽⁶⁾ Derivative exposure amounts are calculated using the standardized approach for measuring counterparty credit risk at June 30, 2020 and the current exposure method at 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 ECL inherent in the Corporation's relevant financial assets. For more information, see *Note 1 – Summary of Significant Accounting Principles* to the Consolidated Financial Statements. During the first quarter of 2020, in accordance with an interim final rule issued by U.S. banking regulators, the Corporation delayed 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). For more information, see Capital Management – Regulatory Developments in the MD&A of the Corporation's Quarterly Report on Form 10-Q for the quarter ended March 31, 2020.

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. Based on the CCAR 2020 supervisory stress test results, the Corporation will be subject to a preliminary 2.5 percent SCB for the period beginning October 1, 2020 and ending on September 30, 2021. The Federal Reserve plans to finalize the SCB for all BHCs by August 31, 2020.

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.

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 supplementary leverage exposure for bank holding companies. The rule is effective for June 30, 2020 through March 31, 2021 reports. As of June 30, 2020, temporary exclusions improved the supplementary leverage ratio by 0.9 percent to 7.1 percent.

On May 15, 2020, the U.S. banking regulators issued an interim final rule that provides a similar temporary exclusion to depository institutions, effective from the beginning of the second quarter of 2020 through March 31, 2021; however, institutions must elect the relief. Beginning in the third quarter of 2020, a depository institution electing to apply the exclusion must receive approval from its primary regulator prior to making any capital distributions

as long as the exclusion is in effect. As of June 30, 2020, the Corporation's insured depository institution subsidiaries have not elected the exclusions.

Paycheck Protection Program Loans

On April 9, 2020, in response to the economic impact of the COVID-19 pandemic, the Federal Reserve, the Office of the Comptroller of the Currency and the Federal Deposit Insurance Corporation issued an interim final rule that, among other things, stipulates 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 on page 3 and *Note 1 – Summary of Significant Accounting Principles* to the Consolidated Financial Statements.

Standardized Approach for Measuring Counterparty Credit Risk

As of June 30, 2020 the Corporation adopted the new standardized approach for measuring counterparty credit risk (SA-CCR), which replaces the current exposure method for calculating the exposure amount of derivative contracts for risk-weighted assets and supplementary leverage exposure. Adoption of SA-CCR resulted in a decrease of approximately \$15 billion in the Corporation's Standardized risk-weighted assets, and a \$66 billion decrease in supplementary leverage exposure.

Swap Dealer Capital Requirements

On July 22, 2020, the U.S. Commodity Futures Trading Commission (CFTC) issued a final rule to establish capital requirements for swap dealers and major swap participants that are not subject to existing U.S. prudential regulation. Under the rule, applicable subsidiaries of the Corporation would be permitted to elect one of two approaches to compute their regulatory capital. The first approach is a bank-based capital approach which requires that firms maintain CET1 capital greater than or equal to 6.5 percent of the entity's RWA as calculated under Basel 3, Total capital greater than or equal to 8.0 percent of the entity's RWA as calculated under Basel 3 and Total capital greater than or equal to 8.0 percent of the entity's uncleared swap margin. The second approach is based on net liquid assets and requires that a firm maintain net capital greater than or equal to 2.0 percent of uncleared swap margin. The final rule also includes reporting requirements. The impact to the Corporation is not expected to be significant.

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). 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 CFTC Regulation 1.17. The U.S. broker-dealer subsidiaries are also registered with the Financial Industry Regulatory Authority, Inc. (FINRA). Pursuant to FINRA Rule 4110, FINRA may impose higher net capital requirements than

Rule 15c3-1 under the Exchange Act with respect to each of the broker-dealers.

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 June 30, 2020, BofAS had tentative net capital of \$19.4 billion. BofAS also had regulatory net capital of \$16.6 billion which exceeded the minimum requirement of \$3.0 billion.

MLPCC is a fully-guaranteed subsidiary of BofAS and provides clearing and settlement services as well as prime brokerage and arranged financing services for institutional clients. At June 30, 2020, MLPCC's regulatory net capital of \$7.4 billion exceeded the minimum requirement of \$1.2 billion.

MLPF&S provides retail services. At June 30, 2020, MLPF&S' regulatory net capital was \$4.4 billion which exceeded the minimum requirement of \$134 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 June 30, 2020, MLI's capital resources were \$35.0 billion, which exceeded the minimum Pillar 1 requirement of \$13.8 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 June 30, 2020, BofASE's capital resources were \$5.5 billion which exceeded the minimum Pillar 1 requirement of \$1.7 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 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 14 presents average Global Liquidity Sources (GLS) for the three months ended June 30, 2020 and December 31, 2019.

Table 14 Average Global Liquidity Sources

	Three Months Ended June 30	
	June 30 2020	December 31 2019
(Dollars in billions)		
Bank entities	\$ 637	\$ 454
Nonbank and other entities (1)	159	122
Total Average Global Liquidity Sources	\$ 796	\$ 576

(1) Nonbank includes Parent, NB Holdings and other regulated entities.

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 \$340 billion and \$372 billion at June 30, 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 15 presents the composition of average GLS for the three months ended June 30, 2020 and December 31, 2019.

Table 15 Average Global Liquidity Sources Composition

	Three Months Ended June 30	
	June 30 2020	December 31 2019
(Dollars in billions)		
Cash on deposit	\$ 312	\$ 103
U.S. Treasury securities	96	98
U.S. agency securities, mortgage-backed securities, and other investment-grade securities	366	358
Non-U.S. government securities	22	17
Total Average Global Liquidity Sources	\$ 796	\$ 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 \$549 billion and \$464 billion for the three months ended June 30, 2020 and December 31, 2019. For the same periods, the average consolidated LCR was 121 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 \$1.72 trillion and \$1.43 trillion at June 30, 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 six months ended June 30, 2020, we issued \$30.7 billion of long-term debt consisting of \$26.2 billion of notes issued by Bank of America Corporation, substantially all of which was TLAC compliant, \$817 million of notes issued by Bank of America, N.A. and \$3.7 billion of other debt, substantially all of which were structured liabilities.

During the six months ended June 30, 2020, we had total long-term debt maturities and redemptions in the aggregate of \$20.4 billion consisting of \$6.4 billion for Bank of America Corporation, \$8.6 billion for Bank of America, N.A. and \$5.4 billion of other debt. Table 16 presents the carrying value of aggregate annual contractual maturities of long-term debt at June 30, 2020.

Table 16 Long-term Debt by Maturity

(Dollars in millions)	Remainder of 2020	2021	2022	2023	2024	Thereafter	Total
Bank of America Corporation							
Senior notes (1)	\$ 6,027	\$ 15,950	\$ 14,905	\$ 23,630	\$ 18,656	\$ 108,275	\$ 187,443
Senior structured notes	539	410	2,008	274	371	14,474	18,076
Subordinated notes	—	337	364	—	3,383	20,278	24,362
Junior subordinated notes	—	—	—	—	—	738	738
Total Bank of America Corporation	6,566	16,697	17,277	23,904	22,410	143,765	230,619
Bank of America, N.A.							
Senior notes	1,342	1,790	—	517	—	8	3,657
Subordinated notes	—	—	—	—	—	1,974	1,974
Advances from Federal Home Loan Banks	7	2	3	1	—	95	108
Securitizations and other Bank VIEs (2)	1,100	4,024	1,249	—	—	—	6,373
Other	17	52	—	148	—	139	356
Total Bank of America, N.A.	2,466	5,868	1,252	666	—	2,216	12,468
Other debt							
Structured liabilities	4,452	2,892	1,695	1,711	646	6,668	18,064
Nonbank VIEs (2)	—	1	—	—	—	486	487
Total other debt	4,452	2,893	1,695	1,711	646	7,154	18,551
Total long-term debt	\$ 13,484	\$ 25,458	\$ 20,224	\$ 26,281	\$ 23,056	\$ 153,135	\$ 261,638

(1) Total includes \$137.6 billion of outstanding notes that are both TLAC eligible and callable one year before their stated maturities, including \$7.4 billion during the remainder of 2020, and \$11.7 billion, \$15.2 billion, \$11.9 billion and \$9.5 billion during each year of 2021 through 2024, respectively, and \$81.9 billion thereafter. The call features provide 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 17 presents our long-term debt by major currency at June 30, 2020 and December 31, 2019.

Table 17 Long-term Debt by Major Currency

	June 30 2020	December 31 2019
(Dollars in millions)		
U.S. dollar	\$ 209,624	\$ 191,284
Euro	35,219	32,781
British pound	4,877	5,067
Japanese yen	4,407	4,310
Canadian dollar	4,185	3,857
Australian dollar	1,937	1,957
Other	1,389	1,600
Total long-term debt	\$ 261,638	\$ 240,856

Total long-term debt increased \$20.8 billion during the six months ended June 30, 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 47.

We may issue unsecured debt in the form of structured notes for client purposes, certain of which qualify as TLAC-eligible debt. During the six months ended June 30, 2020, we issued \$5.3 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 18 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 MIU 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 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.

On June 9, 2020, Fitch affirmed as A the subordinated debt rating of BANA. This rating had remained UCO following Fitch's broader rating actions.

The ratings and outlooks from Moody's Investors Service (Moody's) and Standard & Poor's Global Ratings 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 18 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 37, Non-U.S. Portfolio on page 43, Allowance for Credit Losses on page 44, and Note 5 – Outstanding Loans and Leases and Allowance for Credit Losses to the Consolidated Financial Statements.

During the six months ended June 30, 2020, the COVID-19 pandemic negatively impacted economic activity in the U.S. and around the world. While we experienced increases in Commercial nonperforming loans and reservable criticized exposures as a result of weaker economic conditions arising from COVID-19, we did not see meaningful impacts to Consumer portfolio delinquencies, nonperforming loans or charge-offs during the six months ended June 30, 2020 due to payment deferrals and government stimulus benefits. 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 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 six months ended June 30, 2020 due to payment deferrals and government stimulus benefits but there may be adverse impacts to credit quality metrics in future periods if negative economic conditions continue. Net charge-offs increased \$43 million and \$80 million to \$734 million and \$1.6 billion for the three and six months ended June 30, 2020 driven by lower consumer real estate loan sale recoveries.

The consumer allowance for loan and lease losses increased \$6.4 billion during the six months ended June 30, 2020 to \$11.0 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 44.

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

Table 19 Consumer Credit Quality

	Outstandings		Nonperforming		Accruing Past Due 90 Days or More	
	June 30 2020	December 31 2019	June 30 2020	December 31 2019	June 30 2020	December 31 2019
(Dollars in millions)						
Residential mortgage (1)	\$ 239,500	\$ 236,169	\$ 1,552	\$ 1,470	\$ 854	\$ 1,088
Home equity	38,396	40,208	594	536	—	—
Credit card	84,244	97,608	n/a	n/a	782	1,042
Direct/Indirect consumer (2)	88,628	90,998	45	47	27	33
Other consumer	120	192	—	—	—	—
Consumer loans excluding loans accounted for under the fair value option	\$ 450,888	\$ 465,175	\$ 2,191	\$ 2,053	\$ 1,663	\$ 2,163
Loans accounted for under the fair value option (3)	684	594				
Total consumer loans and leases	\$ 451,572	\$ 465,769				
Percentage of outstanding consumer loans and leases (4)	n/a	n/a	0.49%	0.44%	0.37%	0.47%
Percentage of outstanding consumer loans and leases, excluding fully-insured loan portfolios (4)	n/a	n/a	0.50	0.46	0.18	0.24

(1) Residential mortgage loans accruing past due 90 days or more are fully-insured loans. At June 30, 2020 and December 31, 2019, residential mortgage includes \$590 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 \$264 million and \$348 million of loans on which interest was still accruing.

(2) Outstandings primarily include auto and specialty lending loans and leases of \$48.4 billion and \$50.4 billion, U.S. securities-based lending loans of \$36.6 billion and \$36.7 billion and non-U.S. consumer loans of \$2.8 billion and \$2.8 billion at June 30, 2020 and December 31, 2019.

(3) Consumer loans accounted for under the fair value option include residential mortgage loans of \$330 million and \$257 million and home equity loans of \$354 million and \$337 million at June 30, 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 June 30, 2020 and December 31, 2019, \$7 million and \$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 20 presents net charge-offs and related ratios for consumer loans and leases.

Table 20 Consumer Net Charge-offs and Related Ratios

	Net Charge-offs				Net Charge-off Ratios (1)			
	Three Months Ended June 30		Six Months Ended June 30		Three Months Ended June 30		Six Months Ended June 30	
	2020	2019	2020	2019	2020	2019	2020	2019
(Dollars in millions)								
Residential mortgage	\$ (20)	\$ 3	\$ (21)	\$ (13)	(0.03)%	0.01%	(0.02)%	(0.01)%
Home equity	(14)	(155)	(25)	(144)	(0.14)	(1.36)	(0.13)	(0.62)
Credit card	665	762	1,435	1,507	3.10	3.26	3.19	3.22
Direct/Indirect consumer	26	40	66	94	0.12	0.18	0.15	0.21
Other consumer	77	41	151	82	n/m	n/m	n/m	n/m
Total	\$ 734	\$ 691	\$ 1,606	\$ 1,526	0.65	0.62	0.70	0.69

(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 21 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 21 include loans held in the *Consumer Banking* and *GWM* segments, as well as loans held for ALM activities in *All Other*.

As shown in Table 21, outstanding core consumer real estate loans increased \$3.1 billion during the six months ended June 30, 2020 driven by an increase of \$4.4 billion in residential mortgage, partially offset by a \$1.3 billion decrease in home equity.

Table 21 Consumer Real Estate Portfolio (1)

	Outstandings		Nonperforming		Net Charge-offs			
	June 30 2020		December 31 2019		Three Months Ended June 30		Six Months Ended June 30	
	2020	2019	2020	2019	2020	2019	2020	2019
(Dollars in millions)								
Core portfolio								
Residential mortgage	\$ 230,140	\$ 225,770	\$ 921	\$ 883	\$ (19)	\$ 7	\$ (20)	\$ 4
Home equity	33,935	35,226	411	363	1	10	3	31
Total core portfolio	264,075	260,996	1,332	1,246	(18)	17	(17)	35
Non-core portfolio								
Residential mortgage	9,360	10,399	631	587	(1)	(4)	(1)	(17)
Home equity	4,461	4,982	183	173	(15)	(165)	(28)	(175)
Total non-core portfolio	13,821	15,381	814	760	(16)	(169)	(29)	(192)
Consumer real estate portfolio								
Residential mortgage	239,500	236,169	1,552	1,470	(20)	3	(21)	(13)
Home equity	38,396	40,208	594	536	(14)	(155)	(25)	(144)
Total consumer real estate portfolio	\$ 277,896	\$ 276,377	\$ 2,146	\$ 2,006	\$ (34)	\$ (152)	\$ (46)	\$ (157)

	Allowance for Credit Losses		Provision for Credit Losses			
	June 30 2020		December 31 2019		Three Months Ended June 30	
	2020	2019	2020	2019	2020	2019
(Dollars in millions)						
Core portfolio						
Residential mortgage	\$ 359	\$ 229	\$ 3	\$ 11	\$ 127	\$ 7
Home equity	603	120	2	(11)	148	(33)
Total core portfolio	962	349	5	—	275	(26)
Non-core portfolio						
Residential mortgage	80	96	(14)	(21)	76	(52)
Home equity (2)	(68)	101	(8)	(218)	13	(231)
Total non-core portfolio	12	197	(22)	(239)	89	(283)
Consumer real estate portfolio						
Residential mortgage	439	325	(11)	(10)	203	(45)
Home equity (3)	535	221	(6)	(229)	161	(264)
Total consumer real estate portfolio	\$ 974	\$ 546	\$ (17)	\$ (239)	\$ 364	\$ (309)

(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 \$330 million and \$257 million and home equity loans of \$354 million and \$337 million at June 30, 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 June 30, 2020 as it includes expected recoveries of amounts previously charged off.

(3) Home equity allowance includes a reserve for unfunded lending commitments of \$14.1 million at June 30, 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 53 percent of consumer loans and leases at June 30, 2020. Approximately 54 percent of the residential mortgage portfolio was in *Consumer Banking* and 37 percent was in *GWMM*. 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 portfolio increased \$3.3 billion during the six months ended June 30, 2020 as retention of new originations was partially offset by both loan sales and runoff.

At June 30, 2020 and December 31, 2019, the residential mortgage portfolio included \$11.7 billion and \$18.7 billion of outstanding fully-insured loans, of which \$3.1 billion and \$11.2 billion had FHA insurance with the remainder protected by long-term standby agreements. The decline was primarily driven by sales of loans with FHA insurance during the three months ended June 30, 2020.

Table 22 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 22 Residential Mortgage – Key Credit Statistics

	Reported Basis (1)		Excluding Fully-Insured Loans (1)	
	June 30 2020	December 31 2019	June 30 2020	December 31 2019
(Dollars in millions)				
Outstandings	\$ 239,500	\$ 236,169	\$ 227,753	\$ 217,479
Accruing past due 30 days or more	2,052	3,108	899	1,296
Accruing past due 90 days or more	854	1,088	—	—
Nonperforming loans (2)	1,552	1,470	1,552	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 (3)	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) Includes loans that are contractually current which primarily consist of collateral-dependent TDRs, including those that have been discharged in Chapter 7 bankruptcy and loans that have not yet demonstrated a sustained period of payment performance following a TDR.

(3) These vintages of loans accounted for \$435 million, or 28 percent, and \$365 million, or 25 percent, of nonperforming residential mortgage loans at June 30, 2020 and December 31, 2019.

Nonperforming outstanding balances in the residential mortgage portfolio increased \$82 million during the six months ended June 30, 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 June 30, 2020, \$628 million, or 40 percent, were current on contractual payments. Loans accruing past due 30 days or more decreased \$397 million driven by both government stimulus benefits and payment deferrals associated with the economic impact of COVID-19, as well as seasonal declines.

Net charge-offs decreased \$23 million and \$8 million to a net recovery of \$20 million and \$21 million for the three and six months ended June 30, 2020 compared to the same periods in 2019. This decrease is due largely to loan sales that generated a recovery of \$16 million during the three months ended June 30, 2020.

Of the \$227.8 billion in total residential mortgage loans outstanding at June 30, 2020, as shown in Table 22, 26 percent were originated as interest-only loans. The outstanding balance of interest-only residential mortgage loans that have entered the amortization period was \$6.6 billion, or 11 percent, at June 30, 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 June 30, 2020, \$87 million, or one percent of outstanding interest-only residential mortgages that had entered the amortization period were accruing past due 30 days or more compared to \$899 million, or less than one percent, for the entire residential mortgage portfolio. In addition, at June 30, 2020, \$295 million, or four percent, of outstanding interest-only residential mortgage loans that had entered the amortization period were nonperforming, of which \$11.1 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 96 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 23 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 June 30, 2020 and December 31, 2019. In the New York area, the New York-Northern New Jersey-Long Island MSA made up 14 percent and 13 percent of outstandings at June 30, 2020 and December 31, 2019.

Table 23 Residential Mortgage State Concentrations

	Outstandings (1)		Nonperforming (1)		Net Charge-offs			
	June 30 2020	December 31 2019	June 30 2020	December 31 2019	Three Months Ended June 30		Six Months Ended June 30	
					2020	2019	2020	2019
(Dollars in millions)								
California	\$ 94,104	\$ 88,998	\$ 330	\$ 274	\$ (8)	\$ (2)	\$ (11)	\$ (10)
New York	23,715	22,385	226	196	—	1	1	1
Florida	13,207	12,833	150	143	(1)	(1)	(3)	(4)
Texas	9,404	8,943	73	65	—	—	—	(1)
New Jersey	9,331	8,734	65	77	—	—	—	(2)
Other	77,992	75,586	708	715	(11)	5	(8)	3
Residential mortgage loans	\$ 227,753	\$ 217,479	\$ 1,552	\$ 1,470	\$ (20)	\$ 3	\$ (21)	\$ (13)
Fully-insured loan portfolio	11,747	18,690						
Total residential mortgage loan portfolio	\$ 239,500	\$ 236,169						

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

Home Equity

At June 30, 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 June 30, 2020, our HELOC portfolio had an outstanding balance of \$35.9 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 June 30, 2020 and December 31, 2019, our home equity loan portfolio had an outstanding balance of \$1.1 billion and \$1.2 billion, or three percent, of the total home equity portfolio. At June 30, 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 June 30, 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 *GWM*. Outstanding balances in the home equity portfolio decreased \$1.8 billion during the six months ended June 30, 2020 primarily due to paydowns outpacing new originations and draws on existing lines. Of the total home equity portfolio at June 30, 2020 and December 31, 2019, \$14.7 billion, or 38 percent, and \$15.0 billion, or 37 percent, were in first-lien positions. At June 30, 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 \$6.6 billion, or 17 percent, of our total home equity portfolio.

Unused HELOCs totaled \$44.4 billion and \$43.6 billion at June 30, 2020 and December 31, 2019. The increase was primarily driven by new production, partially offset by accounts closed voluntarily. The HELOC utilization rate was 45 percent and 46 percent at June 30, 2020 and December 31, 2019.

Table 24 presents certain home equity portfolio key credit statistics.

Table 24 Home Equity – Key Credit Statistics (1)

	June 30 2020	December 31 2019
(Dollars in millions)		
Outstandings	\$ 38,396	\$ 40,208
Accruing past due 30 days or more (2)	174	218
Nonperforming loans (2, 3)	594	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 (4)	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 \$20 million and \$30 million and nonperforming loans include \$62 million and \$57 million of loans where we serviced the underlying first lien at June 30, 2020 and December 31, 2019.

(3) Includes loans that are contractually current which 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.

(4) These vintages of loans accounted for 35 percent and 34 percent of nonperforming home equity loans at June 30, 2020 and December 31, 2019.

Nonperforming outstanding balances in the home equity portfolio increased \$58 million during the six months ended June 30, 2020 primarily driven by an increase in loans that were current on their contractual payments, as well as 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 June 30, 2020, \$266 million, or 45 percent, were current on contractual payments. In addition, \$201 million, or 34 percent, of nonperforming home

equity loans were 180 days or more past due and had been written down to the estimated fair value of the collateral, less costs to sell. Accruing loans that were 30 days or more past due decreased \$44 million during the six months ended June 30, 2020.

Net charge-offs increased \$141 million to a net recovery of \$14 million, and \$119 million to a net recovery of \$25 million for the three and six months ended June 30, 2020 compared to the same periods in 2019 as the prior-year period included recoveries from non-core home equity loan sales.

Of the \$38.4 billion in total home equity portfolio outstandings at June 30, 2020, as shown in Table 24, 15 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 \$10.6 billion at June 30, 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 June 30, 2020, \$124 million, or one percent of outstanding HELOCs that had entered the amortization period were accruing past due 30 days or more. In addition, at June 30, 2020, \$438 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 June 30, 2020, 18 percent of these customers with an outstanding balance did not pay any principal on their HELOCs.

Table 25 presents outstandings, nonperforming balances and net charge-offs by certain state concentrations for the home equity portfolio. In the New York area, the New York-Northern New Jersey-Long Island MSA made up 13 percent of the outstanding home equity portfolio at both June 30, 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 June 30, 2020 and December 31, 2019.

Table 25 Home Equity State Concentrations

	Outstandings (1)		Nonperforming (1)		Net Charge-offs			
					Three Months Ended June 30		Six Months Ended June 30	
	June 30 2020	December 31 2019	June 30 2020	December 31 2019	2020	2019	2020	2019
(Dollars in millions)								
California	\$ 10,767	\$ 11,232	\$ 119	\$ 101	\$ (4)	\$ (50)	\$ (9)	\$ (55)
Florida	4,114	4,327	76	71	(2)	(39)	(5)	(42)
New Jersey	3,052	3,216	61	56	(1)	(3)	(1)	2
New York	2,728	2,899	93	85	—	(4)	1	6
Massachusetts	1,911	2,023	34	29	—	—	1	—
Other	15,824	16,511	211	194	(7)	(59)	(12)	(55)
Total home equity loan portfolio	\$ 38,396	\$ 40,208	\$ 594	\$ 536	\$ (14)	\$ (155)	\$ (25)	\$ (144)

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

Credit Card

At June 30, 2020, 97 percent of the credit card portfolio was managed in Consumer Banking with the remainder in GWM. Outstandings in the credit card portfolio decreased \$13.4 billion during the six months ended June 30, 2020 to \$84.2 billion due to lower retail spending. Net charge-offs decreased \$97 million to \$665 million and \$72 million to \$1.4 billion during the three and six months ended June 30, 2020 compared to the same periods in 2019 due to government stimulus benefits and payment deferrals associated with COVID-19. Credit card loans 30 days or

more past due and still accruing interest decreased \$615 million and loans 90 days or more past due and still accruing interest decreased \$260 million primarily due to government stimulus benefits and payment deferrals along with declines in loan balances associated with COVID-19.

Unused lines of credit for credit card increased to \$348.1 billion at June 30, 2020 from \$336.9 billion at December 31, 2019 driven by lower purchase volumes.

Table 26 presents certain state concentrations for the credit card portfolio.

Table 26 Credit Card State Concentrations

	Outstandings		Accruing Past Due 90 Days or More (1)		Net Charge-offs			
					Three Months Ended June 30		Six Months Ended June 30	
	June 30 2020	December 31 2019	June 30 2020	December 31 2019	2020	2019	2020	2019
(Dollars in millions)								
California	\$ 13,692	\$ 16,135	\$ 140	\$ 178	\$ 119	\$ 134	\$ 255	\$ 266
Florida	8,022	9,075	103	135	85	92	186	182
Texas	6,953	7,815	73	93	56	63	121	122
New York	5,131	5,975	64	80	51	59	111	120
Washington	3,783	4,639	19	26	17	18	35	36
Other	46,663	53,969	383	530	337	396	727	781
Total credit card portfolio	\$ 84,244	\$ 97,608	\$ 782	\$ 1,042	\$ 665	\$ 762	\$ 1,435	\$ 1,507

(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 June 30, 2020, 55 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 45 percent was included in *GWM* (principally securities-based lending loans). Outstandings in the

direct/indirect portfolio decreased \$2.4 billion during the six months ended June 30, 2020 to \$88.6 billion primarily due to lower originations in Auto.

Table 27 presents certain state concentrations for the direct/indirect consumer loan portfolio.

Table 27 Direct/Indirect State Concentrations

	Outstandings		Accruing Past Due 90 Days or More (1)		Net Charge-offs			
					Three Months Ended June 30		Six Months Ended June 30	
	June 30 2020	December 31 2019	June 30 2020	December 31 2019	2020	2019	2020	2019
(Dollars in millions)								
California	\$ 11,637	\$ 11,912	\$ 4	\$ 4	\$ 5	\$ 5	\$ 11	\$ 12
Florida	10,201	10,154	3	4	4	8	11	16
Texas	9,078	9,516	4	5	3	5	9	15
New York	6,259	6,394	2	1	2	3	4	6
New Jersey	3,376	3,468	1	1	1	1	1	2
Other	48,077	49,554	13	18	11	18	30	43
Total direct/indirect loan portfolio	\$ 88,628	\$ 90,998	\$ 27	\$ 33	\$ 26	\$ 40	\$ 66	\$ 94

(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 28 presents nonperforming consumer loans, leases and foreclosed properties activity for the three and six months ended June 30, 2020 and 2019. During the six months ended June 30, 2020, nonperforming consumer loans increased \$138 million to \$2.2 billion primarily driven by the inclusion of \$135 million of certain loans that were previously classified as purchased credit-impaired loans and accounted for under a pool basis.

At June 30, 2020, \$730 million, or 33 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 June 30, 2020, \$934 million, or 43 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 \$60 million during the six months ended June 30, 2020 to \$169 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 28. 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 on page 3 and Note 1 – *Summary of Significant Accounting Principles* to the Consolidated Financial Statements.

Table 28 Nonperforming Consumer Loans, Leases and Foreclosed Properties Activity

	Three Months Ended June 30		Six Months Ended June 30	
	2020	2019	2020	2019
(Dollars in millions)				
Nonperforming loans and leases, beginning of period	\$ 2,204	\$ 3,578	\$ 2,053	\$ 3,842
Additions	354	390	831	781
Reductions:				
Paydowns and payoffs	(84)	(195)	(190)	(383)
Sales	(25)	(502)	(31)	(666)
Returns to performing status (1)	(233)	(189)	(398)	(438)
Charge-offs	(22)	(29)	(49)	(57)
Transfers to foreclosed properties	(3)	(26)	(25)	(52)
Total net additions/(reductions) to nonperforming loans and leases	(13)	(551)	138	(815)
Total nonperforming loans and leases, June 30	2,191	3,027	2,191	3,027
Foreclosed properties, June 30 (2)	169	205	169	205
Nonperforming consumer loans, leases and foreclosed properties, June 30	\$ 2,360	\$ 3,232	\$ 2,360	\$ 3,232
Nonperforming consumer loans and leases as a percentage of outstanding consumer loans and leases (3)	0.49%	0.67%		
Nonperforming consumer loans, leases and foreclosed properties as a percentage of outstanding consumer loans, leases and foreclosed properties (3)	0.52	0.72		

(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 \$124 million and \$294 million at June 30, 2020 and 2019.

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

Table 29 presents TDRs for the consumer real estate portfolio. Performing TDR balances are excluded from nonperforming loans and leases in Table 28. 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 on page 3.

Table 29 Consumer Real Estate Troubled Debt Restructurings

(Dollars in millions)	June 30, 2020			December 31, 2019		
	Nonperforming	Performing	Total	Nonperforming	Performing	Total
Residential mortgage (1, 2)	\$ 865	\$ 3,229	\$ 4,094	\$ 921	\$ 3,832	\$ 4,753
Home equity (3)	250	910	1,160	252	977	1,229
Total consumer real estate troubled debt restructurings	\$ 1,115	\$ 4,139	\$ 5,254	\$ 1,173	\$ 4,809	\$ 5,982

(1) At June 30, 2020 and December 31, 2019, residential mortgage TDRs deemed collateral dependent totaled \$1.1 billion and \$1.2 billion, and included \$698 million and \$748 million of loans classified as nonperforming and \$415 million and \$468 million of loans classified as performing.

(2) At June 30, 2020 and December 31, 2019, residential mortgage performing TDRs include \$1.6 billion and \$2.1 billion of loans that were fully-insured.

(3) At June 30, 2020 and December 31, 2019, home equity TDRs deemed collateral dependent totaled \$422 million and \$442 million, and include \$209 million and \$209 million of loans classified as nonperforming and \$213 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 28 as substantially all of the loans remain on accrual status until either charged off or paid in full. At June 30, 2020 and December 31, 2019, our renegotiated TDR portfolio was \$677 million and \$679 million, of which \$601 million and \$570 million were current or less than 30 days past due under the modified terms.

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 34, 37 and 40 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 41 and Table 37.

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 six months ended June 30, 2020, commercial asset quality weakened as a result of the economic impact from COVID-19. However, there were also positive signs during this period. Of the draws by large corporate and commercial clients contributing to the \$67.2 billion loan growth in the first three months of 2020, \$62.0 billion was repaid as emergency or contingent funding was no longer needed or clients were able to access capital markets. Additionally, as part of the CARES Act, we funded \$25.1 billion of PPP loans for our small business clients, which are included in U.S. small business commercial in the tables

in this section. For more information on PPP loans, see Note 1 – Summary of Significant Accounting Principles to the Consolidated Financial Statements.

Credit quality of commercial real estate borrowers in most sectors remained stable but various sectors continued to experience varying degrees of strain as a result of COVID-19. Hospitality and retail sectors have been most negatively impacted. Many real estate markets experienced disruption in demand, supply chain challenges and underlying tenant difficulties.

The commercial allowance for loan and lease losses increased \$3.6 billion during the six months ended June 30, 2020 to \$8.4 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 44.

Total commercial utilized credit exposure increased \$32.3 billion during the six months ended June 30, 2020 to \$667.7 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 60 percent at June 30, 2020 and 58 percent at December 31, 2019.

Table 30 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 30 Commercial Credit Exposure by Type

	Commercial Utilized (1)		Commercial Unfunded (2, 3, 4)		Total Commercial Committed	
	June 30 2020	December 31 2019	June 30 2020	December 31 2019	June 30 2020	December 31 2019
(Dollars in millions)						
Loans and leases	\$ 547,372	\$ 517,657	\$ 382,336	\$ 405,834	\$ 929,708	\$ 923,491
Derivative assets (5)	45,184	40,485	—	—	45,184	40,485
Standby letters of credit and financial guarantees	35,727	36,062	479	468	36,206	36,530
Debt securities and other investments	24,982	25,546	4,712	5,101	29,694	30,647
Loans held-for-sale	5,546	7,047	4,047	15,135	9,593	22,182
Operating leases	7,065	6,660	—	—	7,065	6,660
Commercial letters of credit	942	1,049	308	451	1,250	1,500
Other	837	800	—	—	837	800
Total	\$ 667,655	\$ 635,306	\$ 391,882	\$ 426,989	\$ 1,059,537	\$ 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 \$152 million and \$170 million accounted for under the fair value option at June 30, 2020 and December 31, 2019.

(2) Commercial unfunded exposure includes commitments accounted for under the fair value option with a notional amount of \$2.7 billion and \$4.2 billion at June 30, 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 \$10.4 billion and \$10.6 billion at June 30, 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 \$42.2 billion and \$33.9 billion at June 30, 2020 and December 31, 2019. Not reflected in utilized and committed exposure is additional non-cash derivative collateral held of \$32.2 billion and \$35.2 billion at June 30, 2020 and December 31, 2019, which consists primarily of other marketable securities.

Outstanding commercial loans and leases increased \$29.7 billion during the six months ended June 30, 2020 due to \$25.1 billion of funded PPP loans and growth in the commercial and industrial portfolio. Nonperforming commercial loans increased \$703 million and commercial reservable criticized utilized exposure increased \$14.5 billion primarily driven by the impact of COVID-19 and was broad-based across industries. Table 31 presents our commercial loans and leases portfolio and related credit quality information at June 30, 2020 and December 31, 2019.

Table 31 Commercial Credit Quality

	Outstandings		Nonperforming (3)		Accruing Past Due 90 Days or More (4)	
	June 30 2020	December 31 2019	June 30 2020	December 31 2019	June 30 2020	December 31 2019
(Dollars in millions)						
Commercial and industrial:						
U.S. commercial	\$ 313,938	\$ 307,048	\$ 1,247	\$ 1,094	\$ 342	\$ 106
Non-U.S. commercial	103,684	104,966	387	43	9	8
Total commercial and industrial	417,622	412,014	1,634	1,137	351	114
Commercial real estate	64,095	62,689	474	280	44	19
Commercial lease financing	18,200	19,880	17	32	46	20
	499,917	494,583	2,125	1,449	441	153
U.S. small business commercial (1)	38,963	15,333	77	50	111	97
Commercial loans excluding loans accounted for under the fair value option	538,880	509,916	2,202	1,499	552	250
Loans accounted for under the fair value option (2)	8,492	7,741				
Total commercial loans and leases	\$ 547,372	\$ 517,657				

(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 June 30, 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) Excludes nonperforming commercial loans accounted for under the fair value option of \$74 million at June 30, 2020.

(4) 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 32 presents net charge-offs and related ratios for our commercial loans and leases for the three and six months ended June 30, 2020 and 2019.

Table 32 Commercial Net Charge-offs and Related Ratios

	Net Charge-offs				Net Charge-off Ratios (1)			
	Three Months Ended June 30		Six Months Ended June 30		Three Months Ended June 30		Six Months Ended June 30	
	2020	2019	2020	2019	2020	2019	2020	2019
(Dollars in millions)								
Commercial and industrial:								
U.S. commercial	\$ 219	\$ 66	\$ 382	\$ 149	0.26%	0.09%	0.24%	0.10%
Non-U.S. commercial	32	48	33	48	0.12	0.19	0.06	0.10
Total commercial and industrial	251	114	415	197	0.22	0.11	0.19	0.10
Commercial real estate	57	4	63	9	0.35	0.02	0.20	0.03
Commercial lease financing	31	13	36	13	0.66	0.26	0.38	0.13
	339	131	514	219	0.25	0.11	0.20	0.09
U.S. small business commercial	73	65	148	133	0.96	1.76	1.29	1.83
Total commercial	\$ 412	\$ 196	\$ 662	\$ 352	0.29	0.16	0.25	0.14

(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 33 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 \$14.5 billion, or 127 percent, during the six months ended June 30, 2020 driven by the impact of COVID-19 with increases spread across multiple industries. At June 30, 2020 and December 31, 2019, 83 percent and 90 percent of commercial reservable criticized utilized exposure was secured.

Table 33 Commercial Reservable Criticized Utilized Exposure (1, 2)

	June 30, 2020		December 31, 2019	
(Dollars in millions)				
Commercial and industrial:				
U.S. commercial	\$ 18,639	5.43%	\$ 8,272	2.46%
Non-U.S. commercial	3,134	2.86	989	0.89
Total commercial and industrial	21,773	4.81	9,261	2.07
Commercial real estate	2,505	3.79	1,129	1.75
Commercial lease financing	597	3.28	329	1.66
	24,875	4.63	10,719	2.01
U.S. small business commercial	1,075	2.76	733	4.78
Total commercial reservable criticized utilized exposure (1)	\$ 25,950	4.51	\$ 11,452	2.09

(1) Total commercial reservable criticized utilized exposure includes loans and leases of \$24.5 billion and \$10.7 billion and commercial letters of credit of \$1.4 billion and \$715 million at June 30, 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 June 30, 2020, 69 percent of the U.S. commercial loan portfolio, excluding small business, was managed in *Global Banking*, 15 percent in *Global Markets*, 13 percent in *GWM* (generally business-purpose loans for high net worth clients) and the remainder primarily in *Consumer Banking*. U.S. commercial loans increased \$6.9 billion during the six months ended June 30, 2020 across most lines of business. Reservable criticized utilized exposure increased \$10.4 billion, or 125 percent, driven by the impact of COVID-19 and was broad-based across industries.

Non-U.S. Commercial

At June 30, 2020, 82 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 decreased \$1.3 billion during the six months ended June 30, 2020, primarily in *Global Banking*. For information on the non-U.S. commercial portfolio, see Non-U.S. Portfolio on page 43.

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 \$1.4 billion, or two percent, during the six months ended June 30, 2020 to \$64.1 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 June 30, 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 and six months ended June 30, 2020, we continued to see low default rates and varying degrees of weakness in the non-residential portfolio. 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 34 presents outstanding commercial real estate loans by geographic region, based on the geographic location of the collateral, and by property type.

Table 34 Outstanding Commercial Real Estate Loans

(Dollars in millions)		June 30 2020	December 31 2019
By Geographic Region			
California	\$	14,848	\$ 14,910
Northeast		12,314	12,408
Southwest		9,123	8,408
Southeast		6,780	5,937
Florida		4,303	3,984
Midwest		3,445	3,203
Illinois		3,388	3,349
Midsouth		2,658	2,468
Northwest		1,689	1,638
Non-U.S.		3,469	3,724
Other (1)		2,078	2,660
Total outstanding commercial real estate loans	\$	64,095	\$ 62,689
By Property Type			
Non-residential			
Office	\$	17,844	\$ 17,902
Industrial / Warehouse		9,375	8,677
Shopping centers / Retail		8,438	8,183
Multi-family rental		7,796	7,250
Hotels / Motels		7,511	6,982
Unsecured		2,638	3,438
Multi-use		1,853	1,788
Other		7,381	6,958
Total non-residential		62,836	61,178
Residential		1,259	1,511
Total outstanding commercial real estate loans	\$	64,095	\$ 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* including \$25.1 billion of PPP loans that were funded through June 30, 2020. Excluding PPP, credit card-related products were 50 percent and 52 percent of the U.S. small business commercial portfolio at June 30, 2020 and December 31, 2019. Of the U.S. small business commercial net charge-offs, 95 percent and 92 percent were credit card-related products for the three and six months ended June 30, 2020 compared to 99 percent and 97 percent for the same periods in 2019.

Nonperforming Commercial Loans, Leases and Foreclosed Properties Activity

Table 35 presents the nonperforming commercial loans, leases

and foreclosed properties activity during the three and six months ended June 30, 2020 and 2019. Nonperforming loans do not include loans accounted for under the fair value option. During the six months ended June 30, 2020, nonperforming commercial loans and leases increased \$703 million to \$2.2 billion, primarily driven by the impact of COVID-19. At June 30, 2020, 87 percent of commercial nonperforming loans, leases and foreclosed properties were secured and 65 percent were contractually current. Commercial nonperforming loans were carried at 81 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 35 Nonperforming Commercial Loans, Leases and Foreclosed Properties Activity (1, 2)

	Three Months Ended June 30		Six Months Ended June 30	
	2020	2019	2020	2019
(Dollars in millions)				
Nonperforming loans and leases, beginning of period	\$ 1,852	\$ 1,272	\$ 1,499	\$ 1,102
Additions	889	389	1,670	1,029
Reductions:				
Paydowns	(177)	(210)	(389)	(318)
Sales	(10)	(117)	(26)	(160)
Returns to performing status (3)	(8)	(23)	(24)	(57)
Charge-offs	(344)	(151)	(528)	(248)
Transfers to foreclosed properties	—	—	—	(7)
Transfers to loans held-for-sale	—	—	—	(181)
Total net additions/(reductions) to nonperforming loans and leases	350	(112)	703	58
Total nonperforming loans and leases, June 30	2,202	1,160	2,202	1,160
Foreclosed properties, June 30	49	60	49	60
Nonperforming commercial loans, leases and foreclosed properties, June 30	\$ 2,251	\$ 1,220	\$ 2,251	\$ 1,220
Nonperforming commercial loans and leases as a percentage of outstanding commercial loans and leases (4)	0.41%	0.23%		
Nonperforming commercial loans, leases and foreclosed properties as a percentage of outstanding commercial loans, leases and foreclosed properties (4)	0.42	0.24		

(1) Balances do not include nonperforming loans held-for-sale of \$151 million and \$278 million at June 30, 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 36 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 on page 3 and Note 1 - Summary of Significant Accounting Principles to the Consolidated Financial Statements.

Table 36 Commercial Troubled Debt Restructurings

	June 30, 2020			December 31, 2019		
	Nonperforming	Performing	Total	Nonperforming	Performing	Total
(Dollars in millions)						
Commercial and industrial:						
U.S. commercial	\$ 848	\$ 916	\$ 1,764	\$ 617	\$ 999	\$ 1,616
Non-U.S. commercial	119	167	286	41	193	234
Total commercial and industrial	967	1,083	2,050	658	1,192	1,850
Commercial real estate	290	36	326	212	14	226
Commercial lease financing	—	29	29	18	31	49
	1,257	1,148	2,405	888	1,237	2,125
U.S. small business commercial	—	27	27	—	27	27
Total commercial troubled debt restructurings	\$ 1,257	\$ 1,175	\$ 2,432	\$ 888	\$ 1,264	\$ 2,152

Industry Concentrations

Table 37 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 decreased \$2.8 billion, less than one percent, during the six months ended June 30, 2020 to \$1.1 trillion. The decrease in commercial committed exposure was concentrated in the Asset managers and funds, Utilities, and Global commercial banks industry sectors. Decreases were partially offset by increased exposure to the Healthcare equipment and services, Capital goods, and Automobiles and components 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 \$100.8 billion, decreased \$9.3 billion, or eight percent, during the six months ended June 30, 2020.

Real estate, our second largest industry concentration with committed exposure of \$96.1 billion, remained relatively flat during the six months ended June 30, 2020. For more information on the commercial real estate and related portfolios, see Commercial Portfolio Credit Risk Management - Commercial Real Estate on page 39.

Capital goods, our third largest industry concentration with committed exposure of \$85.7 billion, increased \$4.8 billion, or six percent, during the six months ended June 30, 2020 with the growth largely occurring in the machinery, and aerospace and defense conglomerates categories, partially offset by a decrease in trading companies and distributors, and industrial conglomerates.

Given the widespread impact the COVID-19 pandemic is having on the U.S. and global economy, a number of industries continue to be adversely impacted. We continue to monitor all industries, particularly higher risk industries, which are continuing 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 COVID-19. 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 \$1.1 billion, or three percent, during the six months ended June 30, 2020 to \$37.4 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 on page 3.

Table 37 Commercial Credit Exposure by Industry (1, 2)

	Commercial Utilized		Total Commercial Committed (3)	
	June 30 2020	December 31 2019	June 30 2020	December 31 2019
(Dollars in millions)				
Asset managers and funds	\$ 64,237	\$ 71,386	\$ 100,773	\$ 110,069
Real estate (4)	74,181	70,361	96,124	96,370
Capital goods	47,711	41,082	85,715	80,892
Finance companies	40,661	40,173	63,767	63,942
Healthcare equipment and services	39,716	34,353	63,759	55,918
Government and public education	43,787	41,889	55,972	53,566
Materials	28,771	26,663	52,417	52,129
Retailing	29,564	25,868	49,813	48,317
Consumer services	34,245	28,434	48,300	49,071
Food, beverage and tobacco	24,633	24,163	46,159	45,956
Commercial services and supplies	24,686	23,103	38,147	38,944
Energy	16,954	16,406	37,386	36,326
Transportation	26,309	23,449	35,473	33,028
Utilities	13,310	12,383	29,978	36,060
Individuals and trusts	20,460	18,927	28,364	27,817
Global commercial banks	25,096	30,171	27,507	32,345
Media	14,457	12,445	26,396	23,645
Technology hardware and equipment	10,280	10,646	22,485	24,072
Consumer durables and apparel	10,931	10,193	21,061	21,245
Software and services	11,721	10,432	20,963	20,556
Vehicle dealers	15,369	18,013	19,798	21,435
Automobiles and components	12,417	7,345	18,609	14,910
Pharmaceuticals and biotechnology	6,790	5,964	17,565	20,206
Insurance	6,791	6,673	14,227	15,218
Telecommunication services	7,939	9,154	13,581	16,113
Food and staples retailing	6,383	6,290	10,628	10,392
Financial markets infrastructure (clearinghouses)	4,852	5,496	7,330	7,997
Religious and social organizations	5,404	3,844	7,240	5,756
Total commercial credit exposure by industry	\$ 667,655	\$ 635,306	\$ 1,059,537	\$ 1,062,295
Net credit default protection purchased on total commitments (5)			\$ (5,415)	\$ (3,349)

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

(2) Certain prior-period amounts have been reclassified to conform to current period presentation.

(3) 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 \$10.4 billion and \$10.6 billion at June 30, 2020 and December 31, 2019.

(4) 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.

(5) 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 June 30, 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 \$5.4 billion and \$3.3 billion. We recorded net losses on these positions of \$231 million and \$2 million for the three and six months ended June 30, 2020 compared to net losses of \$13 million and \$77 million for the same periods 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 43. For more information, see Trading Risk Management on page 46.

Tables 38 and 39 present the maturity profiles and the credit exposure debt ratings of the net credit default protection portfolio at June 30, 2020 and December 31, 2019.

Table 38 Net Credit Default Protection by Maturity

	June 30 2020	December 31 2019
Less than or equal to one year	36%	54%
Greater than one year and less than or equal to five years	62	45
Greater than five years	2	1
Total net credit default protection	100%	100%

Table 39 Net Credit Default Protection by Credit Exposure Debt Rating

	Net Notional (1)	Percent of Total	Net Notional (1)	Percent of Total
(Dollars in millions)	June 30, 2020		December 31, 2019	
Ratings (2, 3)				
A	\$ (318)	5.9%	\$ (697)	20.8%
BBB	(2,728)	50.4	(1,089)	32.5
BB	(1,757)	32.4	(766)	22.9
B	(348)	6.4	(373)	11.1
CCC and below	(240)	4.4	(119)	3.6
NR (4)	(24)	0.5	(305)	9.1
Total net credit default protection	\$ (5,415)	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 40 presents our 20 largest non-U.S. country exposures at June 30, 2020. These exposures accounted for 90 percent and 88 percent of our total non-U.S. exposure at June 30, 2020 and December 31, 2019. Net country exposure for these 20 countries increased \$43.7 billion in the six months ended June 30, 2020. The majority of the increase was due to higher deposits with central banks in Germany and Japan.

Table 40 Top 20 Non-U.S. Countries Exposure

	Funded Loans and Loan Equivalents	Unfunded Loan Commitments	Net Counterparty Exposure	Securities/ Other Investments	Country Exposure at June 30 2020	Hedges and Credit Default Protection	Net Country Exposure at June 30 2020	Increase (Decrease) from December 31 2019
(Dollars in millions)								
United Kingdom	\$ 36,255	\$ 15,413	\$ 7,702	\$ 3,151	\$ 62,521	\$ (1,507)	\$ 61,014	\$ 5,170
Germany	37,059	7,595	3,766	3,875	52,295	(2,371)	49,924	19,096
Japan	19,106	964	1,902	3,729	25,701	(1,041)	24,660	14,128
France	10,206	7,606	996	3,620	22,428	(1,346)	21,082	4,827
Canada	8,924	8,260	1,557	2,249	20,990	(495)	20,495	373
Australia	6,751	3,758	504	2,202	13,215	(387)	12,828	1,726
China	11,371	291	1,030	674	13,366	(538)	12,828	(2,759)
Netherlands	6,339	3,031	628	2,065	12,063	(518)	11,545	1,218
Brazil	7,307	125	196	4,025	11,653	(356)	11,297	(475)
India	6,561	150	392	2,984	10,087	(205)	9,882	(2,135)
Switzerland	5,939	2,826	207	508	9,480	(313)	9,167	1,782
South Korea	5,464	858	379	2,067	8,768	(161)	8,607	(98)
Singapore	3,907	237	393	2,941	7,478	(63)	7,415	(411)
Mexico	4,500	1,077	260	1,361	7,198	(108)	7,090	(721)
Hong Kong	4,870	459	344	1,158	6,831	(43)	6,788	(268)
Belgium	4,178	1,229	451	810	6,668	(267)	6,401	(106)
Italy	2,702	1,226	534	2,573	7,035	(1,019)	6,016	639
Spain	3,253	1,078	231	1,007	5,569	(308)	5,261	539
Ireland	3,425	780	114	311	4,630	(10)	4,620	1,253
United Arab Emirates	3,119	159	183	77	3,538	(41)	3,497	(90)
Total top 20 non-U.S. countries exposure	\$ 191,236	\$ 57,122	\$ 21,769	\$ 41,387	\$ 311,514	\$ (11,097)	\$ 300,417	\$ 43,688

Our largest non-U.S. country exposure at June 30, 2020 was the U.K. with net exposure of \$61.0 billion, which represents a \$5.2 billion increase from December 31, 2019. Our second largest non-U.S. country exposure was Germany with net exposure of \$49.9 billion at June 30, 2020, a \$19.1 billion increase from December 31, 2019. The increase in Germany was primarily driven by an increase in deposits with the central bank.

In light of the global COVID-19 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 continue to be highly uncertain. The impact of COVID-19 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 on page 3 and Part II, Item 1A. Risk Factors on page 104.

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 ECL 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 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 \$7.6 billion at June 30, 2020, which included a \$4.5 billion increase in the commercial portfolio and a \$3.1 billion increase in the consumer portfolio. The increases were primarily due to the weaker 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 June 30, 2020, January 1, 2020 and December 31, 2019 (prior to the adoption of the CECL accounting standard).

Table 41 Allocation of the Allowance for Credit Losses by Product Type

	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⁾
(Dollars in millions)	June 30, 2020			January 1, 2020			December 31, 2019		
Allowance for loan and lease losses									
Residential mortgage	\$ 439	2.26%	0.18%	\$ 212	1.72%	0.09%	\$ 325	3.45%	0.14%
Home equity	394	2.03	1.03	228	1.84	0.57	221	2.35	0.55
Credit card	9,247	47.69	10.98	6,809	55.10	6.98	3,710	39.39	3.80
Direct/Indirect consumer	800	4.13	0.90	566	4.58	0.62	234	2.49	0.26
Other consumer	75	0.40	n/m	55	0.45	n/m	52	0.55	n/m
Total consumer	10,955	56.51	2.43	7,870	63.69	1.69	4,542	48.23	0.98
U.S. commercial ⁽²⁾	4,788	24.69	1.36	2,723	22.03	0.84	3,015	32.02	0.94
Non-U.S. commercial	1,321	6.81	1.27	668	5.41	0.64	658	6.99	0.63
Commercial real estate	2,235	11.53	3.49	1,036	8.38	1.65	1,042	11.07	1.66
Commercial lease financing	90	0.46	0.50	61	0.49	0.31	159	1.69	0.80
Total commercial	8,434	43.49	1.57	4,488	36.31	0.88	4,874	51.77	0.96
Allowance for loan and lease losses	19,389	100.00%	1.96	12,358	100.00%	1.27	9,416	100.00%	0.97
Reserve for unfunded lending commitments	1,702			1,123			813		
Allowance for credit losses	\$ 21,091			\$ 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 \$330 million at June 30, 2020 and \$257 million at January 1, 2020 and December 31, 2019 and home equity loans of \$354 million at June 30, 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, \$5.1 billion and \$4.7 billion at June 30, 2020, January 1, 2020 and December 31, 2019, respectively and non-U.S. commercial loans of \$3.4 billion, \$3.2 billion and \$3.1 billion at June 30, 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 \$1.4 billion, \$831 million and \$523 million at June 30, 2020, January 1, 2020 and December 31, 2019, respectively.
n/m = not meaningful

Net charge-offs for the three and six months ended June 30, 2020 were \$1.1 billion and \$2.3 billion compared to \$887 million and \$1.9 billion for the same periods in 2019 driven by increases in commercial losses. The provision for credit losses increased \$4.3 billion to \$5.1 billion, and \$8.0 billion to \$9.9 billion for the three and six months ended June 30, 2020 compared to the same periods in 2019. The provision for credit losses was \$4.0 billion and \$7.6 billion higher than net charge-offs for the three and six months ended June 30, 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 \$2.0 billion to \$2.6 billion and \$3.2 billion to \$4.7 billion for the three and six months ended June 30, 2020 compared to the same periods in 2019. The

provision for credit losses for the commercial portfolio, including unfunded lending commitments, increased \$2.3 billion to \$2.5 billion and \$4.8 billion to \$5.2 billion for the three and six months ended June 30, 2020 compared to the same periods in 2019.

The following table presents a rollforward of the allowance for credit losses, including certain loan and allowance ratios for the six months ended June 30, 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 42 Allowance for Credit Losses

	Three Months Ended June 30		Six Months Ended June 30	
	2020	2019	2020	2019
(Dollars in millions)				
Allowance for loan and lease losses, beginning of period	\$ 15,766	\$ 9,577	\$ 12,358	\$ 9,601
Loans and leases charged off				
Residential mortgage	(12)	(17)	(23)	(41)
Home equity	(15)	(136)	(39)	(215)
Credit card	(818)	(907)	(1,742)	(1,794)
Direct/Indirect consumer	(86)	(122)	(202)	(246)
Other consumer	(81)	(46)	(162)	(92)
Total consumer charge-offs	(1,012)	(1,228)	(2,168)	(2,388)
U.S. commercial (1)	(324)	(165)	(591)	(335)
Non-U.S. commercial	(33)	(49)	(34)	(49)
Commercial real estate	(57)	(5)	(64)	(10)
Commercial lease financing	(33)	(14)	(40)	(16)
Total commercial charge-offs	(447)	(233)	(729)	(410)
Total loans and leases charged off	(1,459)	(1,461)	(2,897)	(2,798)
Recoveries of loans and leases previously charged off				
Residential mortgage	32	14	44	54
Home equity	29	291	64	359
Credit card	153	145	307	287
Direct/Indirect consumer	60	82	136	152
Other consumer	4	5	11	10
Total consumer recoveries	278	537	562	862
U.S. commercial (2)	32	34	61	53
Non-U.S. commercial	1	1	1	1
Commercial real estate	—	1	1	1
Commercial lease financing	2	1	4	3
Total commercial recoveries	35	37	67	58
Total recoveries of loans and leases previously charged off	313	574	629	920
Net charge-offs	(1,146)	(887)	(2,268)	(1,878)
Provision for loan and lease losses	4,775	863	9,300	1,861
Other (3)	(6)	(16)	(1)	(57)
Allowance for loan and lease losses, June 30	19,389	9,527	19,389	9,527
Reserve for unfunded lending commitments, beginning of period	1,360	802	1,123	797
Provision for unfunded lending commitments	342	4	578	9
Other (3)	—	—	1	—
Reserve for unfunded lending commitments, June 30	1,702	806	1,702	806
Allowance for credit losses, June 30	\$ 21,091	\$ 10,333	\$ 21,091	\$ 10,333

Loan and allowance ratios:

Loans and leases outstanding at June 30 (4)	\$ 989,768	\$ 955,937	\$ 989,768	\$ 955,937
Allowance for loan and lease losses as a percentage of total loans and leases outstanding at June 30 (4)	1.96%	1.00%	1.96%	1.00%
Consumer allowance for loan and lease losses as a percentage of total consumer loans and leases outstanding at June 30 (5)	2.43	1.04	2.43	1.04
Commercial allowance for loan and lease losses as a percentage of total commercial loans and leases outstanding at June 30 (6)	1.57	0.95	1.57	0.95
Average loans and leases outstanding (4)	\$ 1,022,294	\$ 943,588	\$ 1,001,972	\$ 941,311
Annualized net charge-offs as a percentage of average loans and leases outstanding (4)	0.45%	0.38%	0.46%	0.40%
Allowance for loan and lease losses as a percentage of total nonperforming loans and leases at June 30	441	228	441	228
Ratio of the allowance for loan and lease losses at June 30 to net charge-offs	4.21	2.68	4.25	2.52
Amounts included in allowance for loan and lease losses for loans and leases that are excluded from nonperforming loans and leases at June 30 (7)	\$ 10,517	\$ 4,142	\$ 10,517	\$ 4,142
Allowance for loan and lease losses as a percentage of total nonperforming loans and leases, excluding the allowance for loan and lease losses for loans and leases that are excluded from nonperforming loans and leases at June 30 (7)	202%	129%	202%	129%

(1) Includes U.S. small business commercial charge-offs of \$84 million and \$170 million for the three and six months ended June 30, 2020 compared to \$81 million and \$160 million for the same periods in 2019.

(2) Includes U.S. small business commercial recoveries of \$11 million and \$22 million for the three and six months ended June 30, 2020 compared to \$16 million and \$27 million for the same periods in 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 \$9.2 billion and \$7.9 billion at June 30, 2020 and 2019. Average loans accounted for under the fair value option were \$9.1 billion and \$9.4 billion for the three and six months ended June 30, 2020 compared to \$6.9 billion and \$6.0 billion for the same periods in 2019.

(5) Excludes consumer loans accounted for under the fair value option of \$684 million and \$658 million at June 30, 2020 and 2019.

(6) Excludes commercial loans accounted for under the fair value option of \$8.5 billion and \$7.2 billion at June 30, 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 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 43 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 43 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 43 presents period-end, average, high and low daily trading VaR for the three months ended June 30, 2020, March 31, 2020 and June 30, 2019 using a 99 percent confidence level, as well as average daily trading VaR for the six months ended June 30, 2020 and 2019. The amounts disclosed in Table 43 and Table 44 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.

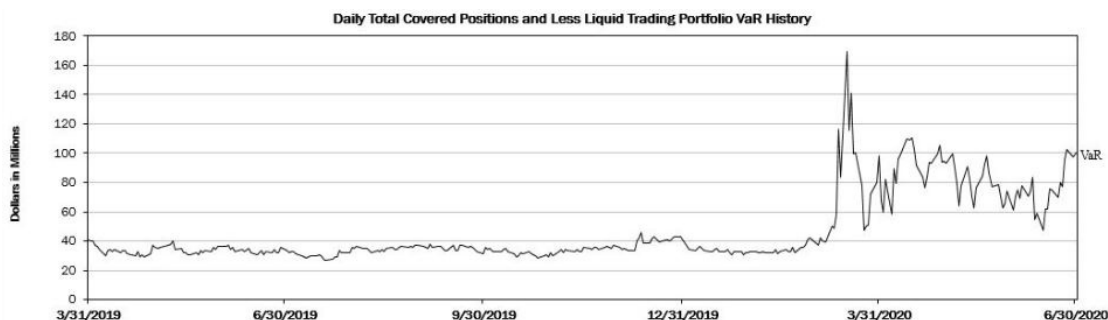
The average of total covered positions and less liquid trading positions portfolio VaR increased for the three months ended June 30, 2020 compared to the prior quarter primarily due to the impact of market volatility stemming from the COVID-19 pandemic in the look-back period.

Table 43 Market Risk VaR for Trading Activities

	Three Months Ended												Six Months Ended June 30	
	June 30, 2020				March 31, 2020				June 30, 2019				2020 Average	2019 Average
	Period End	Average	High ⁽¹⁾	Low ⁽¹⁾	Period End	Average	High ⁽¹⁾	Low ⁽¹⁾	Period End	Average	High ⁽¹⁾	Low ⁽¹⁾		
(Dollars in millions)														
Foreign exchange	\$ 5	\$ 7	\$ 11	\$ 4	\$ 8	\$ 6	\$ 84	\$ 2	\$ 6	\$ 5	\$ 11	\$ 4	\$ 7	\$ 6
Interest rate	17	15	23	7	13	21	39	13	20	26	38	18	18	27
Credit	64	65	91	48	86	35	86	25	26	22	27	16	50	22
Equity	16	24	43	15	26	36	162	19	21	20	25	15	30	20
Commodities	7	7	12	5	8	6	10	4	6	6	8	4	7	7
Portfolio diversification	(39)	(60)	—	—	(82)	(57)	—	—	(45)	(48)	—	—	(59)	(50)
Total covered positions portfolio	70	58	85	28	59	47	171	27	34	31	37	28	53	32
Impact from less liquid exposures	30	23	—	—	39	1	—	—	1	3	—	—	12	4
Total covered positions and less liquid trading positions portfolio	100	81	111	47	98	48	169	30	35	34	40	29	65	36
Fair value option loans	56	67	84	55	75	16	78	7	10	9	11	7	42	9
Fair value option hedges	15	15	17	12	13	11	16	9	10	7	11	4	13	9
Fair value option portfolio diversification	(36)	(31)	—	—	(13)	(11)	—	—	(11)	(9)	—	—	(21)	(10)
Total fair value option portfolio	35	51	86	34	75	16	75	9	9	7	10	5	34	8
Portfolio diversification	(16)	(12)	—	—	(21)	(11)	—	—	(7)	(5)	—	—	(12)	(6)
Total market-based portfolio	\$ 119	\$ 120	159	76	\$ 152	\$ 53	171	32	\$ 37	\$ 36	42	31	\$ 87	\$ 38

⁽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 43. Peak VaR in mid-March 2020 was driven by increased market realized volatility and higher implied volatilities.



Additional VaR statistics produced within our single VaR model are provided in Table 44 at the same level of detail as in Table 43. 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 44 presents average

trading VaR statistics at 99 percent and 95 percent confidence levels for the three months ended June 30, 2020, March 31, 2020 and June 30, 2019. The increase in VaR for the 99 percent confidence level for the three months ended June 30, 2020 was primarily due to higher model volatility based on March 2020 market data included in the calibration of the VaR model.

Table 44 Average Market Risk VaR for Trading Activities – 99 percent and 95 percent VaR Statistics

(Dollars in millions)	Three Months Ended					
	June 30, 2020		March 31, 2020		June 30, 2019	
	99 percent	95 percent	99 percent	95 percent	99 percent	95 percent
Foreign exchange	\$ 7	\$ 4	\$ 6	\$ 4	\$ 5	\$ 3
Interest rate	15	6	21	13	26	16
Credit	65	18	35	18	22	13
Equity	24	12	36	21	20	10
Commodities	7	4	6	4	6	3
Portfolio diversification	(60)	(25)	(57)	(34)	(48)	(28)
Total covered positions portfolio	58	19	47	26	31	17
Impact from less liquid exposures	23	2	1	1	3	2
Total covered positions and less liquid trading positions portfolio	81	21	48	27	34	19
Fair value option loans	67	15	16	7	9	5
Fair value option hedges	15	8	11	7	7	5
Fair value option portfolio diversification	(31)	(12)	(11)	(7)	(9)	(6)
Total fair value option portfolio	51	11	16	7	7	4
Portfolio diversification	(12)	(7)	(11)	(6)	(5)	(3)
Total market-based portfolio	\$ 120	\$ 25	\$ 53	\$ 28	\$ 36	\$ 20

Backtesting

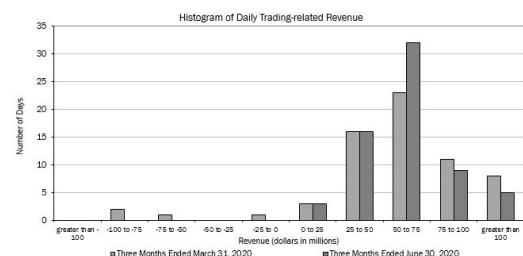
The accuracy of the VaR methodology is evaluated by backtesting, which compares the daily VaR results, utilizing a one-day holding period, against a comparable subset of trading revenue. For more information on our backtesting process, see Trading Risk Management – Backtesting in the MD&A of the Corporation's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

During the three and six months ended June 30, 2020, there were zero days and seven days respectively 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 June 30, 2020 compared to the three months ended March 31, 2020. During the three months ended June 30, 2020, positive trading-related revenue was recorded for 100 percent of the trading days, of which 95 percent were daily trading gains of over \$25 million. This compares to the three months ended March 31, 2020 where 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.



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 45 presents the spot and 12-month forward rates used in our baseline forecasts at June 30, 2020 and December 31, 2019.

Table 45 Forward Rates

	June 30, 2020		
	Federal Funds	Three-month LIBOR	10-Year Swap
Spot rates	0.25%	0.30%	0.64%
12-month forward rates	0.00	0.18	0.72
December 31, 2019			
Spot rates	1.75%	1.91%	1.90%
12-month forward rates	1.50	1.62	1.92

Table 46 shows the pretax impact to forecasted net interest income over the next 12 months from June 30, 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 six months ended June 30, 2020, the asset sensitivity of our balance sheet increased in up-rate scenarios primarily due to lower rates and higher cash levels. Asset sensitivity of our balance sheet decreased in down-rate scenarios due to interest rate floors. 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 23.

Table 46 Estimated Banking Book Net Interest Income Sensitivity to Curve Changes

(Dollars in millions)	Short Rate (bps)	Long Rate (bps)	June 30 2020	December 31 2019
Parallel Shifts				
+100 bps instantaneous shift	+100	+100	\$ 8,774	\$ 4,190
-25 bps instantaneous shift	-25	-25	(1,742)	(1,500)
Flatteners				
Short-end instantaneous change	+100	—	5,498	2,641
Long-end instantaneous change	—	-25	(942)	(653)
Steeperers				
Short-end instantaneous change	-25	—	(800)	(844)
Long-end instantaneous change	—	+100	3,325	1,561

The sensitivity analysis in Table 46 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 46 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 \$454 million and a loss of \$496 million, on a pretax basis, at June 30, 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 June 30, 2020, the after-tax net gains are expected to be reclassified into earnings as follows: a gain of \$189 million within the next year, a gain of \$298 million in years two through five, a loss of \$96 million in years six through ten, with the remaining loss of \$59 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 June 30, 2020.

Table 47 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 June 30, 2020 and December 31, 2019. These amounts do not include derivative hedges on our MSRs. During the six months ended June 30, 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 47 Asset and Liability Management Interest Rate and Foreign Exchange Contracts

	June 30, 2020								
	Expected Maturity								
	Fair Value	Total	Remainder of 2020	2021	2022	2023	2024	Thereafter	Average Estimated Duration
(Dollars in millions, average estimated duration in years)									
Receive-fixed interest rate swaps (1)	\$ 31,771								7.72
Notional amount		\$ 293,388	\$ 12,107	\$ 14,644	\$ 26,318	\$ 46,913	\$ 32,627	\$ 160,779	
Weighted-average fixed-rate		2.11%	2.80%	3.17%	2.06%	1.86%	1.72%	2.12%	
Pay-fixed interest rate swaps (1)	(10,541)								7.36
Notional amount		\$ 146,430	\$ 4,344	\$ 2,719	\$ 6,393	\$ 23,331	\$ 21,080	\$ 88,563	
Weighted-average fixed-rate		1.40%	2.16%	1.69%	0.12%	1.58%	0.99%	1.49%	
Same-currency basis swaps (2)	(236)								
Notional amount		\$ 166,855	\$ 6,973	\$ 18,327	\$ 6,786	\$ 2,017	\$ 14,937	\$ 117,815	
Foreign exchange basis swaps (1, 3, 4)	(1,170)								
Notional amount		106,000	6,942	24,150	14,424	7,329	3,410	49,745	
Foreign exchange contracts (1, 4, 5)	498								
Notional amount (6)		(99,932)	(126,821)	3,807	2,629	2,318	4,393	13,742	
Option products	—								
Notional amount		15	—	—	—	15	—	—	
Net ALM contracts	\$ 20,322								

	December 31, 2019								
	Expected Maturity								
	Fair Value	Total	2020	2021	2022	2023	2024	Thereafter	Average Estimated Duration
(Dollars in millions, average estimated duration in years)									
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 June 30, 2020 and December 31, 2019, the notional amount of same-currency basis swaps included \$166.9 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 \$(99.9) billion at June 30, 2020 was comprised of \$32.2 billion in foreign currency-denominated and cross-currency receive-fixed swaps, \$(129.5) billion in net foreign currency forward rate contracts, \$(3.2) billion in foreign currency-denominated interest rate swaps and \$590 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 and six months ended June 30, 2020 and 2019, we recorded gains of \$65 million and \$228 million related to the change in fair value of the MSRs, IRLCs and LHFS, net of

gains and losses on the hedge portfolio, compared to gains of \$78 million and \$139 million for the same periods in 2019.

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 ECL inherent in the Corporation's relevant financial assets.

The Corporation's estimate of lifetime ECL 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 and 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 the pandemic 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.

Goodwill and Intangible Assets

The nature of and accounting for goodwill and intangible assets are discussed in *Note 1 – Summary of Significant Accounting Principles* and *Note 7 – Goodwill and Intangible Assets* to the Consolidated Financial Statements. As of June 30, 2020, goodwill

recorded on our consolidated balance sheet was as follows.

Table 48 Goodwill by Reporting Unit

(Dollars in millions)	June 30 2020	December 31 2019
Consumer Banking		
Consumer Lending	\$ 11,709	\$ 11,709
Deposits	18,414	18,414
Global Wealth and Investment Management		
Private Bank	2,917	2,917
Merrill Lynch Global Wealth Management	6,760	6,760
Global Banking		
Global Commercial Banking	16,146	16,146
Global Corporate and Investment Banking	6,231	6,231
Business Banking	1,546	1,546
Global Markets	5,182	5,182
All Other	46	46
Total	\$ 68,951	\$ 68,951

We perform goodwill impairment testing at least annually, unless indicators of impairment exist in interim periods. We completed our annual goodwill impairment test as of June 30, 2020. In performing that test, we compared the fair value of each reporting unit to its estimated carrying value as measured by allocated equity. We estimated the fair value of each reporting unit based on the income approach (which utilizes the present value of cash flows to estimate fair value) and the market multiplier approach (which utilizes observable market prices and metrics of peer companies to estimate fair value).

Our discounted cash flows were generally based on the Corporation's three-year internal forecasts with a long-term growth rate of 3.68 percent. Our estimated cash flows take into account the current challenging global industry and market conditions related to the COVID-19 pandemic, including the low interest rate environment. The cash flows were discounted using rates that range from 9 percent to 12 percent, which were derived from a capital asset pricing model that incorporates the risk and uncertainty in the cash flow forecasts, the financial markets and industries similar to each of the reporting units.

Under the market multiplier approach, we estimated the fair value of the individual reporting units utilizing various market multiples, primarily various pricing multiples, from comparable publicly-traded companies in industries similar to the reporting unit and then factored in a control premium based upon observed comparable premiums paid for change-in-control transactions for financial institutions.

Based on the results of the test, we determined that each reporting unit's estimated fair value exceeded its respective carrying value and that the goodwill assigned to each reporting unit, as of June 30, 2020, was not impaired. The fair values of the reporting units as a percentage of their carrying values ranged from 109 percent to 213 percent. As it currently remains difficult to predict the economic impacts related to the COVID-19 pandemic, we will continue to monitor key assumptions and other factors utilized in our impairment analysis. It is possible that, during the remainder of 2020, economic and market conditions (both in the U.S. and internationally) could further deteriorate, which could negatively impact our reporting units. If our key assumptions and related estimates change, we may be required to record an impairment charge in the future.

Non-GAAP Reconciliations

Table 49 provides reconciliations of certain non-GAAP financial measures to the most closely related GAAP financial measures.

Table 49 Period-end and Average Supplemental Financial Data and Reconciliations to GAAP Financial Measures (1)

	Period-end		Average			
	June 30 2020	December 31 2019	Three Months Ended June 30		Six Months Ended June 30	
			2020	2019	2020	2019
(Dollars in millions)						
Shareholders' equity	\$ 265,637	\$ 264,810	\$ 266,316	\$ 267,975	\$ 265,425	\$ 267,101
Goodwill	(68,951)	(68,951)	(68,951)	(68,951)	(68,951)	(68,951)
Intangible assets (excluding MSRs)	(1,630)	(1,661)	(1,640)	(1,736)	(1,648)	(1,750)
Related deferred tax liabilities	789	713	790	770	759	805
Tangible shareholders' equity	\$ 195,845	\$ 194,911	\$ 196,515	\$ 198,058	\$ 195,585	\$ 197,205
Preferred stock	(23,427)	(23,401)	(23,427)	(22,537)	(23,442)	(22,433)
Tangible common shareholders' equity	\$ 172,418	\$ 171,510	\$ 173,088	\$ 175,521	\$ 172,143	\$ 174,772
Total assets	\$ 2,741,688	\$ 2,434,079				
Goodwill	(68,951)	(68,951)				
Intangible assets (excluding MSRs)	(1,630)	(1,661)				
Related deferred tax liabilities	789	713				
Tangible assets	\$ 2,671,896	\$ 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 8.

Item 3. Quantitative and Qualitative Disclosures about Market Risk

See Market Risk Management on page 46 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 June 30, 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

	Three Months Ended June 30		Six Months Ended June 30	
	2020	2019	2020	2019
(In millions, except per share information)				
Net interest income				
Interest income	\$ 12,540	\$ 18,224	\$ 28,638	\$ 36,394
Interest expense	1,692	6,035	5,660	11,830
Net interest income	10,848	12,189	22,978	24,564
Noninterest income				
Fees and commissions	8,392	8,190	16,713	16,028
Market making and similar activities	2,487	2,381	5,294	5,149
Other income	599	324	108	347
Total noninterest income	11,478	10,895	22,115	21,524
Total revenue, net of interest expense	22,326	23,084	45,093	46,088
Provision for credit losses	5,117	857	9,878	1,870
Noninterest expense				
Compensation and benefits	7,994	7,972	16,335	16,221
Occupancy and equipment	1,802	1,640	3,504	3,245
Information processing and communications	1,265	1,157	2,474	2,321
Product delivery and transaction related	811	709	1,588	1,371
Marketing	492	528	930	970
Professional fees	381	409	756	769
Other general operating	665	853	1,298	1,595
Total noninterest expense	13,410	13,268	26,885	26,492
Income before income taxes	3,799	8,959	8,330	17,726
Income tax expense	266	1,611	787	3,067
Net income	\$ 3,533	\$ 7,348	\$ 7,543	\$ 14,659
Preferred stock dividends	249	239	718	681
Net income applicable to common shareholders	\$ 3,284	\$ 7,109	\$ 6,825	\$ 13,978
Per common share information				
Earnings	\$ 0.38	\$ 0.75	\$ 0.78	\$ 1.45
Diluted earnings	0.37	0.74	0.77	1.45
Average common shares issued and outstanding	8,739.9	9,523.2	8,777.6	9,624.0
Average diluted common shares issued and outstanding	8,768.1	9,559.6	8,813.3	9,672.4

Consolidated Statement of Comprehensive Income

	Three Months Ended June 30		Six Months Ended June 30	
	2020	2019	2020	2019
(Dollars in millions)				
Net income	\$ 3,533	\$ 7,348	\$ 7,543	\$ 14,659
Other comprehensive income (loss), net-of-tax:				
Net change in debt securities	(102)	2,384	4,693	4,693
Net change in debit valuation adjustments	(1,293)	(138)	53	(501)
Net change in derivatives	315	304	732	533
Employee benefit plan adjustments	57	29	100	57
Net change in foreign currency translation adjustments	(19)	(14)	(107)	(48)
Other comprehensive income (loss)	(1,042)	2,565	5,471	4,734
Comprehensive income	\$ 2,491	\$ 9,913	\$ 13,014	\$ 19,393

See accompanying Notes to Consolidated Financial Statements.

Bank of America Corporation and Subsidiaries

Consolidated Balance Sheet

	June 30 2020	December 31 2019
(Dollars in millions)		
Assets		
Cash and due from banks	\$ 33,915	\$ 30,152
Interest-bearing deposits with the Federal Reserve, non-U.S. central banks and other banks	255,431	131,408
Cash and cash equivalents	289,346	161,560
Time deposits placed and other short-term investments	6,071	7,107
Federal funds sold and securities borrowed or purchased under agreements to resell (includes \$46,139 and \$50,364 measured at fair value)	451,179	274,597
Trading account assets (includes \$100,882 and \$90,946 pledged as collateral)	226,465	229,826
Derivative assets	45,184	40,485
Debt securities:		
Carried at fair value	202,912	256,467
Held-to-maturity, at cost (fair value – \$279,872 and \$219,821)	268,949	215,730
Total debt securities	471,861	472,197
Loans and leases (includes \$9,176 and \$8,335 measured at fair value)	998,944	983,426
Allowance for loan and lease losses	(19,389)	(9,416)
Loans and leases, net of allowance	979,555	974,010
Premises and equipment, net	10,790	10,561
Goodwill	68,951	68,951
Loans held-for-sale (includes \$3,244 and \$3,709 measured at fair value)	7,381	9,158
Customer and other receivables	55,392	55,937
Other assets (includes \$10,785 and \$15,518 measured at fair value)	129,513	129,690
Total assets	\$ 2,741,688	\$ 2,434,079
Liabilities		
Deposits in U.S. offices:		
Noninterest-bearing	\$ 580,667	\$ 403,305
Interest-bearing (includes \$594 and \$508 measured at fair value)	1,048,012	940,731
Deposits in non-U.S. offices:		
Noninterest-bearing	15,082	13,719
Interest-bearing	74,905	77,048
Total deposits	1,718,666	1,434,803
Federal funds purchased and securities loaned or sold under agreements to repurchase (includes \$21,516 and \$16,008 measured at fair value)	179,024	165,109
Trading account liabilities	80,912	83,270
Derivative liabilities	42,511	38,229
Short-term borrowings (includes \$2,651 and \$3,941 measured at fair value)	17,998	24,204
Accrued expenses and other liabilities (includes \$10,689 and \$15,434 measured at fair value and \$1,702 and \$813 of reserve for unfunded lending commitments)	175,302	182,798
Long-term debt (includes \$33,825 and \$34,975 measured at fair value)	261,638	240,856
Total liabilities	2,476,051	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 – 8,664,081,625 and 8,836,148,954 shares	85,794	91,723
Retained earnings	157,578	156,319
Accumulated other comprehensive income (loss)	(1,162)	(6,633)
Total shareholders' equity	265,637	264,810
Total liabilities and shareholders' equity	\$ 2,741,688	\$ 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	\$ 4,390	\$ 5,811
Loans and leases	25,532	38,837
Allowance for loan and lease losses	(1,869)	(807)
Loans and leases, net of allowance	23,663	38,030
All other assets	563	540

Total assets of consolidated variable interest entities	\$	28,616	\$	44,381
Liabilities of consolidated variable interest entities included in total liabilities above				
Short-term borrowings (includes \$24 and \$0 of non-recourse short-term borrowings)	\$	739	\$	2,175
Long-term debt (includes \$6,860 and \$8,717 of non-recourse debt)		6,861		8,718
All other liabilities (includes \$22 and \$19 of non-recourse liabilities)		22		22
Total liabilities of consolidated variable interest entities	\$	7,622	\$	10,915

See accompanying Notes to Consolidated Financial Statements.

Bank of America Corporation and Subsidiaries

Consolidated Statement of Changes in Shareholders' Equity

(In millions)	Preferred Stock	Common Stock and Additional Paid-in Capital		Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Total Shareholders' Equity
		Shares	Amount			
Balance, March 31, 2020	\$ 23,427	8,675.5	\$ 85,745	\$ 155,866	\$ (120)	\$ 264,918
Net income				3,533		3,533
Net change in debt securities					(102)	(102)
Net change in debit valuation adjustments					(1,293)	(1,293)
Net change in derivatives					315	315
Employee benefit plan adjustments					57	57
Net change in foreign currency translation adjustments					(19)	(19)
Dividends declared:						
Common				(1,572)		(1,572)
Preferred				(249)		(249)
Common stock issued under employee plans, net, and other		0.1	335			335
Common stock repurchased		(11.5)	(286)			(286)
Balance, June 30, 2020	\$ 23,427	8,664.1	\$ 85,794	\$ 157,578	\$ (1,162)	\$ 265,637
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				7,543		7,543
Net change in debt securities					4,693	4,693
Net change in debit valuation adjustments					53	53
Net change in derivatives					732	732
Employee benefit plan adjustments					100	100
Net change in foreign currency translation adjustments					(107)	(107)
Dividends declared:						
Common				(3,151)		(3,151)
Preferred				(718)		(718)
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		39.8	—	(9)		710
Common stock repurchased		(211.8)	—	(6,648)		(6,648)
Balance, June 30, 2020	\$ 23,427	8,664.1	\$ 85,794	\$ 157,578	\$ (1,162)	\$ 265,637
Balance, March 31, 2019	\$ 22,326	9,568.4	\$ 112,838	\$ 141,888	\$ (10,042)	\$ 267,010
Net income				7,348		7,348
Net change in debt securities					2,384	2,384
Net change in debit valuation adjustments					(138)	(138)
Net change in derivatives					304	304
Employee benefit plan adjustments					29	29
Net change in foreign currency translation adjustments					(14)	(14)
Dividends declared:						
Common				(1,420)		(1,420)
Preferred				(239)		(239)
Issuance of preferred stock	2,363					2,363
Common stock issued under employee plans, net, and other			288			288
Common stock repurchased		(225.8)	(6,507)			(6,507)
Balance, June 30, 2019	\$ 24,689	9,342.6	\$ 106,619	\$ 147,577	\$ (7,477)	\$ 271,408
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				14,659		14,659
Net change in debt securities					4,693	4,693
Net change in debit valuation adjustments					(501)	(501)
Net change in derivatives					533	533
Employee benefit plan adjustments					57	57
Net change in foreign currency translation adjustments					(48)	(48)
Dividends declared:						

Common					(2,876)			(2,876)
Preferred					(681)			(681)
Issuance of preferred stock	2,363							2,363
Common stock issued under employee plans, net, and other		119.1		493	(4)			489
Common stock repurchased		(445.8)		(12,770)				(12,770)
Balance, June 30, 2019	\$ 24,689	9,342.6	\$ 106,619	\$ 147,577	\$ (7,477)	\$	\$	271,408

See accompanying Notes to Consolidated Financial Statements.

Bank of America Corporation and Subsidiaries

Consolidated Statement of Cash Flows

	Six Months Ended June 30	
	2020	2019
(Dollars in millions)		
Operating activities		
Net income	\$ 7,543	\$ 14,659
Adjustments to reconcile net income to net cash provided by operating activities:		
Provision for credit losses	9,878	1,870
Gains on sales of debt securities	(377)	(115)
Depreciation and amortization	880	852
Net amortization of premium/discount on debt securities	1,364	810
Deferred income taxes	(686)	1,494
Stock-based compensation	1,077	985
Loans held-for-sale:		
Originations and purchases	(9,151)	(9,190)
Proceeds from sales and paydowns of loans originally classified as held for sale and instruments from related securitization activities	10,963	14,082
Net change in:		
Trading and derivative assets/liabilities	1,065	(17,734)
Other assets	611	2,405
Accrued expenses and other liabilities	(9,297)	(5,863)
Other operating activities, net	2,167	4,121
Net cash provided by operating activities	16,037	8,376
Investing activities		
Net change in:		
Time deposits placed and other short-term investments	1,036	(1,198)
Federal funds sold and securities borrowed or purchased under agreements to resell	(176,582)	13,054
Debt securities carried at fair value:		
Proceeds from sales	18,945	43,488
Proceeds from paydowns and maturities	37,132	38,186
Purchases	(38,656)	(83,704)
Held-to-maturity debt securities:		
Proceeds from paydowns and maturities	33,847	12,921
Purchases	(27,587)	(9,463)
Loans and leases:		
Proceeds from sales of loans originally classified as held for investment and instruments from related securitization activities	8,118	5,844
Purchases	(2,961)	(2,364)
Other changes in loans and leases, net	(30,066)	(22,655)
Other investing activities, net	(1,986)	(1,327)
Net cash used in investing activities	(178,760)	(7,218)
Financing activities		
Net change in:		
Deposits	283,863	(6,383)
Federal funds purchased and securities loaned or sold under agreements to repurchase	13,915	7,960
Short-term borrowings	(6,216)	7,055
Long-term debt:		
Proceeds from issuance	30,704	32,493
Retirement	(20,876)	(33,848)
Preferred stock:		
Proceeds from issuance	1,098	2,363
Redemption	(1,072)	—
Common stock repurchased	(6,648)	(12,770)
Cash dividends paid	(3,916)	(3,622)
Other financing activities, net	(573)	(833)
Net cash provided by (used in) financing activities	290,279	(7,585)
Effect of exchange rate changes on cash and cash equivalents	230	417
Net increase (decrease) in cash and cash equivalents	127,786	(6,010)
Cash and cash equivalents at January 1	161,560	177,404

Cash and cash equivalents at June 30	\$	289,346	\$	171,394
--------------------------------------	----	---------	----	---------

See accompanying Notes to Consolidated Financial Statements.

Bank of America Corporation and Subsidiaries

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 Principles 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 ECL 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 ECL 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 ECL 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 ECL 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 ECL 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 the COVID-19 pandemic. In accordance with the Coronavirus Aid, Relief, and Economic Security Act (CARES Act), the Corporation has elected to not apply TDR 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.

Paycheck Protection Program

The Corporation is participating in the Paycheck Protection Program (PPP), which is a loan program that originated from the CARES Act and was subsequently expanded by the Paycheck Protection Program and Health Care Enhancement Act. The PPP is designed to provide U.S. small businesses with cash-flow assistance through loans fully guaranteed by the Small Business Administration (SBA). If the borrower meets certain criteria and uses the proceeds towards certain eligible expenses, the borrower's obligation to repay the loan can be forgiven up to the full principal amount of the loan and any accrued interest. Upon borrower forgiveness, the SBA pays the Corporation for the principal and accrued interest owed on the loan. If the full principal of the loan is not forgiven, the loan will operate according to the original loan terms with the 100 percent SBA guaranty remaining. As of June 30, 2020, the Corporation had funded approximately 334,000 loans under the PPP totaling \$25.1 billion. As compensation for originating the loans, the Corporation receives lender processing fees from the SBA, which are

capitalized, along with the loan origination costs, and will be amortized over the loans' contractual lives and recognized as interest income. Upon forgiveness of a loan and repayment by the SBA, any unrecognized net capitalized fees and costs related to the loan will be recognized as interest income in that period.

Accounting Principles for Goodwill

Goodwill is the purchase premium after adjusting for the fair value of net assets acquired. Goodwill is not amortized but is reviewed for potential impairment on an annual basis, or when events or circumstances indicate a potential impairment, at the reporting unit level. Beginning January 1, 2020, the Corporation adopted the new accounting standard that requires the measurement of any goodwill impairment to be based on the amount by which a reporting unit's carrying value exceeds its fair value. If the fair value of the reporting unit exceeds its carrying value, the reporting unit's goodwill is not considered impaired. Previously, the amount of impairment was based on a comparison of the reporting unit's implied fair value of goodwill to the reporting unit's assigned amount of goodwill.

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 and six months ended June 30, 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 June 30		Six Months Ended June 30	
	2020	2019	2020	2019
(Dollars in millions)				
Net interest income				
Interest income				
Loans and leases	\$ 8,569	\$ 10,942	\$ 18,532	\$ 21,827
Debt securities	2,440	3,017	5,283	6,136
Federal funds sold and securities borrowed or purchased under agreements to resell	26	1,309	845	2,504
Trading account assets	1,008	1,321	2,255	2,643
Other interest income	497	1,635	1,723	3,284
Total interest income	12,540	18,224	28,638	36,394
Interest expense				
Deposits	373	1,965	1,557	3,760
Short-term borrowings	(72)	1,997	1,048	3,849
Trading account liabilities	223	319	552	664
Long-term debt	1,168	1,754	2,503	3,557
Total interest expense	1,692	6,035	5,660	11,830
Net interest income	\$ 10,848	\$ 12,189	\$ 22,978	\$ 24,564
Noninterest income				
Fees and commissions				
Card income				
Interchange fees (1)	\$ 830	\$ 968	\$ 1,622	\$ 1,864
Other card income	419	478	899	957
Total card income	1,249	1,446	2,521	2,821
Service charges				
Deposit-related fees	1,299	1,638	2,926	3,218
Lending-related fees	263	265	539	524
Total service charges	1,562	1,903	3,465	3,742
Investment and brokerage services				
Asset management fees	2,483	2,554	5,165	4,994
Brokerage fees	939	916	2,015	1,836
Total investment and brokerage services	3,422	3,470	7,180	6,830
Investment banking fees				
Underwriting income	1,523	792	2,371	1,458
Syndication fees	230	291	501	546
Financial advisory services	406	288	675	631
Total investment banking fees	2,159	1,371	3,547	2,635
Total fees and commissions	8,392	8,190	16,713	16,028
Market making and similar activities	2,487	2,381	5,294	5,149
Other income	599	324	108	347
Total noninterest income	\$ 11,478	\$ 10,895	\$ 22,115	\$ 21,524

(1) Gross interchange fees were \$2.0 billion and \$2.5 billion for the three months ended June 30, 2020 and 2019 and are presented net of \$1.2 billion and \$1.6 billion of expenses for rewards and partner payments. Gross interchange fees were \$4.3 billion and \$4.8 billion for the six months ended June 30, 2020 and 2019 and are presented net of \$2.7 billion and \$3.0 billion of expenses for rewards and partner payments for the same periods.

During the second quarter of 2020, the Corporation performed a quantitative analysis for its annual goodwill impairment test as of June 30, 2020. For more information on the results of the Corporation's test, see *Note 7 – Goodwill and Intangible Assets*. For more information on accounting for goodwill, see *Note 1 – Summary of Significant Accounting Principles* to the Consolidated Financial Statements of the Corporation's 2019 Annual Report on Form 10-K.

Subsequent Events

On July 22, 2020, the U.K. enacted a repeal of the final two percent of scheduled decreases in the U.K. corporation tax rate, which had been previously enacted. This change will unfavorably affect income tax expense on future U.K. earnings, and requires a remeasurement of the Corporation's U.K. net deferred tax assets using the higher tax rate. Accordingly, during the third quarter of 2020, the Corporation will record an income tax benefit of approximately \$700 million along with a corresponding increase to the U.K. net deferred tax assets.

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 June 30, 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.

	June 30, 2020							
	Gross Derivative Assets				Gross Derivative Liabilities			
	Contract/ Notional (1)	Trading and Other Risk Management Derivatives	Qualifying Accounting Hedges	Total	Trading and Other Risk Management Derivatives	Qualifying Accounting Hedges	Total	
(Dollars in billions)								
Interest rate contracts								
Swaps	\$ 18,327.8	\$ 201.4	\$ 22.9	\$ 224.3	\$ 221.7	\$ 0.9	\$ 222.6	
Futures and forwards	6,513.7	3.1	—	3.1	2.8	—	2.8	
Written options	1,691.4	—	—	—	52.8	—	52.8	
Purchased options	1,674.3	58.4	—	58.4	—	—	—	
Foreign exchange contracts								
Swaps	1,497.3	37.1	0.3	37.4	41.1	0.6	41.7	
Spot, futures and forwards	4,295.5	30.3	0.1	30.4	33.1	0.4	33.5	
Written options	275.7	—	—	—	4.3	—	4.3	
Purchased options	260.0	4.4	—	4.4	—	—	—	
Equity contracts								
Swaps	263.5	11.7	—	11.7	13.0	—	13.0	
Futures and forwards	113.9	0.6	—	0.6	0.6	—	0.6	
Written options	608.7	—	—	—	41.3	—	41.3	
Purchased options	551.3	43.7	—	43.7	—	—	—	
Commodity contracts								
Swaps	36.2	3.6	—	3.6	5.0	—	5.0	
Futures and forwards	54.6	1.9	—	1.9	0.7	—	0.7	
Written options	29.6	—	—	—	3.1	—	3.1	
Purchased options	32.2	2.8	—	2.8	—	—	—	
Credit derivatives (2)								
Purchased credit derivatives:								
Credit default swaps	379.4	5.0	—	5.0	3.4	—	3.4	
Total return swaps/options	84.7	0.9	—	0.9	1.6	—	1.6	
Written credit derivatives:								
Credit default swaps	357.4	3.2	—	3.2	4.1	—	4.1	
Total return swaps/options	80.8	0.6	—	0.6	0.9	—	0.9	
Gross derivative assets/liabilities		\$ 408.7	\$ 23.3	\$ 432.0	\$ 429.5	\$ 1.9	\$ 431.4	
Less: Legally enforceable master netting agreements				(344.6)			(344.6)	
Less: Cash collateral received/paid				(42.2)			(44.3)	
Total derivative assets/liabilities				\$ 45.2			\$ 42.5	

(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 \$(1.1) billion and \$324.6 billion at June 30, 2020.

	December 31, 2019							
		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	\$ 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 June 30, 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)

	Derivative Assets		Derivative Liabilities		Derivative Assets	Derivative Liabilities		
(Dollars in billions)	June 30, 2020		December 31, 2019					
Interest rate contracts								
Over-the-counter	\$	275.1	\$	268.4	\$	203.1	\$	196.6
Exchange-traded		0.1		0.1		0.1		0.1
Over-the-counter cleared		9.4		8.6		6.0		5.3
Foreign exchange contracts								
Over-the-counter		70.1		77.5		69.2		73.1
Over-the-counter cleared		1.0		0.8		0.5		0.5
Equity contracts								
Over-the-counter		23.2		20.8		21.3		17.8
Exchange-traded		31.4		30.5		26.4		22.8
Commodity contracts								
Over-the-counter		5.6		6.5		2.8		4.2
Exchange-traded		1.3		1.2		0.8		0.8
Over-the-counter cleared		0.1		0.1		—		0.1
Credit derivatives								
Over-the-counter		7.6		8.0		6.4		6.6
Over-the-counter cleared		1.9		1.7		2.5		2.2
Total gross derivative assets/liabilities, before netting								
Over-the-counter		381.6		381.2		302.8		298.3
Exchange-traded		32.8		31.8		27.3		23.7
Over-the-counter cleared		12.4		11.2		9.0		8.1
Less: Legally enforceable master netting agreements and cash collateral received/paid								
Over-the-counter		(346.0)		(348.6)		(274.7)		(269.3)
Exchange-traded		(29.1)		(29.1)		(21.5)		(21.5)
Over-the-counter cleared		(11.7)		(11.2)		(8.1)		(8.1)
Derivative assets/liabilities, after netting		40.0		35.3		34.8		31.2
Other gross derivative assets/liabilities (2)		5.2		7.2		5.7		7.0
Total derivative assets/liabilities		45.2		42.5		40.5		38.2
Less: Financial instruments collateral (3)		(14.2)		(15.4)		(14.6)		(16.1)
Total net derivative assets/liabilities	\$	31.0	\$	27.1	\$	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 following table summarizes information related to fair value hedges for the three and six months ended June 30, 2020 and 2019.

Gains and Losses on Derivatives Designated as Fair Value Hedges

	Three Months Ended June 30, 2020		Three Months Ended June 30, 2019	
	Derivative	Hedged Item	Derivative	Hedged Item
(Dollars in millions)				
Interest rate risk on long-term debt (1)	\$ 475	\$ (600)	\$ 4,132	\$ (4,121)
Interest rate and foreign currency risk on long-term debt (2)	60	(60)	41	(32)
Interest rate risk on available-for-sale securities (3)	(361)	356	(55)	55
Total	\$ 174	\$ (304)	\$ 4,118	\$ (4,098)

	Six Months Ended June 30, 2020		Six Months Ended June 30, 2019	
	Derivative	Hedged Item	Derivative	Hedged Item
Interest rate risk on long-term debt (1)	\$ 10,809	\$ (10,876)	\$ 6,045	\$ (6,050)
Interest rate and foreign currency risk on long-term debt (2)	565	(551)	98	(80)
Interest rate risk on available-for-sale securities (3)	(711)	698	(100)	98
Total	\$ 10,663	\$ (10,729)	\$ 6,043	\$ (6,032)

(1) Amounts are recorded in interest expense in the Consolidated Statement of Income.

(2) For the three and six months ended June 30, 2020, the derivative amount includes gains (losses) of \$(3) million and \$731 million in interest expense, \$63 million and \$(178) million in market making and similar activities, and \$0 and \$12 million in accumulated OCI. For the same periods in 2019, the derivative amount includes gains (losses) of \$(3) million and \$167 million in interest expense, \$30 million and \$(89) million in market making and similar activities, and \$14 million and \$20 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)

	June 30, 2020		December 31, 2019	
	Carrying Value	Cumulative Fair Value Adjustments (1)	Carrying Value	Cumulative Fair Value Adjustments (1)
(Dollars in millions)				
Long-term debt (2)	\$ (192,130)	\$ (19,856)	\$ (162,389)	\$ (8,685)
Available-for-sale debt securities (2, 3, 4)	53,063	746	1,654	64

(1) For assets, increase (decrease) to carrying value and for liabilities, (increase) decrease to carrying value.

(2) At June 30, 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 \$780 million and \$1.3 billion and an increase in the related asset of \$27 million and \$8 million, which are being amortized over the remaining contractual life of the de-designated hedged items.

(3) These amounts include the amortized cost basis of the prepayable financial assets used to designate hedging relationships in which the hedged item is the last layer expected to be remaining at the end of the hedging relationship. At June 30, 2020, the amortized cost of the closed portfolios used in these hedging relationships was \$45.2 billion, of which \$8.4 billion was designated in the hedging relationship. The cumulative basis adjustments associated with these hedging relationships were \$135 million.

(4) 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 and six months ended June 30, 2020 and 2019. Of the \$332 million after-tax net gain (\$441 million pretax) on derivatives in accumulated OCI at June 30, 2020, gains of \$189 million after-tax (\$250 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 3 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

	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	
(Dollars in millions, amounts pretax)	Three Months Ended June 30, 2020				Six Months Ended June 30, 2020			
Cash flow hedges								
Interest rate risk on variable-rate assets (1)	\$	320	\$	(23)	\$	911	\$	(49)
Price risk on certain compensation plans (2)		73		—		(9)		—
Total	\$	393	\$	(23)	\$	902	\$	(49)
Net investment hedges								
Foreign exchange risk (3)	\$	(400)	\$	1	\$	968	\$	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 and six months ended June 30, 2020, amounts excluded from effectiveness testing and recognized in market making and similar activities were gains of \$75 million and \$105 million. For the same periods in 2019, amounts excluded from effectiveness testing and recognized in market making and similar activities were gains of \$24 million and \$77 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 and six months ended June 30, 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 June 30		Six Months Ended June 30	
	2020	2019	2020	2019
(Dollars in millions)				
Interest rate risk on mortgage activities (1, 2)	\$ 62	\$ 147	\$ 441	\$ 251
Credit risk on loans (2)	(66)	(14)	22	(40)
Interest rate and foreign currency risk on ALM activities (3)	(1,017)	(355)	511	874
Price risk on certain compensation plans (4)	603	125	(154)	636

(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 \$39 million and \$87 million for the three and six months ended June 30, 2020 compared to \$24 million and \$36 million for the same periods in 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. At both June 30, 2020 and December 31, 2019, the Corporation had transferred \$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 \$5.2 billion at both transfer dates. At June 30, 2020 and December 31, 2019, the fair value of the transferred securities was \$5.1 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 and six months ended June 30, 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

	Three Months Ended June 30, 2020				Six Months Ended June 30, 2020			
	Market making and similar activities	Net Interest Income	Other (1)	Total	Market making and similar activities	Net Interest Income	Other (1)	Total
(Dollars in millions)								
Interest rate risk	\$ 635	\$ 658	\$ 49	\$ 1,342	\$ 2,188	\$ 1,275	\$ 121	\$ 3,584
Foreign exchange risk	367	(3)	(11)	353	804	2	(6)	800
Equity risk	741	31	451	1,223	2,003	(91)	968	2,880
Credit risk	537	426	142	1,105	156	869	177	1,202
Other risk	80	8	2	90	181	28	11	220
Total sales and trading revenue	\$ 2,360	\$ 1,120	\$ 633	\$ 4,113	\$ 5,332	\$ 2,083	\$ 1,271	\$ 8,686
	Three Months Ended June 30, 2019				Six Months Ended June 30, 2019			
	Market making and similar activities	Net Interest Income	Other (1)	Total	Market making and similar activities	Net Interest Income	Other (1)	Total
(Dollars in millions)								
Interest rate risk	\$ 321	\$ 389	\$ 62	\$ 772	\$ 634	\$ 796	\$ 145	\$ 1,575
Foreign exchange risk	322	14	9	345	637	34	15	686
Equity risk	1,010	(264)	399	1,145	1,979	(439)	794	2,334
Credit risk	290	465	129	884	767	898	265	1,930
Other risk	17	30	18	65	24	47	30	101
Total sales and trading revenue	\$ 1,960	\$ 634	\$ 617	\$ 3,211	\$ 4,041	\$ 1,336	\$ 1,249	\$ 6,626

(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 \$470 million and \$1.0 billion for the three and six months ended June 30, 2020 compared to \$423 million and \$857 million for the same periods in 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 June 30, 2020 and December 31, 2019 are summarized in the following table.

Credit Derivative Instruments

	Less than One Year	One to Three Years	Three to Five Years	Over Five Years	Total
	June 30, 2020				
	Carrying Value				
(Dollars in millions)					
Credit default swaps:					
Investment grade	\$ 1	\$ 33	\$ 171	\$ 325	\$ 530
Non-investment grade	101	705	1,127	1,649	3,582
Total	102	738	1,298	1,974	4,112
Total return swaps/options:					
Investment grade	76	—	—	—	76
Non-investment grade	803	5	—	—	808
Total	879	5	—	—	884
Total credit derivatives	\$ 981	\$ 743	\$ 1,298	\$ 1,974	\$ 4,996
Credit-related notes:					
Investment grade	\$ —	\$ —	\$ —	\$ 569	\$ 569
Non-investment grade	6	2	2	978	988
Total credit-related notes	\$ 6	\$ 2	\$ 2	\$ 1,547	\$ 1,557
	Maximum Payout/Notional				
Credit default swaps:					
Investment grade	\$ 50,713	\$ 80,302	\$ 106,343	\$ 17,662	\$ 255,020
Non-investment grade	20,066	30,178	41,237	10,938	102,419
Total	70,779	110,480	147,580	28,600	357,439
Total return swaps/options:					
Investment grade	35,492	—	132	—	35,624
Non-investment grade	44,487	687	—	5	45,179
Total	79,979	687	132	5	80,803
Total credit derivatives	\$ 150,758	\$ 111,167	\$ 147,712	\$ 28,605	\$ 438,242
	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 June 30, 2020 and December 31, 2019, the Corporation held cash and securities collateral of \$89.0 billion and \$84.3 billion and posted cash and securities collateral of \$85.3 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 June 30, 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 \$2.2 billion, including \$1.3 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 June 30, 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 June 30, 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 June 30, 2020

(Dollars in millions)	One Incremental notch	Second Incremental notch
Bank of America Corporation	\$ 337	\$ 707
Bank of America, N.A. and subsidiaries (1)	111	512

(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 June 30, 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 June 30, 2020

(Dollars in millions)	One Incremental notch	Second Incremental notch
Derivative liabilities	\$ 36	\$ 1,189
Collateral posted	1	920

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 and six months ended June 30, 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)

(Dollars in millions)	Three Months Ended June 30	
	2020	2019
Derivative assets (CVA)	\$ 276	\$ (64)
Derivative assets/liabilities (FVA)	69	26
Derivative liabilities (DVA)	(256)	8

(Dollars in millions)	Six Months Ended June 30	
	2020	2019
Derivative assets (CVA)	\$ (508)	\$ 2
Derivative assets/liabilities (FVA)	(87)	33
Derivative liabilities (DVA)	158	(73)

(1) At June 30, 2020 and December 31, 2019, cumulative CVA reduced the derivative assets balance by \$1.0 billion and \$528 million, cumulative FVA reduced the net derivatives balance by \$240 million and \$153 million, and cumulative DVA reduced the derivative liabilities balance by \$443 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 June 30, 2020 and December 31, 2019.

Debt Securities

	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
June 30, 2020				
(Dollars in millions)				
Available-for-sale debt securities				
Mortgage-backed securities:				
Agency	\$ 76,539	\$ 2,501	\$ (41)	\$ 78,999
Agency-collateralized mortgage obligations	6,113	198	(16)	6,295
Commercial	14,926	996	(1)	15,921
Non-agency residential (1)	903	127	(39)	991
Total mortgage-backed securities	98,481	3,822	(97)	102,206
U.S. Treasury and agency securities	50,304	2,368	(8)	52,664
Non-U.S. securities	13,334	12	(14)	13,332
Other taxable securities, substantially all asset-backed securities	4,244	48	(40)	4,252
Total taxable securities	166,363	6,250	(159)	172,454
Tax-exempt securities	17,791	279	(92)	17,978
Total available-for-sale debt securities (3)	184,154	6,529	(251)	190,432
Other debt securities carried at fair value (2)	12,266	295	(81)	12,480
Total debt securities carried at fair value	196,420	6,824	(332)	202,912
Held-to-maturity debt securities, substantially all U.S. agency mortgage-backed securities (3)	268,967	10,937	(32)	279,872
Total debt securities (4, 5)	\$ 465,387	\$ 17,761	\$ (364)	\$ 482,784
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 June 30, 2020 and December 31, 2019, the underlying collateral type included approximately 47 percent and 49 percent prime, five percent and six percent Alt-A and 48 percent 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 and six months ended June 30, 2020, the Corporation reclassified AFS debt securities with a fair value of \$16.2 billion and \$60.6 billion to HTM.

(4) Includes securities pledged as collateral of \$58.7 billion and \$67.0 billion at June 30, 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 \$154.8 billion and \$51.0 billion, and a fair value of \$162.6 billion and \$53.5 billion at June 30, 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 June 30, 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 \$4.8 billion, net of the related income tax expense of \$1.6 billion. The Corporation had nonperforming AFS debt securities of \$25 million and \$9 million at June 30, 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 June 30, 2020, the Corporation had \$153.9 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 \$36.6 billion in AFS debt securities, the amount of ECL 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 June 30, 2020, the Corporation held equity securities at an aggregate fair value of \$798 million and other equity securities, as valued under the measurement alternative, at cost of \$225 million, both of which are included in other assets. At June 30, 2020, the Corporation also held equity securities at fair value of \$1.2 billion included in time deposits placed and other short-term investments.

In the three and six months ended June 30, 2020, the Corporation recorded gross realized gains on sales of AFS debt securities of \$63 million and \$379 million and gross realized losses of \$1 million and \$2 million, resulting in net gains of \$62 million and \$377 million, with \$15 million and \$94 million of income taxes attributable to the realized net gain on sales of these AFS debt securities. For the same periods in 2019, the Corporation recorded gross realized gains of \$110 million and \$227 million and gross realized losses of \$1 million and \$112 million, resulting

in net gains of \$109 million and \$115 million with \$26 million and \$28 million of income taxes attributable to the realized net gains on sales of these AFS debt securities.

The table below presents the fair value and the associated gross unrealized losses on AFS debt securities and whether these securities have had gross unrealized losses for less than 12 months or for 12 months or longer at June 30, 2020 and December 31, 2019.

Total AFS Debt Securities in a Continuous Unrealized Loss Position

	Less than Twelve Months		Twelve Months or Longer		Total	
	Fair Value	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses
June 30, 2020						
(Dollars in millions)						
Continuously unrealized loss-positioned AFS debt securities						
Mortgage-backed securities:						
Agency	\$ 6,244	\$ (41)	\$ 2	\$ —	\$ 6,246	\$ (41)
Agency-collateralized mortgage obligations	296	(2)	516	(14)	812	(16)
Commercial	292	—	197	(1)	489	(1)
Non-agency residential	350	(27)	74	(12)	424	(39)
Total mortgage-backed securities	7,182	(70)	789	(27)	7,971	(97)
U.S. Treasury and agency securities	615	(3)	504	(5)	1,119	(8)
Non-U.S. securities	2,868	(10)	533	(4)	3,401	(14)
Other taxable securities, substantially all asset-backed securities	1,560	(27)	290	(13)	1,850	(40)
Total taxable securities	12,225	(110)	2,116	(49)	14,341	(159)
Tax-exempt securities	4,429	(79)	913	(13)	5,342	(92)
Total AFS debt securities in a continuous unrealized loss position	\$ 16,654	\$ (189)	\$ 3,029	\$ (62)	\$ 19,683	\$ (251)
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)

The remaining contractual maturity distribution and yields of the Corporation's debt securities carried at fair value and HTM debt securities at June 30, 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

(Dollars in millions)	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	
	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	\$ —	—%	\$ 8	4.80%	\$ 62	4.48%	\$ 76,469	3.35%	\$ 76,539	3.35%
Agency collateralized mortgage obligations	—	—	—	—	25	2.52	6,088	2.96	6,113	2.96
Commercial	15	2.81	5,915	2.49	7,991	2.51	1,017	2.83	14,938	2.52
Non-agency residential	—	—	—	—	11	—	2,075	7.58	2,086	7.54
Total mortgage-backed securities	15	2.81	5,923	2.49	8,089	2.52	85,649	3.42	99,676	3.29
U.S. Treasury and agency securities	9,096	1.28	28,239	1.76	12,939	2.41	33	2.56	50,307	1.84
Non-U.S. securities	22,980	0.38	1,328	1.55	11	4.02	83	11.43	24,402	0.49
Other taxable securities, substantially all asset-backed securities	1,377	1.39	1,759	2.40	527	2.24	581	2.01	4,244	2.00
Total taxable securities	33,468	0.66	37,249	1.89	21,566	2.44	86,346	3.41	178,629	2.46
Tax-exempt securities	1,224	0.95	7,938	1.25	5,670	1.61	2,959	1.51	17,791	1.39
Total amortized cost of debt securities carried at fair value	\$ 34,692	0.66	\$ 45,187	1.75	\$ 27,236	2.21	\$ 89,305	3.35	\$ 196,420	2.35
Amortized cost of HTM debt securities ⁽²⁾	\$ 310	1.98	\$ 46	3.62	\$ 17,258	0.84	\$ 251,353	3.07	\$ 268,967	2.93
Debt securities carried at fair value										
Mortgage-backed securities:										
Agency	\$ —		\$ 9		\$ 67		\$ 78,923		\$ 78,999	
Agency collateralized mortgage obligations	—		—		26		6,269		6,295	
Commercial	17		6,256		8,558		1,104		15,935	
Non-agency residential	—		—		23		2,179		2,202	
Total mortgage-backed securities	17		6,265		8,674		88,475		103,431	
U.S. Treasury and agency securities	9,165		29,483		13,985		34		52,667	
Non-U.S. securities	23,158		1,328		11		84		24,581	
Other taxable securities, substantially all asset-backed securities	1,380		1,758		525		592		4,255	
Total taxable securities	33,720		38,834		23,195		89,185		184,934	
Tax-exempt securities	1,225		7,966		5,778		3,009		17,978	
Total debt securities carried at fair value	\$ 34,945		\$ 46,800		\$ 28,973		\$ 92,194		\$ 202,912	
Fair value of HTM debt securities ⁽²⁾	\$ 310		\$ 46		\$ 17,508		\$ 262,008		\$ 279,872	

⁽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 June 30, 2020 and December 31, 2019.

	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
June 30, 2020							
(Dollars in millions)							
Consumer real estate							
Core portfolio							
Residential mortgage	\$ 833	\$ 144	\$ 637	\$ 1,614	\$ 228,526		\$ 230,140
Home equity	103	66	228	397	33,538		33,935
Non-core portfolio							
Residential mortgage	252	110	1,001	1,363	7,997		9,360
Home equity	23	15	68	106	4,355		4,461
Credit card and other consumer							
Credit card	352	286	782	1,420	82,824		84,244
Direct/Indirect consumer (2)	193	63	30	286	88,342		88,628
Other consumer	—	—	—	—	120		120
Total consumer	1,756	684	2,746	5,186	445,702		450,888
Consumer loans accounted for under the fair value option (3)						\$ 684	684
Total consumer loans and leases	1,756	684	2,746	5,186	445,702	684	451,572
Commercial							
U.S. commercial	504	303	596	1,403	312,535		313,938
Non-U.S. commercial	17	43	16	76	103,608		103,684
Commercial real estate (4)	38	2	201	241	63,854		64,095
Commercial lease financing	64	92	60	216	17,984		18,200
U.S. small business commercial (5)	73	66	122	261	38,702		38,963
Total commercial	696	506	995	2,197	536,683		538,880
Commercial loans accounted for under the fair value option (3)						8,492	8,492
Total commercial loans and leases	696	506	995	2,197	536,683	8,492	547,372
Total loans and leases (6)	\$ 2,452	\$ 1,190	\$ 3,741	\$ 7,383	\$ 982,385	\$ 9,176	\$ 998,944
Percentage of outstandings	0.25%	0.12%	0.37%	0.74%	98.34%	0.92%	100.00%

(1) Consumer real estate loans 30-59 days past due includes fully-insured loans of \$208 million and nonperforming loans of \$95 million. Consumer real estate loans 60-89 days past due includes fully-insured loans of \$92 million and nonperforming loans of \$78 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 \$894 million and direct/indirect consumer includes \$40 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 \$48.4 billion, U.S. securities-based lending loans of \$36.6 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 \$330 million and home equity loans of \$354 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 \$60.6 billion and non-U.S. commercial real estate loans of \$3.5 billion.

(5) Includes PPP loans.

(6) Total outstandings includes loans and leases pledged as collateral of \$15.7 billion. The Corporation also pledged \$194.3 billion of loans with no related outstanding borrowings to secure potential borrowing capacity with the Federal Reserve Bank and Federal Home Loan Bank.

	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
(Dollars in millions)	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 \$51.7 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 \$8.6 billion and \$7.5 billion at June 30, 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 \$2.2 billion at June 30, 2020 from \$1.5 billion at December 31, 2019 with broad-based increases across multiple industries. The Corporation did not see meaningful impacts to consumer portfolio delinquencies and nonperforming loans during the six months ended June 30, 2020 due to payment deferrals and government stimulus benefits.

The table below presents the Corporation's nonperforming loans and leases including nonperforming TDRs, and loans accruing past due 90 days or more at June 30, 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		Accruing Past Due 90 Days or More (1)	
	June 30 2020	December 31 2019	June 30 2020	December 31 2019
Residential mortgage (2)	\$ 1,552	\$ 1,470	\$ 854	\$ 1,088
With negative allowance (3)	469	—	—	—
Home equity (2)	594	536	—	—
With negative allowance (3)	117	—	—	—
Credit Card	n/a	n/a	782	1,042
Direct/indirect consumer	45	47	27	33
Total consumer	2,191	2,053	1,663	2,163
U.S. commercial	1,247	1,094	342	106
Non-U.S. commercial	387	43	9	8
Commercial real estate	474	280	44	19
Commercial lease financing	17	32	46	20
U.S. small business commercial	77	50	111	97
Total commercial	2,202	1,499	552	250
Total nonperforming loans	\$ 4,393	\$ 3,552	\$ 2,215	\$ 2,413
Percentage of outstanding loans and leases	0.44%	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 June 30, 2020 and December 31, 2019 residential mortgage includes \$590 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 \$264 million and \$348 million of loans on which interest was still accruing.

(3) At June 30, 2020, Residential Mortgage and Home Equity include negative allowance on nonperforming loans of \$155 million and \$106 million.
n/a = not applicable

Included in the June 30, 2020 nonperforming loans are \$119 million and \$16 million of residential mortgage and home equity loans that prior to the January 1, 2020 adoption of the new credit loss standard were not included in nonperforming loans as they were previously classified as purchased credit-impaired loans and accounted for under a pool basis.

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 June 30, 2020, including revolving loans that converted to term loans without an additional credit decision after origination or through a TDR.

Residential Mortgage – Credit Quality Indicators By Vintage

(Dollars in millions)	Total as of June 30, 2020	2020	2019	2018	2017	2016	Prior
Total Residential Mortgage							
Refreshed LTV							
Less than or equal to 90 percent	\$ 222,670	\$ 36,651	\$ 56,859	\$ 21,030	\$ 29,491	\$ 30,393	\$ 48,246
Greater than 90 percent but less than or equal to 100 percent	3,721	1,075	1,517	420	172	132	405
Greater than 100 percent	1,362	356	376	119	68	51	392
Fully-insured loans	11,747	1,788	2,635	522	425	2,453	3,924
Total Residential Mortgage	\$ 239,500	\$ 39,870	\$ 61,387	\$ 22,091	\$ 30,156	\$ 33,029	\$ 52,967

Total Residential Mortgage

Refreshed FICO score							
Less than 620	\$ 3,029	\$ 109	\$ 277	\$ 227	\$ 245	\$ 257	\$ 1,914
Greater than or equal to 620 and less than 680	5,756	403	997	644	616	525	2,571
Greater than or equal to 680 and less than 740	26,826	3,162	6,570	2,926	3,314	2,937	7,917
Greater than or equal to 740	192,142	34,408	50,908	17,772	25,556	26,857	36,641
Fully-insured loans	11,747	1,788	2,635	522	425	2,453	3,924
Total Residential Mortgage	\$ 239,500	\$ 39,870	\$ 61,387	\$ 22,091	\$ 30,156	\$ 33,029	\$ 52,967

Home Equity - Credit Quality Indicators

(Dollars in millions)	Total	Home Equity Loans and Reverse Mortgages (1)	Revolving Loans	Revolving Loans Converted to Term Loans
June 30, 2020				
Total Home Equity				
Refreshed LTV				
Less than or equal to 90 percent	\$ 37,252	\$ 2,091	\$ 25,071	\$ 10,090
Greater than 90 percent but less than or equal to 100 percent	497	141	145	211
Greater than 100 percent	647	211	127	309
Total Home Equity	\$ 38,396	\$ 2,443	\$ 25,343	\$ 10,610

Total Home Equity

Refreshed FICO score				
Less than 620	\$ 1,212	\$ 256	\$ 261	\$ 695
Greater than or equal to 620 and less than 680	2,082	298	629	1,155
Greater than or equal to 680 and less than 740	6,606	600	3,336	2,670
Greater than or equal to 740	28,496	1,289	21,117	6,090
Total Home Equity	\$ 38,396	\$ 2,443	\$ 25,343	\$ 10,610

(1) Includes reverse mortgages of \$1.4 billion and home equity loans of \$1.1 billion which are no longer originated.

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

	Direct/Indirect												
	Total Direct/Indirect as of June 30, 2020	Revolving Loans	Term Loans by Origination Year							Credit Card			
			2020	2019	2018	2017	2016	Prior	Total Credit Card as of June 30, 2020	Revolving Loans	Revolving Loans Converted to Term Loans ⁽³⁾		
(Dollars in millions)													
Refreshed FICO score													
Less than 620	\$ 1,197	\$ 22	\$ 55	\$ 220	\$ 223	\$ 338	\$ 234	\$ 105	\$ 4,300	\$ 4,075	\$ 225		
Greater than or equal to 620 and less than 680	2,409	25	352	735	447	433	268	149	10,511	10,304	207		
Greater than or equal to 680 and less than 740	7,719	90	1,519	2,602	1,375	1,078	616	439	30,679	30,505	174		
Greater than or equal to 740	37,307	129	6,690	12,879	7,590	5,039	2,668	2,312	38,754	38,713	41		
Other internal credit metrics ^(1, 2)	39,996	39,351	41	120	119	83	56	226	—	—	—		
Total credit card and other consumer	\$ 88,628	\$ 39,617	\$ 8,657	\$ 16,556	\$ 9,754	\$ 6,971	\$ 3,842	\$ 3,231	\$ 84,244	\$ 83,597	\$ 647		

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

(2) Direct/indirect consumer includes \$39.4 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 June 30, 2020.

(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 June 30, 2020	2020	2019	2018	2017	2016	Prior	Revolving Loans	
U.S. Commercial									
Risk ratings									
Pass rated	\$ 296,434	\$ 25,884	\$ 42,179	\$ 22,334	\$ 17,409	\$ 9,549	\$ 22,068	\$ 157,011	
Reservable criticized	17,504	531	1,822	1,455	789	547	1,333	11,027	
Total U.S. Commercial	\$ 313,938	\$ 26,415	\$ 44,001	\$ 23,789	\$ 18,198	\$ 10,096	\$ 23,401	\$ 168,038	
Non-U.S. Commercial									
Risk ratings									
Pass rated	\$ 100,749	\$ 10,880	\$ 16,038	\$ 9,521	\$ 6,733	\$ 1,717	\$ 6,986	\$ 48,874	
Reservable criticized	2,935	182	423	345	122	60	73	1,730	
Total Non-U.S. Commercial	\$ 103,684	\$ 11,062	\$ 16,461	\$ 9,866	\$ 6,855	\$ 1,777	\$ 7,059	\$ 50,604	
Commercial Real Estate									
Risk ratings									
Pass rated	\$ 61,690	\$ 5,654	\$ 17,096	\$ 11,800	\$ 7,005	\$ 4,090	\$ 8,750	\$ 7,295	
Reservable criticized	2,405	1	485	510	539	267	414	189	
Total Commercial Real Estate	\$ 64,095	\$ 5,655	\$ 17,581	\$ 12,310	\$ 7,544	\$ 4,357	\$ 9,164	\$ 7,484	
Commercial Lease Financing									
Risk ratings									
Pass rated	\$ 17,603	\$ 1,860	\$ 3,552	\$ 3,509	\$ 2,996	\$ 2,035	\$ 3,651	\$ —	
Reservable criticized	597	58	92	148	64	44	191	—	
Total Commercial Lease Financing	\$ 18,200	\$ 1,918	\$ 3,644	\$ 3,657	\$ 3,060	\$ 2,079	\$ 3,842	\$ —	
U.S. Small Business Commercial (3)									
Risk ratings									
Pass rated	\$ 31,169	\$ 25,656	\$ 1,320	\$ 1,001	\$ 843	\$ 605	\$ 1,538	\$ 206	
Reservable criticized	938	15	87	141	164	120	402	9	
Total U.S. Small Business Commercial	\$ 32,107	\$ 25,671	\$ 1,407	\$ 1,142	\$ 1,007	\$ 725	\$ 1,940	\$ 215	
Total (1, 2)	\$ 532,024	\$ 70,721	\$ 83,094	\$ 50,764	\$ 36,664	\$ 19,034	\$ 45,406	\$ 226,341	

(1) Excludes \$8.5 billion and \$7.7 billion of loans accounted for under the fair value option at June 30, 2020 and December 31, 2019.

(2) Includes \$69 million of loans that converted from revolving to term loans.

(3) Excludes U.S. Small Business Card loans of \$6.9 billion. Refreshed FICO scores for this portfolio are \$294 million for less than 620; \$674 million for greater than or equal to 620 and less than 680; \$1.9 billion for greater than or equal to 680 and less than 740; and \$4.0 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 June 30, 2020. Commercial reservable criticized utilized exposure increased to \$26.0 billion at June 30, 2020 from \$11.5 billion (to 4.51 percent from 2.09 percent of total commercial reservable utilized exposure) at December 31, 2019 with increases spread across multiple industries.

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

Modifications of consumer real estate loans are classified as TDRs when the borrower is experiencing financial difficulties and a concession has been granted. 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 \$396 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 June 30, 2020, of which \$98 million were classified as nonperforming and \$75 million were loans fully insured.

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 June 30, 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 \$169 million and \$229 million at June 30, 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 June 30, 2020 was \$1.4 billion. Although the Corporation has paused formal loan foreclosure proceedings and foreclosure sales, during the six months ended June 30, 2020, the Corporation reclassified \$154 million of consumer real estate loans completed or which were in process

prior to the pause in foreclosures, 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 June 30, 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 and six months ended June 30, 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 and Six Months Ended June 30, 2020 and 2019 (1)

	Unpaid Principal Balance	Carrying Value	Pre-Modification Interest Rate	Post-Modification Interest Rate (2)	Unpaid Principal Balance	Carrying Value	Pre-Modification Interest Rate	Post-Modification Interest Rate (2)
(Dollars in millions)	Three Months Ended June 30, 2020				Six Months Ended June 30, 2020			
Residential mortgage	\$ 120	\$ 103	4.22%	4.19%	\$ 219	\$ 185	4.10%	4.01%
Home equity	22	18	3.68	3.65	45	38	3.99	3.92
Total	\$ 142	\$ 121	4.14	4.11	\$ 264	\$ 223	4.08	3.99
	Three Months Ended June 30, 2019				Six Months Ended June 30, 2019			
Residential mortgage	\$ 154	\$ 125	4.28%	4.39%	\$ 277	\$ 224	4.27%	4.30%
Home equity	101	71	5.17	5.16	159	113	5.21	4.88
Total	\$ 255	\$ 196	4.63	4.69	\$ 436	\$ 337	4.61	4.51

(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 June 30, 2020 and 2019 carrying value for consumer real estate loans that were modified in a TDR during the three and six months ended June 30, 2020 and 2019, by type of modification.

Consumer Real Estate – Modification Programs (1)

	TDRs Entered into During the			
	Three Months Ended June 30		Six Months Ended June 30	
(Dollars in millions)	2020	2019	2020	2019
Modifications under government programs	\$ —	\$ 10	\$ 3	\$ 18
Modifications under proprietary programs	20	22	59	75
Loans discharged in Chapter 7 bankruptcy (2)	21	30	32	569
Trial modifications	80	134	129	211
Total modifications	\$ 121	\$ 196	\$ 223	\$ 337

(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 and six months ended June 30, 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)

	Three Months Ended June 30		Six Months Ended June 30	
(Dollars in millions)	2020	2019	2020	2019
Modifications under government programs	\$ 2	\$ 6	\$ 8	\$ 13
Modifications under proprietary programs	5	20	19	49
Loans discharged in Chapter 7 bankruptcy (2)	4	9	11	18
Trial modifications (3)	12	11	30	27
Total modifications	\$ 23	\$ 46	\$ 68	\$ 107

(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 June 30, 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 and six months ended June 30, 2020 and 2019.

Credit Card and Other Consumer – TDRs Entered into During the Three and Six Months Ended June 30, 2020 and 2019 (1)

	Unpaid Principal Balance	Carrying Value (2)	Pre-Modification Interest Rate	Post-Modification Interest Rate	Unpaid Principal Balance	Carrying Value (2)	Pre-Modification Interest Rate	Post-Modification Interest Rate
	Three Months Ended June 30, 2020				Six Months Ended June 30, 2020			
(Dollars in millions)								
Credit card	\$ 57	\$ 61	18.08%	5.15%	\$ 144	\$ 152	18.02%	5.24%
Direct/Indirect consumer	14	8	5.26	5.26	23	12	5.31	5.31
Total	\$ 71	\$ 69	16.61	5.16	\$ 167	\$ 164	17.07	5.25
	Three Months Ended June 30, 2019				Six Months Ended June 30, 2019			
Credit card	\$ 95	\$ 102	19.84%	5.38%	\$ 184	\$ 195	19.82%	5.32%
Direct/Indirect consumer	19	11	5.19	5.16	27	15	5.18	5.16
Total	\$ 114	\$ 113	18.45	5.36	\$ 211	\$ 210	18.80	5.30

(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 June 30, 2020 and 2019 carrying value for Credit Card and Other Consumer loans that were modified in a TDR during the three and six months ended June 30, 2020 and 2019, by program type.

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

	TDRs Entered into During the Three Months Ended June 30		TDRs Entered into During the Six Months Ended June 30	
	2020	2019	2020	2019
(Dollars in millions)				
Internal programs	\$ 43	\$ 71	\$ 109	\$ 136
External programs	18	31	43	59
Other	8	11	12	15
Total	\$ 69	\$ 113	\$ 164	\$ 210

(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 22 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 June 30, 2020 and December 31, 2019, remaining commitments to lend additional funds to debtors whose terms have been modified in a commercial loan TDR were \$500 million and \$445 million. The balance of commercial TDRs in payment default was not significant at June 30, 2020 and December 31, 2019.

Loans Held-for-sale

The Corporation had LHFS of \$7.4 billion and \$9.2 billion at June 30, 2020 and December 31, 2019. Cash and non-cash proceeds from sales and paydowns of loans originally classified as LHFS were \$11.1 billion and \$14.4 billion for the six months ended June 30, 2020 and 2019. Cash used for originations and purchases of LHFS totaled approximately \$9.2 billion for both the six months ended June 30, 2020 and 2019.

Accrued Interest Receivable

Accrued interest receivable for loans and leases and loans held-for-sale at June 30, 2020 and December 31, 2019 was \$2.4 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 and six months ended June 30, 2020, the Corporation reversed \$141 million and \$306 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 and six months ended June 30, 2020, the Corporation reversed \$8 million and \$18 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 ECL 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, 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 increase in the reserve for unfunded lending commitments included \$119 million in the consumer portfolio for the undrawn portion of HELOCs and \$191 million in the commercial portfolio. 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 allowance for loan and lease losses at June 30, 2020 was \$19.4 billion, an increase of \$7.0 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 \$393 million in the consumer real estate portfolio, \$2.7 billion in the credit card and other consumer portfolio, and \$3.9 billion in the commercial portfolio. The reserve for unfunded lending commitments increased \$579 million from January 1, 2020 to \$1.7 billion at June 30, 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 recessionary scenarios that include deterioration in key macroeconomic variables such as gross domestic product, unemployment rate and home price index over the life of the portfolio. As of January 1, 2020, the Corporation's economic outlook was weighted to include the potential of a recession with some expectation of tail risk similar to the severely adverse scenario used in stress testing. During the three and six months ended June 30, 2020, there was significant deterioration in the macroeconomic conditions in the U.S. and globally related to impact of COVID-19. This has resulted in changes to key macroeconomic variables, including, but not limited to, increases in the unemployment rate and decreases to the forecasted gross domestic product compared to the Corporation's January 1, 2020 outlook. The weakened economic outlook was the primary driver of the Corporation's increase in the allowance for credit losses. In establishing the allowance for credit losses at June 30, 2020, the Corporation used an economic outlook derived from weighting consensus estimates, a downside scenario that assumed a significantly slower recovery in order to reflect the uncertainty around the pace of recovery in the current crisis, and a tail risk scenario similar to the severely adverse scenario used in stress testing. The unemployment rate under this economic outlook remained above 10 percent as of the fourth quarter of 2020 with a gradual decline to above seven percent in the fourth quarter of 2021. Additionally, in this economic outlook, gross domestic product did not return to pre-pandemic levels until the beginning of 2023. The Corporation factored into its allowance for credit loss estimate the impact to borrowers from additional unemployment benefits that were provided as part of the CARES Act, including a probability-weighted likelihood of an extension of benefits into the fourth quarter of 2020.

In addition, the allowance for credit losses at June 30, 2020 included qualitative reserves for certain segments that the Corporation views as higher risk that may not be fully recognized through its quantitative models. These high risk segments include leveraged loans and higher risk industries such as hospitality and energy. The Corporation also holds additional reserves for borrowers who requested deferrals that take into account their credit characteristics and payment behavior subsequent to deferral. There are still many unknowns including the duration of the impact of COVID-19 on the economy and the results of the current government fiscal and monetary actions including payment deferral programs as well as future government actions. 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 \$14.7 billion in the six months ended June 30, 2020. Outstanding commercial loans and leases excluding loans accounted for under the fair value option increased \$29.0 billion primarily due to \$25.1 billion of funded PPP loans and growth in the commercial and industrial portfolio. Outstanding consumer loans and leases excluding loans accounted for under the fair value option decreased \$14.3 billion in the six months ended June 30, 2020 primarily driven by a decline in credit card

due to reduced consumer spending. The funding of PPP loans did not impact the allowance for credit losses as they are fully guaranteed by the SBA. The decline in consumer loans and leases somewhat offset the increase in the allowance for credit driven by the weaker economic outlook.

The table below summarizes the changes in the allowance for credit losses by portfolio segment for the three and six months ended June 30, 2020 and 2019.

	Consumer Real Estate	Credit Card and Other Consumer	Commercial	Total
Three Months Ended June 30, 2020				
(Dollars in millions)				
Allowance for loan and lease losses, April 1	\$ 808	\$ 8,258	\$ 6,700	\$ 15,766
Loans and leases charged off	(27)	(985)	(447)	(1,459)
Recoveries of loans and leases previously charged off	61	217	35	313
Net charge-offs	34	(768)	(412)	(1,146)
Provision for loan and lease losses	(9)	2,632	2,152	4,775
Other (1)	—	—	(6)	(6)
Allowance for loan and lease losses, June 30	833	10,122	8,434	19,389
Reserve for unfunded lending commitments, April 1	149	—	1,211	1,360
Provision for unfunded lending commitments	(8)	—	350	342
Reserve for unfunded lending commitments, June 30	141	—	1,561	1,702
Allowance for credit losses, June 30	\$ 974	\$ 10,122	\$ 9,995	\$ 21,091
Three Months Ended June 30, 2019				
Allowance for loan and lease losses, April 1	\$ 822	\$ 3,934	\$ 4,821	\$ 9,577
Loans and leases charged off	(153)	(1,075)	(233)	(1,461)
Recoveries of loans and leases previously charged off	305	232	37	574
Net charge-offs	152	(843)	(196)	(887)
Provision for loan and lease losses	(239)	879	213	853
Other (1)	(16)	—	—	(16)
Allowance for loan and lease losses, June 30	719	3,970	4,838	9,527
Reserve for unfunded lending commitments, April 1	—	—	802	802
Provision for unfunded lending commitments	—	—	4	4
Reserve for unfunded lending commitments, June 30	—	—	806	806
Allowance for credit losses, June 30	\$ 719	\$ 3,970	\$ 5,644	\$ 10,333
Six Months Ended June 30, 2020				
(Dollars in millions)				
Allowance for loan and lease losses, January 1	\$ 440	\$ 7,430	\$ 4,488	\$ 12,358
Loans and leases charged off	(62)	(2,106)	(729)	(2,897)
Recoveries of loans and leases previously charged off	108	454	67	629
Net charge-offs	46	(1,652)	(662)	(2,268)
Provision for loan and lease losses	342	4,344	4,614	9,300
Other (1)	5	—	(6)	(1)
Allowance for loan and lease losses, June 30	833	10,122	8,434	19,389
Reserve for unfunded lending commitments, January 1	119	—	1,004	1,123
Provision for unfunded lending commitments	22	—	556	578
Other (1)	—	—	1	1
Reserve for unfunded lending commitments, June 30	141	—	1,561	1,702
Allowance for credit losses, June 30	\$ 974	\$ 10,122	\$ 9,995	\$ 21,091
Six Months Ended June 30, 2019				
Allowance for loan and lease losses, January 1	\$ 928	\$ 3,874	\$ 4,799	\$ 9,601
Loans and leases charged off	(256)	(2,132)	(410)	(2,798)
Recoveries of loans and leases previously charged off	413	449	58	920
Net charge-offs	157	(1,683)	(352)	(1,878)
Provision for loan and lease losses	(309)	1,779	391	1,861
Other (1)	(57)	—	—	(57)
Allowance for loan and lease losses, June 30	719	3,970	4,838	9,527
Reserve for unfunded lending commitments, January 1	—	—	797	797
Provision for unfunded lending commitments	—	—	9	9
Reserve for unfunded lending commitments, June 30	—	—	806	806
Allowance for credit losses, June 30	\$ 719	\$ 3,970	\$ 5,644	\$ 10,333

(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 \$4.3 billion to \$5.1 billion, and \$8.0 billion to \$9.9 billion for the three and six months ended June 30, 2020 compared to the same periods in 2019 driven by deterioration in the economic outlook resulting from the impact of COVID-19. At June 30, 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 June 30, 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 six months ended June 30, 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 June 30, 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 and six months ended June 30, 2020 and 2019.

First-lien Mortgage Securitizations

	Residential Mortgage - Agency				Commercial Mortgage			
	Three Months Ended June 30		Six Months Ended June 30		Three Months Ended June 30		Six Months Ended June 30	
	2020	2019	2020	2019	2020	2019	2020	2019
(Dollars in millions)								
Proceeds from loan sales (1)	\$ 11,375	\$ 2,206	\$ 12,927	\$ 3,302	\$ 220	\$ 2,194	\$ 2,292	\$ 3,181
Gains (losses) on securitizations (2)	715	8	721	15	(1)	28	40	45
Repurchases from securitization trusts (3)	167	242	295	486	—	—	—	—

(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 typically 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 \$34 million and \$61 million, net of hedges, during the three and six months ended June 30, 2020 compared to \$11 million and \$19 million for the same periods in 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 \$183.4 billion and \$210.5 billion at June 30, 2020 and 2019. Servicing fee and ancillary fee income on serviced loans was \$124 million and \$252 million during the three and six months ended June 30, 2020 compared to \$144 million and \$292 million for the same periods in 2019. Servicing advances on serviced loans, including loans serviced for others and loans held for investment, were \$2.0 billion and \$2.4 billion at June 30, 2020 and December 31, 2019. For more information on MSRs, see Note 14 – Fair Value Measurements.

During the three and six months ended June 30, 2019, the Corporation deconsolidated agency residential mortgage securitization trusts with total assets of \$430 million and \$1.1 billion. During the three months ended June 30, 2020, the Corporation completed the sale of \$9.3 billion of consumer real estate loans through GNMA loan securitizations. As part of the securitizations, the Corporation retained \$8.4 billion of mortgage-backed securities, which are classified as debt securities carried at fair value on the Consolidated Balance Sheet. Total gains on loan sales of \$704 million were recorded in other income in the Consolidated Statement of Income.

The following table summarizes select information related to first-lien mortgage securitization trusts in which the Corporation held a variable interest at June 30, 2020 and December 31, 2019.

First-lien Mortgage VIEs

	Residential Mortgage									
	Agency		Non-agency							
			Prime		Subprime		Alt-A		Commercial Mortgage	
	June 30 2020	December 31 2019	June 30 2020	December 31 2019	June 30 2020	December 31 2019	June 30 2020	December 31 2019	June 30 2020	December 31 2019
(Dollars in millions)										
Unconsolidated VIEs										
Maximum loss exposure ⁽¹⁾	\$ 15,177	\$ 12,554	\$ 307	\$ 340	\$ 1,457	\$ 1,622	\$ 101	\$ 98	\$ 1,084	\$ 1,036
On-balance sheet assets										
Senior securities:										
Trading account assets	\$ 254	\$ 627	\$ 11	\$ 5	\$ 28	\$ 54	\$ 35	\$ 24	\$ 58	\$ 65
Debt securities carried at fair value	9,089	6,392	167	193	1,071	1,178	65	72	—	—
Held-to-maturity securities	5,834	5,535	—	—	—	—	—	—	875	809
All other assets	—	—	7	2	30	49	1	2	39	38
Total retained positions	\$ 15,177	\$ 12,554	\$ 185	\$ 200	\$ 1,129	\$ 1,281	\$ 101	\$ 98	\$ 972	\$ 912
Principal balance outstanding ⁽²⁾	\$ 154,300	\$ 160,226	\$ 7,022	\$ 7,268	\$ 7,275	\$ 8,594	\$ 18,393	\$ 19,878	\$ 55,693	\$ 60,129

Consolidated VIEs

Maximum loss exposure ⁽¹⁾	\$ 554	\$ 10,857	\$ —	\$ 5	\$ 21	\$ 44	\$ —	\$ —	\$ —	\$ —
On-balance sheet assets										
Trading account assets	\$ 554	\$ 780	\$ 94	\$ 116	\$ 214	\$ 149	\$ —	\$ —	\$ —	\$ —
Loans and leases, net	—	9,917	—	—	—	—	—	—	—	—
All other assets	—	161	—	—	—	—	—	—	—	—
Total assets	\$ 554	\$ 10,858	\$ 94	\$ 116	\$ 214	\$ 149	\$ —	\$ —	\$ —	\$ —
Total liabilities	\$ —	\$ 4	\$ 94	\$ 111	\$ 193	\$ 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 June 30, 2020 and December 31, 2019.

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

	Home Equity ⁽¹⁾		Credit Card ⁽²⁾		Resecuritization Trusts		Municipal Bond Trusts	
	June 30 2020	December 31 2019	June 30 2020	December 31 2019	June 30 2020	December 31 2019	June 30 2020	December 31 2019
(Dollars in millions)								
Unconsolidated VIEs								
Maximum loss exposure	\$ 348	\$ 412	\$ —	\$ —	\$ 9,673	\$ 7,526	\$ 3,309	\$ 3,701
On-balance sheet assets								
Securities ⁽³⁾ :								
Trading account assets	\$ —	\$ —	\$ —	\$ —	\$ 1,067	\$ 2,188	\$ —	\$ —
Debt securities carried at fair value	9	11	—	—	3,107	1,126	—	—
Held-to-maturity securities	—	—	—	—	5,499	4,212	—	—
Total retained positions	\$ 9	\$ 11	\$ —	\$ —	\$ 9,673	\$ 7,526	\$ —	\$ —
Total assets of VIEs	\$ 862	\$ 1,023	\$ —	\$ —	\$ 20,951	\$ 21,234	\$ 3,826	\$ 4,395
Consolidated VIEs								
Maximum loss exposure	\$ 67	\$ 64	\$ 15,340	\$ 17,915	\$ 123	\$ 54	\$ 1,292	\$ 2,656
On-balance sheet assets								
Trading account assets	\$ —	\$ —	\$ —	\$ —	\$ 141	\$ 73	\$ 1,252	\$ 2,480
Loans and leases	133	122	23,155	26,985	—	—	—	—
Allowance for loan and lease losses	16	(2)	(1,882)	(800)	—	—	—	—
All other assets	3	3	462	119	—	—	40	176
Total assets	\$ 152	\$ 123	\$ 21,735	\$ 26,304	\$ 141	\$ 73	\$ 1,292	\$ 2,656
On-balance sheet liabilities								
Short-term borrowings	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ 715	\$ 2,175
Long-term debt	85	64	6,373	8,372	18	19	—	—
All other liabilities	—	—	22	17	—	—	—	—
Total liabilities	\$ 85	\$ 64	\$ 6,395	\$ 8,389	\$ 18	\$ 19	\$ 715	\$ 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 June 30, 2020 and December 31, 2019, loans and leases in the consolidated credit card trust included \$9.1 billion and \$10.5 billion of seller's interest.

⁽³⁾ The retained senior securities were valued using quoted market prices or observable market inputs (Level 2 of the fair value hierarchy).

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 and cash reserve accounts.

No new senior debt securities were issued to third-party investors from the credit card securitization trust during the six months ended June 30, 2020 and 2019.

At June 30, 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 six months ended June 30, 2020 and 2019.

Resecuritization Trusts

The Corporation transfers securities, typically MBS, into resecuritization VIEs generally 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 \$10.7 billion and \$18.1 billion of securities during the three and six months ended June 30, 2020 compared to \$4.1 billion and \$8.5 billion for the same periods in 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. Securities received from the resecuritization VIEs were recognized at their fair value of \$4.4 billion and \$4.9 billion during the three and six months ended June 30, 2020 compared to \$1.5 billion and \$2.8 billion for the same periods in 2019, of which substantially all of the securities in the prior-year period were classified as trading account assets. Of the securities received as resecuritization proceeds during the three months ended June 30, 2020, \$654 million, \$2.1 billion and \$1.7 billion were classified as trading account assets, debt securities carried at fair value and HTM securities, respectively. Of the securities received as resecuritizations proceeds during the six months ended June 30, 2020, \$1.2 billion, \$2.1 billion and \$1.7 billion were classified as trading account assets, debt securities carried at fair value and HTM securities, respectively. Substantially all of the trading account securities and debt securities carried at fair value 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 repurchase 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 \$3.3 billion and \$3.7 billion at June 30, 2020 and December 31, 2019. The weighted-average remaining life of bonds held in the trusts at June 30, 2020 was 7.0 years. There were no significant write-downs or downgrades of assets or issuers during the six months ended June 30, 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 June 30, 2020 and December 31, 2019.

Other VIEs

	Consolidated		Unconsolidated		Total		Consolidated		Unconsolidated		Total	
(Dollars in millions)	June 30, 2020						December 31, 2019					
Maximum loss exposure	\$	4,313	\$	25,745	\$	30,058	\$	4,055	\$	26,326	\$	30,381
On-balance sheet assets												
Trading account assets	\$	2,135	\$	597	\$	2,732	\$	2,213	\$	549	\$	2,762
Debt securities carried at fair value		—		71		71		—		74		74
Loans and leases		2,244		3,045		5,289		1,810		3,214		5,024
Allowance for loan and lease losses		(3)		(130)		(133)		(2)		(38)		(40)
All other assets		58		21,409		21,467		81		20,547		20,628
Total	\$	4,434	\$	24,992	\$	29,426	\$	4,102	\$	24,346	\$	28,448
On-balance sheet liabilities												
Short-term borrowings	\$	24	\$	—	\$	24	\$	—	\$	—	\$	—
Long-term debt		98		—		98		46		—		46
All other liabilities		—		5,190		5,190		2		5,087		5,089
Total	\$	122	\$	5,190	\$	5,312	\$	48	\$	5,087	\$	5,135
Total assets of VIEs	\$	4,434	\$	101,761	\$	106,195	\$	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 \$2.1 billion and \$2.2 billion at June 30, 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 \$245 million and \$304 million at June 30, 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 June 30, 2020 and December 31, 2019, the Corporation's consolidated investment VIEs had total assets of \$601 million and \$104 million. The Corporation also held investments in unconsolidated VIEs with total assets of \$35.1 billion and \$32.4 billion at June 30, 2020 and December 31, 2019. The Corporation's maximum loss exposure associated with both consolidated and unconsolidated investment VIEs totaled \$6.3 billion and \$6.4 billion at June 30, 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 June 30, 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 \$19.6 billion and \$18.9 billion at June 30, 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 \$10.3 billion and \$10.0 billion, including unfunded commitments to provide capital contributions of \$4.6 billion and \$4.3 billion at June 30, 2020 and December 31, 2019. The unfunded commitments are expected to be paid over the next five years. The Corporation recognized tax credits and other tax benefits from investments in affordable housing partnerships of \$342 million and \$610 million and reported pretax losses in other income of \$255 million and \$527 million for the three and six months ended June 30, 2020. For the same periods in 2019, the Corporation recognized tax credits and other tax benefits of \$291 million and \$571 million and reported pretax losses in other income of \$234 million and \$482 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 June 30, 2020 and December 31, 2019. The reporting units utilized for goodwill impairment testing are the operating segments or one level below. The Corporation completed its annual goodwill impairment test as of June 30, 2020 using a quantitative assessment for all applicable reporting units. Based on the results of the annual goodwill impairment test, the Corporation determined there was no impairment. For more information regarding annual goodwill impairment testing, see *Note 1 – Summary of Significant Accounting Principles* to the Consolidated Financial Statements.

Goodwill

(Dollars in millions)	June 30 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 June 30, 2020 and December 31, 2019, the net carrying value of intangible assets was \$1.6 billion and \$1.7 billion. At June 30, 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 \$32 million for the three and six months ended June 30, 2020 compared to \$29 million and \$55 million for the same periods in 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 June 30, 2020 and December 31, 2019, the total net investment in sales-type and direct financing leases was \$20.4 billion and \$21.9 billion, comprised of \$17.9 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 June 30, 2020 and December 31, 2019.

The following table presents total lease income for the three and six months ended June 30, 2020 and 2019.

Lease Income

	Three Months Ended June 30		Six Months Ended June 30	
	2020	2019	2020	2019
(Dollars in millions)				
Sale-type and direct financing leases	\$ 175	\$ 198	\$ 372	\$ 403
Operating leases	236	215	479	436
Total lease income	\$ 411	\$ 413	\$ 851	\$ 839

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

\$10.0 billion and \$9.7 billion and lease liabilities were \$10.3 billion and \$10.1 billion at June 30, 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	Amount	Rate	Amount	Rate
	Three Months Ended June 30				Six Months Ended June 30			
	2020		2019		2020		2019	
(Dollars in millions)								
Federal funds sold and securities borrowed or purchased under agreements to resell								
Average during period	\$ 312,404	0.03%	\$ 281,085	1.87%	\$ 295,599	0.57%	\$ 277,715	1.82%
Maximum month-end balance during period	451,179	n/a	263,416	n/a	451,179	n/a	280,562	n/a
Federal funds purchased and securities loaned or sold under agreements to repurchase								
Average during period	\$ 187,180	0.38%	\$ 204,001	2.50%	\$ 193,359	1.01%	\$ 202,088	2.47%
Maximum month-end balance during period	194,870	n/a	203,063	n/a	206,493	n/a	203,063	n/a
Short-term borrowings								
Average during period	25,901	0.12	23,051	2.79	26,166	0.88	19,263	2.86
Maximum month-end balance during period	27,315	n/a	28,600	n/a	30,118	n/a	28,600	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 June 30, 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

	Gross Assets/Liabilities (1)	Amounts Offset	Net Balance Sheet Amount	Financial Instruments (2)	Net Assets/Liabilities
	June 30, 2020				
(Dollars in millions)					
Securities borrowed or purchased under agreements to resell (3)	\$ 630,551	\$ (179,372)	\$ 451,179	\$ (414,538)	\$ 36,641
Securities loaned or sold under agreements to repurchase	\$ 358,396	\$ (179,372)	\$ 179,024	\$ (159,389)	\$ 19,635
Other (4)	10,576	—	10,576	(10,576)	—
Total	\$ 368,972	\$ (179,372)	\$ 189,600	\$ (169,965)	\$ 19,635
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 \$12.4 billion and \$12.9 billion reported in loans and leases on the Consolidated Balance Sheet at June 30, 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

	Overnight and Continuous	30 Days or Less	After 30 Days Through 90 Days	Greater than 90 Days (1)	Total
June 30, 2020					
Securities sold under agreements to repurchase	\$ 158,547	\$ 108,147	\$ 29,515	\$ 37,757	\$ 333,966
Securities loaned	20,660	12	812	2,946	24,430
Other	10,576	—	—	—	10,576
Total	\$ 189,783	\$ 108,159	\$ 30,327	\$ 40,703	\$ 368,972
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

	Securities Sold Under Agreements to Repurchase	Securities Loaned	Other	Total
June 30, 2020				
U.S. government and agency securities	\$ 197,420	\$ —	\$ —	\$ 197,420
Corporate securities, trading loans and other	11,342	870	694	12,906
Equity securities	12,690	22,351	9,833	44,874
Non-U.S. sovereign debt	108,984	1,209	49	110,242
Mortgage trading loans and ABS	3,530	—	—	3,530
Total	\$ 333,966	\$ 24,430	\$ 10,576	\$ 368,972
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 June 30, 2020 and December 31, 2019, the Corporation held restricted cash included within cash and cash equivalents on the Consolidated Balance Sheet of \$6.8 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 \$10.4 billion and \$10.6 billion at June 30, 2020 and December 31, 2019. At June 30, 2020, the carrying value of these commitments, excluding commitments accounted for under the fair value option, was \$1.7 billion, including deferred revenue of \$17 million and a reserve for unfunded lending commitments of \$1.7 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 \$2.9 billion and \$4.4 billion at June 30, 2020 and December 31, 2019 that are accounted for under the fair value option. However, the table excludes cumulative net fair value of \$113

million and \$90 million at June 30, 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

	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
(Dollars in millions)					
June 30, 2020					
Notional amount of credit extension commitments					
Loan commitments (1)	\$ 105,322	\$ 146,449	\$ 145,519	\$ 11,652	\$ 408,942
Home equity lines of credit	716	2,327	7,759	33,590	44,392
Standby letters of credit and financial guarantees (2)	23,284	10,166	2,551	616	36,617
Letters of credit (3)	1,036	134	52	28	1,250
Legally binding commitments	130,358	159,076	155,881	45,886	491,201
Credit card lines (4)	391,346	—	—	—	391,346
Total credit extension commitments	\$ 521,704	\$ 159,076	\$ 155,881	\$ 45,886	\$ 882,547
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 June 30, 2020 and December 31, 2019, \$4.7 billion and \$5.1 billion of these loan commitments are held in the form of a security.

(2) The notional amounts of SBLs and financial guarantees classified as investment grade and non-investment grade based on the credit quality of the underlying reference name within the instrument were \$26.0 billion and \$10.2 billion at June 30, 2020, and \$27.9 billion and \$8.6 billion at December 31, 2019. Amounts in the table include consumer SBLs of \$41.1 million and \$41.3 million at June 30, 2020 and December 31, 2019.

(3) At June 30, 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 June 30, 2020 and December 31, 2019, the Corporation had commitments to purchase loans (e.g., residential mortgage and commercial real estate) of \$169 million and \$86 million, which upon settlement will be included in trading account assets, loans or LHFS, and commitments to purchase commercial loans of \$430 million and \$1.1 billion, which upon settlement will be included in trading account assets.

At June 30, 2020 and December 31, 2019, the Corporation had commitments to purchase commodities, primarily liquefied natural gas, of \$498 million and \$830 million, which upon settlement will be included in trading account assets.

At June 30, 2020 and December 31, 2019, the Corporation had commitments to enter into resale and forward-dated resale and securities borrowing agreements of \$144.3 billion and \$97.2 billion, and commitments to enter into forward-dated repurchase and securities lending agreements of \$45.5 billion and \$24.9 billion. These commitments generally expire within the next 12 months.

At June 30, 2020 and December 31, 2019, the Corporation had a commitment to originate or purchase up to \$3.5 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 June 30, 2020 and December 31, 2019, the notional amount of these guarantees totaled \$7.1 billion and \$7.3 billion. At June 30, 2020 and December 31, 2019, the Corporation's maximum exposure related to these guarantees totaled \$1.0 billion and \$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 and six months ended June 30, 2020, the sponsored entities processed \$183.1 billion and \$386.9 billion of transactions and recorded losses of \$6 million and \$13 million. For the same periods in 2019, the sponsored entities processed \$235.7 billion and \$441.3 billion of transactions and recorded losses of \$7 million and \$11 million.

At June 30, 2020 and December 31, 2019, the maximum potential exposure for sponsored transactions totaled \$307.9 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 \$614 million and \$640 million at June 30, 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. Effective July 1, 2020, the Corporation received its share of the joint venture's merchant contracts and began providing merchant services for the customer relationships received. Beginning in the third quarter of 2020, merchant revenue and the related noninterest expense will be recorded in the Consolidated Statement of Income and are not expected to be material.

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 June 30, 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 \$3.8 billion and \$9.3 billion at June 30, 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 June 30, 2020 and December 31, 2019. The estimated maturity dates of these obligations extend up to 2049. 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 \$57 million and \$81 million was recognized for the three and six months ended June 30, 2020 compared to \$114 million and \$187 million for the same periods in 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 businesses or results of operations for any particular reporting period, or cause significant reputational harm.

Mortgage Appraisal Litigation

On July 16, 2020, the District Court granted final 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
July 22, 2020	September 4, 2020	September 25, 2020	\$ 0.18
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 July 30, 2020.

In June 2020, the Board of Governors of the Federal Reserve System (Federal Reserve) announced that due to economic uncertainty resulting from COVID-19, all large banks will be required to suspend share repurchase programs in the third quarter of 2020, except for repurchases to offset shares awarded under equity-based compensation plans, and limit dividends to existing rates that do not exceed the average of the last four quarters' net income.

The Federal Reserve's directive regarding share repurchases aligns with the Corporation's decision to voluntarily suspend repurchases in the first quarter of 2020 from the date of the announcement on March 15, 2020 through the end of the second quarter of 2020. The suspension of the Corporation's repurchases did not include repurchases to offset shares awarded under its equity-based compensation plans.

During the three and six months ended June 30, 2020, the Corporation repurchased and retired 12 million and 212 million shares of common stock in connection with the Board of Directors' (the Board) 2019 repurchase authorizations, which reduced shareholders' equity by \$286 million and \$6.6 billion.

During the six months ended June 30, 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 June 30, 2020, the Corporation had reserved 516 million unissued shares of common stock for future issuances under employee stock plans, convertible notes and preferred stock.

On July 22, 2020 the Board declared a quarterly common stock dividend at the existing rate of \$0.18 per share.

Preferred Stock

During the three months ended March 31, 2020 and June 30, 2020, the Corporation declared \$469 million and \$249 million of cash dividends on preferred stock, or a total of \$718 million for the six months ended June 30, 2020. 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.

NOTE 12 Earnings Per Common Share

The calculation of earnings per common share (EPS) and diluted EPS for the three and six months ended June 30, 2020 and 2019 is presented on the following page. 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.

(In millions, except per share information)	Three Months Ended June 30		Six Months Ended June 30	
	2020	2019	2020	2019
Earnings per common share				
Net income	\$ 3,533	\$ 7,348	\$ 7,543	\$ 14,659
Preferred stock dividends	(249)	(239)	(718)	(681)
Net income applicable to common shareholders	\$ 3,284	\$ 7,109	\$ 6,825	\$ 13,978
Average common shares issued and outstanding	8,739.9	9,523.2	8,777.6	9,624.0
Earnings per common share	\$ 0.38	\$ 0.75	\$ 0.78	\$ 1.45
Diluted earnings per common share				
Net income applicable to common shareholders	3,284.0	7,109	6,825	13,978
Average common shares issued and outstanding	8,739.9	9,523.2	8,777.6	9,624.0
Dilutive potential common shares ⁽¹⁾	28.2	36.4	35.7	48.4
Total diluted average common shares issued and outstanding	8,768.1	9,559.6	8,813.3	9,672.4
Diluted earnings per common share	\$ 0.37	\$ 0.74	\$ 0.77	\$ 1.45

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

For both the three and six months ended June 30, 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.

NOTE 13 Accumulated Other Comprehensive Income (Loss)

The table below presents the changes in accumulated OCI after-tax for the six months ended June 30, 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	4,693	(501)	533	57	(48)	4,734
Balance, June 30, 2019	\$ (859)	\$ (1,032)	\$ (483)	\$ (4,247)	\$ (856)	\$ (7,477)
Balance, December 31, 2019	\$ 323	\$ (1,494)	\$ (400)	\$ (4,168)	\$ (894)	\$ (6,633)
Net change	4,693	53	732	100	(107)	5,471
Balance, June 30, 2020	\$ 5,016	\$ (1,441)	\$ 332	\$ (4,068)	\$ (1,001)	\$ (1,162)

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 six months ended June 30, 2020 and 2019.

(Dollars in millions)	Pretax	Tax effect	After-tax	Pretax	Tax effect	After-tax
	Six Months Ended June 30					
	2020			2019		
Debt securities:						
Net increase in fair value	\$ 6,628	\$ (1,652)	\$ 4,976	\$ 6,354	\$ (1,583)	\$ 4,771
Net realized (gains) reclassified into earnings ⁽¹⁾	(377)	94	(283)	(104)	26	(78)
Net change	6,251	(1,558)	4,693	6,250	(1,557)	4,693
Debit valuation adjustments:						
Net increase (decrease) in fair value	63	(13)	50	(663)	153	(510)
Net realized losses reclassified into earnings ⁽¹⁾	4	(1)	3	10	(1)	9
Net change	67	(14)	53	(653)	152	(501)
Derivatives:						
Net increase in fair value	914	(222)	692	637	(143)	494
Reclassifications into earnings:						
Net interest income	53	(13)	40	51	(12)	39
Net realized losses reclassified into earnings	53	(13)	40	51	(12)	39
Net change	967	(235)	732	688	(155)	533
Employee benefit plans:						
Net actuarial losses and other reclassified into earnings ⁽²⁾	133	(33)	100	74	(17)	57
Net change	133	(33)	100	74	(17)	57
Foreign currency:						
Net (decrease) in fair value	115	(222)	(107)	(37)	(11)	(48)
Net change	115	(222)	(107)	(37)	(11)	(48)
Total other comprehensive income (loss)	\$ 7,533	\$ (2,062)	\$ 5,471	\$ 6,322	\$ (1,588)	\$ 4,734

⁽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 six months ended June 30, 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 June 30, 2020 and December 31, 2019, including financial instruments that the Corporation accounts for under the fair value option, are summarized in the following tables.

(Dollars in millions)	June 30, 2020					
	Fair Value Measurements			Netting Adjustments (1)	Assets/Liabilities at Fair Value	
	Level 1	Level 2	Level 3			
Assets						
Time deposits placed and other short-term investments	\$ 1,194	\$ —	\$ —	\$ —	\$ —	1,194
Federal funds sold and securities borrowed or purchased under agreements to resell	—	46,139	—	—	—	46,139
Trading account assets:						
U.S. Treasury and agency securities	42,865	2,988	—	—	—	45,853
Corporate securities, trading loans and other	—	24,055	1,548	—	—	25,603
Equity securities	59,311	30,556	194	—	—	90,061
Non-U.S. sovereign debt	11,913	25,344	248	—	—	37,505
Mortgage trading loans, MBS and ABS:						
U.S. government-sponsored agency guaranteed (2)	—	18,188	152	—	—	18,340
Mortgage trading loans, ABS and other MBS	—	7,519	1,584	—	—	9,103
Total trading account assets (3)	114,089	108,650	3,726	—	—	226,465
Derivative assets	18,040	411,420	2,562	(386,838)	—	45,184
AFS debt securities:						
U.S. Treasury and agency securities	51,492	1,172	—	—	—	52,664
Mortgage-backed securities:						
Agency	—	78,999	—	—	—	78,999
Agency-collateralized mortgage obligations	—	6,295	—	—	—	6,295
Non-agency residential	—	529	462	—	—	991
Commercial	—	15,921	—	—	—	15,921
Non-U.S. securities	—	13,327	5	—	—	13,332
Other taxable securities	—	4,187	65	—	—	4,252
Tax-exempt securities	—	17,641	337	—	—	17,978
Total AFS debt securities	51,492	138,071	869	—	—	190,432
Other debt securities carried at fair value:						
U.S. Treasury and agency securities	3	—	—	—	—	3
Agency MBS	—	—	—	—	—	—
Non-agency residential MBS	—	762	449	—	—	1,211
Non-U.S. and other securities	5,484	5,782	—	—	—	11,266
Total other debt securities carried at fair value	5,487	6,544	449	—	—	12,480
Loans and leases	—	8,435	741	—	—	9,176
Loans held-for-sale	—	2,274	970	—	—	3,244
Other assets (4)	5,857	3,017	1,911	—	—	10,785
Total assets (5)	\$ 196,159	\$ 724,550	\$ 11,228	\$ (386,838)	\$ —	545,099
Liabilities						
Interest-bearing deposits in U.S. offices	\$ —	\$ 594	\$ —	\$ —	\$ —	594
Federal funds purchased and securities loaned or sold under agreements to repurchase	—	21,516	—	—	—	21,516
Trading account liabilities:						
U.S. Treasury and agency securities	11,193	361	—	—	—	11,554
Equity securities	41,057	4,610	1	—	—	45,668
Non-U.S. sovereign debt	8,651	9,420	—	—	—	18,071
Corporate securities and other	—	5,603	16	—	—	5,619
Total trading account liabilities	60,901	19,994	17	—	—	80,912
Derivative liabilities	17,836	407,669	5,905	(388,899)	—	42,511
Short-term borrowings	—	2,651	—	—	—	2,651
Accrued expenses and other liabilities	7,488	3,201	—	—	—	10,689
Long-term debt	—	32,869	956	—	—	33,825

Total liabilities (5)	\$	86,225	\$	488,494	\$	6,878	\$	(388,899)	\$	192,698
------------------------------	-----------	---------------	-----------	----------------	-----------	--------------	-----------	------------------	-----------	----------------

(1) Amounts represent the impact of legally enforceable master netting agreements and also cash collateral held or placed with the same counterparties.
(2) Includes \$19.9 billion of GSE obligations.
(3) Includes securities with a fair value of \$15.9 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 \$1.1 billion which are classified as Level 3 assets.
(5) Total recurring Level 3 assets were 0.41 percent of total consolidated assets, and total recurring Level 3 liabilities were 0.28 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 MBS 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 and six months ended June 30, 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							Gross Transfers into Level 3	Gross Transfers out of Level 3	Balance June 30	Change in Unrealized Gains (Losses) in Net Income Related to Financial Instruments Still Held ⁽²⁾				
	Balance April 1	Total Realized/Unrealized Gains (Losses) in Net Income ⁽²⁾	Gains (Losses) in OCI ⁽³⁾	Purchases	Sales	Issuances	Settlements								
(Dollars in millions)															
Three Months Ended June 30, 2020															
Trading account assets:															
Corporate securities, trading loans and other	1,640	(27)	—	64	(42)	—	(42)	147	(192)	1,548	(27)				
Equity securities	249	1	—	3	(23)	—	—	—	(36)	194	—				
Non-U.S. sovereign debt	250	26	(10)	2	(11)	—	(9)	—	—	248	26				
Mortgage trading loans, ABS and other MBS	1,733	(22)	(1)	104	(229)	—	(21)	259	(87)	1,736	(36)				
Total trading account assets	3,872	(22)	(11)	173	(305)	—	(72)	406	(315)	3,726	(37)				
Net derivative assets (liabilities) ⁽⁴⁾	(2,909)	(463)	—	137	(233)	—	(178)	252	51	(3,343)	(558)				
AFS debt securities:															
Non-agency residential MBS	524	(2)	4	23	—	—	(10)	5	(82)	462	(2)				
Non-U.S. securities	1	—	—	—	—	—	—	4	—	5	—				
Other taxable securities	68	—	—	—	(4)	—	—	1	—	65	—				
Tax-exempt securities	100	(24)	1	—	—	—	—	265	(5)	337	(24)				
Total AFS debt securities	693	(26)	5	23	(4)	—	(10)	275	(87)	869	(26)				
Other debt securities carried at fair value – Non-agency residential MBS	269	43	—	—	—	—	(4)	150	(9)	449	43				
Loans and leases ^(5,6)	558	47	—	32	(1)	22	(15)	98	—	741	46				
Loans held-for-sale ^(5,6)	1,077	9	(5)	—	(81)	—	(30)	—	—	970	5				
Other assets ^(6,7)	1,960	(68)	13	—	—	133	(128)	3	(2)	1,911	(91)				
Trading account liabilities – Equity securities	(1)	—	—	—	—	—	—	—	—	(1)	—				
Trading account liabilities – Corporate securities and other	(20)	4	—	(1)	—	—	1	—	—	(16)	—				
Longterm debt ⁽⁵⁾	(721)	(72)	(127)	—	—	(32)	14	(29)	11	(956)	(74)				
Three Months Ended June 30, 2019															
Trading account assets:															
Corporate securities, trading loans and other	\$ 1,428	\$ 55	\$ —	\$ 140	\$ (79)	\$ —	\$ (146)	\$ 107	\$ (112)	\$ 1,393	\$ 26				
Equity securities	288	20	—	3	(5)	—	—	1	(11)	296	20				
Non-U.S. sovereign debt	472	19	5	1	—	—	(11)	—	(5)	481	19				
Mortgage trading loans, ABS and other MBS	1,510	50	(1)	167	(324)	—	(115)	178	(76)	1,389	4				
Total trading account assets	3,698	144	4	311	(408)	—	(272)	286	(204)	3,559	69				
Net derivative assets (liabilities) ⁽⁴⁾	(1,018)	(91)	—	56	(161)	—	(33)	17	116	(1,114)	(94)				
AFS debt securities:															
Non-agency residential MBS	581	—	(3)	—	—	—	(14)	47	(43)	568	—				
Non-U.S. securities	2	—	—	—	—	—	—	—	—	2	—				
Other taxable securities	3	—	—	—	—	—	—	—	—	3	—				
Total AFS debt securities	586	—	(3)	—	—	—	(14)	47	(43)	573	—				
Other debt securities carried at fair value – Non-agency residential MBS	224	2	—	—	—	—	(7)	69	(15)	273	2				
Loans and leases ^(5,6)	317	—	—	—	—	53	(15)	—	—	355	—				
Loans held-for-sale ^(5,6)	558	26	2	—	(50)	—	(50)	—	—	486	16				
Other assets ^(6,7)	2,749	(80)	8	—	(10)	67	(183)	—	—	2,551	(128)				
Trading account liabilities – Equity securities	—	(2)	—	—	—	—	—	—	—	(2)	(2)				
Trading account liabilities – Corporate securities and other	(21)	7	—	1	—	—	—	—	—	(13)	—				
Longterm debt ⁽⁵⁾	(890)	(41)	—	—	—	(10)	38	—	1	(902)	(41)				

(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; AFS debt securities - 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 (losses) of \$(126) million and \$11 million related to financial instruments still held at June 30, 2020 and 2019.

(4) Net derivative assets (liabilities) include derivative assets of \$2.6 billion and \$3.4 billion and derivative liabilities of \$5.9 billion and \$4.5 billion at June 30, 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.

Level 3 – Fair Value Measurements (1)

(Dollars in millions)	Gross								Gross Transfers into Level 3	Gross Transfers out of Level 3	Balance June 30	Change in Unrealized Gains (Losses) in Net Income Related to Financial Instruments Still Held ⁽²⁾
	Balance January 1	Total Realized/Unrealized Gains (Losses) in Net Income ⁽²⁾	Gains (Losses) in OCI ⁽³⁾	Purchases	Sales	Issuances	Settlements					
Six Months Ended June 30, 2020												
Trading account assets:												
Corporate securities, trading loans and other	1,507	(130)	(1)	280	(132)	8	(74)	384	(294)	1,548	(122)	
Equity securities	239	(25)	—	29	(34)	—	—	25	(40)	194	(23)	
Non-U.S. sovereign debt	482	28	(63)	75	(59)	—	(19)	17	(213)	248	28	
Mortgage trading loans, ABS and other MBS	1,553	(147)	(3)	466	(474)	—	(40)	492	(111)	1,736	(139)	
Total trading account assets	3,781	(274)	(67)	850	(699)	8	(133)	918	(658)	3,726	(256)	
Net derivative assets (liabilities) ⁽⁴⁾	(2,538)	(117)	—	177	(381)	—	(166)	(276)	(42)	(3,343)	(500)	
AFS debt securities:												
Non-agency residential MBS	424	(5)	(9)	23	—	—	(22)	133	(82)	462	(5)	
Non-U.S. securities	2	—	—	—	(1)	—	—	4	—	5	—	
Other taxable securities	65	—	—	3	(4)	—	—	1	—	65	—	
Tax-exempt securities	108	(34)	3	—	—	—	—	265	(5)	337	(33)	
Total AFS debt securities	599	(39)	(6)	26	(5)	—	(22)	403	(87)	869	(38)	
Other debt securities carried at fair value – Non-agency residential MBS												
	299	(6)	—	—	—	—	(8)	176	(12)	449	(29)	
Loans and leases ^(5,6)	693	(72)	—	32	(1)	22	(31)	98	—	741	(36)	
Loans held-for-sale ^(5,6)	375	—	(33)	—	(81)	691	(75)	93	—	970	(10)	
Other assets ^(6,7)	2,360	(319)	(17)	—	1	153	(270)	5	(2)	1,911	(376)	
Trading account liabilities – Equity securities	(2)	1	—	—	—	—	—	—	—	(1)	1	
Trading account liabilities – Corporate securities and other	(15)	5	—	(7)	—	—	1	—	—	(16)	1	
Long-term debt ⁽⁵⁾	(1,149)	55	60	8	—	(45)	155	(52)	12	(956)	37	

Six Months Ended June 30, 2019

Trading account assets:											
Corporate securities, trading loans and other	\$ 1,558	\$ 58	\$ —	\$ 194	\$ (152)	\$ —	\$ (206)	\$ 246	\$ (305)	\$ 1,393	\$ 20
Equity securities	276	22	—	21	(6)	—	(3)	3	(17)	296	(4)
Non-U.S. sovereign debt	465	27	4	1	—	—	(11)	—	(5)	481	27
Mortgage trading loans, ABS and other MBS	1,635	88	(2)	397	(661)	—	(124)	267	(211)	1,389	20
Total trading account assets	3,934	195	2	613	(819)	—	(344)	516	(538)	3,559	63
Net derivative assets (liabilities) (4)	(935)	(116)	—	167	(406)	—	(88)	139	125	(1,114)	(131)
AFS debt securities:											
Non-agency residential MBS	597	—	90	—	—	—	(21)	206	(304)	568	—
Non-U.S. securities	2	—	—	—	—	—	—	—	—	2	—
Other taxable securities	7	—	—	—	—	—	(4)	—	—	3	—
Total AFS debt securities	606	—	90	—	—	—	(25)	206	(304)	573	—
Other debt securities carried at fair value – Non-agency residential MBS	172	49	—	—	—	—	(8)	107	(47)	273	47
Loans and leases (5,6)	338	4	—	—	(15)	53	(25)	—	—	355	3
Loans held-for-sale (5,6)	542	38	—	10	(71)	11	(103)	59	—	486	20
Other assets (6,7)	2,932	(154)	16	—	(10)	108	(341)	—	—	2,551	(253)
Trading account liabilities – Equity securities	—	(2)	—	—	—	—	—	—	—	(2)	(2)
Trading account liabilities – Corporate securities and other	(18)	7	—	1	(3)	—	—	—	—	(13)	—
Long-term debt (5)	(817)	(87)	(1)	—	—	(13)	76	(61)	1	(902)	(82)

(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; AFS debt securities – other income; Other debt securities carried at fair value – other income; Loans and leases – primarily 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 (losses) of \$40 million and \$112 million related to financial instruments still held at June 30, 2020 and 2019.

(4) Net derivative assets (liabilities) include derivative assets of \$2.6 billion and \$3.4 billion and derivative liabilities of \$5.9 billion and \$4.5 billion at June 30, 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 June 30, 2020 and December 31, 2019.

Quantitative Information about Level 3 Fair Value Measurements at June 30, 2020

(Dollars in millions)

(Dollars in millions)

Financial Instrument		Fair Value	Valuation Technique	Inputs		
				Significant Unobservable Inputs	Ranges of Inputs	Weighted Average ⁽¹⁾
Loans and Securities ⁽²⁾						
Instruments backed by residential real estate assets	\$ 1,838	Discounted cash flow, Market comparables	Yield	0% to 25%	8%	
Trading account assets – Mortgage trading loans, ABS and other MBS	608		Prepayment speed	1% to 33% CPR	21% CPR	
Loans and leases	248		Default rate	0% to 3% CDR	1% CDR	
Loans held-for-sale	1		Loss severity	0% to 50%	17%	
AFS debt securities, primarily non-agency residential	467		Price	\$0 to \$160	\$76	
AFS debt securities – Other taxable securities	65					
Other debt securities carried at fair value - Non-agency residential	449					
Instruments backed by commercial real estate assets	\$ 1,117	Discounted cash flow	Yield	0% to 25%	3%	
Trading account assets – Corporate securities, trading loans and other	249		Price	\$0 to \$117	\$63	
Trading account assets – Mortgage trading loans, ABS and other MBS	169					
Loans held-for-sale	699					
Commercial loans, debt securities and other	\$ 3,454	Discounted cash flow, Market comparables	Yield	1% to 29%	7%	
Trading account assets – Corporate securities, trading loans and other	1,299		Prepayment speed	10% to 20%	14%	
Trading account assets – Non-U.S. sovereign debt	248		Default rate	3% to 4%	4%	
Trading account assets – Mortgage trading loans, ABS and other MBS	807		Loss severity	35% to 40%	38%	
AFS debt securities – Tax-exempt securities	337		Price	\$0 to \$142	\$69	
Loans and leases	493		Long-dated equity volatilities	85%	n/a	
Loans held-for-sale	270					
Other assets, primarily auction rate securities	\$ 795	Discounted cash flow, Market comparables	Price	\$10 to \$99	\$95	
MSRs	\$ 1,116	Discounted cash flow	Weighted-average life, fixed rate ⁽⁵⁾	0 to 13 years	4 years	
			Weighted-average life, variable rate ⁽⁵⁾	0 to 8 years	3 years	
			Option-adjusted spread, fixed rate	7% to 14%	9%	
			Option-adjusted spread, variable rate	9% to 15%	12%	
Structured liabilities						
Long-term debt	\$ (956)	Discounted cash flow, Market comparables, Industry standard derivative pricing ⁽³⁾	Yield	2% to 7%	7%	
			Equity correlation	6% to 100%	71%	
			Long-dated equity volatilities	4% to 235%	32%	
			Price	\$0 to \$119	\$85	
			Natural gas forward price	\$1/MMBtu to \$4/MMBtu	\$2/MMBtu	
Net derivative assets (liabilities)						
Credit derivatives	\$ (4)	Discounted cash flow, Stochastic recovery correlation model	Yield	5%	n/a	
			Upfront points	0 to 100 points	75 points	
			Prepayment speed	15% to 100% CPR	25% CPR	
			Default rate	1% CDR	n/a	
			Price	\$0 to \$122	\$51	
Equity derivatives	\$ (1,600)	Industry standard derivative pricing ⁽³⁾	Equity correlation	6% to 100%	71%	
			Long-dated equity volatilities	4% to 235%	32%	
Commodity derivatives	\$ (1,616)	Discounted cash flow, Industry standard derivative pricing ⁽³⁾	Natural gas forward price	\$1/MMBtu to \$4/MMBtu	\$2/MMBtu	
			Correlation	54% to 85%	73%	
			Volatilities	17% to 74%	54%	
Interest rate derivatives	\$ (123)	Industry standard derivative pricing ⁽⁴⁾	Correlation (IR/IR)	15% to 91%	39%	
			Correlation (FX/IR)	0% to 46%	3%	
			Long-dated inflation rates	-13% to 60%	18%	
			Long-dated inflation volatilities	0% to 1%	1%	
Total net derivative assets (liabilities)	\$ (3,343)					

⁽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 89: Trading account assets – Corporate securities, trading loans and other of \$1.5 billion, Trading account assets – Non-U.S. sovereign debt of \$248 million, Trading account assets – Mortgage trading loans, ABS and other MBS of \$1.6 billion, AFS debt securities of \$869 million, Other debt securities carried at fair value - Non-agency residential of \$449 million, Other assets, including MSRs, of \$1.9 billion, Loans and leases of \$741 million and LHFS of \$970 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

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

(Dollars in millions)

(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 90: 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 and six months ended June 30, 2020 and 2019.

Assets Measured at Fair Value on a Nonrecurring Basis

(Dollars in millions)	June 30, 2020		Three Months Ended June 30, 2020	Six Months Ended June 30, 2020
	Level 2	Level 3	Gains (Losses)	
Assets				
Loans held-for-sale	\$ 505	\$ 1,119	\$ (37)	\$ (113)
Loans and leases (1)	—	186	(22)	(45)
Foreclosed properties (2, 3)	—	16	(5)	(8)
Other assets	187	6	(26)	(27)
	June 30, 2019		Three Months Ended June 30, 2019	Six Months Ended June 30, 2019
Assets				
Loans held-for-sale	\$ 15	\$ 28	\$ —	\$ (1)
Loans and leases (1)	—	204	(40)	(73)
Foreclosed properties (2, 3)	—	21	(9)	(12)
Other assets	142	6	(15)	(29)
Accrued expenses and other liabilities	(2)	(12)	(14)	(14)

(1) Includes \$9 million and \$18 million of losses on loans that were written down to a collateral value of zero during the three and six months ended June 30, 2020 compared to losses of \$18 million and \$31 million for the same periods in 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 \$124 million and \$294 million of properties acquired upon foreclosure of certain government-guaranteed loans (principally FHA-insured loans) at June 30, 2020 and 2019.

The table below presents information about significant unobservable inputs at June 30, 2020 and December 31, 2019.

Quantitative Information about Nonrecurring Level 3 Fair Value Measurements

Financial Instrument	Fair Value	Valuation Technique	Inputs		
			Significant Unobservable Inputs	Ranges of Inputs	Weighted Average (1)
(Dollars in millions)			June 30, 2020		
Loans held-for-sale	\$ 1,119	Discounted cash flow	Price	\$8 to \$98	\$96
Loans and leases (2)	186	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 June 30, 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 and six months ended June 30, 2020 and 2019.

Fair Value Option Elections

	June 30, 2020			December 31, 2019		
(Dollars in millions)	Fair Value Carrying Amount	Contractual Principal Outstanding	Fair Value Carrying Amount Less Unpaid Principal	Fair Value Carrying Amount	Contractual Principal Outstanding	Fair Value Carrying Amount Less Unpaid Principal
Federal funds sold and securities borrowed or purchased under agreements to resell	\$ 46,139	\$ 46,075	\$ 64	\$ 50,364	\$ 50,318	\$ 46
Loans reported as trading account assets (1)	6,953	16,515	(9,562)	6,989	14,703	(7,714)
Trading inventory – other	20,124	n/a	n/a	19,574	n/a	n/a
Consumer and commercial loans	9,176	9,430	(254)	8,335	8,372	(37)
Loans held-for-sale (1)	3,244	4,114	(870)	3,709	4,879	(1,170)
Other assets	4	n/a	n/a	4	n/a	n/a
Long-term deposits	594	544	50	508	496	12
Federal funds purchased and securities loaned or sold under agreements to repurchase	21,516	21,505	11	16,008	16,029	(21)
Short-term borrowings	2,651	2,276	375	3,941	3,930	11
Unfunded loan commitments	113	n/a	n/a	90	n/a	n/a
Long-term debt (2)	33,825	34,714	(889)	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 \$33.4 billion and \$34.6 billion at June 30, 2020 and December 31, 2019, and contractual principal outstanding of \$34.3 billion and \$35.3 billion at June 30, 2020 and December 31, 2019.
n/a = not applicable

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

	Three Months Ended June 30					
	2020			2019		
(Dollars in millions)	Market making and similar activities	Other Income	Total	Market making and similar activities	Other Income	Total
Loans reported as trading account assets	\$ 314	\$ —	\$ 314	\$ 72	\$ —	\$ 72
Trading inventory – other (1)	3,343	—	3,343	1,823	—	1,823
Consumer and commercial loans	36	171	207	16	(1)	15
Loans held-for-sale (2)	—	58	58	—	52	52
Short-term borrowings	(283)	—	(283)	—	—	—
Unfunded loan commitments	—	46	46	—	(22)	(22)
Long-term debt (3)	(1,869)	(9)	(1,878)	(205)	(22)	(227)
Other (4)	(4)	—	(4)	(2)	(15)	(17)
Total	\$ 1,537	\$ 266	\$ 1,803	\$ 1,704	\$ (8)	\$ 1,696

	Six Months Ended June 30					
	2020			2019		
Loans reported as trading account assets	\$ (73)	\$ —	\$ (73)	\$ 163	\$ —	\$ 163
Trading inventory – other (1)	550	—	550	4,367	—	4,367
Consumer and commercial loans	(47)	(187)	(234)	17	17	34
Loans held-for-sale (2)	—	45	45	—	82	82
Short-term borrowings	234	—	234	—	—	—
Unfunded loan commitments	—	(70)	(70)	—	41	41
Long-term debt (3)	(953)	(25)	(978)	(1,285)	(45)	(1,330)
Other (4)	9	(38)	(29)	9	(20)	(11)
Total	\$ (280)	\$ (275)	\$ (555)	\$ 3,271	\$ 75	\$ 3,346

(1) The gains in market making and similar activities are primarily offset by losses on trading liabilities that hedge these assets.

(2) Includes the value of interest rate lock commitments on funded loans, including those sold during the period.

(3) The net losses in market making and similar activities relate to the embedded derivatives in structured liabilities and are typically offset by 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.

(4) Includes gains (losses) on federal funds sold and securities borrowed or purchased under agreements to resell, 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 and Liabilities Accounted for Under the Fair Value Option

(Dollars in millions)	Three Months Ended June 30		Six Months Ended June 30	
	2020	2019	2020	2019
Loans reported as trading account assets	\$ 153	\$ 16	\$ (236)	\$ 28
Consumer and commercial loans	153	—	(196)	19
Loans held-for-sale	(19)	30	(93)	41
Unfunded loan commitments	46	(22)	(70)	41

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 June 30, 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	Level 3	Total
		June 30, 2020		
Financial assets				
Loans	\$ 957,108	\$ 53,847	\$ 938,619	\$ 992,466
Loans held-for-sale	7,381	4,789	2,594	7,383
Financial liabilities				
Deposits (1)	1,718,666	1,718,914	—	1,718,914
Long-term debt	261,638	263,855	956	264,811
Commercial unfunded lending commitments (2)	1,815	113	5,137	5,250
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 \$740.8 billion and \$545.5 billion with no stated maturities at June 30, 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 tables present net income (loss) and the associated components (with net interest

income on an FTE basis for the business segments, *All Other* and the total Corporation) for the three and six months ended June 30, 2020 and 2019, and total assets at June 30, 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 June 30	Total Corporation (1)		Consumer Banking		Global Wealth & Investment Management	
	2020	2019	2020	2019	2020	2019
(Dollars in millions)						
Net interest income	\$ 10,976	\$ 12,338	\$ 5,991	\$ 7,116	\$ 1,378	\$ 1,624
Noninterest income	11,478	10,895	1,860	2,601	3,047	3,276
Total revenue, net of interest expense	22,454	23,233	7,851	9,717	4,425	4,900
Provision for credit losses	5,117	857	3,024	947	136	21
Noninterest expense	13,410	13,268	4,733	4,412	3,463	3,454
Income before income taxes	3,927	9,108	94	4,358	826	1,425
Income tax expense	394	1,760	23	1,068	202	349
Net income	\$ 3,533	\$ 7,348	\$ 71	\$ 3,290	\$ 624	\$ 1,076
Period-end total assets	\$ 2,741,688	\$ 2,395,892	\$ 929,193	\$ 787,036	\$ 334,190	\$ 287,903

	Global Banking		Global Markets		All Other	
	2020	2019	2020	2019	2020	2019
Net interest income	\$ 2,363	\$ 2,709	\$ 1,297	\$ 811	\$ (53)	\$ 78
Noninterest income	2,728	2,266	4,052	3,333	(209)	(581)
Total revenue, net of interest expense	5,091	4,975	5,349	4,144	(262)	(503)
Provision for credit losses	1,873	125	105	5	(21)	(241)
Noninterest expense	2,223	2,211	2,682	2,675	309	516
Income before income taxes	995	2,639	2,562	1,464	(550)	(778)
Income tax expense	269	713	666	417	(766)	(787)
Net income	\$ 726	\$ 1,926	\$ 1,896	\$ 1,047	\$ 216	\$ 9
Period-end total assets	\$ 586,078	\$ 440,352	\$ 652,068	\$ 674,987	\$ 240,159	\$ 205,614

(1) There were no material intersegment revenues.

Results of Business Segments and All Other

At and for the six months ended June 30	Total Corporation (1)		Consumer Banking		Global Wealth & Investment Management	
	2020	2019	2020	2019	2020	2019
(Dollars in millions)						
Net interest income	\$ 23,250	\$ 24,866	\$ 12,853	\$ 14,222	\$ 2,949	\$ 3,308
Noninterest income	22,115	21,524	4,127	5,127	6,412	6,412
Total revenue, net of interest expense	45,365	46,390	16,980	19,349	9,361	9,720
Provision for credit losses	9,878	1,870	5,282	1,921	325	26
Noninterest expense	26,885	26,492	9,228	8,779	7,063	6,887
Income before income taxes	8,602	18,028	2,470	8,649	1,973	2,807
Income tax expense	1,059	3,369	605	2,119	483	688
Net income	\$ 7,543	\$ 14,659	\$ 1,865	\$ 6,530	\$ 1,490	\$ 2,119
Period-end total assets	\$ 2,741,688	\$ 2,395,892	\$ 929,193	\$ 787,036	\$ 334,190	\$ 287,903

	Global Banking		Global Markets		All Other	
	2020	2019	2020	2019	2020	2019
Net interest income	\$ 4,975	\$ 5,499	\$ 2,450	\$ 1,764	\$ 23	\$ 73
Noninterest income	4,716	4,631	8,125	6,562	(1,265)	(1,208)
Total revenue, net of interest expense	9,691	10,130	10,575	8,326	(1,242)	(1,135)
Provision for credit losses	3,966	236	212	(18)	93	(295)
Noninterest expense	4,544	4,478	5,494	5,432	556	916
Income before income taxes	1,181	5,416	4,869	2,912	(1,891)	(1,756)
Income tax expense	319	1,462	1,266	830	(1,614)	(1,730)
Net income	\$ 862	\$ 3,954	\$ 3,603	\$ 2,082	\$ (277)	\$ (26)
Period-end total assets	\$ 586,078	\$ 440,352	\$ 652,068	\$ 674,987	\$ 240,159	\$ 205,614

(1) There were no material intersegment revenues.

The tables below present noninterest income and the associated components for the three and six months ended June 30, 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 June 30					
(Dollars in millions)	2020	2019	2020	2019	2020	2019
Fees and commissions:						
Card income						
Interchange fees	\$ 830	\$ 968	\$ 646	\$ 804	\$ 8	\$ 10
Other card income	419	478	407	464	10	11
Total card income	1,249	1,446	1,053	1,268	18	21
Service charges						
Deposit-related fees	1,299	1,638	706	1,045	15	16
Lending-related fees	263	265	—	—	—	—
Total service charges	1,562	1,903	706	1,045	15	16
Investment and brokerage services						
Asset management fees	2,483	2,554	35	36	2,453	2,524
Brokerage fees	939	916	32	39	401	438
Total investment and brokerage services	3,422	3,470	67	75	2,854	2,962
Investment banking fees						
Underwriting income	1,523	792	—	—	84	127
Syndication fees	230	291	—	—	—	—
Financial advisory services	406	288	—	—	—	—
Total investment banking fees	2,159	1,371	—	—	84	127
Total fees and commissions	8,392	8,190	1,826	2,388	2,971	3,126
Market making and similar activities	2,487	2,381	1	2	18	30
Other income (loss)	599	324	33	211	58	120
Total noninterest income	\$ 11,478	\$ 10,895	\$ 1,860	\$ 2,601	\$ 3,047	\$ 3,276

	Global Banking		Global Markets		All Other (1)	
	Three Months Ended June 30					
	2020	2019	2020	2019	2020	2019
Fees and commissions:						
Card income						
Interchange fees	\$ 65	\$ 133	\$ 111	\$ 22	\$ —	\$ (1)
Other card income	3	2	—	—	(1)	1
Total card income	68	135	111	22	(1)	—
Service charges						
Deposit-related fees	524	526	45	44	9	7
Lending-related fees	213	223	50	43	—	(1)
Total service charges	737	749	95	87	9	6
Investment and brokerage services						
Asset management fees	—	—	—	—	(5)	(6)
Brokerage fees	24	7	481	433	1	(1)
Total investment and brokerage services	24	7	481	433	(4)	(7)
Investment banking fees						
Underwriting income	702	325	782	397	(45)	(57)
Syndication fees	134	138	97	154	(1)	(1)
Financial advisory services	345	254	61	34	—	—
Total investment banking fees	1,181	717	940	585	(46)	(58)
Total fees and commissions	2,010	1,608	1,627	1,127	(42)	(59)
Market making and similar activities	(15)	56	2,361	1,961	122	332
Other income (loss)	733	602	64	245	(289)	(854)
Total noninterest income	\$ 2,728	\$ 2,266	\$ 4,052	\$ 3,333	\$ (209)	\$ (581)

(1) All Other includes eliminations of intercompany transactions.

Noninterest Income by Business Segment and All Other

	Total Corporation		Consumer Banking		Global Wealth & Investment Management	
	Six Months Ended June 30					
(Dollars in millions)	2020	2019	2020	2019	2020	2019
Fees and commissions:						
Card income						
Interchange fees	\$ 1,622	\$ 1,864	\$ 1,290	\$ 1,532	\$ 16	\$ 28
Other card income	899	957	873	933	19	20
Total card income	2,521	2,821	2,163	2,465	35	48
Service charges						
Deposit-related fees	2,926	3,218	1,701	2,065	32	33
Lending-related fees	539	524	—	—	—	—
Total service charges	3,465	3,742	1,701	2,065	32	33
Investment and brokerage services						
Asset management fees	5,165	4,994	72	71	5,105	4,939
Brokerage fees	2,015	1,836	65	77	871	866
Total investment and brokerage services	7,180	6,830	137	148	5,976	5,805
Investment banking fees						
Underwriting income	2,371	1,458	—	—	199	207
Syndication fees	501	546	—	—	—	—
Financial advisory services	675	631	—	—	—	—
Total investment banking fees	3,547	2,635	—	—	199	207
Total fees and commissions	16,713	16,028	4,001	4,678	6,242	6,093
Market making and similar activities	5,294	5,149	2	4	39	64
Other income (loss)	108	347	124	445	131	255
Total noninterest income	\$ 22,115	\$ 21,524	\$ 4,127	\$ 5,127	\$ 6,412	\$ 6,412
	Global Banking		Global Markets		All Other (1)	
	Six Months Ended June 30					
	2020	2019	2020	2019	2020	2019
Fees and commissions:						
Card income						
Interchange fees	\$ 184	\$ 261	\$ 132	\$ 43	\$ —	\$ —
Other card income	7	4	—	—	—	—
Total card income	191	265	132	43	—	—
Service charges						
Deposit-related fees	1,096	1,024	80	82	17	14
Lending-related fees	437	438	102	87	—	(1)
Total service charges	1,533	1,462	182	169	17	13
Investment and brokerage services						
Asset management fees	—	—	—	—	(12)	(16)
Brokerage fees	31	16	1,048	877	—	—
Total investment and brokerage services	31	16	1,048	877	(12)	(16)
Investment banking fees						
Underwriting income	1,071	605	1,237	764	(136)	(118)
Syndication fees	279	264	222	283	—	(1)
Financial advisory services	592	557	83	74	—	—
Total investment banking fees	1,942	1,426	1,542	1,121	(136)	(119)
Total fees and commissions	3,697	3,169	2,904	2,210	(131)	(122)
Market making and similar activities	72	106	5,334	4,043	(153)	932
Other income (loss)	947	1,356	(113)	309	(981)	(2,018)
Total noninterest income	\$ 4,716	\$ 4,631	\$ 8,125	\$ 6,562	\$ (1,265)	\$ (1,208)

(1) All Other includes eliminations of intercompany transactions.

Business Segment Reconciliations

(Dollars in millions)	Three Months Ended June 30		Six Months Ended June 30	
	2020	2019	2020	2019
Segments' total revenue, net of interest expense	\$ 22,716	\$ 23,736	\$ 46,607	\$ 47,525
Adjustments (1):				
ALM activities	677	34	592	47
Liquidating businesses, eliminations and other	(939)	(537)	(1,834)	(1,182)
FTE basis adjustment	(128)	(149)	(272)	(302)
Consolidated revenue, net of interest expense	\$ 22,326	\$ 23,084	\$ 45,093	\$ 46,088
Segments' total net income	3,317	7,339	7,820	14,685
Adjustments, net-of-tax (1):				
ALM activities	521	27	444	46
Liquidating businesses, eliminations and other	(305)	(18)	(721)	(72)
Consolidated net income	\$ 3,533	\$ 7,348	\$ 7,543	\$ 14,669

	June 30	
	2020	2019
Segments' total assets	\$ 2,501,529	\$ 2,190,278
Adjustments (1):		
ALM activities, including securities portfolio	1,002,652	677,337
Elimination of segment asset allocations to match liabilities	(829,129)	(543,938)
Other	66,636	72,215
Consolidated total assets	\$ 2,741,688	\$ 2,395,892

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

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 evolved subsequent to our 2019 Form 10-K filing, the Corporation disclosed a risk factor in its Quarterly Report on Form 10-Q for the period ended March 31, 2020 captioned "Coronavirus Disease 2019" to supplement the risk factors described in its 2019 Form 10-K. The following supplements the risk factors described in the Corporation's 2019 Form 10-K and Quarterly Report on Form 10-Q for the period ended March 31, 2020.

Coronavirus Disease 2019

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

The COVID-19 pandemic has resulted in authorities implementing numerous measures intended 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 have severely restricted economic activity, reduced economic output and resulted in a deterioration in economic conditions, globally and in the U.S. This has resulted in, among other things, high rates of unemployment and underemployment and caused volatility and disruptions in consumer spending and the global financial markets, including the energy and commodity markets. Although some of these restrictive measures have been eased in certain areas, many of the restrictive measures remain in place or have been reinstated, and in some cases additional restrictive measures are being or may need to be implemented. Businesses, market participants, our counterparties and clients, and the U.S. and global economy have been negatively impacted and are likely to be so for an extended period of time, as there remains significant uncertainty about the timing and strength of an economic recovery.

The negative economic conditions arising from the COVID-19 pandemic negatively impacted our financial results during the second quarter in various respects, including an increase in our provision for credit losses and our noninterest expenses. These negative economic conditions are expected to have a continued adverse effect on our businesses and results of operations, which could include, but not be limited to: decreased demand for and use of our products and services; protracted periods of historically

low interest rates; lower fees, including 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 our customers' and clients' ability to fulfill contractual obligations and deterioration in the financial condition of our consumer and commercial borrowers, which may continue to increase our provision for credit losses and net charge-offs. Our provision for credit losses and net charge-offs may also continue to be impacted by 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 customer draws on lines of credit. Continued adverse macroeconomic conditions caused by COVID-19 could also result in potential downgrades to our credit ratings, negative impacts to regulatory capital and liquidity and further capital preservation measures, which could limit the capital we return to shareholders.

If we become unable to successfully operate our business from remote locations including, for example, because of an internal or external failure of our information technology infrastructure, we experience increased rates of employee illness or unavailability, or governmental restrictions are placed on our employees or operations, this could also have an adverse effect on our business continuity status and result in disruption to our businesses. To the extent the COVID-19 pandemic continues to adversely affect the U.S. and/or global economy and/or adversely affects our businesses, 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 and may take further action to provide fiscal and monetary stimuli to support the global economy. 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 measures taken by governments and regulatory authorities could result in reputational harm and government actions and proceedings, and has resulted in, and may continue to result in, litigation, including class actions. 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 and in the U.S. 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 businesses, results of operation and financial condition 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 businesses, 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 June 30, 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.

	Total Common Shares Repurchased (1)	Weighted-Average Per Share Price	Total Shares Purchased as Part of Publicly Announced Programs	Remaining Buyback Authority Amounts (2)
(Dollars in millions, except per share information; shares in thousands)				
April 1 - 30, 2020	39	\$ 32.12	—	\$ 286
May 1 - 31, 2020	5,022	22.50	5,020	173
June 1 - 30, 2020	6,529	26.49	6,528	—
Three months ended June 30, 2020	11,590	24.78	11,548	

(1) Includes 42 thousand 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) During the three months ended June 30, 2020, pursuant to the Board of Directors' authorization, the Corporation repurchased \$286 million of common stock solely to offset shares awarded under equity-based compensation plans, as the Corporation's general repurchase program was voluntarily suspended. For more information, see Capital Management - CCAR and Capital Planning in the MD&A on page 23 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 June 30, 2020.

Item 6. Exhibits

Exhibit No.	Description	Notes	Incorporated by Reference			
			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
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	2				
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⁾ 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: July 30, 2020

/s/ Rudolf A. Bless

Rudolf A. Bless

Chief Accounting Officer