

Exhibit 13

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This Annual Report, including the Financial Review and the Financial Statements and related Notes, contains forward-looking statements, which may include forecasts of our financial results and condition, expectations for our operations and business, and our assumptions for those forecasts and expectations. Do not unduly rely on forward-looking statements. Actual results may differ materially from our forward-looking statements due to several factors. Factors that could cause our actual results to differ materially from our forward-looking statements are described in this Report, including in the “Forward-Looking Statements” and “Risk Factors” sections, and in the “Regulation and Supervision” section of our Annual Report on Form 10-K for the year ended December 31, 2020 (2020 Form 10-K).

When we refer to “Wells Fargo,” “the Company,” “we,” “our,” or “us” in this Report, we mean Wells Fargo & Company and Subsidiaries (consolidated). When we refer to the “Parent,” we mean Wells Fargo & Company. See the Glossary of Acronyms for definitions of terms used throughout this Report.

Financial Review

Overview

Wells Fargo & Company is a leading financial services company that has approximately \$1.9 trillion in assets and proudly serves one in three U.S. households and more than 10% of all middle market companies in the U.S. We provide a diversified set of banking, investment and mortgage products and services, as well as consumer and commercial finance, through our four reportable operating segments: Consumer Banking and Lending, Commercial Banking, Corporate and Investment Banking, and Wealth and Investment Management. Wells Fargo ranked No. 30 on *Fortune’s* 2020 rankings of America’s largest corporations. We ranked fourth in both assets and in the market value of our common stock among all U.S. banks at December 31, 2020.

Wells Fargo’s top priority remains meeting its regulatory requirements to build the right foundation for all that lies ahead. To do that, the Company is committing the resources necessary to ensure that we operate with the strongest business practices and controls, maintain the highest level of integrity, and have an appropriate culture in place.

Federal Reserve Board Consent Order Regarding Governance Oversight and Compliance and Operational Risk Management

On February 2, 2018, the Company entered into a consent order with the Board of Governors of the Federal Reserve System (FRB). As required by the consent order, the Company’s Board of Directors (Board) submitted to the FRB a plan to further enhance the Board’s governance and oversight of the Company, and the Company submitted to the FRB a plan to further improve the Company’s compliance and operational risk management program. The Company continues to engage with the FRB as the Company works to address the consent order provisions. The consent order also requires the Company, following the FRB’s acceptance and approval of the plans and the Company’s adoption and implementation of the plans, to complete an initial third-party review of the enhancements and improvements provided for in the plans. Until this third-party review is complete and the plans are approved and implemented to the satisfaction of the FRB, the Company’s total consolidated assets as defined under the consent order will be limited to the level as of December 31, 2017. Compliance with this asset cap is measured on a two-quarter daily average basis to allow for management of temporary fluctuations. Due to the COVID-19 pandemic, on April 8, 2020, the FRB amended the consent order to allow the Company to exclude from the asset cap any on-balance sheet exposure resulting from loans made by the Company in connection with the Small Business Administration’s Paycheck Protection Program and the FRB’s Main Street Lending Program. As required under the amendment to the consent order, to the

extent the Company chooses to exclude these exposures from the asset cap, certain fees and other economic benefits received by the Company from loans made in connection with these programs shall be transferred to the U.S. Treasury or to non-profit organizations approved by the FRB that support small businesses. After removal of the asset cap, a second third-party review must also be conducted to assess the efficacy and sustainability of the enhancements and improvements.

Consent Orders with the Consumer Financial Protection Bureau and Office of the Comptroller of the Currency Regarding Compliance Risk Management Program, Automobile Collateral Protection Insurance Policies, and Mortgage Interest Rate Lock Extensions

On April 20, 2018, the Company entered into consent orders with the Consumer Financial Protection Bureau (CFPB) and the Office of the Comptroller of the Currency (OCC) to pay an aggregate of \$1 billion in civil money penalties to resolve matters regarding the Company’s compliance risk management program and past practices involving certain automobile collateral protection insurance (CPI) policies and certain mortgage interest rate lock extensions. As required by the consent orders, the Company submitted to the CFPB and OCC an enterprise-wide compliance risk management plan and a plan to enhance the Company’s internal audit program with respect to federal consumer financial law and the terms of the consent orders. In addition, as required by the consent orders, the Company submitted for non-objection plans to remediate customers affected by the automobile collateral protection insurance and mortgage interest rate lock matters, as well as a plan for the management of remediation activities conducted by the Company.

Retail Sales Practices Matters

In September 2016, we announced settlements with the CFPB, the OCC, and the Office of the Los Angeles City Attorney, and entered into related consent orders with the CFPB and the OCC, in connection with allegations that some of our retail customers received products and services they did not request. As a result, it remains a top priority to rebuild trust through a comprehensive action plan that includes making things right for our customers, employees, and other stakeholders, and building a better Company for the future. Our priority of rebuilding trust has included numerous actions focused on identifying potential financial harm to customers resulting from these matters and providing remediation.

For additional information regarding retail sales practices matters, including related legal matters, see the “Risk Factors”

section and Note 15 (Legal Actions) to Financial Statements in this Report.

Other Customer Remediation Activities

Our priority of rebuilding trust has also included an effort to identify other areas or instances where customers may have experienced financial harm, provide remediation as appropriate, and implement additional operational and control procedures. We are working with our regulatory agencies in this effort. We have previously disclosed key areas of focus as part of our rebuilding trust efforts and are in the process of providing remediation for those matters. We have accrued for the reasonably estimable remediation costs related to our rebuilding trust efforts, which amounts may change based on additional facts and information, as well as ongoing reviews and communications with our regulators.

As our ongoing reviews continue, it is possible that in the future we may identify additional items or areas of potential concern. To the extent issues are identified, we will continue to assess any customer harm and provide remediation as appropriate. For additional information, including related legal and regulatory risk, see the “Risk Factors” section and Note 15 (Legal Actions) to Financial Statements in this Report.

Recent Developments

CECL Adoption

On January 1, 2020, we adopted Accounting Standards Update (ASU) 2016-13, Financial Instruments – Credit Losses (Topic 326): *Measurement of Credit Losses on Financial Instruments* (CECL), which requires estimating an allowance for expected lifetime credit losses for loans and debt securities. For additional information, see the “Risk Management – Credit Risk Management – Allowance for Credit Losses” section and Note 1 (Summary of Significant Accounting Policies) to Financial Statements in this Report.

Efficiency Initiatives

We are pursuing various initiatives to reduce expenses and create a more efficient and streamlined organization. Actions from these initiatives may include (i) reorganizing and simplifying business processes and structures to improve internal operations and the customer experience, (ii) reducing headcount, (iii) optimizing third-party spending, including for our technology infrastructure, and (iv) rationalizing our branch and administrative locations, which may include consolidations and closures. We have established teams in each of our lines of business and enterprise functions to focus on an organized and structured approach for implementing these initiatives. The evaluation of potential actions will continue in future periods. In 2020, we recognized \$1.5 billion of restructuring charges, predominantly personnel costs, within noninterest expense in our consolidated statement of income as a result of these initiatives. For additional information, see Note 22 (Restructuring Charges) to Financial Statements in this Report.

COVID-19 Pandemic

In response to the COVID-19 pandemic, we have been working diligently to protect employee safety while continuing to carry out Wells Fargo’s role as a provider of essential services to the public. We have taken comprehensive steps to help customers, employees and communities.

We have strong levels of capital and liquidity, and we remain focused on delivering for our customers and communities to get through these unprecedented times.

PAYCHECK PROTECTION PROGRAM The Coronavirus Aid, Relief, and Economic Security Act (CARES Act) created funding for the Small Business Administration’s (SBA) loan program providing forgiveness of up to the full principal amount of qualifying loans guaranteed under a new program called the Paycheck Protection Program (PPP). The intent of the PPP is to provide loans to small businesses to keep their employees on the payroll and make certain other eligible payments. Loans granted under the PPP are guaranteed by the SBA and are fully forgivable if used for qualifying expenses such as payroll, mortgage interest, rent and utilities. If the loans are not forgiven, they must be repaid over a term not to exceed five years. Under the PPP, through December 31, 2020, we funded \$10.5 billion in loans to approximately 194,000 borrowers and deferred approximately \$420 million of SBA processing fees that will be recognized as interest income over the term of the loans. As of December 31, 2020, \$10.1 billion of principal remained outstanding on these PPP loans. We voluntarily committed to donate all of the gross processing fees received in 2020 from funding PPP loans. Through December 31, 2020, we donated approximately \$85 million of these processing fees to non-profit organizations that support small businesses. We expect to donate the remaining amount of these fees through 2022. In January 2021, the SBA reopened the PPP for new and certain existing PPP borrowers, and we have begun to fund loans under this latest round of the PPP.

SBA SIX-MONTH PAYMENT ASSISTANCE Under the CARES Act, the SBA will make principal and interest payments on behalf of certain borrowers for six months. During 2020, over 20,000 of our lending customers were eligible for SBA payment assistance, and we received \$402 million in payments from the SBA.

CONSOLIDATED APPROPRIATIONS ACT On December 27, 2020, the Consolidated Appropriations Act, 2021 (CAA) was signed into law. The CAA provides additional COVID-19 focused relief and extends or amends certain provisions of the CARES Act, including those related to the PPP and troubled debt restructurings (TDRs).

Brexit

With the exit of the United Kingdom from the European Union (Brexit), our primary goal is to continue to serve our existing clients in the United Kingdom and the European Union, as well as to continue to meet the needs of our domestic clients as they do business in those locations. We are leveraging our authorized bank in Ireland, our asset management entity in Luxembourg, and our broker-dealer in France to help serve clients in the European Union. For additional information on risks associated with Brexit, see the “Risk Factors” section in this Report.

LIBOR Transition

The London Interbank Offered Rate (LIBOR) is a widely-referenced benchmark rate, which is published in five currencies and a range of tenors, and seeks to estimate the cost at which banks can borrow on an unsecured basis from other banks. The administrator of LIBOR, ICE Benchmark Administration, published a consultation in December 2020 regarding its intention to cease the publication of LIBOR after December 31, 2021, with the exception of certain tenors of U.S. dollar (USD) LIBOR that it proposed would remain available for use in legacy contracts or as otherwise enumerated by financial regulators until June 30, 2023. We have a significant number of assets and liabilities referenced to LIBOR, such as commercial loans, adjustable-rate mortgage (ARM) loans, derivatives, debt

Overview (continued)

securities, and long-term debt. As of December 31, 2020, we had approximately \$475 billion of assets, consisting mostly of commercial loans, approximately \$25 billion of liabilities, and approximately \$350 billion of off-balance sheet commitments linked to LIBOR. These amounts exclude derivative assets and liabilities on our consolidated balance sheet. As of December 31, 2020, the notional amount of our LIBOR-linked interest rate derivative contracts was approximately \$7 trillion, of which approximately \$5 trillion related to contracts with central counterparty clearinghouses. Each of the LIBOR-linked amounts referenced above will vary in future periods as current contracts expire with potential replacement contracts using an alternative reference rate. As of December 31, 2020, USD LIBOR represented substantially all of the LIBOR-linked amounts referenced above.

In an effort to mitigate the risks associated with a transition away from LIBOR, our LIBOR Transition Office (LTO) has undertaken initiatives to: (i) develop more robust fallback language and disclosures related to the LIBOR transition, (ii) develop a plan to seek to amend legacy contracts to reference such fallback language or alternative reference rates, (iii) launch and enhance systems to support new products, including mortgages, commercial loans, securities and derivatives linked to the Secured Overnight Financing Rate and other alternative reference rates, (iv) develop and evaluate internal guidance, policies and procedures focused on the transition away from LIBOR to alternative reference rate products, and (v) prepare and disseminate internal and external communications regarding the LIBOR transition.

In addition, our LTO is actively working with financial regulators, industry working groups (such as the Alternative Reference Rate Committee) and trade associations that are developing guidance to facilitate an orderly transition away from the use of LIBOR. We continue to assess the risks and related impacts associated with a transition away from LIBOR. See the “Risk Factors” section in this Report for additional information regarding the potential impact of LIBOR or any other referenced financial metric being significantly changed, replaced, or discontinued.

On March 12, 2020, the Financial Accounting Standards Board (FASB) issued ASU 2020-04 – *Facilitation of the Effects of Reference Rate Reform on Financial Reporting* (Update) that provides temporary relief from existing generally accepted accounting principles (GAAP) accounting requirements for contract modifications and hedge accounting relationships impacted by reference rate reform activities. For additional information on the Update, see Note 1 (Summary of Significant Accounting Policies) to Financial Statements in this Report.

Capital Actions and Restrictions

On December 18, 2020, the Board of Governors of the Federal Reserve System (FRB) announced that it was extending, with certain adjustments, measures it announced on June 25, 2020, limiting capital distributions by large bank holding companies (BHCs), including Wells Fargo, subject to certain exceptions. For first quarter 2021, the FRB generally authorized, among other things, BHCs to pay common stock dividends and make share repurchases that, in the aggregate, do not exceed an amount equal to the average of the BHC’s net income for the four preceding calendar quarters, so long as the BHC does not increase the amount of its common stock dividend from the level paid in second quarter 2020. For additional information about capital planning, including the FRB’s recent prohibition on capital distributions, see the “Capital Management – Capital Planning and Stress Testing” section in this Report.

In January 2021, the Board approved an increase in the Company’s authority to repurchase common stock by an additional 500 million shares.

In January 2021, we issued \$3.5 billion of our Preferred Stock, Series BB, and in February 2021, we issued \$1.05 billion of our Preferred Stock, Series CC. Additionally, in February 2021, we announced the redemption of our Preferred Stock, Series I, Series P and Series W, and a partial redemption of our Preferred Stock, Series N, for an aggregate cost of \$4.5 billion. The redemptions are scheduled to occur on March 15, 2021.

Announced Business Divestiture

On February 23, 2021, we announced an agreement to sell Wells Fargo Asset Management for a purchase price of \$2.1 billion. As part of the transaction, we will own a 9.9% equity interest in the ongoing entity and continue to serve as a client and distribution partner. The transaction is expected to close in the second half of 2021, subject to customary closing conditions.

Financial Performance

In 2020, we generated \$3.3 billion of net income and diluted earnings per common share (EPS) of \$0.41, compared with \$19.5 billion of net income and EPS of \$4.05 in 2019. Financial performance for 2020, compared with 2019, was impacted by an increase of \$11.4 billion to our provision for credit losses reflecting the economic impact of the COVID-19 pandemic and \$1.5 billion of restructuring charges as a result of our efficiency initiatives. Also, in 2020 compared with 2019:

- total revenue decreased due to lower net interest income, lower other noninterest income related to gains on the sales of purchased credit-impaired (PCI) loans, our Institutional Retirement and Trust (IRT) business and Eastdil Secured (Eastdil) in 2019, and lower net gains from equity securities;
- noninterest expense decreased due to lower operating losses, advertising and promotion expense, other expense, and personnel expense, partially offset by higher restructuring charges;
- average loans decreased due to paydowns exceeding originations in the residential mortgage – junior lien portfolio and the reclassification of student loans, included in other consumer loans, to loans held for sale (LHFS) after the announced sale of the portfolio in fourth quarter 2020; and
- average deposits increased on growth in interest-bearing and noninterest-bearing deposits driven by Consumer Banking and Lending and Wealth and Investment Management.

Capital and Liquidity

We maintained a strong capital position in 2020, with total equity of \$185.9 billion at December 31, 2020, compared with \$188.0 billion at December 31, 2019. Our liquidity and regulatory capital ratios remained strong at December 31, 2020, including:

- our liquidity coverage ratio (LCR) was 133%, which continued to exceed the regulatory minimum of 100%;
- our Common Equity Tier 1 (CET1) ratio was 11.59%, which continued to exceed both the regulatory requirement of 9% and our current internal target of 10%; and
- our eligible external total loss absorbing capacity (TLAC) as a percentage of total risk-weighted assets was 25.74%, compared with the regulatory requirement of 22.0%.

See the “Capital Management” and the “Risk Management – Asset/Liability Management – Liquidity and Funding” sections in this Report for additional information regarding our capital and

liquidity, including the calculation of our regulatory capital and liquidity amounts.

Credit Quality

Credit quality was affected by the economic impact of the COVID-19 pandemic on our customer base.

- The allowance for credit losses (ACL) for loans of \$19.7 billion at December 31, 2020, increased \$9.3 billion from December 31, 2019. The change in the ACL for loans during 2020 was comprised of a \$10.6 billion increase in the ACL for loans during 2020, partially offset by a \$1.3 billion decrease as a result of our adoption of CECL on January 1, 2020.
- Our provision for credit losses for loans was \$14.0 billion in 2020, up from \$2.7 billion in 2019. The increase in the ACL for loans and the provision for credit losses in 2020 reflected current and forecasted economic conditions due to the COVID-19 pandemic and their impact on borrower performance.
- The allowance coverage for total loans was 2.22% at December 31, 2020, compared with 1.09% at December 31, 2019.
- Commercial portfolio net loan charge-offs were \$1.6 billion, or 31 basis points of average commercial loans, in 2020,

compared with net loan charge-offs of \$652 million, or 13 basis points, in 2019, predominantly driven by increased losses in our commercial and industrial portfolio primarily within the oil, gas and pipelines portfolio, and in our commercial real estate mortgage loan portfolio.

- Consumer portfolio net loan charge-offs were \$1.7 billion, or 39 basis points of average consumer loans, in 2020, compared with net loan charge-offs of \$2.1 billion, or 48 basis points, in 2019, predominantly driven by lower losses in our credit card, auto and other consumer loan portfolios as a result of payment deferral activities instituted in response to the COVID-19 pandemic.
- Nonperforming assets (NPAs) of \$8.9 billion at December 31, 2020, increased \$3.2 billion, or 57%, from December 31, 2019, predominantly driven by increases in commercial and industrial, commercial real estate mortgage, and residential mortgage – first lien nonaccrual loans, reflecting the economic impact of the COVID-19 pandemic. NPAs represented 1.00% of total loans at December 31, 2020.

Table 1 presents a three-year summary of selected financial data and Table 2 presents selected ratios and per common share data.

Table 1: Summary of Selected Financial Data

(in millions, except per share amounts)	2020	2019			Year ended December 31,		
			\$ Change 2020/ 2019	% Change 2020/ 2019	2018	\$ Change 2019/ 2018	% Change 2019/ 2018
Income statement							
Net interest income	\$ 39,835	47,231	(7,396)	(16)%	\$ 49,995	(2,764)	(6)%
Noninterest income	32,505	37,832	(5,327)	(14)	36,413	1,419	4
Total revenue	72,340	85,063	(12,723)	(15)	86,408	(1,345)	(2)
Provision for credit losses	14,129	2,687	11,442	426	1,744	943	54
Noninterest expense	57,630	58,178	(548)	(1)	56,126	2,052	4
Net income before noncontrolling interests	3,586	20,041	(16,455)	(82)	22,876	(2,835)	(12)
Less: Net income from noncontrolling interests	285	492	(207)	(42)	483	9	2
Wells Fargo net income	3,301	19,549	(16,248)	(83)	22,393	(2,844)	(13)
Earnings per common share	0.42	4.08	(3.66)	(90)	4.31	(0.23)	(5)
Diluted earnings per common share	0.41	4.05	(3.64)	(90)	4.28	(0.23)	(5)
Dividends declared per common share	1.22	1.92	(0.70)	(36)	1.64	0.28	17
Balance sheet (at year end)							
Debt securities	501,207	497,125	4,082	1	484,689	12,436	3
Loans	887,637	962,265	(74,628)	(8)	953,110	9,155	1
Allowance for loan losses	18,516	9,551	8,965	94	9,775	(224)	(2)
Equity securities	62,260	68,241	(5,981)	(9)	55,148	13,093	24
Assets	1,955,163	1,927,555	27,608	1	1,895,883	31,672	2
Deposits	1,404,381	1,322,626	81,755	6	1,286,170	36,456	3
Long-term debt	212,950	228,191	(15,241)	(7)	229,044	(853)	—
Common stockholders' equity	164,778	166,669	(1,891)	(1)	174,359	(7,690)	(4)
Wells Fargo stockholders' equity	184,887	187,146	(2,259)	(1)	196,166	(9,020)	(5)
Total equity	185,920	187,984	(2,064)	(1)	197,066	(9,082)	(5)

Overview (continued)

Table 2: Ratios and Per Common Share Data

	Year ended December 31,		
	2020	2019	2018
Profitability ratios			
Return on average assets (ROA) (1)	0.17 %	1.02	1.19
Return on average equity (ROE) (2)	1.04	10.23	11.53
Return on average tangible common equity (ROTCE) (3)	1.25	12.20	13.73
Efficiency ratio (4)	79.7	68.4	65.0
Capital ratios (5)			
At year end:			
Wells Fargo common stockholders' equity to assets	8.43	8.65	9.20
Total equity to assets	9.51	9.75	10.39
Risk-based capital (6):			
Common Equity Tier 1	11.59	11.14	11.74
Tier 1 capital	13.25	12.76	13.46
Total capital	16.14	15.75	16.60
Tier 1 leverage	8.32	8.31	9.07
Average balances:			
Average Wells Fargo common stockholders' equity to average assets	8.45	9.16	9.50
Average total equity to average assets	9.53	10.33	10.77
Per common share data			
Dividend payout ratio (7)	297.6	47.4	38.3
Book value (8)	\$ 39.76	40.31	38.06

(1) Represents Wells Fargo net income (loss) divided by average assets.

(2) Represents Wells Fargo net income (loss) applicable to common stock divided by average common stockholders' equity.

(3) Tangible common equity is a non-GAAP financial measure and represents total equity less preferred equity, noncontrolling interests, goodwill, certain identifiable intangible assets (other than mortgage servicing rights) and goodwill and other intangibles on nonmarketable equity securities, net of applicable deferred taxes. The methodology of determining tangible common equity may differ among companies. Management believes that return on average tangible common equity, which utilizes tangible common equity, is a useful financial measure because it enables investors and others to assess the Company's use of equity. For additional information, including a corresponding reconciliation to generally accepted accounting principles (GAAP) financial measures, see the "Capital Management – Tangible Common Equity" section in this Report.

(4) The efficiency ratio is noninterest expense divided by total revenue (net interest income and noninterest income).

(5) See the "Capital Management" section and Note 28 (Regulatory Capital Requirements and Other Restrictions) to Financial Statements in this Report for additional information.

(6) The risk-based capital ratios were calculated under the lower of the Standardized or Advanced Approach determined pursuant to Basel III. Beginning January 1, 2018, the requirements for calculating common equity tier 1 and tier 1 capital, along with risk-weighted assets, became fully phased-in. Accordingly, the information presented reflects fully phased-in common equity tier 1 capital, tier 1 capital and risk-weighted assets, but reflects total capital still in accordance with Transition Requirements. See the "Capital Management" section and Note 28 (Regulatory Capital Requirements and Other Restrictions) to Financial Statements in this Report for additional information.

(7) Dividend payout ratio is dividends declared per common share as a percentage of diluted earnings per common share.

(8) Book value per common share is common stockholders' equity divided by common shares outstanding.

Earnings Performance

Wells Fargo net income for 2020 was \$3.3 billion (\$0.41 diluted EPS), compared with \$19.5 billion (\$4.05 diluted EPS) for 2019. Net income decreased in 2020, compared with 2019, predominantly due to a \$11.4 billion increase in provision for credit losses, a \$7.4 billion decrease in net interest income, and a \$5.3 billion decrease in noninterest income, partially offset by a \$7.2 billion decrease in income tax expense.

For a discussion of our 2019 financial results, compared with 2018, see the "Earnings Performance" section of our Annual Report on Form 10-K for the year ended December 31, 2019.

Net Interest Income

Net interest income is the interest earned on debt securities, loans (including yield-related loan fees) and other interest-earning assets minus the interest paid on deposits, short-term borrowings and long-term debt. The net interest margin is the average yield on earning assets minus the average interest rate paid for deposits and our other sources of funding.

Net interest income and the net interest margin in any one period can be significantly affected by a variety of factors including the mix and overall size of our earning assets portfolio and the cost of funding those assets. In addition, variable sources of interest income, such as loan fees, periodic dividends, and collection of interest on nonaccrual loans, can fluctuate from period to period.

Net interest income and net interest margin decreased in 2020, compared with 2019, driven by unfavorable impacts of repricing due to the lower interest rate environment and higher mortgage-backed securities (MBS) premium amortization.

Table 3 presents the individual components of net interest income and the net interest margin. Net interest income and the net interest margin are presented on a taxable-equivalent basis in Table 3 to consistently reflect income from taxable and tax-exempt loans and debt and equity securities based on a 21% federal statutory tax rate for the periods ended December 31, 2020, 2019 and 2018.

Table 3: Average Balances and Interest Rates (Taxable-Equivalent Basis) (1)

(in millions)	Year ended December 31,								
	2020			2019			2018		
	Average balance	Interest income/expense	Interest rates	Average balance	Interest income/expense	Interest rates	Average balance	Interest income/expense	Interest rates
Assets									
Interest-earning deposits with banks	\$ 186,386	547	0.29 %	\$ 135,741	2,875	2.12 %	\$ 156,366	2,854	1.82 %
Federal funds sold and securities purchased under resale agreements	82,798	393	0.47	99,286	2,164	2.18	78,547	1,431	1.82
Debt securities:									
Trading debt securities	94,731	2,544	2.69	93,655	3,149	3.36	83,526	2,856	3.42
Available-for-sale debt securities	229,077	5,248	2.29	262,694	8,493	3.23	265,198	8,604	3.24
Held-to-maturity debt securities	173,505	3,841	2.21	149,105	3,814	2.56	145,565	3,487	2.40
Total debt securities	497,313	11,633	2.34	505,454	15,456	3.06	494,289	14,947	3.02
Loans held for sale (2)(3)	27,493	947	3.45	21,516	892	4.14	20,920	917	4.38
Loans:									
Commercial loans:									
Commercial and industrial – U.S.	281,080	7,912	2.82	284,888	12,107	4.25	275,656	11,465	4.16
Commercial and industrial – Non-U.S.	66,915	1,673	2.50	64,274	2,385	3.71	60,718	2,143	3.53
Real estate mortgage	122,482	3,842	3.14	121,813	5,356	4.40	122,947	5,279	4.29
Real estate construction	21,608	760	3.52	21,183	1,095	5.17	23,609	1,167	4.94
Lease financing	17,801	736	4.13	19,302	873	4.52	19,392	919	4.74
Total commercial loans	509,886	14,923	2.93	511,460	21,816	4.27	502,322	20,973	4.18
Consumer loans:									
Residential mortgage – first lien	288,105	9,661	3.35	288,059	10,974	3.81	284,178	11,481	4.04
Residential mortgage – junior lien	26,700	1,185	4.44	31,989	1,800	5.63	36,687	1,975	5.38
Credit card	37,093	4,315	11.63	38,865	4,889	12.58	36,780	4,678	12.72
Auto	48,362	2,379	4.92	45,901	2,362	5.15	48,115	2,491	5.18
Other consumer	31,642	1,719	5.43	34,682	2,412	6.95	37,115	2,488	6.70
Total consumer loans	431,902	19,259	4.46	439,496	22,437	5.11	442,875	23,113	5.22
Total loans (3)	941,788	34,182	3.63	950,956	44,253	4.65	945,197	44,086	4.66
Equity securities	28,950	557	1.92	35,930	966	2.69	38,092	999	2.62
Other	7,505	14	0.18	5,579	90	1.62	5,071	74	1.46
Total interest-earning assets	\$ 1,772,233	48,273	2.72 %	\$ 1,754,462	66,696	3.80 %	\$ 1,738,482	65,308	3.76 %
Cash and due from banks	21,676	—	—	19,558	—	—	18,777	—	—
Goodwill	26,387	—	—	26,409	—	—	26,453	—	—
Other	123,205	—	—	113,015	—	—	105,180	—	—
Total noninterest-earning assets	\$ 171,268	—	—	158,982	—	—	150,410	—	—
Total assets	\$ 1,943,501	48,273		1,913,444	66,696		1,888,892	65,308	
Liabilities									
Deposits:									
Demand deposits	\$ 98,182	184	0.19 %	\$ 59,121	789	1.33 %	\$ 63,243	606	0.96 %
Savings deposits	744,226	1,492	0.20	705,957	4,132	0.59	684,882	2,157	0.31
Time deposits	81,674	892	1.09	123,634	2,776	2.25	105,475	2,024	1.92
Deposits in non-U.S. offices	39,260	236	0.60	53,438	938	1.75	63,945	835	1.30
Total interest-bearing deposits	963,342	2,804	0.29	942,150	8,635	0.92	917,545	5,622	0.61
Short-term borrowings	70,206	251	0.36	115,337	2,317	2.01	104,267	1,719	1.65
Long-term debt	224,587	4,471	1.99	232,491	7,350	3.16	224,268	6,703	2.99
Other liabilities	28,435	438	1.54	25,771	551	2.13	27,648	610	2.21
Total interest-bearing liabilities	\$ 1,286,570	7,964	0.62 %	\$ 1,315,749	18,853	1.43 %	\$ 1,273,728	14,654	1.15 %
Noninterest-bearing demand deposits	412,669	—	—	344,111	—	—	358,312	—	—
Other noninterest-bearing liabilities	59,048	—	—	55,963	—	—	53,496	—	—
Total noninterest-bearing liabilities	\$ 471,717	—	—	400,074	—	—	411,808	—	—
Total liabilities	\$ 1,758,287	7,964		1,715,823	18,853		1,685,536	14,654	
Total equity	185,214	—	—	197,621	—	—	203,356	—	—
Total liabilities and equity	\$ 1,943,501	7,964		1,913,444	18,853		1,888,892	14,654	
Interest rate spread on a taxable-equivalent basis (4)			2.10			2.37			2.61
Net interest margin and net interest income on a taxable-equivalent basis (4)		\$ 40,309	2.27 %		\$ 47,843	2.73 %		\$ 50,654	2.91 %

(1) The average balance amounts represent amortized costs. The interest rates are based on interest income or expense amounts for the period. Interest rates and amounts include the effects of hedge and risk management activities associated with the respective asset and liability categories.

(2) In fourth quarter 2020, loans held for sale and mortgage loans held for sale were combined into a single line item. Prior period balances have been revised to conform with the current period presentation.

(3) Nonaccrual loans and any related income are included in their respective loan categories.

(4) Includes taxable-equivalent adjustments of \$475 million, \$611 million and \$659 million for the years ended December 31, 2020, 2019 and 2018, respectively, predominantly related to tax-exempt income on certain loans and securities.

Earnings Performance (continued)

Table 4 allocates the changes in net interest income on a taxable-equivalent basis to changes in either average balances or average rates for both interest-earning assets and interest-bearing liabilities. Because of the numerous simultaneous volume and rate changes during any period, it is not possible to precisely

allocate such changes between volume and rate. For this table, changes that are not solely due to either volume or rate are allocated to these categories on a pro-rata basis based on the absolute value of the change due to average volume and average rate.

Table 4: Analysis of Changes in Net Interest Income

(in millions)	Year ended December 31,					
	2020 vs. 2019			2019 vs. 2018		
	Volume	Rate	Total	Volume	Rate	Total
Increase (decrease) in interest income:						
Interest-earning deposits with banks	\$ 797	(3,125)	(2,328)	(407)	428	21
Federal funds sold and securities purchased under resale agreements	(309)	(1,462)	(1,771)	419	314	733
Debt securities:						
Trading debt securities	35	(640)	(605)	343	(50)	293
Available-for-sale debt securities:	(991)	(2,254)	(3,245)	(83)	(28)	(111)
Held-to-maturity debt securities:	584	(557)	27	87	240	327
Total debt securities	(372)	(3,451)	(3,823)	347	162	509
Loans held for sale	219	(164)	55	26	(51)	(25)
Commercial loans:						
Commercial and industrial – U.S.	(160)	(4,035)	(4,195)	390	252	642
Commercial and industrial – Non-U.S.	94	(806)	(712)	130	112	242
Real estate mortgage	29	(1,543)	(1,514)	(51)	128	77
Real estate construction	22	(357)	(335)	(124)	52	(72)
Lease financing	(65)	(72)	(137)	(4)	(42)	(46)
Total commercial loans	(80)	(6,813)	(6,893)	341	502	843
Consumer loans:						
Residential mortgage – first lien	2	(1,315)	(1,313)	155	(662)	(507)
Residential mortgage – junior lien	(270)	(345)	(615)	(263)	88	(175)
Credit card	(216)	(358)	(574)	262	(51)	211
Auto	125	(108)	17	(115)	(14)	(129)
Other consumer	(198)	(495)	(693)	(167)	91	(76)
Total consumer loans	(557)	(2,621)	(3,178)	(128)	(548)	(676)
Total loans	(637)	(9,434)	(10,071)	213	(46)	167
Equity securities	(165)	(244)	(409)	(59)	26	(33)
Other	23	(99)	(76)	7	9	16
Total increase (decrease) in interest income	(444)	(17,979)	(18,423)	546	842	1,388
Increase (decrease) in interest expense:						
Deposits:						
Demand deposits	324	(929)	(605)	(42)	225	183
Savings deposits	217	(2,857)	(2,640)	65	1,910	1,975
Time deposits	(748)	(1,136)	(1,884)	377	375	752
Deposits in non-U.S. offices	(202)	(500)	(702)	(152)	255	103
Total interest-bearing deposits	(409)	(5,422)	(5,831)	248	2,765	3,013
Short-term borrowings	(667)	(1,399)	(2,066)	196	402	598
Long-term debt	(242)	(2,637)	(2,879)	254	393	647
Other liabilities	52	(165)	(113)	(38)	(21)	(59)
Total increase (decrease) in interest expense	(1,266)	(9,623)	(10,889)	660	3,539	4,199
Increase (decrease) in net interest income on a taxable-equivalent basis	\$ 822	(8,356)	(7,534)	(114)	(2,697)	(2,811)

Noninterest Income

Table 5: Noninterest Income

(in millions)			Year ended December 31,				
	2020	2019	\$ Change 2020/ 2019	% Change 2020/ 2019	2018	\$ Change 2019/ 2018	% Change 2019/ 2018
Deposit-related fees	\$ 5,221	5,819	(598)	(10)%	\$ 5,741	78	1 %
Lending-related fees	1,381	1,474	(93)	(6)	1,628	(154)	(9)
Brokerage fees	9,375	9,237	138	1	9,436	(199)	(2)
Trust and investment management fees	2,872	3,038	(166)	(5)	3,316	(278)	(8)
Investment banking fees	1,865	1,797	68	4	1,757	40	2
Card fees	3,544	4,016	(472)	(12)	3,907	109	3
Servicing income, net	(139)	522	(661)	NM	1,373	(851)	(62)
Net gains on mortgage loan originations/sales	3,632	2,193	1,439	66	1,644	549	33
Mortgage banking	3,493	2,715	778	29	3,017	(302)	(10)
Net gains from trading activities	1,172	993	179	18	602	391	65
Net gains on debt securities	873	140	733	524	108	32	30
Net gains from equity securities	665	2,843	(2,178)	(77)	1,515	1,328	88
Lease income	1,245	1,614	(369)	(23)	1,757	(143)	(8)
Other	799	4,146	(3,347)	(81)	3,629	517	14
Total	\$ 32,505	37,832	(5,327)	(14)	\$ 36,413	1,419	4

NM – Not meaningful

Full year 2020 vs. full year 2019

Deposit-related fees decreased driven by:

- lower customer transaction volumes and higher average consumer deposit account balances due to the economic slowdown associated with the COVID-19 pandemic; and
- higher fee waivers and reversals as part of our actions to support customers during the COVID-19 pandemic;

partially offset by:

- higher treasury management fees on commercial accounts driven by a lower earnings credit rate due to the lower interest rate environment.

Lending-related fees decreased driven by an increase in fee waivers and reversals as part of our actions to support customers during the COVID-19 pandemic.

Brokerage fees increased reflecting higher asset-based fees, partially offset by lower transactional revenue. Asset-based fees include fees from advisory accounts that are based on a percentage of the market value of the assets as of the beginning of the quarter.

Trust and investment management fees decreased driven by lower trust fees due to the sale of our Institutional Retirement and Trust (IRT) business in 2019.

Our assets under management (AUM), excluding IRT client assets, totaled \$786.6 billion at December 31, 2020, compared with \$684.4 billion at December 31, 2019. Substantially all of our AUM is managed by our Wealth and Investment Management (WIM) operating segment. Our assets under administration (AUA), excluding IRT client assets, totaled \$942.4 billion at December 31, 2020, and \$898.0 billion at December 31, 2019. Our AUA is managed by our WIM operating segment and our Corporate and Investment Banking operating segment. Management believes that AUM and AUA are useful metrics because they allow investors and others to assess how changes in asset amounts may impact the generation of certain asset-based fees.

Card fees decreased reflecting:

- lower interchange fees, net of rewards costs, driven by decreased credit card purchase volumes and debit card transaction volumes due to the impact of the COVID-19 pandemic; and
- higher fee waivers as part of our actions to support customers during the COVID-19 pandemic.

Servicing income, net decreased reflecting:

- lower servicing fees due to a lower balance of loans serviced for others and the impacts of customer accommodations instituted in response to the COVID-19 pandemic; and
- higher unreimbursed servicing costs associated with the COVID-19 pandemic;

partially offset by:

- lower mortgage servicing right (MSR) valuation losses, net of hedge results, as gains from favorable hedge results more than offset valuation adjustments for higher expected servicing costs and prepayment estimates due to changes in economic and market conditions.

Net gains on mortgage loan originations/sales increased driven by:

- higher residential real estate held for sale (HFS) origination volumes; and
- higher margins in both our retail and correspondent production channels, as well as a shift to more retail origination volume, which has a higher margin.

For additional information on servicing income and net gains on mortgage loan originations/sales, see Note 9 (Mortgage Banking Activities) to Financial Statements in this Report.

Net gains from trading activities increased reflecting:

- higher volumes in interest rate products due to lower interest rates;
- higher volumes and customer activity for equities trading due to volatility in the equity markets; and

Earnings Performance (continued)

- higher volumes for credit trading due to additional market liquidity from government actions in response to the COVID-19 pandemic;
- partially offset by:
- losses due to higher prepayment speeds on agency MBS pools, net of hedge gains, and wider credit spreads for non-agency and certain asset-backed securities.

Net gains on debt securities increased due to higher gains from the sales of agency MBS as a result of portfolio re-balancing and actions taken to manage under the asset cap.

Net gains from equity securities decreased driven by:

- lower unrealized gains on deferred compensation plan investments (largely offset in personnel expense). Refer to Table 6a for the results for our deferred compensation plan and related investments;
- lower realized gains on nonmarketable equity securities; and
- impairment on equity securities of \$1.7 billion due to the market impact of the COVID-19 pandemic, partially offset

by higher unrealized gains on securities accounted for under the measurement alternative, both of which included the impact of a change in the accounting measurement model for certain nonmarketable equity securities from our affiliated venture capital partnerships.

Lease income decreased due to a reduction in the size of the operating lease asset portfolio.

Other income decreased due to gains in 2019 of:

- \$1.6 billion on the sales of PCI loans;
- \$1.1 billion on the sale of our IRT business; and
- \$362 million on the sale of Eastdil, which also resulted in a decline in commercial real estate brokerage commissions in 2020;

partially offset by:

- gains on the sales of residential mortgage loans reclassified to held for sale in 2019 and sold in 2020.

Noninterest Expense

Table 6: Noninterest Expense

(in millions)					Year ended December 31,		
	2020	2019	\$ Change 2020/ 2019	% Change 2020/ 2019	2018	\$ Change 2019/ 2018	% Change 2019/ 2018
Personnel	\$ 34,811	35,128	(317)	(1)%	\$ 33,085	2,043	6 %
Technology, telecommunications and equipment	3,099	3,276	(177)	(5)	2,903	373	13
Occupancy	3,263	2,945	318	11	2,888	57	2
Operating losses	3,523	4,321	(798)	(18)	3,124	1,197	38
Professional and outside services	6,706	6,745	(39)	(1)	6,588	157	2
Leases (1)	1,022	1,155	(133)	(12)	1,334	(179)	(13)
Advertising and promotion	600	1,076	(476)	(44)	857	219	26
Restructuring charges	1,499	—	1,499	NM	—	—	NM
Other	3,107	3,532	(425)	(12)	5,347	(1,815)	(34)
Total	\$ 57,630	58,178	(548)	(1)	\$ 56,126	2,052	4

NM – Not meaningful

(1) Represents expenses for assets we lease to customers.

Full year 2020 vs. full year 2019

Personnel expense decreased driven by:

- lower deferred compensation expense; and
 - lower incentive compensation expense;
- partially offset by:
- higher salaries expense driven by annual salary increases and higher salary rates driven by risk management and technology hires; and
 - increases in employee benefits related to the COVID-19 pandemic, including additional payments for certain customer-facing and support employees and back-up childcare services.

Table 6a presents results for our deferred compensation plan and related hedges. In second quarter 2020, we entered into arrangements to transition our economic hedges of the deferred compensation plan liabilities from equity securities to derivative instruments. As a result of this transition, changes in fair value of derivatives used to economically hedge the deferred compensation plan are reported in personnel expense rather than in net gains (losses) from equity securities within noninterest income. For additional information on the derivatives used in the economic hedges, see Note 16 (Derivatives) to Financial Statements in this Report.

Table 6a: Deferred Compensation and Related Hedges

(in millions)	Year ended December 31,	
	2020	2019
Net interest income	\$ 15	70
Net gains (losses) from equity securities	(273)	664
Total revenue (losses) from deferred compensation plan investments	(258)	734
Increase in deferred compensation plan liabilities	(582)	(739)
Net derivative gains from economic hedges of deferred compensation	778	—
Decrease (increase) in personnel expense	196	(739)
Loss before income tax expense	\$ (62)	(5)

Technology, telecommunications and equipment expense

decreased due to:

- software impairments in 2019; and
- a software licensing liability accrual reversal in 2020;

partially offset by:

- higher technology contracts expense; and
- higher telecommunications expense related to the COVID-19 pandemic.

Occupancy expense increased due to additional cleaning fees, supplies, and equipment expenses related to the COVID-19 pandemic.

Operating losses decreased driven by:

- lower expense for litigation accruals;

partially offset by:

- higher expense for customer remediation accruals primarily reflecting expansions of the population of affected customers, remediation payments, and/or remediation time frames for a variety of matters.

Advertising and promotion expense decreased driven by reduced marketing and brand campaign volumes due to the impact of the COVID-19 pandemic.

Restructuring charges increased driven predominantly by personnel costs, as well as facility closure costs, related to our efficiency initiatives that commenced in third quarter 2020. For additional information on restructuring charges, see Note 22 (Restructuring Charges) to Financial Statements in this Report.

Other expenses decreased driven by:

- a reduction in business travel and company events due to the impact of the COVID-19 pandemic; and
- lower foreclosed assets expense due to the suspension of certain mortgage foreclosure activities in response to the COVID-19 pandemic;

partially offset by:

- higher pension plan settlement expenses;
- higher charitable donations expense driven by the donation of PPP processing fees; and
- higher Federal Deposit Insurance Corporation (FDIC) deposit assessment expense driven by both a higher assessment rate and a higher deposit assessment base.

Income Tax Expense

Income tax benefit was \$3.0 billion in 2020, compared with income tax expense of \$4.2 billion in 2019, driven by lower pre-tax income. The effective income tax rate was (1,016)% for 2020, compared with 17.5% for 2019. The effective income tax rate for 2020 reflected the impact of income tax benefits (including tax credits) on lower pre-tax income and included income tax benefits related to the resolution and reevaluation of prior period matters with U.S. federal and state tax authorities. The effective income tax rate for 2019 included the impact of certain litigation accruals that were not deductible for U.S. federal income tax purposes. For additional information on income taxes, see Note 23 (Income Taxes) to Financial Statements in this Report.

Earnings Performance (continued)

Operating Segment Results

We reorganized our management reporting into four reportable operating segments: Consumer Banking and Lending; Commercial Banking; Corporate and Investment Banking; and Wealth and Investment Management. All other business activities that are not included in the reportable operating segments have been included in Corporate. For additional information, see Table 7. We define our reportable operating segments by type of product and customer segment, and their results are based on our management reporting process. The management reporting process measures the performance of the reportable operating segments based on the Company's management structure, and the results are regularly reviewed by our Chief Executive Officer and Operating Committee. The management reporting process is based on U.S. GAAP and includes specific adjustments, such as funds transfer pricing for asset/liability management, shared revenues and expenses, and taxable-equivalent adjustments to consistently reflect income from taxable and tax-exempt sources, which allows management to assess performance consistently across the operating segments.

Prior period reportable operating segment results have been revised to reflect the reorganization of our management reporting structure. The reorganization did not impact the previously reported consolidated financial results of the Company. As a result of the reorganization, we have included a discussion of our 2019 financial results, compared with 2018, for each of our reportable operating segments and for Corporate.

Funds Transfer Pricing Corporate treasury manages a funds transfer pricing methodology that considers interest rate risk, liquidity risk, and other product characteristics. Operating segments pay a funding charge for their assets and receive a funding credit for their deposits, both of which are included in net interest income. The net impact of the funding charges or credits is recognized in corporate treasury.

Revenue and Expense Sharing When lines of business jointly serve customers, the line of business that is responsible for providing the product or service recognizes revenue or expense with a referral fee paid or an allocation of cost to the other line of business based on established internal revenue-sharing agreements.

When a line of business uses a service provided by another line of business or enterprise function (included in Corporate), expense is generally allocated based on the cost and use of the service provided.

Taxable-Equivalent Adjustments Taxable-equivalent adjustments related to tax-exempt income on certain loans and debt securities are included in net interest income, while taxable-equivalent adjustments related to income tax credits for low-income housing and renewable energy investments are included in noninterest income, in each case with corresponding impacts to income tax expense (benefit). Adjustments are included in Corporate, Commercial Banking, and Corporate and Investment Banking and are eliminated to reconcile to the Company's consolidated financial results.

Allocated Capital Reportable operating segments are allocated capital under a risk-sensitive framework that is primarily based on aspects of our regulatory capital requirements, and the assumptions and methodologies used to allocate capital are periodically assessed and revised. Management believes that return on allocated capital is a useful financial measure because it enables management, investors, and others to assess a reportable operating segment's use of capital.

Selected Metrics We present certain financial and nonfinancial metrics that management uses when evaluating reportable operating segment results. Management believes that these metrics are useful to investors and others to assess the performance, customer growth, and trends of reportable operating segments or lines of business.

Table 7: Management Reporting Structure

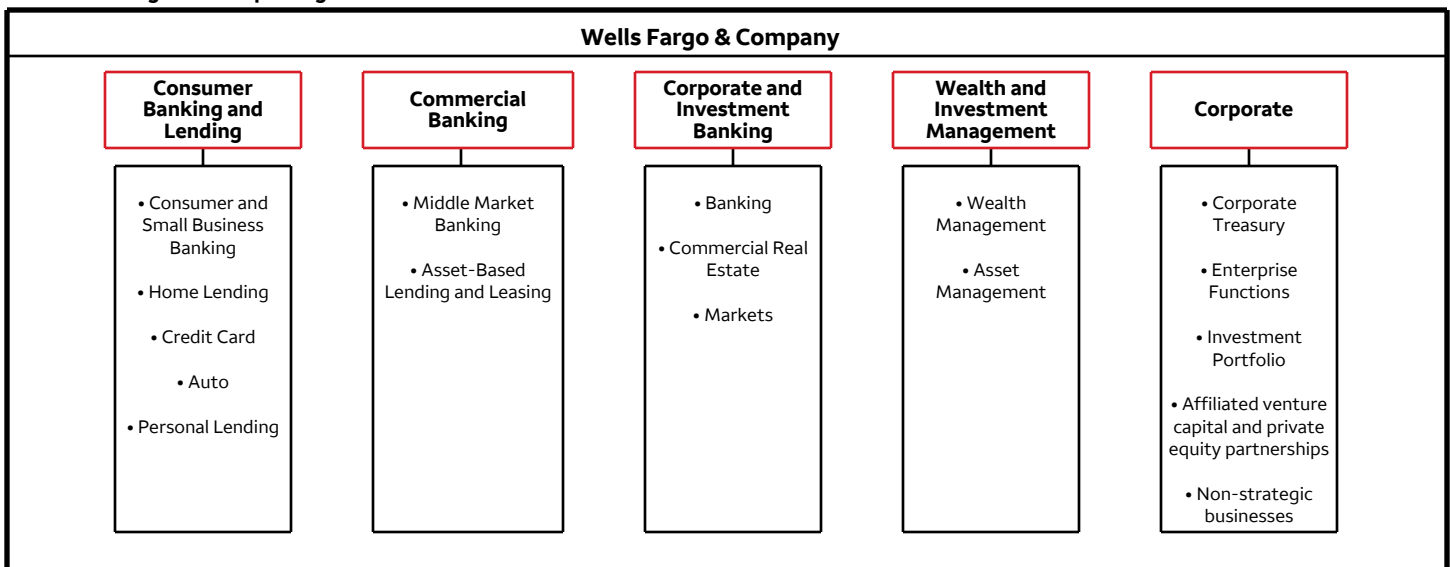


Table 8 and the following discussion present our results by reportable operating segment. For additional information, see Note 26 (Operating Segments) to Financial Statements in this Report.

Table 8: Operating Segment Results – Highlights

	Year ended December 31,						
(in millions)	Consumer Banking and Lending	Commercial Banking	Corporate and Investment Banking	Wealth and Investment Management	Corporate (1)	Reconciling Items (2)	Consolidated Company
2020							
Net interest income	\$ 23,378	6,191	7,501	2,993	247	(475)	39,835
Noninterest income	10,638	3,547	6,319	11,519	3,216	(2,734)	32,505
Total revenue	34,016	9,738	13,820	14,512	3,463	(3,209)	72,340
Provision for credit losses	5,662	3,744	4,946	249	(472)	—	14,129
Noninterest expense	26,976	6,908	7,703	12,051	3,992	—	57,630
Income (loss) before income tax expense (benefit)	1,378	(914)	1,171	2,212	(57)	(3,209)	581
Income tax expense (benefit)	302	(238)	330	552	(742)	(3,209)	(3,005)
Net income (loss) before noncontrolling interests	1,076	(676)	841	1,660	685	—	3,586
Less: Net income (loss) from noncontrolling interests	—	5	(1)	4	277	—	285
Net income (loss)	\$ 1,076	(681)	842	1,656	408	—	3,301
2019							
Net interest income	\$ 25,786	8,184	8,005	3,917	1,950	(611)	47,231
Noninterest income	12,105	4,154	6,223	11,815	5,859	(2,324)	37,832
Total revenue	37,891	12,338	14,228	15,732	7,809	(2,935)	85,063
Provision for credit losses	2,184	190	173	2	138	—	2,687
Noninterest expense	26,998	7,068	7,432	13,363	3,317	—	58,178
Income (loss) before income tax expense (benefit)	8,709	5,080	6,623	2,367	4,354	(2,935)	24,198
Income tax expense (benefit)	2,814	1,266	1,658	590	764	(2,935)	4,157
Net income before noncontrolling interests	5,895	3,814	4,965	1,777	3,590	—	20,041
Less: Net income (loss) from noncontrolling interests	—	6	(1)	9	478	—	492
Net income	\$ 5,895	3,808	4,966	1,768	3,112	—	19,549
2018							
Net interest income	\$ 26,985	8,748	8,345	4,317	2,259	(659)	49,995
Noninterest income	12,930	4,332	5,726	11,552	4,013	(2,140)	36,413
Total revenue	39,915	13,080	14,071	15,869	6,272	(2,799)	86,408
Provision for credit losses	1,931	(79)	13	(9)	(112)	—	1,744
Noninterest expense	26,162	7,368	7,471	12,551	2,574	—	56,126
Income (loss) before income tax expense (benefit)	11,822	5,791	6,587	3,327	3,810	(2,799)	28,538
Income tax expense (benefit)	2,915	1,456	1,663	831	1,596	(2,799)	5,662
Net income before noncontrolling interests	8,907	4,335	4,924	2,496	2,214	—	22,876
Less: Net income (loss) from noncontrolling interests	—	27	(7)	1	462	—	483
Net income	\$ 8,907	4,308	4,931	2,495	1,752	—	22,393

(1) All other business activities that are not included in the reportable operating segments have been included in Corporate. Corporate includes corporate treasury and enterprise functions, net of allocations (including funds transfer pricing, capital, liquidity and certain expenses), in support of the reportable operating segments, as well as our investment portfolio and affiliated venture capital and private equity partnerships. Corporate also includes certain lines of business that management has determined are no longer consistent with the long-term strategic goals of the Company, including our student loan and rail car leasing businesses, as well as previously divested businesses.

(2) Taxable-equivalent adjustments related to tax-exempt income on certain loans and debt securities are included in net interest income, while taxable-equivalent adjustments related to income tax credits for low-income housing and renewable energy investments are included in noninterest income, in each case with corresponding impacts to income tax expense (benefit). Adjustments are included in Corporate, Commercial Banking, and Corporate and Investment Banking and are eliminated to reconcile to the Company's consolidated financial results.

Earnings Performance (continued)

Consumer Banking and Lending offers diversified financial products and services for consumers and small businesses with annual sales generally up to \$5 million. These financial products and services include checking and savings accounts, credit and

debit cards, as well as home, auto, personal, and small business lending. Table 8a and Table 8b provide additional information for Consumer Banking and Lending.

Table 8a: Consumer Banking and Lending – Income Statement and Selected Metrics

(\$ in millions, unless otherwise noted)					Year ended December 31,		
	2020	2019	\$ Change 2020/ 2019	% Change 2020/ 2019	2018	\$ Change 2019/ 2018	% Change 2019/ 2018
Income Statement							
Net interest income	\$ 23,378	25,786	(2,408)	(9)%	\$ 26,985	(1,199)	(4)%
Noninterest income:							
Deposit-related fees	2,904	3,582	(678)	(19)	3,431	151	4
Card fees	3,318	3,672	(354)	(10)	3,551	121	3
Mortgage banking	3,224	2,314	910	39	2,666	(352)	(13)
Other	1,192	2,537	(1,345)	(53)	3,282	(745)	(23)
Total noninterest income	10,638	12,105	(1,467)	(12)	12,930	(825)	(6)
Total revenue	34,016	37,891	(3,875)	(10)	39,915	(2,024)	(5)
Provision for credit losses	5,662	2,184	3,478	159	1,931	253	13
Noninterest expense	26,976	26,998	(22)	—	26,162	836	3
Income before income tax expense	1,378	8,709	(7,331)	(84)	11,822	(3,113)	(26)
Income tax expense	302	2,814	(2,512)	(89)	2,915	(101)	(3)
Net income	\$ 1,076	5,895	(4,819)	(82)	\$ 8,907	(3,012)	(34)
Revenue by Line of Business							
Consumer and Small Business Banking	\$ 18,684	21,148	(2,464)	(12)	\$ 21,127	21	—
Consumer Lending:							
Home Lending	7,875	8,817	(942)	(11)	10,595	(1,778)	(17)
Credit Card	5,288	5,707	(419)	(7)	5,653	54	1
Auto	1,575	1,567	8	1	1,820	(253)	(14)
Personal Lending	594	652	(58)	(9)	720	(68)	(9)
Total revenue	\$ 34,016	37,891	(3,875)	(10)	\$ 39,915	(2,024)	(5)
Selected Metrics							
Consumer Banking and Lending:							
Return on allocated capital (1)	1.6 %	12.1			17.7 %		
Efficiency ratio (2)	79	71			66		
Headcount (#)	125,034	134,881		(7)	140,795		(4)
Retail bank branches (#)	5,032	5,352		(6)	5,518		(3)
Digital active customers (# in millions) (3)	32.0	30.3		6	29.1		4
Mobile active customers (# in millions) (3)	26.0	24.4		7	22.8		7
Consumer and Small Business Banking:							
Deposit spread (4)	1.8 %	2.4			2.5 %		
Debit card purchase volume (\$ in billions) (5)	\$ 391.9	367.6	24.3	7	\$ 346.7	20.9	6
Debit card purchase transactions (# in millions) (5)	8,792	9,189	(397)	(4)	8,777	412	5

(continued on following page)

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(\$ in millions, unless otherwise noted)					Year ended December 31,		
	2020	2019	\$ Change 2020/ 2019	% Change 2020/ 2019	2018	\$ Change 2019/ 2018	% Change 2019/ 2018
Home Lending:							
Mortgage banking fees:							
Net servicing income	(160)	454	(614)	NM	1,286	(832)	(65)%
Net gains on mortgage loan originations/sales	3,384	1,860	1,524	82 %	1,380	480	35
Total mortgage banking fees	3,224	2,314	910	39	2,666	(352)	(13)
Originations (\$ in billions):							
Retail	\$ 118.7	96.4	22.3	23	\$ 73.2	23.2	32
Correspondent	104.0	107.6	(3.6)	(3)	103.4	4.2	4
Total originations	222.7	204.0	18.7	9	176.6	27.4	16
% of originations held for sale (HFS)	73.9 %	66.1			74.6 %		
Third-party mortgage loans serviced (period-end) (\$ in billions) (6)	\$ 856.7	1,063.4	(206.7)	(19)	\$ 1,163.9	(100.5)	(9)
Mortgage servicing rights (MSR) carrying value (period-end)	6,125	11,517	(5,392)	(47)	14,649	(3,132)	(21)
Ratio of MSR carrying value (period-end) to third-party mortgage loans serviced (period-end) (6)	0.71 %	1.08			1.26 %		
Home lending loans 30+ days or more delinquency rate (7)(8)	0.64	0.64			1.03		
Credit Card:							
Point of sale (POS) volume (\$ in billions)	\$ 81.6	88.2	(6.6)	(7)	\$ 84.1	4.1	5
New accounts (# in thousands) (9)	1,022	1,840		(44)	1,808		2
Credit card loans 30+ days or more delinquency rate (8)	2.17 %	2.63			2.61 %		
Auto:							
Auto originations (\$ in billions)	\$ 22.8	25.4	(2.6)	(10)	\$ 18.3	7.1	39
Auto loans 30+ days or more delinquency rate (8)	1.77 %	2.56			3.22 %		
Personal Lending:							
New funded balances	\$ 1,599	2,829	(1,230)	(43)	\$ 2,583	246	10

NM – Not meaningful

- (1) Return on allocated capital is segment net income (loss) applicable to common stock divided by segment average allocated capital. Segment net income (loss) applicable to common stock is segment net income (loss) less allocated preferred stock dividends.
- (2) Efficiency ratio is segment noninterest expense divided by segment total revenue (net interest income and noninterest income).
- (3) Digital and mobile active customers is the number of consumer and small business customers who have logged on via a digital or mobile device, respectively, in the prior 90 days. Digital active customers includes both online and mobile customers.
- (4) Deposit spread is (i) the internal funds transfer pricing credit on segment deposits minus interest paid to customers for segment deposits, divided by (ii) average segment deposits.
- (5) Debit card purchase volume and transactions reflect combined activity for both consumer and business debit card purchases.
- (6) Excludes residential mortgage loans subserviced for others.
- (7) Excludes residential mortgage loans insured by the Federal Housing Administration (FHA) or guaranteed by the Department of Veterans Affairs (VA) and loans held for sale.
- (8) Beginning in second quarter 2020, customer payment deferral activities instituted in response to the COVID-19 pandemic may have delayed the recognition of delinquencies for those customers who would have otherwise moved into past due status.
- (9) Excludes certain private label new account openings.

Full year 2020 vs. full year 2019

Revenue decreased driven by:

- lower net interest income reflecting the lower interest rate environment;
- lower deposit-related fees driven by higher average consumer deposit account balances due to the economic slowdown associated with the COVID-19 pandemic, as well as fee waivers and reversals as part of our actions to support customers during the COVID-19 pandemic;
- lower card fees driven by lower credit card purchase volumes and lower debit card transaction volumes; and
- lower other income driven by higher gains in 2019 related to sales of PCI loans;

partially offset by:

- higher mortgage banking revenue driven by increased net gains on mortgage loan originations/sales reflecting higher real estate HFS origination volumes and higher margins.

Provision for credit losses increased driven by weakened economic conditions due to the impact of the COVID-19 pandemic.

Noninterest expense was largely unchanged reflecting:

- a decline in personnel expense due to lower headcount and lower incentive compensation expense;
- lower operating losses due to lower expense for litigation and customer remediation accruals; and
- lower advertising and promotion expense;

offset by:

- an increase in employee benefits expense related to the COVID-19 pandemic, including additional payments to certain customer-facing and support employees and for back-up childcare services;
- higher occupancy expense due to additional cleaning fees, supplies, and equipment expense related to the COVID-19 pandemic; and
- higher charitable donations expense due to the donation of PPP processing fees.

Earnings Performance (continued)

Full year 2019 vs. full year 2018

Revenue decreased driven by:

- lower net interest income reflecting the lower interest rate environment;
- lower noninterest income reflecting a decrease in mortgage banking fees driven by lower net servicing fees due to higher prepayments and sales of mortgage servicing rights; and
- lower other income driven by higher gains in 2018 related to sales of PCI loans;

partially offset by:

- higher deposit-related fees driven by higher customer transaction volumes; and
- higher card fees driven by higher credit card purchase volumes and higher debit card transaction volumes.

Provision for credit losses increased due to a lower level of credit quality improvement, partially offset by lower net charge-offs in the auto portfolio.

Noninterest expense increased due to:

- higher operating losses due to higher expense for litigation and customer remediation accruals;
- higher incentive compensation expense;
- higher advertising and promotion expense; and
- higher expenses allocated from enterprise functions, reflecting additional risk management and technology support;

partially offset by:

- lower core deposit intangibles expense reflecting the end of the 10-year amortization period on Wachovia intangibles in 2018; and
- lower FDIC deposit assessment expense due to the termination of the FDIC temporary assessment effective October 1, 2018.

Table 8b: Consumer Banking and Lending – Balance Sheet

(in millions)					Year ended December 31,		
	2020	2019	\$ Change 2020/ 2019	% Change 2020/ 2019	2018	\$ Change 2019/ 2018	% Change 2019/ 2018
Selected Balance Sheet Data (average)							
Loans by Line of Business:							
Home Lending	\$ 268,586	276,962	(8,376)	(3)%	\$ 279,850	(2,888)	(1)%
Auto	49,460	47,117	2,343	5	48,783	(1,666)	(3)
Credit Card	37,093	38,865	(1,772)	(5)	36,780	2,085	6
Small Business	15,173	9,951	5,222	52	10,526	(575)	(5)
Personal Lending	6,151	6,871	(720)	(10)	7,377	(506)	(7)
Total loans	\$ 376,463	379,766	(3,303)	(1)	\$ 383,316	(3,550)	(1)
Total deposits	722,085	629,110	92,975	15	608,186	20,924	3
Allocated capital	48,000	46,000	2,000	4	48,000	(2,000)	(4)
Selected Balance Sheet Data (period-end)							
Loans by Line of Business:							
Home Lending	\$ 253,942	278,325	(24,383)	(9)	\$ 277,579	746	—
Auto	49,072	49,124	(52)	—	46,260	2,864	6
Credit Card	36,664	41,013	(4,349)	(11)	39,025	1,988	5
Small Business	17,743	9,695	8,048	83	10,245	(550)	(5)
Personal Lending	5,375	6,845	(1,470)	(21)	7,083	(238)	(3)
Total loans	\$ 362,796	385,002	(22,206)	(6)	\$ 380,192	4,810	1
Total deposits	784,565	647,152	137,413	21	604,078	43,074	7

Full year 2020 vs. full year 2019

Total loans (period-end) decreased as growth in small business loans driven by loans funded under the PPP was more than offset by paydowns exceeding originations in the home lending, credit card and personal lending portfolios.

Total deposits (average and period-end) increased driven by government stimulus programs and lower consumer spending due to the COVID-19 pandemic.

Full year 2019 vs. full year 2018

Total deposits (period-end) increased driven by growth in consumer and small business banking deposits and higher mortgage escrow deposits reflecting an inflow of higher mortgage payoffs to be remitted to investors in accordance with servicing contracts.

Commercial Banking provides financial solutions to private, family owned and certain public companies. Products and services include banking and credit products across multiple

industry sectors and municipalities, secured lending and lease products, and treasury management. Table 8c and Table 8d provide additional information for Commercial Banking.

Table 8c: Commercial Banking – Income Statement and Selected Metrics

(\$ in millions)					Year ended December 31,		
	2020	2019	\$ Change 2020/ 2019	% Change 2020/ 2019	2018	\$ Change 2019/ 2018	% Change 2019/ 2018
Income Statement							
Net interest income	\$ 6,191	8,184	(1,993)	(24)%	\$ 8,748	(564)	(6)%
Noninterest income:							
Deposit-related fees	1,219	1,175	44	4	1,219	(44)	(4)
Lending-related fees	531	524	7	1	604	(80)	(13)
Lease income	646	931	(285)	(31)	1,025	(94)	(9)
Other	1,151	1,524	(373)	(24)	1,484	40	3
Total noninterest income	3,547	4,154	(607)	(15)	4,332	(178)	(4)
Total revenue	9,738	12,338	(2,600)	(21)	13,080	(742)	(6)
Provision for credit losses	3,744	190	3,554	NM	(79)	269	341
Noninterest expense	6,908	7,068	(160)	(2)	7,368	(300)	(4)
Income (loss) before income tax expense (benefit)	(914)	5,080	(5,994)	NM	5,791	(711)	(12)
Income tax expense (benefit)	(238)	1,266	(1,504)	NM	1,456	(190)	(13)
Less: Net income from noncontrolling interests	5	6	(1)	(17)	27	(21)	(78)
Net income (loss)	\$ (681)	3,808	(4,489)	NM	\$ 4,308	(500)	(12)
Revenue by Line of Business							
Middle Market Banking	\$ 5,067	6,691	(1,624)	(24)	\$ 7,240	(549)	(8)
Asset-Based Lending and Leasing	3,862	4,814	(952)	(20)	5,046	(232)	(5)
Other	809	833	(24)	(3)	794	39	5
Total revenue	\$ 9,738	12,338	(2,600)	(21)	\$ 13,080	(742)	(6)
Revenue by Product							
Lending and leasing	\$ 5,297	5,904	(607)	(10)	\$ 6,520	(616)	(9)
Treasury management and payments	3,398	4,698	(1,300)	(28)	4,873	(175)	(4)
Other	1,043	1,736	(693)	(40)	1,687	49	3
Total revenue	\$ 9,738	12,338	(2,600)	(21)	\$ 13,080	(742)	(6)
Selected Metrics							
Return on allocated capital	(4.5)%	17.5			19.4 %		
Efficiency ratio	71	57			56		
Headcount (#)	22,410	23,871		(6)	23,737		1

NM – Not meaningful

Full year 2020 vs. full year 2019

Revenue decreased driven by:

- lower net interest income reflecting the lower interest rate environment and lower average loan balances;
- lower lease income reflecting a reduction in the size of the operating lease asset portfolio; and
- lower net gains on equity securities due to impairments taken in 2020;

partially offset by:

- higher renewable energy tax credit income due to strong new investment activity.

Provision for credit losses increased reflecting economic uncertainty due to the impact of the COVID-19 pandemic on our commercial loan portfolios.

Noninterest expense decreased driven by:

- lower professional and outside services expense reflecting decreased project-related expense; and

- lower leases expense reflecting a reduction in the size of the operating lease asset portfolio;
- partially offset by:
- higher expenses allocated from enterprise functions reflecting additional risk management support.

Full year 2019 vs. full year 2018

Revenue decreased driven by:

- lower net interest income reflecting lower spreads on loans and lower average loan balances, as well as the impact of migration from noninterest-bearing to interest-bearing deposits;
- lower lending-related fees reflecting lower customer activity; and
- lower lease income reflecting a reduction in the size of the operating lease asset portfolio.

Provision for credit losses increased driven by lower recoveries and higher loan losses.

Earnings Performance (continued)

Noninterest expense decreased driven by:

- lower professional and outside services expense reflecting decreased project-related expense;
- lower core deposit intangibles expense reflecting the end of the 10-year amortization period on Wachovia intangibles in 2018;
- lower FDIC deposit assessment expense due to the termination of the FDIC temporary assessment effective October 1, 2018; and

- lower leases expense reflecting a reduction in the size of the operating lease asset portfolio;
- partially offset by:
- higher expenses allocated from enterprise functions reflecting additional risk management and technology support.

Table 8d: Commercial Banking – Balance Sheet

(in millions)	2020	2019			Year ended December 31,		
			\$ Change 2020/ 2019	% Change 2020/ 2019	2018	\$ Change 2019/ 2018	% Change 2019/ 2018
Selected Balance Sheet Data (average)							
Loans:							
Commercial and industrial	\$ 143,263	157,829	(14,566)	(9)%	\$ 159,565	(1,736)	(1)%
Commercial real estate	52,220	54,416	(2,196)	(4)	56,286	(1,870)	(3)
Lease financing and other	15,953	17,109	(1,156)	(7)	17,053	56	—
Total loans	\$ 211,436	229,354	(17,918)	(8)	\$ 232,904	(3,550)	(2)
Loans by Line of Business:							
Middle Market Banking	\$ 112,848	119,717	(6,869)	(6)	\$ 125,584	(5,867)	(5)
Asset-Based Lending and Leasing	97,482	108,422	(10,940)	(10)	105,927	2,495	2
Other	1,106	1,215	(109)	(9)	1,393	(178)	(13)
Total loans	\$ 211,436	229,354	(17,918)	(8)	\$ 232,904	(3,550)	(2)
Total deposits	\$ 200,381	186,942	13,439	7	\$ 194,610	(7,668)	(4)
Allocated capital	19,500	20,500	(1,000)	(5)	21,000	(500)	(2)
Selected Balance Sheet Data (period-end)							
Loans:							
Commercial and industrial	\$ 124,253	153,601	(29,348)	(19)	\$ 159,971	(6,370)	(4)
Commercial real estate	49,903	53,526	(3,623)	(7)	55,150	(1,624)	(3)
Lease financing and other	14,821	17,654	(2,833)	(16)	17,487	167	1
Total loans	\$ 188,977	224,781	(35,804)	(16)	\$ 232,608	(7,827)	(3)
Loans by Line of Business:							
Middle Market Banking	\$ 101,193	115,187	(13,994)	(12)	\$ 123,016	(7,829)	(6)
Asset-Based Lending and Leasing	86,811	108,470	(21,659)	(20)	108,311	159	—
Other	973	1,124	(151)	(13)	1,281	(157)	(12)
Total loans	\$ 188,977	224,781	(35,804)	(16)	\$ 232,608	(7,827)	(3)
Total deposits	208,284	194,469	13,815	7	193,250	1,219	1

Full year 2020 vs. full year 2019

Total loans (average and period-end) decreased driven by lower loan demand, including lower line utilization, and higher paydowns reflecting continued client liquidity and strength in the capital markets.

Total deposits (average and period-end) increased due to customers' preferences for liquidity given the economic uncertainty associated with the COVID-19 pandemic, government stimulus programs, and lower investment spending.

Full year 2019 vs. full year 2018

Total deposits (average) decreased driven by market pricing changes for commercial deposits.

Corporate and Investment Banking (CIB) delivers a suite of capital markets, banking, and financial products and services to corporate, commercial real estate, government and institutional clients globally. Products and services include corporate banking,

investment banking, treasury management, commercial real estate lending and servicing, equity and fixed income solutions, as well as sales, trading, and research capabilities. Table 8e and Table 8f provide additional information for CIB.

Table 8e: Corporate and Investment Banking – Income Statement and Selected Metrics

(\$ in millions)					Year ended December 31,		
	2020	2019	\$ Change 2020/ 2019	% Change 2020/ 2019	2018	\$ Change 2019/ 2018	% Change 2019/ 2018
Income Statement							
Net interest income	\$ 7,501	8,005	(504)	(6)%	\$ 8,345	(340)	(4)%
Noninterest income:							
Deposit-related fees	1,062	1,029	33	3	1,057	(28)	(3)
Lending-related fees	684	710	(26)	(4)	742	(32)	(4)
Investment banking fees	1,952	1,804	148	8	1,730	74	4
Net gains on trading activities	1,190	1,022	168	16	561	461	82
Other	1,431	1,658	(227)	(14)	1,636	22	1
Total noninterest income	6,319	6,223	96	2	5,726	497	9
Total revenue	13,820	14,228	(408)	(3)	14,071	157	1
Provision for credit losses	4,946	173	4,773	NM	13	160	NM
Noninterest expense	7,703	7,432	271	4	7,471	(39)	(1)
Income before income tax expense (benefit)	1,171	6,623	(5,452)	(82)	6,587	36	1
Income tax expense	330	1,658	(1,328)	(80)	1,663	(5)	—
Less: Net loss from noncontrolling interests	(1)	(1)	—	—	(7)	6	86
Net income	\$ 842	4,966	(4,124)	(83)	4,931	35	1
Revenue by Line of Business							
Banking:							
Lending	\$ 1,767	1,811	(44)	(2)	1,749	62	4
Treasury Management and Payments	1,680	2,290	(610)	(27)	2,460	(170)	(7)
Investment Banking	1,448	1,370	78	6	1,295	75	6
Total Banking	4,895	5,471	(576)	(11)	5,504	(33)	(1)
Commercial Real Estate	3,499	4,038	(539)	(13)	4,265	(227)	(5)
Markets:							
Fixed Income, Currencies, and Commodities (FICC)	4,314	3,760	554	15	3,313	447	13
Equities	1,204	1,078	126	12	992	86	9
Credit Adjustment (CVA/DVA) and Other	26	(6)	32	533	(22)	16	73
Total Markets	5,544	4,832	712	15	4,283	549	13
Other	(118)	(113)	(5)	(4)	19	(132)	NM
Total revenue	\$ 13,820	14,228	(408)	(3)	14,071	157	1
Selected Metrics							
Return on allocated capital	1.4 %	14.7			13.8 %		
Efficiency ratio	56	52			53		
Headcount (#)	8,178	7,918		3	8,245		(4)

NM – Not meaningful

Full year 2020 vs. full year 2019

Revenue decreased driven by:

- lower net interest income reflecting the lower interest rate environment and lower deposit balances; and
- lower commercial mortgage banking fees and related hedge income;

partially offset by:

- higher net gains from trading activities driven by higher interest rate product trading volumes due to lower interest rates, higher equities trading volumes and customer activity due to volatility in the equity markets, and higher credit trading volumes due to additional market liquidity from government actions in response to the COVID-19 pandemic, partially offset by losses due to higher prepayments on agency MBS pools, net of hedge gains, and wider credit spreads for non-agency and certain asset-backed securities; and
- higher investment banking fees due to increased debt and equities originations within our Investment Banking business, partially offset by lower advisory fees.

Provision for credit losses increased reflecting economic uncertainty due to the impact of the COVID-19 pandemic on our Commercial Real Estate business and oil and gas portfolio.

Noninterest expense increased driven by:

- higher operating losses due to higher expense for litigation and customer remediation accruals;
- higher occupancy expense due to additional cleaning fees, supplies, and equipment expenses related to the COVID-19 pandemic; and
- higher expenses allocated from enterprise functions reflecting risk management support, as well as investments in our operations and treasury management product services infrastructure;

partially offset by:

- a reduction in business travel and company events due to the impact of the COVID-19 pandemic.

Earnings Performance (continued)

Full year 2019 vs. full year 2018

Revenue increased driven by:

- higher trading volumes for rates and commodities, credit and residential mortgage-backed securities, partially offset by lower equity and foreign exchange trading income; and
- higher investment banking fees due to increased debt originations and higher advisory fees, partially offset by lower asset-backed finance securitization fees;

partially offset by:

- lower net interest income due to lower spreads on trading debt securities, loans, and deposits.

Provision for credit losses increased reflecting lower recoveries and higher loan losses in our oil and gas portfolio.

Noninterest expense decreased driven by:

- lower operating losses due to lower expense for litigation and customer remediation accruals; and
- lower FDIC deposit assessment expense due to the termination of the FDIC temporary assessment effective October 1, 2018;

partially offset by:

- higher expenses allocated from enterprise functions reflecting risk management support, as well as investments in technology, operations, and treasury management product services infrastructure.

Table 8f: Corporate and Investment Banking – Balance Sheet

(in millions)					Year ended December 31,		
	2020	2019	\$ Change 2020/ 2019	% Change 2020/ 2019	2018	\$ Change 2019/ 2018	% Change 2019/ 2018
Selected Balance Sheet Data (average)							
Loans:							
Commercial and industrial	\$ 172,492	168,506	3,986	2 %	\$ 157,251	11,255	7 %
Commercial real estate	82,832	79,804	3,028	4	81,343	(1,539)	(2)
Total loans	\$ 255,324	248,310	7,014	3	\$ 238,594	9,716	4
Loans by Line of Business:							
Banking	\$ 93,501	90,749	2,752	3	\$ 81,591	9,158	11
Commercial Real Estate	108,279	104,261	4,018	4	106,231	(1,970)	(2)
Markets	53,544	53,300	244	—	50,772	2,528	5
Total loans	\$ 255,324	248,310	7,014	3	\$ 238,594	9,716	4
Trading-related assets:							
Trading account securities	\$ 109,803	115,937	(6,134)	(5)	\$ 108,127	7,810	7
Reverse repurchase agreements/securities borrowed	71,485	89,190	(17,705)	(20)	73,793	15,397	21
Derivative assets	21,986	12,762	9,224	72	11,587	1,175	10
Total trading-related assets	\$ 203,274	217,889	(14,615)	(7)	\$ 193,507	24,382	13
Total assets	521,861	520,973	888	—	485,173	35,800	7
Total deposits	234,332	238,651	(4,319)	(2)	229,739	8,912	4
Allocated capital	34,000	31,500	2,500	8	33,000	(1,500)	(5)
Selected Balance Sheet Data (period-end)							
Loans:							
Commercial and industrial	\$ 160,000	173,985	(13,985)	(8)	\$ 170,480	3,505	2
Commercial real estate	84,456	79,451	5,005	6	79,525	(74)	—
Total loans	\$ 244,456	253,436	(8,980)	(4)	\$ 250,005	3,431	1
Loans by Line of Business:							
Banking	\$ 84,640	93,117	(8,477)	(9)	\$ 91,685	1,432	2
Commercial Real Estate	107,207	103,938	3,269	3	104,828	(890)	(1)
Markets	52,609	56,381	(3,772)	(7)	53,492	2,889	5
Total loans	\$ 244,456	253,436	(8,980)	(4)	\$ 250,005	3,431	1
Trading-related assets:							
Trading account securities	\$ 109,311	124,808	(15,497)	(12)	\$ 112,858	11,950	11
Reverse repurchase agreements/securities borrowed	57,248	90,077	(32,829)	(36)	74,615	15,462	21
Derivative assets	25,916	14,382	11,534	80	10,798	3,584	33
Total trading-related assets	\$ 192,475	229,267	(36,792)	(16)	\$ 198,271	30,996	16
Total assets	508,793	538,383	(29,590)	(5)	498,212	40,171	8
Total deposits	203,004	261,134	(58,130)	(22)	236,706	24,428	10

Full year 2020 vs. full year 2019

Total assets (period-end) decreased predominantly due to a decline in loan balances driven by lower loan demand and higher paydowns reflecting continued client liquidity and strength in the capital markets, as well as a decline in trading-related assets reflecting continued actions to manage under the asset cap.

Total deposits (period-end) decreased reflecting continued actions to manage under the asset cap.

Full year 2019 vs. full year 2018

Total assets (average and period-end) increased driven by growth in commercial and industrial loans and trading-related assets reflecting increased customer activity.

Total deposits (period-end) increased driven by growth in Commercial Real Estate and Markets.

Wealth and Investment Management provides personalized wealth management, investment and retirement products and services to clients across U.S.-based businesses including Wells Fargo Advisors, The Private Bank, Abbot Downing, and Wells Fargo Asset Management (WFAM). We serve clients' brokerage needs, and deliver financial planning, private banking,

credit, and fiduciary services to high-net worth and ultra-high-net worth individuals and families. We also provide investment management capabilities delivered to global investment institutional clients through separate accounts and the Wells Fargo Funds. Table 8g, Table 8h, and Table 8i provide additional information for Wealth and Investment Management.

Table 8g: Wealth and Investment Management

(\$ in millions, unless otherwise noted)					Year ended December 31,		
	2020	2019	\$ Change 2020/ 2019	% Change 2020/ 2019	2018	\$ Change 2019/ 2018	% Change 2019/ 2018
Income Statement							
Net interest income	\$ 2,993	3,917	(924)	(24)%	\$ 4,317	(400)	(9)%
Noninterest income:							
Brokerage fees	9,070	8,947	123	1	9,163	(216)	(2)
Trust and investment management fees	2,383	2,407	(24)	(1)	2,509	(102)	(4)
Other	66	461	(395)	(86)	(120)	581	484
Total noninterest income	11,519	11,815	(296)	(3)	11,552	263	2
Total revenue	14,512	15,732	(1,220)	(8)	15,869	(137)	(1)
Provision for credit losses	249	2	247	NM	(9)	11	122
Noninterest expense	12,051	13,363	(1,312)	(10)	12,551	812	6
Income before income tax expense	2,212	2,367	(155)	(7)	3,327	(960)	(29)
Income tax expense	552	590	(38)	(6)	831	(241)	(29)
Less: Net income from noncontrolling interests	4	9	(5)	(56)	1	8	800
Net income	\$ 1,656	\$ 1,768	(112)	(6)	\$ 2,495	(727)	(29)
Selected Balance Sheet Data (average)							
Total loans	\$ 78,775	74,986	3,789	5	\$ 73,976	1,010	1
Total deposits	162,521	139,151	23,370	17	157,223	(18,072)	(11)
Allocated capital	9,000	9,000	—	—	9,500	(500)	(5)
Selected Balance Sheet Data (period-end)							
Total loans	\$ 80,785	77,140	3,645	5	\$ 74,132	3,008	4
Total deposits	175,515	143,873	31,642	22	155,384	(11,511)	(7)
Selected Metrics							
Return on allocated capital	17.8 %	19.0			25.5 %		
Efficiency ratio	83	85			79		
Headcount (#)	29,515	30,818		(4)	31,898		(3)
Advisory assets (\$ in billions)	\$ 853	778	75	10	\$ 674	104	15
Total client assets (\$ in billions)	2,005	1,886	119	6	1,708	178	10
Annualized revenue per advisor (\$ in thousands) (1)	942	985	(43)	(4)	969	16	2
Total financial and wealth advisors (#)	13,513	14,414		(6)	14,885		(3)
Wells Fargo Asset Management assets under management (\$ in billions)	\$ 603	509	94	18	\$ 466	43	9

NM – Not meaningful

(1) Represents annualized total revenue (excluding Wells Fargo Asset Management) divided by average total financial and wealth advisors for the period.

Full year 2020 vs. full year 2019

Revenue decreased driven by:

- lower net interest income reflecting the lower interest rate environment, partially offset by higher average deposit balances; and
- net losses from equity securities driven by a decline in deferred compensation plan investment results (largely offset by lower personnel expense);

partially offset by:

- higher asset-based brokerage fees.

Provision for credit losses increased due to current and forecasted economic conditions due to the impact of the COVID-19 pandemic.

Noninterest expense decreased due to:

- lower operating losses due to lower expense for litigation and customer remediation accruals;
- lower technology, telecommunications and equipment expense driven by impairments of capitalized software in

2019 reflecting a reevaluation of software under development, and the reversal of an accrual for software costs in 2020; and

- lower deferred compensation plan expense and lower incentive compensation expense; partially offset by:
- higher financial advisor commissions expense due to higher brokerage fees.

Total loans (average and period-end) increased driven by growth in residential mortgage loans.

Total deposits (average and period-end) increased primarily due to growth in brokerage clients' cash balances.

Full year 2019 vs. full year 2018

Revenue decreased driven by:

- lower net interest income reflecting lower average deposit balances;

Earnings Performance (continued)

- lower brokerage fees driven by lower asset-based fees and retail brokerage transactional activity; and
- lower trust and investment fees reflecting the sale of our IRT business in 2019;

partially offset by:

- higher net gains from equity securities driven by an increase in deferred compensation plan investment results (largely offset by higher personnel expense), as well as an impairment in 2018 related to the sale of our ownership stake in The Rock Creek Group, LP (RockCreek).

Noninterest expense increased due to:

- higher personnel expense driven by higher deferred compensation plan expense (largely offset by net gains from equity securities);
- higher technology, telecommunications and equipment expense driven by impairments of capitalized software in 2019 reflecting a reevaluation of software under development; and
- higher operating losses due to higher expense for litigation and customer remediation accruals;

partially offset by:

- lower core deposit and other intangibles expense.

Total deposits (average and period-end) decreased as customers allocated more cash into higher yielding liquid alternatives.

WIM Advisory Assets In addition to transactional accounts, WIM offers advisory account relationships to brokerage customers. Fees from advisory accounts are based on a percentage of the market value of the assets as of the beginning of the quarter, which vary across the account types based on the distinct services provided, and are affected by investment performance as well as asset inflows and outflows. Advisory accounts include assets that are financial advisor-directed and separately managed by third-party managers, as well as certain client-directed brokerage assets where we earn a fee for advisory and other services, but do not have investment discretion.

WIM also manages personal trust and other assets for high net worth clients, with fee income earned based on a percentage of the market value of these assets. Table 8h presents advisory assets activity by WIM line of business for the years ended December 31, 2020, 2019 and 2018. Management believes that advisory assets is a useful metric because it allows management, investors, and others to assess how changes in asset amounts may impact the generation of certain asset-based fees.

For the years ended December 31, 2020, 2019 and 2018, the average fee rate by account type ranged from 50 to 120 basis points.

Table 8h: WIM Advisory Assets

(in billions)					Year ended
	Balance, beginning of period	Inflows (1)	Outflows (2)	Market impact (3)	Balance, end of period
December 31, 2020					
Client-directed (4)	\$ 169.4	36.4	(38.2)	18.7	186.3
Financial advisor-directed (5)	176.3	40.6	(33.6)	27.7	211.0
Separate accounts (6)	160.1	24.6	(27.4)	17.3	174.6
Mutual fund advisory (7)	83.7	11.3	(13.9)	10.3	91.4
Total Retail Brokerage	\$ 589.5	112.9	(113.1)	74.0	663.3
Total Private Wealth (8)	188.0	34.0	(45.8)	13.2	189.4
Total WIM advisory assets	\$ 777.5	146.9	(158.9)	87.2	852.7
December 31, 2019					
Client directed (4)	\$ 151.5	33.5	(41.8)	26.2	169.4
Financial advisor directed (5)	141.9	33.9	(34.7)	35.2	176.3
Separate accounts (6)	136.4	24.2	(29.7)	29.2	160.1
Mutual fund advisory (7)	71.3	11.8	(14.1)	14.7	83.7
Total Retail Brokerage	\$ 501.1	103.4	(120.3)	105.3	589.5
Total Private Wealth (8)	173.0	34.5	(43.8)	24.3	188.0
Total WIM advisory assets	\$ 674.1	137.9	(164.1)	129.6	777.5
December 31, 2018					
Client directed (4)	\$ 170.9	33.6	(41.0)	(12.0)	151.5
Financial advisor directed (5)	147.0	30.0	(32.9)	(2.2)	141.9
Separate accounts (6)	149.1	23.8	(29.1)	(7.4)	136.4
Mutual fund advisory (7)	75.8	12.8	(13.8)	(3.5)	71.3
Total Retail Brokerage	\$ 542.8	100.2	(116.8)	(25.1)	501.1
Total Private Wealth (8)	191.8	37.0	(42.9)	(12.9)	173.0
Total WIM advisory assets	\$ 734.6	137.2	(159.7)	(38.0)	674.1

(1) Inflows include new advisory account assets, contributions, dividends and interest.

(2) Outflows include closed advisory account assets, withdrawals and client management fees.

(3) Market impact reflects gains and losses on portfolio investments.

(4) Investment advice and other services are provided to client, but decisions are made by the client and the fees earned are based on a percentage of the advisory account assets, not the number and size of transactions executed by the client.

(5) Professionally managed portfolios with fees earned based on respective strategies and as a percentage of certain client assets.

(6) Professional advisory portfolios managed by Wells Fargo Asset Management or third-party asset managers. Fees are earned based on a percentage of certain client assets.

(7) Program with portfolios constructed of load-waived, no-load and institutional share class mutual funds. Fees are earned based on a percentage of certain client assets.

(8) Discretionary and non-discretionary portfolios held in personal trusts, investment agency, or custody accounts with fees earned based on a percentage of client assets.

Wells Fargo Asset Management (WFAM) Assets Under Management We earn trust and investment management fees from managing and administering assets through WFAM, which offers Wells Fargo proprietary mutual funds and manages institutional separate accounts. Generally, our trust and investment management fee income is earned from AUM where we have discretionary management authority over the investments and generate fees as a percentage of the market value of the AUM. WFAM assets under management consist of

equity, alternative, balanced, fixed income, money market, and stable value, and include client assets that are managed or sub-advised on behalf of other Wells Fargo lines of business. Table 8i presents WFAM AUM activity for the years ended December 31, 2020, 2019 and 2018. Management believes that AUM is a useful metric because it allows management, investors, and others to assess how changes in asset amounts may impact the generation of certain asset-based fees.

Table 8i: WFAM Assets Under Management

(in billions)					Year ended
	Balance, beginning of period	Inflows (1)	Outflows (2)	Market impact (3)	Balance, end of period
December 31, 2020					
Money market funds (4)	\$ 130.6	66.8	—	—	197.4
Other assets managed	378.2	101.3	(104.7)	30.8	405.6
Total WFAM assets under management	\$ 508.8	168.1	(104.7)	30.8	603.0
December 31, 2019					
Money market funds (4)	\$ 112.4	18.2	—	—	130.6
Other assets managed	353.5	75.1	(86.1)	35.7	378.2
Total WFAM assets under management	\$ 465.9	93.3	(86.1)	35.7	508.8
December 31, 2018					
Money market funds (4)	\$ 108.2	4.2	—	—	112.4
Other assets managed	395.7	85.5	(120.2)	(7.5)	353.5
Total WFAM assets under management	\$ 503.9	89.7	(120.2)	(7.5)	465.9

(1) Inflows include new managed account assets, contributions, dividends and interest.

(2) Outflows include closed managed account assets, withdrawals and client management fees.

(3) Market impact reflects gains and losses on portfolio investments.

(4) Money Market funds activity is presented on a net inflow or net outflow basis, because the gross flows are not meaningful nor used by management as an indicator of performance.

Corporate includes corporate treasury and enterprise functions, net of allocations (including funds transfer pricing, capital, liquidity and certain expenses), in support of the reportable operating segments, as well as our investment portfolio and affiliated venture capital and private equity partnerships. In addition, Corporate includes all restructuring charges related to efficiency initiatives, as well as the headcount for approximately 2,800 employees who have been notified of displacement and were previously included in the reportable operating segments.

Corporate also includes certain lines of business that management has determined are no longer consistent with the long-term strategic goals of the Company, including our student loan and rail car leasing businesses, as well as previously divested businesses. Our rail car leasing business has long-lived operating lease assets (as a lessor) that can result in future impairments based on changing economic and market conditions affecting long-term demand for specific types of rail cars. Table 8j and Table 8k provide additional information for Corporate.

Table 8j: Corporate – Income Statement and Selected Metrics

(\$ in millions)					Year ended December 31,		
	2020	2019	\$ Change 2020/2019	% Change 2020/2019	2018	\$ Change 2019/2018	% Change 2019/2018
Income Statement							
Net interest income	\$ 247	1,950	(1,703)	(87)%	\$ 2,259	(309)	(14)%
Noninterest income	3,216	5,859	(2,643)	(45)	4,013	1,846	46
Total revenue	3,463	7,809	(4,346)	(56)	6,272	1,537	25
Provision for credit losses	(472)	138	(610)	NM	(112)	250	223
Noninterest expense	3,992	3,317	675	20	2,574	743	29
Income (loss) before income tax expense (benefit)	(57)	4,354	(4,411)	NM	3,810	544	14
Income tax expense (benefit)	(742)	764	(1,506)	NM	1,596	(832)	(52)
Less: Net income from noncontrolling interests (1)	277	478	(201)	(42)	462	16	3
Net income	\$ 408	3,112	(2,704)	(87)	\$ 1,752	1,360	78
Headcount (#)	83,394	74,436		12	67,805		10

NM – Not meaningful

(1) Reflects results attributable to noncontrolling interests predominantly associated with the Company's consolidated venture capital investments.

Full year 2020 vs. full year 2019

Revenue decreased driven by:

- lower net interest income reflecting the lower interest rate environment, higher prepayments on debt securities, and a

reduction in the investment portfolio due to actions taken to manage under the asset cap;

- lower gains reflecting gains in 2019 of \$1.1 billion on the sale of our IRT business and \$362 million on the sale of Eastdil, which also resulted in a decline in trust and

Earnings Performance (continued)

investment management fees and commercial real estate brokerage commissions in 2020; and

- lower net gains on equity securities from our affiliated venture capital partnerships, as well as a decline in deferred compensation plan investment results (largely offset by lower personnel expense);

partially offset by:

- higher gains on debt securities due to portfolio re-balancing and actions taken to manage under the asset cap.

Provision for credit losses decreased due to a reduction in the allowance for credit losses as a result of the reclassification of student loans to loans held for sale after the announced sale of the portfolio in fourth quarter 2020.

Noninterest expense increased due to:

- higher restructuring charges driven predominantly by personnel costs, as well as facility closure costs, related to our efficiency initiatives that commenced in third quarter 2020. All restructuring charges were included in Corporate. For additional information on restructuring charges, see Note 22 (Restructuring Charges) to Financial Statements in this Report; and
- increased operating losses due to higher expense for litigation and customer remediation accruals;

partially offset by:

- lower deferred compensation expense; and
- lower expenses related to businesses that were divested in 2019.

Full year 2019 vs. full year 2018

Revenue increased driven by:

- gains in 2019 of \$1.1 billion on the sale of our IRT business and \$362 million on the sale of Eastdil, partially offset by a gain on the sale of Wells Fargo Shareowner Services in 2018; and
- higher net gains from equity securities driven by an increase in deferred compensation plan investment results (largely offset by higher personnel expense);

partially offset by:

- lower net interest income related to businesses that were divested in 2018.

Provision for credit losses increased due to a reduction in the allowance for credit losses as a result of the sale of Reliable Financial Services, Inc. in 2018.

Noninterest expense increased due to:

- increased operating losses due to higher expense for litigation accruals, partially offset by lower expense for customer remediation accruals; and
- higher deferred compensation expense;

partially offset by:

- lower lease expense in the rail car leasing business due to portfolio run-off.

Corporate includes AUM and AUA for IRT client assets of \$22 billion and \$700 billion, respectively, at December 31, 2020, which we continue to administer at the direction of the buyer pursuant to a transition services agreement. The transition services agreement has been extended and will now terminate no later than December 2021.

Table 8k: Corporate – Balance Sheet

(in millions)					Year ended December 31,		
	2020	2019	\$ Change 2020/ 2019	% Change 2020/ 2019	2018	\$ Change 2019/ 2018	% Change 2019/ 2018
Selected Balance Sheet Data (average)							
Cash, cash equivalents, and restricted cash	\$ 183,393	130,504	52,889	41 %	\$ 150,181	(19,677)	(13)%
Available-for-sale debt securities	221,493	252,099	(30,606)	(12)	248,883	3,216	1
Held-to-maturity debt securities	172,755	147,303	25,452	17	143,583	3,720	3
Equity securities	12,123	12,883	(760)	(6)	12,237	646	5
Total loans	19,790	18,540	1,250	7	16,407	2,133	13
Total assets	673,440	621,316	52,124	8	621,940	(624)	—
Total deposits	56,692	92,407	(35,715)	(39)	86,099	6,308	7
Selected Balance Sheet Data (period-end)							
Cash, cash equivalents, and restricted cash	\$ 235,239	111,384	123,855	111	\$ 144,606	(33,222)	(23)
Available-for-sale debt securities	208,694	250,801	(42,107)	(17)	253,652	(2,851)	(1)
Held-to-maturity debt securities	204,858	153,142	51,716	34	144,278	8,864	6
Equity securities	10,006	13,390	(3,384)	(25)	12,184	1,206	10
Total loans	10,623	21,906	(11,283)	(52)	16,173	5,733	35
Total assets	726,861	608,712	118,149	19	620,048	(11,336)	(2)
Total deposits	33,013	75,998	(42,985)	(57)	96,752	(20,754)	(21)

Full year 2020 vs. full year 2019

Total assets (average and period-end) increased due to an increase in cash, cash equivalents, and restricted cash managed by corporate treasury reflecting significant liquidity as a result of an increase in deposits from the reportable operating segments.

Total deposits (average and period-end) decreased reflecting actions taken to manage under the asset cap.

Full year 2019 vs. full year 2018

Total deposits (average) increased reflecting higher brokered certificates of deposit (CDs).

Total deposits (period-end) decreased reflecting actions taken to manage under the asset cap.

Balance Sheet Analysis

At December 31, 2020, our assets totaled \$1.96 trillion, up \$27.6 billion from December 31, 2019.

The following discussion provides additional information about the major components of our consolidated balance sheet.

Available-for-Sale and Held-to-Maturity Debt Securities

Table 9: Available-for-Sale and Held-to-Maturity Debt Securities

(\$ in millions)	December 31, 2020				December 31, 2019			
	Amortized cost, net (1)	Net unrealized gain (loss)	Fair value	Weighted average expected maturity (yrs)	Amortized cost	Net unrealized gain (loss)	Fair value	Weighted average expected maturity (yrs)
Available-for-sale (2)	215,533	4,859	220,392	4.5	260,060	3,399	263,459	4.7
Held-to-maturity (3)	205,720	6,587	212,307	4.5	153,933	2,927	156,860	4.9
Total	\$ 421,253	11,446	432,699	n/a	413,993	6,326	420,319	n/a

(1) Represents amortized cost of the securities, net of the allowance for credit losses of \$28 million related to available-for-sale debt securities and \$41 million related to held-to-maturity debt securities at December 31, 2020. The allowance for credit losses related to available-for-sale and held-to-maturity debt securities was \$0 at December 31, 2019, due to our adoption of CECL on January 1, 2020. For additional information, see Note 1 (Summary of Significant Accounting Policies) to Financial Statements in this Report.

(2) Available-for-sale debt securities are carried on the consolidated balance sheet at fair value.

(3) Held-to-maturity debt securities are carried on the consolidated balance sheet at amortized cost, net of the allowance for credit losses, subsequent to the adoption of CECL on January 1, 2020.

Table 9 presents a summary of our portfolio of investments in available-for-sale (AFS) and held-to-maturity (HTM) debt securities. The size and composition of our AFS and HTM debt securities is dependent upon the Company's liquidity and interest rate risk management objectives. The AFS debt securities portfolio can be used to meet funding needs that arise in the normal course of business or due to market stress. Changes in our interest rate risk profile may occur due to changes in overall economic or market conditions, which could influence loan origination demand, prepayment speeds, or deposit balances and mix. In response, the AFS debt securities portfolio can be rebalanced to meet the Company's interest rate risk management objectives. In addition to meeting liquidity and interest rate risk management objectives, the AFS and HTM debt securities portfolios may provide yield enhancement over other short-term assets. See the "Risk Management – Asset/Liability Management" section in this Report for more information on liquidity and interest rate risk.

The AFS debt securities portfolio primarily consists of liquid, high-quality U.S. Treasury and federal agency debt, and agency mortgage-backed securities (MBS). The portfolio also includes securities issued by U.S. states and political subdivisions, non-U.S. government securities, and highly rated collateralized loan obligations (CLOs). The fair value of AFS debt securities decreased from December 31, 2019, as purchases were more than offset by runoff, sales and transfers to HTM debt securities due to actions taken to reposition the overall portfolio for capital management purposes.

The HTM debt securities portfolio predominantly consists of liquid, high-quality U.S. Treasury and federal agency debt, and agency MBS. The portfolio also includes securities issued by U.S. states and political subdivisions and highly rated CLOs. Our intent is to hold these securities to maturity and collect the contractual cash flows. Debt securities are classified as HTM

through purchases or through transfers from the AFS debt securities portfolio. The net amortized cost of HTM debt securities increased from December 31, 2019, as purchases and transfers from AFS debt securities were partially offset by runoff.

At December 31, 2020, 92% of the combined AFS and HTM debt securities portfolio was rated AA- or above. Ratings are based on external ratings where available and, where not available, based on internal credit grades.

The total net unrealized gains on AFS and HTM debt securities increased from December 31, 2019, driven by lower interest rates. See Note 3 (Available-for-Sale and Held-to-Maturity Debt Securities) to Financial Statements in this Report for additional information on AFS and HTM debt securities, including a summary of debt securities by security type.

Loan Portfolios

Table 10 provides a summary of total outstanding loans by portfolio segment. Commercial loans decreased from December 31, 2019, driven by:

- lower demand for originations of new loans and lower utilization on existing revolving loans in commercial and industrial loans; and
- loan paydowns on continued customer liquidity from strength in capital markets.

Consumer loans decreased from December 31, 2019, due to:

- paydowns exceeding originations in first and junior lien mortgage loans; and
- lower consumer spending and originations in credit cards; partially offset by:
- the repurchase of \$30.0 billion of first lien mortgage loans from Government National Mortgage Association (GNMA) loan securitization pools.

Table 10: Loan Portfolios

(in millions)	December 31, 2020	December 31, 2019
Commercial	\$ 478,417	515,719
Consumer	409,220	446,546
Total loans	\$ 887,637	962,265
Change from prior year	\$ (74,628)	9,155

Balance Sheet Analysis (continued)

Average loan balances and a comparative detail of average loan balances is included in Table 3 under “Earnings Performance – Net Interest Income” earlier in this Report. Additional information on total loans outstanding by portfolio segment and class of financing receivable is included in the “Risk Management – Credit Risk Management” section in this Report. Period-end

balances and other loan related information are in Note 4 (Loans and Related Allowance for Credit Losses) to Financial Statements in this Report.

Table 11 shows contractual maturities for selected classes of commercial loans and the distribution of loans to changes in interest rates.

Table 11: Maturities for Selected Commercial Loan Categories

(in millions)	December 31, 2020			
	Within one year	After one year through five years	After five years	Total
Selected loan maturities:				
Commercial and industrial	\$ 124,270	171,314	23,221	318,805
Real estate mortgage	29,824	62,477	29,419	121,720
Real estate construction	10,620	10,737	448	21,805
Total selected loans	\$ 164,714	244,528	53,088	462,330
Distribution of loans to changes in interest rates:				
Loans at fixed interest rates	\$ 22,983	31,656	20,946	75,585
Loans at floating/variable interest rates	141,731	212,872	32,142	386,745
Total selected loans	\$ 164,714	244,528	53,088	462,330

Deposits

Deposits increased from December 31, 2019, reflecting:

- consumer and wealth customers’ preferences for liquidity given the economic uncertainty associated with the COVID-19 pandemic, loan payment deferrals, government stimulus programs, and lower customer spending; and
- an increase in mortgage escrow deposits reflecting an inflow of mortgage payoffs to be remitted to investors in accordance with servicing contracts;

partially offset by:

- actions taken to manage under the asset cap resulting in declines in time deposits, such as brokered certificates of deposit (CDs), and interest-bearing deposits in non-U.S. offices.

In fourth quarter 2020, we ceased the reclassification of certain transactional demand deposit balances to non-transactional deposit balances based on a final rule issued by the FRB, which amended the FRB reserve requirements of depository institutions. As a result, approximately \$380 billion of balances were classified as interest-bearing demand deposits, which were previously classified as savings deposits.

Table 12 provides additional information regarding deposits. Information regarding the impact of deposits on net interest income and a comparison of average deposit balances is provided in the “Earnings Performance – Net Interest Income” section and Table 3 earlier in this Report.

Table 12: Deposits

(\$ in millions)	Dec 31, 2020	% of total deposits	Dec 31, 2019	% of total deposits	% Change
Noninterest-bearing demand deposits	\$ 467,068	33 %	\$ 344,496	26 %	36
Interest-bearing demand deposits	447,446	32	62,814	5	612
Savings deposits	404,935	29	751,080	57	(46)
Time deposits	49,775	4	110,324	8	(55)
Interest-bearing deposits in non-U.S. offices	35,157	2	53,912	4	(35)
Total deposits	\$ 1,404,381	100 %	\$ 1,322,626	100 %	6

Equity

Total equity was \$185.9 billion at December 31, 2020, compared with \$188.0 billion at December 31, 2019. The decrease was driven by:

- common stock repurchases of \$3.4 billion (substantially all of which occurred in first quarter 2020); and
- dividends of \$6.3 billion;

partially offset by:

- net income of \$3.3 billion; and
- issuances of common stock of \$2.7 billion predominantly related to employee stock ownership plans.

Off-Balance Sheet Arrangements

In the ordinary course of business, we engage in financial transactions that are not recorded on the consolidated balance sheet, or may be recorded on the consolidated balance sheet in amounts that are different from the full contract or notional amount of the transaction. Our off-balance sheet arrangements include commitments to lend and purchase debt and equity securities, transactions with unconsolidated entities, guarantees, derivatives, and other commitments. These transactions are designed to (1) meet the financial needs of customers, (2) manage our credit, market or liquidity risks, and/or (3) diversify our funding sources.

Commitments to Lend

We enter into commitments to lend to customers, which are usually at a stated interest rate, if funded, and for specific purposes and time periods. When we enter into commitments, we are exposed to credit risk. The maximum credit risk for these commitments will generally be lower than the contractual amount because a significant portion of these commitments are not funded. For additional information, see Note 4 (Loans and Related Allowance for Credit Losses) to Financial Statements in this Report.

Transactions with Unconsolidated Entities

In the normal course of business, we enter into various types of on- and off-balance sheet transactions with special purpose entities (SPEs), which are corporations, trusts, limited liability companies or partnerships that are established for a limited purpose. Generally, SPEs are formed in connection with securitization transactions and are considered variable interest entities (VIEs). For additional information, see Note 8 (Securitizations and Variable Interest Entities) to Financial Statements in this Report.

Guarantees and Other Arrangements

Guarantees are contracts that contingently require us to make payments to a guaranteed party based on an event or a change in an underlying asset, liability, rate or index. Guarantees are generally in the form of standby letters of credit, direct pay letters of credit, written options, recourse obligations, exchange and clearing house guarantees, indemnifications, and other types of similar arrangements. For additional information, see Note 13 (Guarantees and Other Commitments) to Financial Statements in this Report.

Commitments to Purchase Debt and Equity Securities

We enter into commitments to purchase securities under resale agreements. We also may enter into commitments to purchase debt and equity securities to provide capital for customers' funding, liquidity or other future needs. For additional information, see Note 13 (Guarantees and Other Commitments) to Financial Statements in this Report.

Derivatives

We use derivatives to manage exposure to market risk, including interest rate risk, credit risk and foreign currency risk, and to assist customers with their risk management objectives. Derivatives are recorded on the consolidated balance sheet at fair value, and volume can be measured in terms of the notional amount, which is generally not exchanged, but is used only as the basis on which interest and other payments are determined. The notional amount is not recorded on the consolidated balance sheet and is not, when viewed in isolation, a meaningful measure of the risk profile of the instruments. For additional information, see Note 16 (Derivatives) to Financial Statements in this Report.

Risk Management

Wells Fargo manages a variety of risks that can significantly affect our financial performance and our ability to meet the expectations of our customers, shareholders, regulators and other stakeholders.

Risk is Part of our Business Model. The Company measures and manages risk as part of our business, including in connection with the products and services we offer to our customers. The risks we take include financial, such as credit, interest rate, market, liquidity and funding risks, and non-financial, such as operational including compliance and model risks, strategic and reputation risks.

Risk Profile. Our risk profile is a holistic view of all risks we hold at a point in time, including emerging risks. The Company monitors its risk profile, and the Board periodically reviews reports and analysis concerning our risk profile.

Risk Capacity. Risk capacity refers to the maximum level of risk that the Company could assume given its current level of resources before triggering regulatory and other constraints on its capital and liquidity needs.

Risk Appetite. Management defines and the Board approves the Company's risk appetite, which is the amount of risk the Company is comfortable taking given its current level of resources. Risk appetite defines which risks are acceptable and at what level and guides business and risk leaders. Risk appetite boundaries are set within the Company's risk capacity. The Company's risk appetite is articulated in a statement of risk appetite, which is approved at least annually by the Board. The Company continuously monitors its risk appetite, and the Board reviews periodic risk appetite reports and analysis.

Risk and Strategy. The Company's risk profile, risk capacity, risk appetite, and risk management effectiveness (i.e., the holistic measure of the quality and effectiveness of the Company's risk management activities, including the functional or programmatic use of controls and capabilities to manage risks) are considered in the strategic planning process, which is closely linked with the Company's capital planning process. The Company's Independent Risk Management (IRM) organization participates in strategic planning at several points in the process, providing challenge to and independent assessment of the Company's self-assessment of the risks associated with strategic planning initiatives. IRM also independently assesses the impact of the strategic plan on risk capacity, risk appetite, and risk management effectiveness at the principal line of business, enterprise function, and aggregate Company level. After review by management, the strategic plan is presented to the Board each year for review and approval.

Everyone Manages Risk. Every employee creates risk in the course of performing business activities and is required to manage that risk. Risk is everyone's responsibility. Every employee is required to comply with applicable laws, regulations, and Company policies.

Risk and Culture. Senior management sets the "tone at the top" by supporting a strong culture, defined by the Company's expectations, that guides how employees conduct themselves, work with colleagues, and make decisions. The Board holds senior management accountable for establishing and maintaining the

right culture and effectively managing risk. Employees are strongly encouraged and expected to speak up when they see something that could cause harm to the Company's customers, communities, employees, shareholders, or reputation. Because risk management is everyone's responsibility, all employees are expected to challenge risk decisions when appropriate and to escalate their concerns when they have not been addressed. Employee performance evaluations are tied to, and take into account, effective risk management. The Company's performance management and incentive compensation programs are designed to establish a balanced framework for risk and reward under core principles that employees are expected to know and practice. The Board, through its Human Resources Committee, plays an important role in overseeing and providing credible challenge to the Company's performance management and incentive compensation programs.

Risk Management Framework. The Company's risk management framework sets forth the core principles on how the Company seeks to manage and govern its risk. Many Company policies and documents anchor to the risk management framework's core principles. The Board's Risk Committee annually reviews and approves the risk management framework.

Wells Fargo's top priority is to strengthen our company by building the right risk and control infrastructure. We continue to enhance our risk management programs, including our operational and compliance risk management as required by the FRB's February 2, 2018, and the CFPB/OCC's April 20, 2018, consent orders.

Risk Governance

Role of the Board. The Board oversees the Company's business, including its risk management. The Board assesses management's performance, provides credible challenge, and holds management accountable for maintaining an effective risk management program and for adhering to risk management expectations.

Board Committee Structure. The Board carries out its risk oversight responsibilities directly and through its committees. The Risk Committee approves the Company's risk management framework and oversees its implementation, including the processes established by management to identify, assess, measure, monitor, and manage risks. It also monitors the Company's adherence to its risk appetite. In addition, the Risk Committee oversees IRM and the performance of the Chief Risk Officer (CRO) who reports functionally to the Risk Committee and administratively to the CEO.

Management Committee Structure. The Company has established management committees, including those focused on risk, that support management in carrying out its governance and risk management responsibilities. One type of management committee is a governance committee, which is a decision making body that operates for a particular purpose.

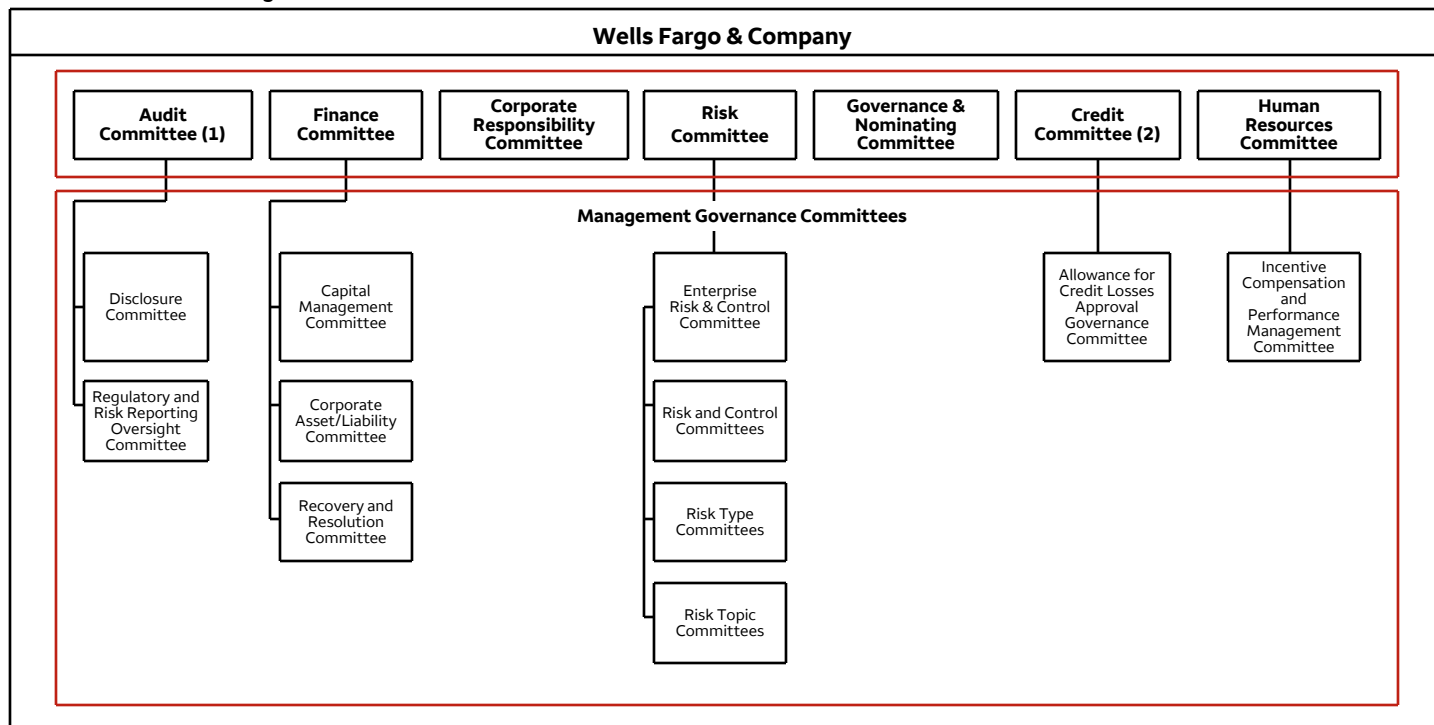
Each management governance committee is expected to discuss, document, and make decisions regarding significant risk issues, emerging risks, and risk acceptances; review and monitor progress related to critical and high-risk issues and remediation efforts within its scope, including lessons learned; and report key

challenges, decisions, escalations, other actions, and open issues as appropriate.

Table 13 presents, as of December 31, 2020, the structure of the Company's Board committees and management

governance committees reporting to a Board committee, including relevant reporting and escalation paths.

Table 13: Board and Management-level Governance Committee Structure



(1) The Audit Committee additionally oversees the internal audit function; external auditor independence, activities, and performance; and the disclosure framework for financial, regulatory and risk reports prepared for the Board, management, and bank regulatory agencies; and assists the Board in its oversight of the Company's compliance with legal and regulatory requirements.
 (2) Effective March 1, 2021, the Risk Committee will have primary oversight responsibility for credit risk and the Credit Committee will become a subcommittee of the Risk Committee.

Management Governance Committees Reporting to the Risk Committee of the Board. The Enterprise Risk & Control Committee (ERCC) governs the management of all risk types, including financial risks and non-financial risks. The ERCC receives information about risk and control events, addresses escalated risks and issues, actively oversees risk control, and provides regular updates to the Risk Committee regarding current and emerging risks and management's assessment of the effectiveness of the Company's risk management program.

The ERCC is co-chaired by the CEO and CRO, with membership comprised of the CEOs of our five principal lines of business (Consumer and Small Business Banking, Consumer Lending, Commercial Banking, Corporate and Investment Banking, and Wealth and Investment Management) and certain enterprise functions. The Chief Auditor or a designee attends all meetings of the ERCC. The ERCC has a direct escalation path to the Risk Committee. The ERCC also escalates market risks and issues and interest rate risks and issues to the Finance Committee and certain human capital risks and issues to the Human Resources Committee. In addition, the CRO has the authority to escalate risks and issues directly to the Board. Risks and issues are escalated to the ERCC in accordance with applicable policies and procedures governing escalations.

Each principal line of business and enterprise function has a risk and control committee, which is a management governance committee with a mandate that aligns with the ERCC but with its scope limited to the relevant principal line of business or enterprise function. The focus of these risk and control committees is on the risks that each principal line of business or enterprise function generates and is responsible for managing,

and the controls each principal line of business or enterprise function is expected to have in place.

In addition to each risk and control committee, management governance committees dedicated to specific risk types and risk topics also report to the ERCC to help provide more comprehensive governance of risks.

Risk Operating Model – Roles and Responsibilities

The Company has three lines of defense: the front line, Independent Risk Management, and Internal Audit. Our risk operating model creates necessary interaction, interdependencies, and ongoing engagement among the lines of defense:

- **Front Line** The front line, which is composed of our five principal lines of business and certain activities of enterprise functions, is the first line of defense. In the course of its business activities, the front line identifies, measures and assesses, manages, controls, monitors, and reports on risk associated with its business activities and balances risk and reward in decision making while remaining within the Company's risk appetite.
- **Independent Risk Management** IRM is the second line of defense. It establishes and maintains the Company's risk management program and provides oversight, including challenge to and independent assessment of the front line's execution of its risk management responsibilities.
- **Internal Audit** Internal Audit is the third line of defense. It is responsible for acting as an independent assurance function and validates that the risk management program is adequately designed and functioning effectively.

Risk Management (continued)

Risk Type Classifications

The Company uses common classifications, hierarchies, and ratings to enable consistency across risk management programs and aggregation of information. Risk type classifications permit the Company to identify and prioritize its risk exposures, including emerging risk exposures.

Operational Risk Management

Operational risk, which in addition to those discussed in this section, includes compliance risk and model risk, is the risk resulting from inadequate or failed internal processes, people and systems, or from external events.

The Board's Risk Committee has primary oversight responsibility for all aspects of operational risk, including significant supporting programs and/or policies regarding the Company's business resiliency and disaster recovery, data management, information security, technology, and third-party risk management. As part of its oversight responsibilities, the Board's Risk Committee reviews and approves significant operational risk policies and oversees the Company's operational risk management program.

At the management level, Operational Risk Management, which is part of IRM, has oversight responsibility for operational risk. Operational Risk Management reports to the CRO and provides periodic reports related to operational risk to the Board's Risk Committee. Operational Risk Management's oversight responsibilities include change management risk, human capital risk, technology risk, third-party risk, information risk management, information security risk, and data management risk.

Information security is a significant operational risk for financial institutions such as Wells Fargo, and includes the risk arising from unauthorized access, use, disclosure, disruption, modification, or destruction of information or information systems. The Board is actively engaged in the oversight of the Company's information security risk management and cyber defense programs. The Board's Risk Committee has primary oversight responsibility for information security risk and approves the Company's information security program, which includes the information security policy and the cyber defense program. A Technology Subcommittee of the Risk Committee assists the Risk Committee in providing oversight of technology, information security, and cybersecurity risks as well as data management risk. The Technology Subcommittee reviews and recommends to the Risk Committee for approval any significant programs and/or policies supporting information security risk (including cybersecurity risk), technology risk, and data management risk. The Technology Subcommittee reports to the Risk Committee and both provide updates to the full Board.

Wells Fargo and other financial institutions continue to be the target of various evolving and adaptive cyber attacks, including malware, ransomware, phishing, and denial-of-service, as part of an effort to disrupt the operations of financial institutions, potentially test their cybersecurity capabilities, commit fraud, or obtain confidential, proprietary or other information. Cyber attacks have also focused on targeting online applications and services, such as online banking, as well as cloud-based and other products and services provided by third parties, and have targeted the infrastructure of the internet causing the widespread unavailability of websites and degrading website performance. Wells Fargo has not experienced any material losses relating to these or other types of cyber attacks. Cybersecurity risk is a priority for Wells Fargo, and we continue to develop and enhance our controls, processes and systems in order to protect our networks, computers, software and data

from attack, damage or unauthorized access. Wells Fargo is also proactively involved in industry cybersecurity efforts and working with other parties, including our third-party service providers and governmental agencies, to continue to enhance defenses and improve resiliency to cybersecurity threats. See the "Risk Factors" section in this Report for additional information regarding the risks associated with a failure or breach of our operational or security systems or infrastructure, including as a result of cyber attacks.

Compliance Risk Management

Compliance risk (a type of operational risk) is the risk resulting from the failure to comply with laws (legislation, regulations and rules) and regulatory guidance, and the failure to appropriately address associated impacts, including to customers. Compliance risk encompasses violations of applicable internal policies, program requirements, procedures, and standards related to ethical principles applicable to the banking industry.

The Board's Risk Committee has primary oversight responsibility for all aspects of compliance risk, including financial crimes risk. As part of its oversight responsibilities, the Board's Risk Committee reviews and approves significant supporting compliance risk and financial crimes risk policies and programs and oversees the Company's compliance risk management and financial crimes risk management programs.

Conduct risk, a sub-category of compliance risk, is the risk of inappropriate, unethical, or unlawful behavior on the part of employees or individuals acting on behalf of the Company, caused by deliberate or unintentional actions or business practices. In connection with its oversight of conduct risk, the Board oversees the alignment of employee conduct to the Company's risk appetite (which the Board approves annually). The Board's Risk Committee has primary oversight responsibility for conduct risk and risk management components of the Company's culture, while the responsibilities of the Board's Human Resources Committee include oversight of the Company's culture, Code of Ethics and Business Conduct, human capital management (including talent management and succession planning), performance management program, and incentive compensation risk management program.

At the management level, the Compliance function, which is part of IRM, monitors the implementation of the Company's compliance and conduct risk programs. Financial Crimes Risk Management, which is part of the Compliance function, oversees and monitors financial crimes risk. The Compliance function reports to the CRO and provides periodic reports related to compliance risk to the Board's Risk Committee.

Model Risk Management

Model risk (a type of operational risk) is the risk arising from the potential for adverse consequences from decisions made based on model outputs that may be incorrect or used inappropriately.

The Board's Risk Committee has primary oversight responsibility for model risk. As part of its oversight responsibilities, the Board's Risk Committee oversees the Company's model risk management policy, model governance, model performance, model issue remediation status, and adherence to model risk appetite metrics.

At the management level, the Model Risk function, which is part of IRM, has oversight responsibility for model risk and is responsible for governance, validation and monitoring of model risk across the Company. The Model Risk function reports to the CRO and provides periodic reports related to model risk to the Board's Risk Committee.

Strategic Risk Management

Strategic risk is the risk to earnings, capital, or liquidity arising from adverse business decisions, improper implementation of strategic initiatives, or inadequate responses to changes in the external operating environment.

The Board has primary oversight responsibility for strategic planning and oversees management's development and implementation of and approves the Company's strategic plan, and considers whether it is aligned with the Company's risk appetite and risk management effectiveness. Management develops, executes and recommends significant strategic corporate transactions and the Board evaluates management's proposals, including their impact on the Company's risk profile and financial position. The Board's Risk Committee has primary oversight responsibility for the Company's strategic risk and the adequacy of the Company's strategic risk management program, including associated risk management practices, processes and controls. The Board's Risk Committee also receives updates from management regarding new business initiatives activity and risks related to new or changing products, as appropriate.

At the management level, the Strategic Risk Oversight function, which is part of IRM, has oversight responsibility for strategic risk. The Strategic Risk Oversight function reports into the CRO and supports periodic reports related to strategic risk provided to the Board's Risk Committee.

Reputation Risk Management

Reputation risk is the risk arising from the potential that negative stakeholder opinion or negative publicity regarding the Company's business practices, whether true or not, will adversely impact current or projected financial conditions and resilience, cause a decline in the customer base, or result in costly litigation. Stakeholders include employees, customers, communities, shareholders, regulators, elected officials, advocacy groups, and media organizations.

The Board's Risk Committee has primary oversight responsibility for reputation risk, while each Board committee has reputation risk oversight responsibilities related to their primary oversight responsibilities. As part of its oversight responsibilities, the Board's Risk Committee receives reports from management that help it monitor how effectively the Company is managing reputation risk. As part of its oversight responsibilities for social and public responsibility matters, the Board's Corporate Responsibility Committee receives reports from management relating to stakeholder perceptions of the Company.

At the management level, the Reputation Risk Oversight function, which is part of IRM, has oversight responsibility for reputation risk. The Reputation Risk Oversight function reports into the CRO and supports periodic reports related to reputation risk provided to the Board's Risk Committee.

Credit Risk Management

We define credit risk as the risk of loss associated with a borrower or counterparty default (failure to meet obligations in accordance with agreed upon terms). Credit risk exists with many of our assets and exposures such as debt security holdings, certain derivatives, and loans.

Effective March 1, 2021, the Board's Risk Committee will have primary oversight responsibility for credit risk and the Credit Committee will become a subcommittee of the Risk Committee. At the management level, Credit Risk, which is part of IRM, has oversight responsibility for credit risk. Credit Risk reports to the CRO and supports periodic reports related to

credit risk provided to the Board's Risk Committee or its Credit Subcommittee.

Loan Portfolio

Our loan portfolios represent the largest component of assets on our consolidated balance sheet for which we have credit risk. Table 14 presents our total loans outstanding by portfolio segment and class of financing receivable.

Table 14: Total Loans Outstanding by Portfolio Segment and Class of Financing Receivable

(in millions)	Dec 31, 2020	Dec 31, 2019
Commercial:		
Commercial and industrial	\$ 318,805	354,125
Real estate mortgage	121,720	121,824
Real estate construction	21,805	19,939
Lease financing	16,087	19,831
Total commercial	478,417	515,719
Consumer:		
Residential mortgage – first lien	276,674	293,847
Residential mortgage – junior lien	23,286	29,509
Credit card	36,664	41,013
Auto	48,187	47,873
Other consumer	24,409	34,304
Total consumer	409,220	446,546
Total loans	\$ 887,637	962,265

We manage our credit risk by establishing what we believe are sound credit policies for underwriting new business, while monitoring and reviewing the performance of our existing loan portfolios. We employ various credit risk management and monitoring activities to mitigate risks associated with multiple risk factors affecting loans we hold including:

- Loan concentrations and related credit quality;
- Counterparty credit risk;
- Economic and market conditions;
- Legislative or regulatory mandates;
- Changes in interest rates;
- Merger and acquisition activities; and
- Reputation risk.

Our credit risk management oversight process is governed centrally, but provides for direct management and accountability by our lines of business. Our overall credit process includes comprehensive credit policies, disciplined credit underwriting, frequent and detailed risk measurement and modeling, extensive credit training programs, and a continual loan review and audit process.

A key to our credit risk management is adherence to a well-controlled underwriting process, which we believe is appropriate for the needs of our customers as well as investors who purchase the loans or securities collateralized by the loans.

Risk Management – Credit Risk Management (*continued*)

Credit Quality Overview Credit quality in 2020 was affected by the economic impact that the COVID-19 pandemic had on our customer base. In particular:

- Nonaccrual loans were \$8.7 billion at December 31, 2020, up from \$5.3 billion at December 31, 2019. Commercial nonaccrual loans increased to \$4.8 billion at December 31, 2020, compared with \$2.3 billion at December 31, 2019, and consumer nonaccrual loans increased to \$3.9 billion at December 31, 2020, compared with \$3.1 billion at December 31, 2019. Nonaccrual loans represented 0.98% of total loans at December 31, 2020, compared with 0.56% at December 31, 2019.
- Net loan charge-offs as a percentage of our average commercial and consumer loan portfolios were 0.31% and 0.39%, respectively, in 2020, compared with 0.13% and 0.48% in 2019.
- Loans that are not government insured/guaranteed and 90 days or more past due and still accruing were \$78 million and \$612 million in our commercial and consumer portfolios, respectively, at December 31, 2020, compared with \$78 million and \$855 million at December 31, 2019.
- Our provision for credit losses for loans was \$14.0 billion in 2020, compared with \$2.7 billion in 2019.
- The ACL for loans increased to \$19.7 billion, or 2.22% of total loans, at December 31, 2020, compared with \$10.5 billion, or 1.09%, at December 31, 2019.

Additional information on our loan portfolios and our credit quality trends follows.

TROUBLED DEBT RESTRUCTURING RELIEF The CARES Act provides banks optional, temporary relief from accounting for certain loan modifications as TDRs. The modifications must be related to the adverse effects of COVID-19, and certain other criteria are required to be met in order to apply the relief. In first quarter 2020, we elected to apply the TDR relief provided by the CARES Act. On December 27, 2020, the CAA was signed into law which extended the expiration of the TDR relief to no later than January 1, 2022.

On April 7, 2020, federal banking regulators issued the *Interagency Statement on Loan Modifications and Reporting for Financial Institutions Working with Customers Affected by the Coronavirus (Revised)* (the Interagency Statement). The Interagency Statement provides additional TDR relief as it clarifies that it is not necessary to consider the impact of COVID-19 on the financial condition of a borrower in connection with short-term (e.g., six months or less) loan modifications related to COVID-19 provided the borrower is current at the date the modification program is implemented. For additional information regarding the TDR relief provided by the CARES Act and the clarifying TDR accounting guidance from the Interagency Statement, see Note 1 (Summary of Significant Accounting Policies) to Financial Statements in this Report.

The TDR relief provided under the CARES Act, as well as from the Interagency Statement, does not change our processes for monitoring the credit quality of our loan portfolios or for updating our measurement of the ACL for loans based on expected losses.

Additionally, our election to apply the TDR relief provided by the CARES Act and the Interagency Statement impacts our regulatory capital ratios as these loan modifications related to COVID-19 are not adjusted to a higher risk-weighting normally required with TDR classification.

COVID-Related Lending Accommodations During 2020, we provided accommodations to customers in response to the COVID-19 pandemic, including fee reversals for consumer and small business banking customers, and payment deferrals, fee waivers, covenant waivers, and other expanded assistance for mortgage, credit card, auto, small business, personal and commercial lending customers. Certain foreclosure, collection and credit bureau reporting activities were also suspended. Additionally, we deferred rental payments on certain leased assets for which we are the lessor.

Table 15 summarizes the unpaid principal balance (UPB) of consumer loans that received accommodations under loan modification programs established to assist customers with the economic impact of the COVID-19 pandemic (COVID-related modifications) and that remained in a deferral period as of December 31, 2020. These amounts included accommodations made for customers with loans reported on our consolidated balance sheet and excluded accommodations made for customers with loans that we service for others. COVID-related modifications primarily included payment deferrals of principal, interest or both, as well as interest and fee waivers. As of December 31, 2020, \$1.7 billion of unpaid principal balance of commercial loans were still in a deferral period, which represented less than 1% of our total outstanding commercial loans.

Customer payment deferral activities instituted in response to the COVID-19 pandemic could continue to delay the recognition of net charge-offs, delinquencies, and nonaccrual status for those customers who would have otherwise moved into past due or nonaccrual status. As of December 31, 2020, the COVID-related modification programs described in Table 15 expired, except for the programs for residential mortgage loans. However, based on the terms of the modifications provided under the programs in Table 15, certain balances may remain in a deferral period during 2021. Customers requiring assistance after receiving payment deferrals under the programs described in Table 15 may be eligible to receive modifications consistent with those offered prior to the COVID-19 pandemic, such as interest rate reductions, term extensions, or principal forgiveness. Additional modifications provided to customers after their exit from COVID-related modification programs may be eligible for the TDR relief provided by the CARES Act and the Interagency Statement.

As of December 31, 2020, substantially all of our consumer loans were current after exiting the deferral period. Customer loans that are not further modified upon exit from the deferral period may be placed on nonaccrual status or charged-off in accordance with our policies if customers are unable to resume making payments in accordance with the contractual terms of their agreement. See Note 1 (Summary of Significant Accounting Policies) to Financial Statements in this Report for additional information on our nonaccrual and charge-off policies.

Of the total modifications granted during 2020, \$6.9 billion of unpaid principal balance of consumer loans were classified as TDRs as of December 31, 2020, including \$4.0 billion that were already classified as a TDR when the COVID-related modification was granted.

For information related to loans that are classified as TDRs, see Note 4 (Loans and Related Allowance for Credit Losses) to Financial Statements in this Report.

Table 15: Consumer Loan Modifications Related to COVID-19

(\$ in millions)	Unpaid principal balance of modified loans still in deferral period at Dec 31, 2020	% of loan class (1)	% current at Dec 31, 2020 after exit from deferral period (2)	General program description
Consumer:				
Residential mortgage – first lien	\$ 10,544	4 %	96	Initial deferral up to 90 days of scheduled principal and interest, with available extensions up to a total of 12 months.
Residential mortgage – junior lien	1,355	6	91	Initial deferral up to 90 days of scheduled principal and interest, with available extensions up to a total of 12 months.
Credit card	373	1	87	Initial 90 day deferral of minimum payment and waiver of interest and fees until June 2020, then initial or subsequent 60 day deferral of minimum payment and waiver of certain fees. Deferrals were limited to an initial period and one subsequent deferral; these programs are no longer being offered.
Auto	1,911	4	91	Initial 90 day deferral of scheduled principal and interest, with available extensions of 90 days. This program has expired and deferrals are no longer being offered.
Other consumer	126	1	91	Revolving lines: Initial 90 day deferral of minimum payment and waiver of interest and fees, with available extensions of 60 days. Installment loans: Initial 90 day deferral of scheduled principal and interest, with available extensions of 90 days. This program has expired and deferrals are no longer being offered.
Subtotal	14,309	3		
Residential mortgage – first lien (government insured/guaranteed) (3)	15,925	6		
Total consumer	\$ 30,234	7%		

(1) Based on total loans outstanding at December 31, 2020.

(2) Represents the UPB of loans that exited the deferral period and had a balance that was less than 30 days past due as of December 31, 2020.

(3) Represents residential mortgage – first lien loans insured by the Federal Housing Administration (FHA) or guaranteed by the Department of Veterans Affairs (VA) that were primarily repurchased from GNMA loan securitization pools. For additional information on GNMA loan securitization pools, see the “Risk Management – Credit Risk Management – Risks Relating to Servicing Activities” section in this Report. FHA/VA loans are entitled to payment deferrals of scheduled principal and interest up to a total of 12 months.

Significant Loan Portfolio Reviews Measuring and monitoring our credit risk is an ongoing process that tracks delinquencies, collateral values, Fair Isaac Corporation (FICO) scores, economic trends by geographic areas, loan-level risk grading for certain portfolios (typically commercial) and other indications of credit risk. Our credit risk monitoring process is designed to enable early identification of developing risk and to support our determination of an appropriate allowance for credit losses. The following discussion provides additional characteristics and analysis of our significant portfolios. See Note 4 (Loans and Related Allowance for Credit Losses) to Financial Statements in this Report for more analysis and credit metric information for each of the following portfolios.

COMMERCIAL AND INDUSTRIAL LOANS AND LEASE FINANCING For purposes of portfolio risk management, we aggregate commercial and industrial loans and lease financing according to market segmentation and standard industry codes. We generally subject commercial and industrial loans and lease financing to individual risk assessment using our internal borrower and collateral quality ratings. Our ratings are aligned to regulatory definitions of pass and criticized categories with criticized segmented among special mention, substandard, doubtful and loss categories.

We had \$19.3 billion of the commercial and industrial loan and lease financing portfolio internally classified as criticized in accordance with regulatory guidance at December 31, 2020, compared with \$16.6 billion at December 31, 2019, reflecting increases driven by the oil, gas and pipelines, real estate and construction, entertainment and recreation, and technology, telecom and media categories due to the economic impact of the COVID-19 pandemic.

The majority of our commercial and industrial loans and lease financing portfolio is secured by short-term assets, such as accounts receivable, inventory and debt securities, as well as long-lived assets, such as equipment and other business assets. Generally, the primary source of repayment for this portfolio is the operating cash flows of customers, with the collateral securing this portfolio representing a secondary source of repayment.

The decrease in loan balances in the portfolio at December 31, 2020, compared with December 31, 2019, was driven by lower loan demand and higher paydowns reflecting continued customer liquidity and strength in the capital markets. Table 16 provides our commercial and industrial loans and lease financing by industry. The industry categories are based on the North American Industry Classification System.

Risk Management – Credit Risk Management (continued)

Table 16: Commercial and Industrial Loans and Lease Financing by Industry

(in millions)	December 31, 2020				December 31, 2019			
	Nonaccrual loans	Total portfolio	% of total loans	Total commitments (1)	Nonaccrual loans	Total portfolio	% of total loans	Total commitments (1)
Financials except banks	\$ 160	117,726	13%	\$ 206,999	\$ 112	117,312	12%	\$ 200,848
Technology, telecom and media	144	23,061	3	56,500	28	22,447	2	53,343
Real estate and construction	133	23,113	3	51,526	47	22,011	2	48,217
Retail	94	17,393	2	41,669	105	19,923	2	41,938
Equipment, machinery and parts manufacturing	81	18,158	2	41,332	36	23,457	2	42,040
Materials and commodities	39	12,071	1	33,879	33	16,375	2	39,369
Health care and pharmaceuticals	145	15,322	2	32,154	28	14,920	2	30,168
Oil, gas and pipelines	953	10,471	1	30,055	615	13,562	1	35,445
Food and beverage manufacturing	17	12,401	1	28,908	9	14,991	2	29,172
Auto related	79	11,817	1	25,034	24	15,996	2	26,310
Commercial services	107	10,284	1	24,442	50	10,455	*	22,713
Utilities	2	5,031	*	18,564	224	5,995	*	19,390
Entertainment and recreation	263	9,884	1	17,551	44	13,462	1	19,854
Transportation services	573	9,236	1	15,531	224	10,957	*	17,660
Diversified or miscellaneous	7	5,437	*	14,717	4	4,600	*	11,290
Insurance and fiduciaries	2	3,297	*	14,334	1	5,525	*	15,596
Banks	—	12,789	1	13,842	—	20,070	*	20,728
Agribusiness	81	6,314	*	11,642	35	7,539	*	12,901
Government and education	9	5,464	*	11,065	6	5,363	*	12,267
Other (2)	68	5,623	*	23,315	15	8,996	1%	21,698
Total	\$ 2,957	334,892	33%	\$ 713,059	\$ 1,640	373,956	39 %	\$ 720,947

* Less than 1%.

(1) Total commitments consist of loans outstanding plus unfunded credit commitments, excluding issued letters of credit.

(2) No other single industry had total loans in excess of \$3.8 billion and \$4.7 billion at December 31, 2020 and 2019, respectively.

Loans to financials except banks, our largest industry concentration, is predominantly comprised of loans to investment firms, financial vehicles, and nonbank creditors. We had \$80.0 billion and \$75.9 billion of loans originated by our Asset Backed Finance (ABF) and Financial Institution Group (FIG) lines of business at December 31, 2020, and December 31, 2019, respectively. These loans include: (i) loans to customers related to their subscription or capital calls, (ii) loans to nonbank lenders collateralized by commercial loans, and (iii) loans to originators or servicers of financial assets collateralized by residential real estate or other consumer loans such as credit cards, auto loans and leases, student loans and other financial assets eligible for the securitization market. These ABF and FIG loans are limited to a percentage of the value of the underlying financial assets considering underlying credit risk, asset duration, and ongoing performance. These ABF and FIG loans may also have other features to manage credit risk such as cross-collateralization, credit enhancements, and contractual re-margining of collateral supporting the loans. In addition, loans to financials except banks included CLOs in loan form, all of which were rated AA or above, of \$7.9 billion and \$7.0 billion at December 31, 2020, and December 31, 2019, respectively.

Oil, gas and pipelines loans included \$7.5 billion and \$9.2 billion of senior secured loans outstanding at December 31, 2020 and 2019, respectively. Oil, gas and pipelines nonaccrual loans increased at December 31, 2020, compared with December 31, 2019, due to new downgrades to nonaccrual status in 2020.

We continue to perform escalated credit monitoring for certain industries that we consider to be directly and most adversely affected by the COVID-19 pandemic.

Our commercial and industrial loans and lease financing portfolio also includes non-U.S. loans of \$63.8 billion and \$71.7 billion at December 31, 2020 and 2019, respectively.

Significant industry concentrations of non-U.S. loans at December 31, 2020 and 2019, respectively, included:

- \$36.2 billion and \$31.2 billion in the financials except banks category;
- \$12.8 billion and \$19.9 billion in the banks category; and
- \$1.6 billion and \$1.5 billion in the oil, gas and pipelines category.

Risk mitigation actions, including the restructuring of repayment terms, securing collateral or guarantees, and entering into extensions, are based on a re-underwriting of the loan and our assessment of the borrower's ability to perform under the agreed-upon terms. Extension terms generally range from six to thirty-six months and may require that the borrower provide additional economic support in the form of partial repayment, or additional collateral or guarantees. In cases where the value of collateral or financial condition of the borrower is insufficient to repay our loan, we may rely upon the support of an outside repayment guarantee in providing the extension.

Our ability to seek performance under a guarantee is directly related to the guarantor's creditworthiness, capacity and willingness to perform, which is evaluated on an annual basis, or more frequently as warranted. Our evaluation is based on the most current financial information available and is focused on various key financial metrics, including net worth, leverage, and current and future liquidity. We consider the guarantor's reputation, creditworthiness, and willingness to work with us based on our analysis, as well as other lenders' experience with the guarantor. Our assessment of the guarantor's credit strength is reflected in our loan risk ratings for such loans. The loan risk rating and accruing status are important factors in our allowance for credit losses methodology.

In considering the accrual status of the loan, we evaluate the collateral and future cash flows, as well as the anticipated

support of any repayment guarantor. In many cases, the strength of the guarantor provides sufficient assurance that full repayment of the loan is expected. When full and timely collection of the loan becomes uncertain, including the performance of the guarantor, we place the loan on nonaccrual status. As appropriate, we also charge the loan down in accordance with our charge-off policies, generally to the net realizable value of the collateral securing the loan, if any.

COMMERCIAL REAL ESTATE (CRE) We generally subject CRE loans to individual risk assessment using our internal borrower and collateral quality ratings. Our ratings are aligned to regulatory definitions of pass and criticized categories with criticized segmented among special mention, substandard, doubtful and loss categories. We had \$12.0 billion of CRE mortgage loans and \$1.6 billion of CRE construction loans classified as criticized at December 31, 2020, compared with \$3.8 billion and \$187 million, respectively, at December 31, 2019. The increase in criticized CRE mortgage and CRE construction loans was driven by the hotel/motel, shopping center, and retail (excluding shopping

center) property types and reflected the economic impact of the COVID-19 pandemic. Due to the significant uncertainty related to the duration and severity of the economic impact of the COVID-19 pandemic, the credit quality of certain property types within our CRE loan portfolio, such as retail, hotel/motel, office buildings, and shopping centers, could continue to be adversely affected.

The total CRE loan portfolio increased \$1.8 billion in 2020 driven by an increase in CRE construction loans predominantly related to the apartments property type. The CRE loan portfolio included \$8.9 billion of non-U.S. CRE loans at December 31, 2020. The portfolio is diversified both geographically and by property type. The largest geographic concentrations of CRE loans are in California, New York, Florida and Texas, which combined represented 48% of the total CRE portfolio. The largest property type concentrations are office buildings at 26% and apartments at 19% of the portfolio. Table 17 summarizes CRE loans by state and property type with the related nonaccrual totals at December 31, 2020.

Table 17: CRE Loans by State and Property Type

(in millions)	December 31, 2020							% of total loans
	Real estate mortgage		Real estate construction		Total			
	Nonaccrual loans	Total portfolio	Nonaccrual loans	Total portfolio	Nonaccrual loans	Total portfolio		
By state:								
California	\$ 224	31,356	3	4,468	227	35,824		4 %
New York	71	12,341	2	2,030	73	14,371		2
Florida	28	8,169	1	1,471	29	9,640		1
Texas	336	7,823	6	1,209	342	9,032		1
Washington	144	3,890	6	924	150	4,814		*
North Carolina	11	3,863	—	728	11	4,591		*
Georgia	10	3,989	—	313	10	4,302		*
Arizona	50	3,897	—	321	50	4,218		*
New Jersey	88	2,884	—	895	88	3,779		*
Colorado	85	3,120	—	595	85	3,715		*
Other (1)	727	40,388	30	8,851	757	49,239		6
Total	\$ 1,774	121,720	48	21,805	1,822	143,525		16 %
By property:								
Office buildings	\$ 272	34,066	2	3,185	274	37,251		4 %
Apartments	30	19,722	—	8,187	30	27,909		3
Industrial/warehouse	86	15,666	1	1,442	87	17,108		2
Retail (excluding shopping center)	283	13,643	3	165	286	13,808		2
Hotel/motel	267	10,370	6	1,764	273	12,134		1
Shopping center	588	10,479	—	962	588	11,441		1
Institutional	72	4,171	21	2,521	93	6,692		*
Mixed use properties	98	5,357	—	835	98	6,192		*
Collateral pool	—	2,691	—	279	—	2,970		*
1-4 family structure	—	8	—	1,338	—	1,346		*
Other	78	5,547	15	1,127	93	6,674		*
Total	\$ 1,774	121,720	48	21,805	1,822	143,525		16 %

* Less than 1%.

(1) Includes 40 states; no state in Other had loans in excess of \$3.7 billion.

Risk Management – Credit Risk Management (continued)

NON-U.S. LOANS Our classification of non-U.S. loans is based on whether the borrower's primary address is outside of the United States. At December 31, 2020, non-U.S. loans totaled \$72.9 billion, representing approximately 8% of our total consolidated loans outstanding, compared with \$80.5 billion, or approximately 8% of total consolidated loans outstanding, at December 31, 2019. Non-U.S. loans were approximately 4% of our consolidated total assets at both December 31, 2020 and 2019.

COUNTRY RISK EXPOSURE Our country risk monitoring process incorporates centralized monitoring of economic, political, social, legal, and transfer risks in countries where we do or plan to do business, along with frequent dialogue with our customers, counterparties and regulatory agencies. We establish exposure limits for each country through a centralized oversight process based on customer needs, and through consideration of the relevant and distinct risk of each country. We monitor exposures closely and adjust our country limits in response to changing conditions. We evaluate our individual country risk exposure based on our assessment of the borrower's ability to repay, which gives consideration for allowable transfers of risk, such as guarantees and collateral, and may be different from the reporting based on the borrower's primary address.

Our largest single country exposure outside the U.S., based on our assessment of risk at December 31, 2020, was the United Kingdom, which totaled \$42.1 billion, or approximately 2% of our total assets, and included \$15.4 billion of sovereign claims. Our United Kingdom sovereign claims arise predominantly from deposits we have placed with the Bank of England pursuant to regulatory requirements in support of our London branch.

Table 18 provides information regarding our top 20 exposures by country (excluding the U.S.), based on our assessment of risk, which gives consideration to the country of any guarantors and/or underlying collateral. With respect to Table 18:

- Lending and deposits exposure includes outstanding loans, unfunded credit commitments, and deposits with non-U.S. banks. These balances are presented prior to the deduction of allowance for credit losses or collateral received under the terms of the credit agreements, if any.
- Securities exposure represents debt and equity securities of non-U.S. issuers. Long and short positions are netted, and net short positions are reflected as negative exposure.
- Derivatives and other exposure represents foreign exchange contracts, derivative contracts, securities resale agreements, and securities lending agreements.

Table 18: Select Country Exposures

(in millions)	December 31, 2020								Total
	Lending and deposits		Securities		Derivatives and other		Total exposure		
	Sovereign	Non-sovereign	Sovereign	Non-sovereign	Sovereign	Non-sovereign	Sovereign	Non-sovereign (1)	
Top 20 country exposures:									
United Kingdom	\$ 15,366	23,859	—	980	8	1,852	15,374	26,691	42,065
Japan	20	772	16,815	10	—	9	16,835	791	17,626
Canada	3	15,671	21	(120)	2	484	26	16,035	16,061
Ireland (EU)	1,554	4,652	—	121	—	165	1,554	4,938	6,492
Cayman Islands	—	6,096	—	—	—	207	—	6,303	6,303
Luxembourg (EU)	—	4,030	—	118	—	213	—	4,361	4,361
Guernsey	—	3,753	—	—	—	5	—	3,758	3,758
China	—	2,792	(10)	434	115	61	105	3,287	3,392
Germany (EU)	—	3,146	33	65	4	66	37	3,277	3,314
Bermuda	—	2,927	—	48	—	164	—	3,139	3,139
Netherlands (EU)	—	2,441	—	536	—	161	—	3,138	3,138
South Korea	—	2,080	2	265	—	14	2	2,359	2,361
France (EU)	—	2,098	—	53	115	15	115	2,166	2,281
Switzerland	—	1,844	—	(72)	—	127	—	1,899	1,899
Australia	—	1,184	—	319	—	23	—	1,526	1,526
Brazil	—	1,387	—	2	1	—	1	1,389	1,390
Singapore	—	603	—	370	—	70	—	1,043	1,043
Norway	—	1,019	—	13	—	—	—	1,032	1,032
Hong Kong	—	939	—	(4)	3	4	3	939	942
United Arab Emirates	—	928	—	—	—	4	—	932	932
Total top 20 country exposures	\$ 16,943	82,221	16,861	3,138	248	3,644	34,052	89,003	123,055

(1) Total non-sovereign exposure comprised \$45.2 billion exposure to financial institutions and \$43.8 billion to non-financial corporations at December 31, 2020.

RESIDENTIAL MORTGAGE LOANS Our residential mortgage loan portfolio is comprised of 1-4 family first and junior lien mortgage loans. Residential mortgage – first lien loans comprised 92% of the total residential mortgage loan portfolio at December 31, 2020, compared with 91% at December 31, 2019.

The residential mortgage loan portfolio includes some loans with adjustable-rate features and some with an interest-only feature as part of the loan terms. Interest-only loans were approximately 3% of total loans at both December 31, 2020 and 2019. We believe our origination process appropriately addresses our adjustable-rate mortgage (ARM) reset risk across our residential mortgage loan portfolios and our ACL for loans considers this risk. We do not offer option ARM products, nor do

we offer variable-rate mortgage products with fixed payment amounts, commonly referred to within the financial services industry as negative amortizing mortgage loans. In connection with our adoption of CECL on January 1, 2020, our residential mortgage purchased credit-impaired (PCI) loans, which had a carrying value of \$568 million, were reclassified as purchased credit deteriorated (PCD) loans. PCD loans are generally accounted for in the same manner as non-PCD loans. For additional information on PCD loans, see Note 1 (Summary of Significant Accounting Policies) to Financial Statements in this Report.

We continue to modify residential mortgage loans to assist homeowners and other borrowers experiencing financial

difficulties. Loans are generally underwritten at the time of the modification in accordance with underwriting guidelines established for our loan modification programs. Under these programs, we may provide concessions such as interest rate reductions, forbearance of principal, and in some cases, principal forgiveness. These programs generally include trial payment periods of three to four months, and after successful completion and compliance with terms during this period, the loan is permanently modified. Loans included under these programs are accounted for as TDRs at the start of the trial period or at the time of permanent modification, if no trial period is used. See the “Critical Accounting Policies – Allowance for Credit Losses” section in this Report for discussion on how we determine the ACL attributable to our modified residential mortgage loan portfolios. For additional information on customer accommodations, including loan modifications, in response to the COVID-19 pandemic, see the “Risk Management – Credit Risk Management – COVID-Related Lending Accommodations” section in this Report.

We monitor changes in real estate values and underlying economic or market conditions for all geographic areas of our residential mortgage portfolios as part of our credit risk management process. Our underwriting and periodic review of loans and lines secured by residential real estate collateral includes original appraisals adjusted for the change in Home Price Index (HPI) or estimates from automated valuation models (AVMs) to support property values. AVMs are computer-based tools used to estimate the market value of homes. AVMs are a lower-cost alternative to appraisals and support valuations of large numbers of properties in a short period of time using market comparables and price trends for local market areas. The primary risk associated with the use of AVMs is that the value of an individual property may vary significantly from the average for

the market area. We have processes to periodically validate AVMs and specific risk management guidelines addressing the circumstances when AVMs may be used. AVMs are not allowed in residential mortgage origination underwriting. Broker evaluations and enhanced desktop appraisal reports are allowed in junior lien originations and some first lien line of credit originations up to \$250,000. An appraisal is required for all residential mortgage commitments greater than \$250,000. Additional information about appraisals, AVMs, and our policy for their use can be found in Note 4 (Loans and Related Allowance for Credit Losses) to Financial Statements in this Report.

Part of our credit monitoring includes tracking delinquency, current FICO scores and loan/combined loan to collateral values (LTV/CLTV) on the entire residential mortgage loan portfolio. Excluding government insured/guaranteed loans, these credit risk indicators on the residential mortgage portfolio were:

- Loans 30 days or more delinquent at December 31, 2020, totaled \$4.7 billion, or 2% of total mortgages, compared with \$3.0 billion, or 1%, at December 31, 2019. Customer payment deferral activities instituted in response to the COVID-19 pandemic could continue to delay the recognition of delinquencies;
- Loans with FICO scores lower than 640 totaled \$5.6 billion, or 2% of total mortgages at December 31, 2020, compared with \$7.6 billion, or 2%, at December 31, 2019; and
- Mortgages with a LTV/CLTV greater than 100% totaled \$1.6 billion at December 31, 2020, or 1% of total mortgages, compared with \$2.5 billion, or 1%, at December 31, 2019.

Information regarding credit quality indicators can be found in Note 4 (Loans and Related Allowance for Credit Losses) to Financial Statements in this Report. Residential mortgage loans by state are presented in Table 19.

Table 19: Residential Mortgage Loans by State

(\$ in millions)	December 31, 2020			
	Residential mortgage – first lien	Residential mortgage – junior lien	Total residential mortgage	% of total loans
Residential mortgage loans:				
California (1)	\$ 104,260	6,237	110,497	12 %
New York	31,028	1,271	32,299	4
New Jersey	12,073	2,258	14,331	2
Florida	10,623	2,119	12,742	1
Washington	9,094	505	9,599	1
Texas	7,775	468	8,243	1
Virginia	6,811	1,355	8,166	1
North Carolina	4,986	1,102	6,088	1
Colorado	5,361	488	5,849	1
Other (2)	54,423	7,483	61,906	7
Government insured/guaranteed loans (3)	30,240	—	30,240	3
Total	\$ 276,674	23,286	299,960	34 %

(1) Our residential mortgage loans to borrowers in California are located predominantly within the larger metropolitan areas, with no single California metropolitan area consisting of more than 4% of total loans.

(2) Consists of 41 states; no state in Other had loans in excess of \$5.8 billion.

(3) Represents loans whose repayments are predominantly insured by the Federal Housing Administration (FHA) or guaranteed by the Department of Veterans Affairs (VA).

Residential Mortgage – First Lien Portfolio Our total residential mortgage – first lien portfolio decreased \$17.2 billion in 2020, driven by loan paydowns as a result of the low interest rate environment, partially offset by mortgage loan originations of \$57.6 billion and our repurchase of \$30.0 billion of loans from GNMA loan securitization pools.

Table 20 shows certain delinquency and loss information for the residential mortgage – first lien portfolio and lists the top five states by outstanding balance.

Risk Management – Credit Risk Management (continued)

Table 20: Residential Mortgage – First Lien Portfolio Performance

(\$ in millions)	Outstanding balance		% of loans 30 days or more past due		Loss (recovery) rate	
	December 31,		December 31,		Year ended December 31,	
	2020	2019	2020	2019	2020	2019
California	\$ 104,260	118,256	1.00 %	0.48	(0.01)	(0.02)
New York	31,028	31,336	1.40	0.83	0.01	0.02
New Jersey	12,073	14,113	1.92	1.40	—	0.02
Florida	10,623	11,804	2.56	1.81	—	(0.06)
Washington	9,094	10,863	0.66	0.29	(0.01)	(0.02)
Other	79,356	95,750	1.60	1.20	0.01	(0.02)
Total	246,434	282,122	1.34	0.86	—	(0.02)
Government insured/guaranteed loans	30,240	11,170				
PCI (1)	N/A	555				
Total first mortgage portfolio	\$ 276,674	293,847				

(1) In connection with our adoption of CECL on January 1, 2020, PCI loans were reclassified as PCD loans and are therefore included with other non-PCD loans in this table. For additional information, see Note 1 (Summary of Significant Accounting Policies) to Financial Statements in this Report.

Residential Mortgage – Junior Lien Portfolio The residential mortgage – junior lien portfolio consists of residential mortgage lines and loans that are subordinate in rights to an existing lien on the same property. It is not unusual for these lines and loans to have draw periods, interest-only payments, balloon payments, adjustable rates and similar features. Junior lien loan products are primarily amortizing payment loans with fixed interest rates and repayment periods between five to 30 years. We continuously monitor the credit performance of our residential mortgage – junior lien portfolio for trends and factors that influence the

frequency and severity of losses, such as residential mortgage – junior lien performance when the residential mortgage – first lien loan is delinquent.

The decrease in the residential mortgage – junior lien portfolio at December 31, 2020, compared with December 31, 2019, predominantly reflected loan paydowns. Beginning in second quarter 2020, we suspended the origination of residential mortgage – junior lien loans. Table 21 shows certain delinquency and loss information for the residential mortgage – junior lien portfolio and lists the top five states by outstanding balance.

Table 21: Residential Mortgage – Junior Lien Portfolio Performance

(in millions)	Outstanding balance		% of loans 30 days or more past due		Loss (recovery) rate	
	December 31,		December 31,		Year ended December 31,	
	2020	2019	2020	2019	2020	2019
California	\$ 6,237	8,054	2.20 %	1.62	(0.35)	(0.44)
New Jersey	2,258	2,744	2.84	2.74	(0.02)	0.07
Florida	2,119	2,600	3.06	2.93	(0.14)	(0.09)
Pennsylvania	1,377	1,674	2.30	2.16	(0.15)	(0.10)
Virginia	1,355	1,712	2.41	1.97	(0.10)	(0.02)
Other	9,940	12,712	2.31	2.05	(0.19)	(0.18)
Total	23,286	29,496	2.41	2.07	(0.21)	(0.21)
PCI (1)	N/A	13				
Total junior lien mortgage portfolio	\$ 23,286	29,509				

(1) In connection with our adoption of CECL on January 1, 2020, PCI loans were reclassified as PCD loans and are therefore included with other non-PCD loans in this table. For additional information, see Note 1 (Summary of Significant Accounting Policies) to Financial Statements in this Report.

As of December 31, 2020, with respect to loans in the residential mortgage – junior lien portfolio that had a CLTV ratio in excess of 100%:

- such loans totaled 3% of the outstanding balance of the residential mortgage – junior lien portfolio;
- 3% were 30 days or more past due. Customer payment deferral activities instituted in response to the COVID-19 pandemic could continue to delay the recognition of delinquencies; and
- the unsecured portion (the outstanding amount that was in excess of the most recent property collateral value) of the outstanding balances of these loans totaled 1% of the residential mortgage – junior lien portfolio.

CLTV represents the ratio of the total loan balance of first and junior lien mortgages (including unused line amounts for credit line products) to property collateral value. For additional information on consumer loans by LTV/CLTV, see Table 4.12 in Note 4 (Loans and Related Allowance for Credit Losses) to Financial Statements in this Report.

Residential Mortgage – Junior Lien Line and Loan and

Residential Mortgage – First Lien Line Our junior lien, as well as first lien, lines of credit portfolios generally have draw periods of 10, 15 or 20 years with variable interest rate and payment options available during the draw period of (1) interest-only or (2) 1.5% of outstanding principal balance plus accrued interest. As of December 31, 2020, lines of credit in a draw period primarily used the interest-only option.

During the draw period, the borrower has the option of converting all or a portion of the line from a variable interest rate to a fixed rate with terms including interest-only payments for a fixed period between three to seven years or a fully amortizing payment with a fixed period between five to 30 years. At the end of the draw period, a line of credit generally converts to an amortizing payment schedule with repayment terms of up to 30 years based on the balance at time of conversion. Certain lines and loans have been structured with a balloon payment, which requires full repayment of the outstanding balance at the end of the term period. The conversion of lines or loans to fully amortizing or balloon payoff may result in a significant payment

increase, which can affect some borrowers' ability to repay the outstanding balance.

The lines that enter their amortization period may experience higher delinquencies and higher loss rates than the ones in their draw or term period. We have considered this increased risk in our ACL for loans estimate.

In anticipation of our borrowers reaching the end of their contractual commitment, we have created a program to inform, educate and help these borrowers transition from interest-only to fully-amortizing payments or full repayment. We monitor the performance of the borrowers moving through the program in an effort to refine our ongoing program strategy.

Table 22 reflects the outstanding balance of our portfolio of residential mortgage – junior liens, including lines and loans, and residential mortgage – first lien lines segregated into scheduled end of draw or end-of-term periods and products that are currently amortizing, or in balloon repayment status. The unfunded credit commitments for residential mortgage – junior and first lien lines totaled \$53.6 billion at December 31, 2020.

Table 22: Residential Mortgage – Junior Lien Line and Loan and Residential Mortgage – First Lien Line Portfolios Payment Schedule

(\$ in millions)	Outstanding balance December 31, 2020	Scheduled end of draw/term							Amortizing (2)
		2021	2022	2023	2024	2025	2026 and thereafter (1)		
Residential mortgage – junior lien lines and loans	\$ 23,286	622	2,651	1,808	1,443	2,394	7,247	7,121	
Residential mortgage – first lien lines	8,879	324	1,367	1,032	805	1,098	2,762	1,491	
Total	\$ 32,165	946	4,018	2,840	2,248	3,492	10,009	8,612	
% of portfolios	100 %	3	12	9	7	11	31	27	

(1) Substantially all lines and loans are scheduled to convert to amortizing loans by the end of 2030, with annual scheduled amounts through 2030 ranging from \$1.1 billion to \$3.8 billion and averaging \$2.0 billion per year.

(2) Includes \$63 million of end-of-term balloon payments which were past due.

At December 31, 2020, \$381 million, or 2%, of lines in their draw period were 30 days or more past due, compared with \$378 million, or 5%, of amortizing lines of credit. Customer payment deferral activities instituted in response to the COVID-19 pandemic could continue to delay the recognition of delinquencies. On a monthly basis, we monitor the payment characteristics of borrowers in our residential mortgage – first and junior lien lines of credit portfolios. In December 2020, excluding borrowers with COVID-related loan modification payment deferrals:

- Approximately 43% of these borrowers paid only the minimum amount due and approximately 51% paid more than the minimum amount due. The rest were either delinquent or paid less than the minimum amount due.
- For the borrowers with an interest-only payment feature, approximately 28% paid only the minimum amount due and approximately 66% paid more than the minimum amount due.

CREDIT CARDS The decrease in the outstanding balance at December 31, 2020, compared with December 31, 2019, was driven by changes in consumer spending due to the economic impact of the COVID-19 pandemic.

AUTO The outstanding balance at December 31, 2020, compared with December 31, 2019, was flat as originations of \$22.8 billion in 2020 were offset by paydowns.

OTHER CONSUMER The decrease in the outstanding balance at December 31, 2020, compared with December 31, 2019, was driven by \$9.8 billion of student loans transferred to loans held for sale after the announced sale of our student loan portfolio in fourth quarter 2020.

Table 23: Credit Card, Auto, and Other Consumer Loans

(\$ in millions)	December 31, 2020		December 31, 2019	
	Outstanding balance	% of total loans	Outstanding balance	% of total loans
Credit card	\$ 36,664	4.13%	\$ 41,013	4.26%
Auto	48,187	5.43	47,873	4.98
Other consumer (1)	24,409	2.75	34,304	3.56
Total	\$ 109,260	12.31%	\$ 123,190	12.80%

(1) Other consumer loans primarily included securities-based loans.

Risk Management – Credit Risk Management (continued)

NONPERFORMING ASSETS (NONACCRUAL LOANS AND FORECLOSED ASSETS)

We generally place loans on nonaccrual status when:

- the full and timely collection of interest or principal becomes uncertain (generally based on an assessment of the borrower’s financial condition and the adequacy of collateral, if any), such as in bankruptcy or other circumstances;
- they are 90 days (120 days with respect to residential mortgages) past due for interest or principal, unless the loan is both well-secured and in the process of collection or the loan is in an active payment deferral as a result of the COVID-19 pandemic;
- part of the principal balance has been charged off; or
- for junior lien mortgages, we have evidence that the related first lien mortgage may be 120 days past due or in the process of foreclosure regardless of the junior lien delinquency status.

Customer payment deferral activities instituted in response to the COVID-19 pandemic could continue to delay the recognition of nonaccrual loans for those customers who would have otherwise moved into nonaccrual status. For additional information on customer accommodations, including loan modifications, in response to the COVID-19 pandemic, see the “Risk Management – Credit Risk Management – COVID-Related Lending Accommodations” section in this Report.

Consumer credit card loans are not placed on nonaccrual status, but are generally fully charged off when the loan reaches 180 days past due.

Table 24 summarizes nonperforming assets (NPAs) for each of the last five years.

Table 24: Nonperforming Assets (Nonaccrual Loans and Foreclosed Assets)

(in millions)	December 31,				
	2020	2019	2018	2017	2016
Nonaccrual loans:					
Commercial:					
Commercial and industrial	\$ 2,698	1,545	1,486	1,899	3,199
Real estate mortgage	1,774	573	580	628	685
Real estate construction	48	41	32	37	43
Lease financing	259	95	90	76	115
Total commercial	4,779	2,254	2,188	2,640	4,042
Consumer:					
Residential mortgage – first lien (1)	2,957	2,150	3,183	3,732	4,516
Residential mortgage – junior lien (1)	754	796	945	1,086	1,206
Auto	202	106	130	130	106
Other consumer	36	40	50	58	51
Total consumer	3,949	3,092	4,308	5,006	5,879
Total nonaccrual loans (2)(3)	\$ 8,728	5,346	6,496	7,646	9,921
As a percentage of total loans	0.98 %	0.56	0.68	0.80	1.03
Foreclosed assets:					
Government insured/guaranteed (4)	\$ 18	50	88	120	197
Non-government insured/guaranteed	141	253	363	522	781
Total foreclosed assets	159	303	451	642	978
Total nonperforming assets	\$ 8,887	5,649	6,947	8,288	10,899
As a percentage of total loans	1.00 %	0.59	0.73	0.87	1.13

(1) Residential mortgage loans predominantly insured by the FHA or guaranteed by the VA are not placed on nonaccrual status because they are insured or guaranteed.

(2) Financial information for periods prior to December 31, 2018, has been revised to exclude LHFS and loans held at fair value of \$390 million and \$463 million at December 31, 2017, and 2016, respectively.

(3) Prior to January 1, 2020, PCI loans were excluded from nonaccrual loans because they continued to earn interest income from accretible yield, independent of performance in accordance with their contractual terms. However, as a result of our adoption of CECL on January 1, 2020, \$275 million of residential mortgage loans were reclassified from PCI to PCD loans, and as a result, were also classified as nonaccrual loans given their contractual delinquency. For additional information on PCD loans, see Note 1 (Summary of Significant Accounting Policies) to Financial Statements in this Report.

(4) Consistent with regulatory reporting requirements, foreclosed real estate resulting from government insured/guaranteed loans are classified as nonperforming. Both principal and interest related to these foreclosed real estate assets are collectible because the loans were predominantly insured by the FHA or guaranteed by the VA. Receivables related to the foreclosure of certain government guaranteed real estate mortgage loans are excluded from this table and included in Accounts Receivable in Other Assets. For more information on the classification of certain government-guaranteed mortgage loans upon foreclosure, see Note 1 (Summary of Significant Accounting Policies) to Financial Statements in this Report.

The increase in commercial nonaccrual loans at December 31, 2020, compared with December 31, 2019, was driven by:

- an increase in commercial and industrial loans in the oil and gas, transportation services, and entertainment and recreation portfolios; and
- an increase in commercial real estate mortgage loans in hotel/motel, shopping center, and office buildings property types reflecting the economic impact of the COVID-19 pandemic.

The increase in consumer nonaccrual loans at December 31, 2020, compared with December 31, 2019, was driven by:

- an increase in residential mortgage loans driven by COVID-related payment deferral programs that were classified as nonaccrual because they did not qualify for legislative or regulatory relief; and
- the implementation of CECL, which required PCI loans to be classified as nonaccruing based on performance.

Table 25 provides a summary of nonperforming assets during 2020.

Table 25: Nonperforming Assets by Quarter During 2020

(in millions)	December 31, 2020		September 30, 2020		June 30, 2020		March 31, 2020	
	Balance	% of total loans	Balance	% of total loans	Balance	% of total loans	Balance	% of total loans
Nonaccrual loans:								
Commercial:								
Commercial and industrial	\$ 2,698	0.85 %	\$ 2,834	0.88 %	\$ 2,896	0.83 %	\$ 1,779	0.44 %
Real estate mortgage	1,774	1.46	1,343	1.10	1,217	0.98	944	0.77
Real estate construction	48	0.22	34	0.15	34	0.16	21	0.10
Lease financing	259	1.61	187	1.10	138	0.79	131	0.68
Total commercial	4,779	1.00	4,398	0.91	4,285	0.83	2,875	0.51
Consumer:								
Residential mortgage – first lien (1)	2,957	1.07	2,641	0.90	2,393	0.86	2,372	0.81
Residential mortgage – junior lien (1)	754	3.24	767	3.05	753	2.81	769	2.70
Auto	202	0.42	176	0.36	129	0.26	99	0.20
Other consumer	36	0.15	40	0.12	45	0.14	41	0.12
Total consumer	3,949	0.97	3,624	0.83	3,320	0.79	3,281	0.74
Total nonaccrual loans	8,728	0.98	8,022	0.87	7,605	0.81	6,156	0.61
Foreclosed assets:								
Government insured/guaranteed (2)	18		22		31		43	
Non-government insured/guaranteed	141		134		164		209	
Total foreclosed assets	159		156		195		252	
Total nonperforming assets	\$ 8,887	1.00 %	\$ 8,178	0.89 %	\$ 7,800	0.83 %	\$ 6,408	0.63 %
Change in NPAs from prior quarter	\$ 709		378		1,392		759	

- (1) Residential mortgage loans predominantly insured by the FHA or guaranteed by the VA are not placed on nonaccrual status because they are insured or guaranteed.
(2) Consistent with regulatory reporting requirements, foreclosed real estate resulting from government insured/guaranteed loans are classified as nonperforming. Both principal and interest related to these foreclosed real estate assets are collectible because the loans were predominantly insured by the FHA or guaranteed by the VA. Receivables related to the foreclosure of certain government guaranteed real estate mortgage loans are excluded from this table and included in Accounts Receivable in Other Assets. For additional information on foreclosed assets, see Note 1 (Summary of Significant Accounting Policies) to Financial Statements in this Report.

Table 26 provides an analysis of the changes in nonaccrual loans. Typically, changes to nonaccrual loans period-over-period represent inflows for loans that are placed on nonaccrual status in accordance with our policies, offset by reductions for loans

that are paid down, charged off, sold, foreclosed, or are no longer classified as nonaccrual as a result of continued performance and an improvement in the borrower's financial condition and loan repayment capabilities.

Table 26: Analysis of Changes in Nonaccrual Loans

(in millions)	Dec 31, 2020	Quarter ended				Year ended Dec 31,	
		Sep 30, 2020	Jun 30, 2020	Mar 31, 2020	2020	2019	
Commercial nonaccrual loans							
Balance, beginning of period	\$ 4,398	4,285	2,875	2,254	2,254	2,188	
Inflows	1,696	1,316	2,741	1,479	7,232	3,221	
Outflows:							
Returned to accruing	(99)	(166)	(64)	(56)	(385)	(265)	
Foreclosures	(37)	—	—	—	(37)	(95)	
Charge-offs	(367)	(382)	(560)	(360)	(1,669)	(740)	
Payments, sales and other	(812)	(655)	(707)	(442)	(2,616)	(2,055)	
Total outflows	(1,315)	(1,203)	(1,331)	(858)	(4,707)	(3,155)	
Balance, end of period	4,779	4,398	4,285	2,875	4,779	2,254	
Consumer nonaccrual loans							
Balance, beginning of period	3,624	3,320	3,281	3,092	3,092	4,308	
Inflows (1)	792	696	379	749	2,616	1,910	
Outflows:							
Returned to accruing	(208)	(160)	(135)	(254)	(757)	(999)	
Foreclosures	(5)	(4)	(6)	(21)	(36)	(137)	
Charge-offs	(36)	(36)	(39)	(48)	(159)	(172)	
Payments, sales and other	(218)	(192)	(160)	(237)	(807)	(1,818)	
Total outflows	(467)	(392)	(340)	(560)	(1,759)	(3,126)	
Balance, end of period	3,949	3,624	3,320	3,281	3,949	3,092	
Total nonaccrual loans	\$ 8,728	8,022	7,605	6,156	8,728	5,346	

- (1) In connection with our adoption of CECL on January 1, 2020, we classified \$275 million of PCD loans as nonaccruing based on performance.

Risk Management – Credit Risk Management (continued)

We believe exposure to loss on nonaccrual loans is mitigated by the following factors at December 31, 2020:

- 95% of total commercial nonaccrual loans and 99% of total consumer nonaccrual loans are secured. Of the consumer nonaccrual loans, 94% are secured by real estate and 91% have a combined LTV (CLTV) ratio of 80% or less.
- losses of \$732 million and \$1.0 billion have already been recognized on 19% of commercial nonaccrual loans and 31% of consumer nonaccrual loans, respectively, in accordance with our charge-off policies. Once we write down loans to the net realizable value (fair value of collateral less estimated costs to sell), we re-evaluate each loan regularly and record additional write-downs if needed.
- 77% of commercial nonaccrual loans were current on interest and 70% of commercial nonaccrual loans were current on both principal and interest, but were on nonaccrual status because the full or timely collection of interest or principal had become uncertain.
- of the \$1.2 billion of consumer loans in bankruptcy or discharged in bankruptcy, and classified as nonaccrual, \$747 million were current.

- the remaining risk of loss of all nonaccrual loans has been considered in developing our allowance for loan losses.

If interest due on all nonaccrual loans (including loans that were, but are no longer on nonaccrual status at year end) had been accrued under the original terms, approximately \$329 million of interest would have been recorded as income on these loans, compared with \$303 million actually recorded as interest income in 2020, versus \$361 million and \$316 million, respectively, in 2019.

We continue to work with our customers experiencing financial difficulty to determine if they can qualify for a loan modification. Under our proprietary modification programs, customers may be required to provide updated documentation, and some programs require completion of payment during trial periods to demonstrate sustained performance before the loan can be removed from nonaccrual status.

Table 27 provides a summary of foreclosed assets and an analysis of changes in foreclosed assets.

Table 27: Foreclosed Assets

(in millions)	Quarter ended				Year ended Dec 31,	
	Dec 31, 2020	Sep 30, 2020	Jun 30, 2020	Mar 31, 2020	2020	2019
Summary by loan segment						
Government insured/guaranteed	\$ 18	22	31	43	\$ 18	50
Commercial	70	39	45	49	70	62
Consumer	71	95	119	160	71	191
Total foreclosed assets	159	156	195	252	159	303
Analysis of changes in foreclosed assets						
Balance, beginning of period	\$ 156	195	252	303	\$ 303	451
Net change in government insured/guaranteed (1)	(4)	(9)	(12)	(7)	(32)	(38)
Additions to foreclosed assets (2)	114	60	51	107	332	698
Reductions:						
Sales	(104)	(88)	(98)	(154)	(444)	(809)
Write-downs and gains (losses) on sales	(3)	(2)	2	3	—	1
Total reductions	(107)	(90)	(96)	(151)	(444)	(808)
Balance, end of period	\$ 159	156	195	252	\$ 159	303

(1) Foreclosed government insured/guaranteed loans are temporarily transferred to and held by us as servicer, until reimbursement is received from FHA or VA.

(2) Includes loans moved into foreclosed assets from nonaccrual status and repossessed autos.

Foreclosed assets at December 31, 2020, included \$73 million of foreclosed residential real estate, of which 24% is predominantly FHA insured or VA guaranteed and expected to have minimal or no loss content. The remaining amount of foreclosed assets has been written down to estimated net realizable value. Of the \$159 million in foreclosed assets at December 31, 2020, 55% have been in the foreclosed assets portfolio for one year or less.

As part of our actions to support customers during the COVID-19 pandemic, we have temporarily suspended certain mortgage foreclosure activities, which has affected the amount of our foreclosed assets. For additional information on loans in process of foreclosure, see Note 4 (Loans and Related Allowance for Credit Losses) to Financial Statements in this Report.

TROUBLED DEBT RESTRUCTURINGS (TDRs) Table 28 and Table 29 provide information regarding the recorded investment of loans modified in TDRs.

Table 28: TDR Balances

(in millions)	December 31,				
	2020	2019	2018	2017	2016
Commercial:					
Commercial and industrial	\$ 1,933	1,183	1,623	2,096	2,584
Real estate mortgage	774	669	704	901	1,119
Real estate construction	15	36	39	44	91
Lease financing	9	13	56	35	6
Total commercial TDRs	2,731	1,901	2,422	3,076	3,800
Consumer:					
Residential mortgage – first lien	9,764	7,589	10,629	12,080	14,134
Residential mortgage – junior lien	1,237	1,407	1,639	1,849	2,074
Credit card	458	520	449	356	300
Auto	176	81	89	87	85
Other consumer	67	170	154	126	101
Trial modifications	90	115	149	194	299
Total consumer TDRs	11,792	9,882	13,109	14,692	16,993
Total TDRs	\$ 14,523	11,783	15,531	17,768	20,793
TDRs on nonaccrual status	\$ 4,456	2,833	4,058	4,801	6,193
TDRs on accrual status:					
Government insured/guaranteed	3,721	1,190	1,299	1,359	1,526
Non-government insured/guaranteed	6,346	7,760	10,174	11,608	13,074
Total TDRs	\$ 14,523	11,783	15,531	17,768	20,793

TDRs at December 31, 2020, increased, compared with December 31, 2019, due to higher loan modifications as a result of the economic impact of the COVID-19 pandemic on our

customers. The amount of our TDRs at December 31, 2020, would have otherwise been higher without the TDR relief provided by the CARES Act and Interagency Statement.

Table 29: TDRs Balance by Quarter During 2020

(in millions)	2020			
	Dec 31, 2020	Sep 30, 2020	Jun 30, 2020	Mar 31, 2020
Commercial:				
Commercial and industrial	\$ 1,933	2,082	1,882	1,302
Real estate mortgage	774	805	717	697
Real estate construction	15	21	20	33
Lease financing	9	9	10	10
Total commercial TDRs	2,731	2,917	2,629	2,042
Consumer:				
Residential mortgage – first lien	9,764	9,420	7,176	7,284
Residential mortgage – junior lien	1,237	1,298	1,309	1,356
Credit card	458	494	510	527
Auto	176	156	108	76
Other consumer	67	190	173	172
Trial modifications	90	91	91	108
Total consumer TDRs	11,792	11,649	9,367	9,523
Total TDRs	\$ 14,523	14,566	11,996	11,565
TDRs on nonaccrual status	\$ 4,456	4,163	3,475	2,846
TDRs on accrual status:				
Government insured/guaranteed	3,721	3,467	1,277	1,157
Non-government insured/guaranteed	6,346	6,936	7,244	7,562
Total TDRs	\$ 14,523	14,566	11,996	11,565

Risk Management – Credit Risk Management (continued)

In those situations where principal is forgiven, the entire amount of such forgiveness is immediately charged off. When we delay the timing on the repayment of a portion of principal (principal forbearance), we charge off the amount of forbearance if that amount is not considered fully collectible. The allowance for loan losses for TDRs was \$565 million and \$1.0 billion at December 31, 2020 and 2019, respectively. As part of our actions to support customers during the COVID-19 pandemic, we have provided borrowers relief in the form of loan modifications. Under the CARES Act and the Interagency Statement, loan modifications related to the COVID-19 pandemic will not be classified as TDRs if they meet certain eligibility criteria. For additional information on the CARES Act and the Interagency Statement, see the “Risk Management – Credit Risk Management – Credit Quality Overview – Troubled Debt Restructuring Relief” section in this Report.

Our nonaccrual policies are generally the same for all loan types when a restructuring is involved. We typically re-underwrite loans at the time of restructuring to determine whether there is sufficient evidence of sustained repayment capacity based on the borrower’s documented income, debt to income ratios, and other factors. Loans lacking sufficient evidence of sustained repayment capacity at the time of

modification are charged down to the fair value of the collateral, if applicable. For an accruing loan that has been modified, if the borrower has demonstrated performance under the previous terms and the underwriting process shows the capacity to continue to perform under the restructured terms, the loan will generally remain in accruing status. Otherwise, the loan will be placed in nonaccrual status and may be returned to accruing status when the borrower demonstrates a sustained period of performance, generally six consecutive months of payments, or equivalent, inclusive of consecutive payments made prior to modification. Loans will also be placed on nonaccrual status, and a corresponding charge-off is recorded to the loan balance, when we believe that principal and interest contractually due under the modified agreement will not be collectible. See Note 4 (Loans and Related Allowance for Credit Losses) to Financial Statements in this Report for additional information regarding TDRs.

Table 30 provides an analysis of the changes in TDRs. Loans modified more than once as a TDR are reported as inflows only in the period they are first modified. In addition to foreclosures, sales and transfers to held for sale, we may remove loans from TDR classification, but only if they have been refinanced or restructured at market terms and qualify as a new loan.

Table 30: Analysis of Changes in TDRs

(in millions)	Quarter ended				Year ended Dec 31,	
	Dec 31, 2020	Sep 30, 2020	Jun 30, 2020	Mar 31, 2020	2020	2019
Commercial TDRs						
Balance, beginning of period	\$ 2,917	2,629	2,042	1,901	1,901	2,422
Inflows (1)	486	866	971	452	2,775	1,540
Outflows						
Charge-offs	(72)	(77)	(60)	(56)	(265)	(195)
Foreclosure	—	—	—	—	—	(1)
Payments, sales and other (2)	(600)	(501)	(324)	(255)	(1,680)	(1,865)
Balance, end of period	2,731	2,917	2,629	2,042	2,731	1,901
Consumer TDRs						
Balance, beginning of period	11,649	9,367	9,523	9,882	9,882	13,109
Inflows (1)	1,226	2,805	425	312	4,768	1,485
Outflows						
Charge-offs	(57)	(58)	(46)	(63)	(224)	(234)
Foreclosure	(5)	(7)	(8)	(57)	(77)	(290)
Payments, sales and other (2)	(1,020)	(458)	(510)	(544)	(2,532)	(4,154)
Net change in trial modifications (3)	(1)	—	(17)	(7)	(25)	(34)
Balance, end of period	11,792	11,649	9,367	9,523	11,792	9,882
Total TDRs	\$ 14,523	14,566	11,996	11,565	14,523	11,783

(1) Inflows include loans that modify, even if they resolve within the period, as well as gross advances on term loans that modified in a prior period and net advances on revolving TDRs that modified in a prior period.

(2) Other outflows include normal amortization/accretion of loan basis adjustments and loans transferred to held for sale. Occasionally, loans that have been refinanced or restructured at market terms qualify as new loans, which are also included as other outflows.

(3) Net change in trial modifications includes: inflows of new TDRs entering the trial payment period, net of outflows for modifications that either (i) successfully perform and enter into a permanent modification, or (ii) did not successfully perform according to the terms of the trial period plan and are subsequently charged-off, foreclosed upon or otherwise resolved.

LOANS 90 DAYS OR MORE PAST DUE AND STILL ACCRUING Loans 90 days or more past due are still accruing if they are (1) well-secured and in the process of collection or (2) residential mortgage loans or consumer loans exempt under regulatory rules from being classified as nonaccrual until later delinquency, usually 120 days past due. Prior to January 1, 2020, PCI loans were excluded from loans 90 days or more past due and still

accruing loans because they continued to earn interest income from accretable yield, independent of performance in accordance with their contractual terms. In connection with our adoption of CECL, PCI loans were reclassified as PCD loans and classified as accruing or nonaccruing based on performance.

Table 31 reflects loans 90 days or more past due and still accruing by class for loans not government insured/guaranteed.

Table 31: Loans 90 Days or More Past Due and Still Accruing (1)

(in millions)	December 31,				
	2020	2019	2018	2017	2016
Total (2):	\$ 7,041	7,285	8,704	11,532	11,437
Less: FHA insured/VA guaranteed (3)	6,351	6,352	7,725	10,475	10,467
Less: Student loans guaranteed under the FFELP (4)	—	—	—	—	3
Total, not government insured/guaranteed	\$ 690	933	979	1,057	967
By segment and class, not government insured/guaranteed:					
Commercial:					
Commercial and industrial	\$ 39	47	43	26	28
Real estate mortgage	38	31	51	23	36
Real estate construction	1	—	—	—	—
Total commercial	78	78	94	49	64
Consumer:					
Residential mortgage – first lien	135	112	124	213	170
Residential mortgage – junior lien	19	32	32	60	56
Credit card	365	546	513	492	452
Auto	65	78	114	143	112
Other consumer	28	87	102	100	113
Total consumer	612	855	885	1,008	903
Total, not government insured/guaranteed	\$ 690	933	979	1,057	967

- (1) Financial information for periods prior to December 31, 2018, has been revised to exclude LHFS and loans held at fair value, which reduced "Total, not government insured/guaranteed" by \$6 million, \$5 million and \$4 million at December 31, 2018, 2017 and 2016, respectively.
- (2) PCI loans totaling \$102 million, \$3.7 billion, \$1.4 billion and \$2.0 billion at December 31, 2019, 2018, 2017 and 2016, respectively, are excluded from this table. PCI loans were reclassified as PCD loans and classified as accruing or nonaccruing based on performance beginning January 1, 2020.
- (3) Represents loans whose repayments are predominantly insured by the FHA or guaranteed by the VA.
- (4) Represents loans whose repayments are primarily guaranteed by agencies on behalf of the U.S. Department of Education under the Federal Family Education Loan Program (FFELP). All remaining student loans guaranteed under the FFELP were sold as of March 31, 2017.

Excluding government insured/guaranteed loans, loans 90 days or more past due and still accruing at December 31, 2020, were down from December 31, 2019, due to lower delinquencies in consumer loans as payment deferral activities instituted in response to the COVID-19 pandemic delayed recognition of delinquencies for customers who would have otherwise moved into past due status.

Loans 90 days or more past due and still accruing whose repayments are predominantly insured by the FHA or guaranteed by the VA for mortgages at December 31, 2020, were flat compared with December 31, 2019, as our repurchases of accruing loans more than 90 days past due from GNMA loan securitization pools were offset by paydowns and transfers to LHFS. For additional information on delinquencies by loan class, see Note 4 (Loans and Related Allowance for Credit Losses) to Financial Statements in this Report.

Risk Management – Credit Risk Management (continued)

NET CHARGE-OFFS Table 32 presents net charge-offs for the four quarters and full year of 2020 and 2019.

Table 32: Net Loan Charge-offs

(\$ in millions)	Year ended				Quarter ended					
	December 31,		September 30,		June 30,		March 31,			
	Net loan charge-offs	% of avg. loans	Net loan charge-offs	% of avg. loans (1)	Net loan charge-offs	% of avg. loans (1)	Net loan charge-offs	% of avg. loans (1)		
2020										
Commercial:										
Commercial and industrial	\$ 1,239	0.36 %	\$ 111	0.14 %	\$ 274	0.33 %	\$ 521	0.55 %	\$ 333	0.37 %
Real estate mortgage	283	0.23	162	0.53	56	0.18	67	0.22	(2)	(0.01)
Real estate construction	(19)	(0.09)	—	—	(2)	(0.03)	(1)	(0.02)	(16)	(0.32)
Lease financing	87	0.49	35	0.83	28	0.66	15	0.33	9	0.19
Total commercial	1,590	0.31	308	0.26	356	0.29	602	0.44	324	0.25
Consumer:										
Residential mortgage – first lien	(5)	—	(3)	—	(1)	—	2	—	(3)	—
Residential mortgage – junior lien	(55)	(0.21)	(24)	(0.39)	(14)	(0.22)	(12)	(0.17)	(5)	(0.07)
Credit card	1,139	3.07	190	2.09	245	2.71	327	3.60	377	3.81
Auto	270	0.56	51	0.43	31	0.25	106	0.88	82	0.68
Other consumer	350	1.10	62	0.88	66	0.80	88	1.09	134	1.59
Total consumer	1,699	0.39	276	0.26	327	0.30	511	0.48	585	0.53
Total	\$ 3,289	0.35 %	\$ 584	0.26 %	\$ 683	0.29 %	\$ 1,113	0.46 %	\$ 909	0.38 %
2019										
Commercial:										
Commercial and industrial	\$ 607	0.17 %	\$ 168	0.19 %	\$ 147	0.17 %	\$ 159	0.18 %	\$ 133	0.15 %
Real estate mortgage	6	—	4	0.01	(8)	(0.02)	4	0.01	6	0.02
Real estate construction	(12)	(0.06)	—	—	(8)	(0.14)	(2)	(0.04)	(2)	(0.04)
Lease financing	51	0.26	31	0.63	8	0.17	4	0.09	8	0.17
Total commercial	652	0.13	203	0.16	139	0.11	165	0.13	145	0.11
Consumer:										
Residential mortgage – first lien	(50)	(0.02)	(3)	—	(5)	(0.01)	(30)	(0.04)	(12)	(0.02)
Residential mortgage – junior lien	(66)	(0.21)	(16)	(0.20)	(22)	(0.28)	(19)	(0.24)	(9)	(0.10)
Credit card	1,370	3.53	350	3.48	319	3.22	349	3.68	352	3.73
Auto	306	0.67	87	0.73	76	0.65	52	0.46	91	0.82
Other consumer	550	1.59	148	1.71	138	1.60	136	1.56	128	1.47
Total consumer	2,110	0.48	566	0.51	506	0.46	488	0.45	550	0.51
Total	\$ 2,762	0.29 %	\$ 769	0.32 %	\$ 645	0.27 %	\$ 653	0.28 %	\$ 695	0.30 %

(1) Quarterly net charge-offs (recoveries) as a percentage of average respective loans are annualized.

The increase in commercial net loan charge-offs in 2020 was driven by:

- higher commercial and industrial losses primarily in our oil, gas and pipelines portfolio; and
- higher commercial real estate mortgage losses.

The decrease in consumer net loan charge-offs in 2020 was driven by:

- lower losses in credit card and other consumer loans as a result of payment deferral activities in response to the COVID-19 pandemic.

The COVID-19 pandemic may continue to impact the credit quality of our loan portfolio. Although the potential impacts were considered in our allowance for credit losses for loans, payment deferral activities instituted in response to the COVID-19 pandemic could continue to delay the recognition of net loan charge-offs. For additional information on customer accommodations in response to the COVID-19 pandemic, see the “Risk Management – Credit Risk Management – COVID-Related Lending Accommodations” section in this Report.

ALLOWANCE FOR CREDIT LOSSES We maintain an allowance for credit losses (ACL) for loans, which is management’s estimate of the expected credit losses in the loan portfolio and unfunded credit commitments, at the balance sheet date, excluding loans

and unfunded credit commitments carried at fair value or held for sale. Additionally, we maintain an ACL for debt securities classified as either AFS or HTM, other financial assets measured at amortized cost, net investments in leases, and other off-balance sheet credit exposures.

We apply a disciplined process and methodology to establish our ACL each quarter. The process for establishing the ACL for loans takes into consideration many factors, including historical and forecasted loss trends, loan-level credit quality ratings and loan grade-specific characteristics. The process involves subjective and complex judgments. In addition, we review a variety of credit metrics and trends. These credit metrics and trends, however, do not solely determine the amount of the allowance as we use several analytical tools. For additional information on our ACL, see the “Critical Accounting Policies – Allowance for Credit Losses” section and Note 1 (Summary of Significant Accounting Policies) to Financial Statements in this Report. For additional information on our ACL for loans, see Note 4 (Loans and Related Allowance for Credit Losses) to Financial Statements in this Report, and for additional information on our ACL for debt securities, see the “Balance Sheet Analysis – Available-For-Sale and Held-To-Maturity Debt Securities” section and Note 3 (Available-for-Sale and Held-to-Maturity Debt Securities) to Financial Statements in this Report.

Table 33 presents the allocation of the ACL for loans by loan segment and class for the last five years.

Table 33: Allocation of the ACL for Loans (1)

(\$ in millions)	Dec 31, 2020		Dec 31, 2019		Dec 31, 2018		Dec 31, 2017		Dec 31, 2016	
	ACL	Loans as % of total loans	ACL	Loans as % of total loans	ACL	Loans as % of total loans	ACL	Loans as % of total loans	ACL	Loans as % of total loans
Commercial:										
Commercial and industrial	\$ 7,230	36 %	\$ 3,600	37 %	\$ 3,628	37 %	\$ 3,752	35 %	\$ 4,560	34 %
Real estate mortgage	3,167	14	1,236	13	1,282	13	1,374	13	1,320	14
Real estate construction	410	2	1,079	2	1,200	2	1,238	3	1,294	2
Lease financing	709	2	330	2	307	2	268	2	220	2
Total commercial	11,516	54	6,245	54	6,417	54	6,632	53	7,394	52
Consumer:										
Residential mortgage – first lien	1,600	31	692	30	750	30	1,085	30	1,270	29
Residential mortgage – junior lien	653	3	247	3	431	3	608	4	815	5
Credit card	4,082	4	2,252	4	2,064	4	1,944	4	1,605	4
Auto	1,230	5	459	5	475	5	1,039	5	817	6
Other consumer	632	3	561	4	570	4	652	4	639	4
Total consumer	8,197	46	4,211	46	4,290	46	5,328	47	5,146	48
Total	\$ 19,713	100 %	\$ 10,456	100 %	\$ 10,707	100 %	\$ 11,960	100 %	\$ 12,540	100 %
Components:										
Allowance for loan losses	\$ 18,516		9,551		9,775		11,004		11,419	
Allowance for unfunded credit commitments	1,197		905		932		956		1,121	
Allowance for credit losses	\$ 19,713		10,456		10,707		11,960		12,540	
Allowance for loan losses as a percentage of total loans	2.09%		0.99		1.03		1.15		1.18	
Allowance for loan losses as a percentage of total net charge-offs	563		346		356		376		324	
Allowance for credit losses for loans as a percentage of total loans	2.22		1.09		1.12		1.25		1.30	
Allowance for credit losses for loans as a percentage of total nonaccrual loans	226		196		165		156		126	

(1) Disclosure is not comparative due to our adoption of CECL on January 1, 2020. For additional information, see Note 1 (Summary of Significant Accounting Policies) to Financial Statements in this Report.

The ratios for the allowance for loan losses and the ACL for loans presented in Table 33 may fluctuate from period to period due to such factors as the mix of loan types in the portfolio, borrower credit strength, and the value and marketability of collateral.

The ACL for loans increased \$9.3 billion, or 89%, from December 31, 2019, driven by a \$10.6 billion increase in the ACL for loans in 2020, reflecting current and forecasted economic conditions due to the COVID-19 pandemic and their impact on borrower performance, partially offset by a \$1.3 billion decrease as a result of adopting CECL. Total provision for credit losses for loans was \$14.0 billion in 2020, compared with \$2.7 billion in 2019. The increase in the provision for credit losses for loans in 2020, compared with 2019, reflected an increase in the ACL for loans due to the economic impact of the COVID-19 pandemic. The detail of the changes in the ACL for loans by portfolio segment (including charge-offs and recoveries by loan class) is included in Note 4 (Loans and Related Allowance for Credit Losses) to Financial Statements in this Report.

We consider multiple economic scenarios to develop our estimate of the ACL for loans. The scenarios generally include a base scenario, along with an optimistic (upside) and one or more pessimistic (downside) scenarios. Our estimate of the ACL for loans at December 31, 2020, was based on a weighting of the base and a downside economic scenario of 50% and 50%,

respectively, with no weighting applied to an upside scenario. The base scenario assumed near-term economic stress recovering into late 2021. The downside scenario assumed more sustained adverse economic impacts resulting from the COVID-19 pandemic, compared with the base scenario. The downside scenario assumed U.S. real GDP increasing but not fully recovering during 2021, and a sustained elevation in the U.S. unemployment rate until mid-2022. We considered within each scenario our expectations for the impact of customer accommodation activity, as well as the estimated impact on certain industries that we consider to be directly and most adversely affected by the COVID-19 pandemic.

In addition to quantitative estimates, we consider qualitative factors that represent risks inherent in our processes and assumptions such as economic environmental factors, modeling assumptions and performance, and other subjective factors, including industry trends and emerging risk assessments. During 2020, we considered the significant uncertainty related to the duration and severity of the economic impacts from the COVID-19 pandemic and the incremental risks to our loan portfolio.

The forecasted key economic variables used in our estimate of the ACL for loans at September 30 and December 31, 2020, are presented in Table 34.

Risk Management – Credit Risk Management (continued)

Table 34: Forecasted Key Economic Variables

	2Q 2021	4Q 2021	2Q 2022
Blend of economic scenarios (1):			
U.S. unemployment rate (2):			
Sep 30, 2020	7.3	6.0	5.3
Dec 31, 2020	8.1	7.1	6.2
U.S. real GDP (3):			
Sep 30, 2020	3.9	2.8	3.1
Dec 31, 2020	5.5	4.5	4.0
Home price index (4):			
Sep 30, 2020	(2.0)	(1.8)	1.4
Dec 31, 2020	1.7	(0.2)	2.5
Commercial real estate asset prices (4):			
Sep 30, 2020	(10.9)	(5.5)	0.1
Dec 31, 2020	(9.2)	(9.8)	(5.3)

(1) Represents a weighting of the forecasted economic variable inputs based on a weighting of 50% for the base and 50% for a downside scenario at December 31, 2020, and a weighting of 80% for the base and 20% for a downside scenario at September 30, 2020.

(2) Quarterly average.

(3) Percent change from the preceding period, seasonally adjusted annualized rate.

(4) Percent change year over year of national average; outlook differs by geography and property type.

Future amounts of the ACL for loans will be based on a variety of factors, including loan balance changes, portfolio credit quality and mix changes, and changes in general economic conditions and expectations (including for unemployment and GDP), among other factors. Based on economic conditions at the end of fourth quarter 2020, it was difficult to estimate the length and severity of the economic downturn that may result from the COVID-19 pandemic and the impact of other factors that may influence the level of eventual losses and corresponding requirements for future amounts of the ACL, including the impact of economic stimulus programs and customer accommodation activity. The COVID-19 pandemic could continue to impact the recognition of credit losses in our loan portfolios and may result in increases in our ACL, particularly if the impact on the economy worsens.

We believe the ACL for loans of \$19.7 billion at December 31, 2020, was appropriate to cover expected credit losses, including unfunded credit commitments, at that date. The entire allowance is available to absorb credit losses from the total loan portfolio. The ACL for loans is subject to change and reflects existing factors as of the date of determination, including economic or market conditions and ongoing internal and external examination processes. Due to the sensitivity of the ACL for loans to changes in the economic and business environment, it is possible that we will incur incremental credit losses not anticipated as of the balance sheet date. Our process for determining the allowance for credit losses is discussed in the “Critical Accounting Policies – Allowance for Credit Losses” section and Note 1 (Summary of Significant Accounting Policies) to Financial Statements in this Report.

LIABILITY FOR MORTGAGE LOAN REPURCHASE LOSSES We sell residential mortgage loans to various parties, including (1) government-sponsored entities (GSEs) Federal Home Loan Mortgage Corporation (FHLMC) and Federal National Mortgage Association (FNMA) who include the mortgage loans in GSE-guaranteed mortgage securitizations, (2) SPEs that issue private label MBS, and (3) other financial institutions that purchase mortgage loans for investment or private label securitization. In addition, we pool FHA-insured and VA-guaranteed mortgage loans that are then used to back securities guaranteed by the

Government National Mortgage Association (GNMA). We may be required to repurchase these mortgage loans, indemnify the securitization trust, investor or insurer, or reimburse the securitization trust, investor or insurer for credit losses incurred on loans (collectively, repurchase) in the event of a breach of contractual representations or warranties that is not remedied within a period (usually 90 days or less) after we receive notice of the breach.

In connection with our sales and securitization of residential mortgage loans to various parties, we have established a mortgage repurchase liability, initially at fair value, related to various representations and warranties that reflect management’s estimate of losses for loans for which we could have a repurchase obligation, whether or not we currently service those loans, based on a combination of factors. Our mortgage repurchase liability estimation process also incorporates a forecast of repurchase demands associated with mortgage insurance rescission activity.

Customary with industry practice, we have the right of recourse against correspondent lenders from whom we have purchased loans with respect to representations and warranties. Historical recovery rates as well as projected lender performance are incorporated in the establishment of our mortgage repurchase liability.

We do not typically receive repurchase requests from GNMA, FHA and the Department of Housing and Urban Development (HUD) or VA. As an originator of an FHA-insured or VA-guaranteed loan, we are responsible for obtaining the insurance with the FHA or the guarantee with the VA. To the extent we are not able to obtain the insurance or the guarantee we must request permission to repurchase the loan from the GNMA pool. Such repurchases from GNMA pools typically represent a self-initiated process upon discovery of the uninsurable loan (usually within 180 days from funding of the loan). Alternatively, in lieu of repurchasing loans from GNMA pools, we may be asked by FHA/HUD or the VA to indemnify them (as applicable) for defects found in the Post Endorsement Technical Review process or audits performed by FHA/HUD or the VA. The Post Endorsement Technical Review is a process whereby HUD performs underwriting audits of closed/insured FHA loans for potential deficiencies. Our liability for mortgage loan repurchase losses incorporates probable losses associated with such indemnification.

RISKS RELATING TO SERVICING ACTIVITIES In addition to servicing loans in our portfolio, we act as servicer and/or master servicer of residential mortgage loans included in GSE-guaranteed mortgage securitizations, GNMA-guaranteed mortgage securitizations of FHA-insured/VA-guaranteed mortgages and private label mortgage securitizations, as well as for unsecuritized loans owned by institutional investors.

The loans we service were originated by us or by other mortgage loan originators. As servicer, our primary duties are typically to (1) collect payments due from borrowers, (2) advance certain delinquent payments of principal and interest on the mortgage loans, (3) maintain and administer any hazard, title or primary mortgage insurance policies relating to the mortgage loans, (4) maintain any required escrow accounts for payment of taxes and insurance and administer escrow payments, (5) foreclose on defaulted mortgage loans or, to the extent consistent with the related servicing agreement, consider alternatives to foreclosure, such as loan modifications or short sales, and (6) for loans sold into private label securitizations, manage the foreclosed property through liquidation.

The amount and timing of reimbursement of advances of delinquent payments vary by investor and the applicable servicing agreements. Due to continued customer requests for payment deferrals as a result of the COVID-19 pandemic, the amount of our servicing advances of principal and interest remained elevated. The amount of these advances may continue to increase if additional payment deferrals are provided. Payment deferrals also delay the collection of contractually specified servicing fees, resulting in lower net servicing income.

In accordance with applicable servicing guidelines, delinquency status continues to advance for loans with COVID-related payment deferrals, which has resulted in an increase in delinquent loans serviced for others and a corresponding increase in loans eligible for repurchase from GNMA loan securitization pools. Upon transfer as servicer, we retain the option to repurchase loans from GNMA loan securitization pools, which becomes exercisable when three scheduled loan payments remain unpaid by the borrower. We generally repurchase these loans for cash and as a result, our total consolidated assets do not change. Since April 1, 2020, we repurchased \$28.6 billion of these delinquent loans, substantially all of which had COVID-related payment deferrals.

Loans that regain current status or are otherwise modified in accordance with applicable servicing guidelines may be included in future GNMA loan securitization pools. However, in accordance with guidance issued by GNMA, loans repurchased after June 30, 2020, with COVID-related payment deferrals are ineligible for inclusion in future GNMA loan securitization pools until the borrower has timely made six consecutive payments. This requirement may delay our ability to resell loans into the securitization market. At December 31, 2020, the amount of repurchased GNMA loans with COVID-related payment deferrals that were ineligible for inclusion in future GNMA loan securitization pools due to this requirement was \$22.6 billion.

As master servicer, our primary duties are typically to (1) supervise, monitor and oversee the servicing of the mortgage loans by the servicer, (2) consult with each servicer and use reasonable efforts to cause the servicer to observe its servicing obligations, (3) prepare monthly distribution statements to security holders and, if required by the securitization documents, certain periodic reports required to be filed with the Securities and Exchange Commission (SEC), (4) if required by the securitization documents, calculate distributions and loss allocations on the mortgage-backed securities, (5) prepare tax and information returns of the securitization trust, and (6) advance amounts required by non-affiliated servicers who fail to perform their advancing obligations.

Each agreement under which we act as servicer or master servicer generally specifies a standard of responsibility for actions we take in such capacity and provides protection against expenses and liabilities we incur when acting in compliance with the specified standard. For example, private label securitization agreements under which we act as servicer or master servicer typically provide that the servicer and the master servicer are entitled to indemnification by the securitization trust for taking action or refraining from taking action in good faith or for errors in judgment. However, we are not indemnified, but rather are required to indemnify the securitization trustee, against any failure by us, as servicer or master servicer, to perform our servicing obligations or against any of our acts or omissions that involve willful misfeasance, bad faith or gross negligence in the performance of, or reckless disregard of, our duties. In addition, if we commit a material breach of our obligations as servicer or master servicer, we may be subject to termination if the breach is not cured within a specified period following notice, which can

generally be given by the securitization trustee or a specified percentage of security holders. Whole loan sale contracts under which we act as servicer generally include similar provisions with respect to our actions as servicer. The standards governing servicing in GSE-guaranteed securitizations, and the possible remedies for violations of such standards, vary, and those standards and remedies are determined by servicing guides maintained by the GSEs, contracts between the GSEs and individual servicers and topical guides published by the GSEs from time to time. Such remedies could include indemnification or repurchase of an affected mortgage loan. In addition, in connection with our servicing activities, we could become subject to consent orders and settlement agreements with federal and state regulators for alleged servicing issues and practices. In general, these can require us to provide customers with loan modification relief, refinancing relief, and foreclosure prevention and assistance, and can result in the imposition of certain monetary penalties on us.

Asset/Liability Management

Asset/liability management involves evaluating, monitoring and managing interest rate risk, market risk, liquidity and funding. Primary oversight of interest rate risk and market risk resides with the Finance Committee of the Board, which oversees the administration and effectiveness of financial risk management policies and processes used to assess and manage these risks. Primary oversight of liquidity and funding resides with the Risk Committee of the Board. At the management level, the Corporate Asset/Liability Committee (Corporate ALCO), which consists of management from finance, risk and business groups, oversees these risks and supports periodic reports provided to the Board's Finance Committee and Risk Committee as appropriate. As discussed in more detail for market risk activities below, we employ separate management level oversight specific to market risk.

INTEREST RATE RISK Interest rate risk is created in our role as a financial intermediary for customers based on investments such as loans and other extensions of credit and debt securities. Interest rate risk can have a significant impact to our earnings. We are subject to interest rate risk because:

- assets and liabilities may mature or reprice at different times. If assets reprice faster than liabilities and interest rates are generally rising, earnings will initially increase;
- assets and liabilities may reprice at the same time but by different amounts;
- short-term and long-term market interest rates may change by different amounts. For example, the shape of the yield curve may affect yield for new loans and funding costs differently;
- the remaining maturity for various assets or liabilities may shorten or lengthen as interest rates change. For example, if long-term mortgage interest rates increase sharply, MBS held in the debt securities portfolio may pay down at a slower rate than anticipated, which could impact portfolio income; or
- interest rates may have a direct or indirect effect on loan demand, collateral values, credit losses, mortgage origination volume, and the fair value of MSRs and other financial instruments.

Currently, our profile is such that we project net interest income will benefit from higher interest rates as our assets would reprice faster and to a greater degree than our liabilities, while in the case of lower interest rates, our assets would reprice

Risk Management – Asset/Liability Management (continued)

downward and to a greater degree than our liabilities resulting in lower net interest income.

We assess interest rate risk by comparing outcomes under various net interest income simulations using many interest rate scenarios that differ in the direction of interest rate changes, the degree of change over time, the speed of change and the projected shape of the yield curve. These simulations require assumptions regarding drivers of earnings and balance sheet composition such as loan originations, prepayment speeds on loans and debt securities, deposit flows and mix, as well as pricing strategies.

Our most recent simulations, as presented in Table 35, estimate net interest income sensitivity over the next 12 months using instantaneous movements across the yield curve with both lower and higher interest rates relative to our base scenario. Steeper and flatter scenarios measure non-parallel changes in the yield curve, with long-term interest rates defined as all tenors three years and longer (e.g., 10-year U.S. Treasury securities) and short-term interest rates defined as all tenors less than three years. Where applicable, U.S. dollar interest rates are floored at 0.00%. The following describes the simulation assumptions for the scenarios presented in Table 35:

- Simulations are dynamic and reflect anticipated changes to our assets and liabilities.
- Other macroeconomic variables that could be correlated with the changes in interest rates are held constant.
- Mortgage prepayment and origination assumptions vary across scenarios and reflect only the impact of the higher or lower interest rates.
- Our base scenario deposit forecast incorporates mix changes consistent with the base interest rate trajectory. Deposit mix is modeled to be the same as in the base scenario across the alternative scenarios. In higher interest rate scenarios, customer activity that shifts balances into higher-yielding products could reduce expected net interest income.
- We hold the size of the projected debt and equity securities portfolios constant across scenarios.

Table 35: Net Interest Income Sensitivity

(\$ in billions)	December 31, 2020	
Parallel Shift:		
+100 bps shift in interest rates	\$	6.7
-100 bps shift in interest rates		(2.7)
Steeper yield curve:		
+50 bps shift in long-term interest rates		1.3
Flatter yield curve:		
+50 bps shift in short-term interest rates		2.2
-50 bps shift in long-term interest rates		(1.4)

The sensitivity results above do not capture noninterest income or expense impacts. Our interest rate sensitive noninterest income and expense are predominantly driven by mortgage banking activities, and may move in the opposite direction of our net interest income. Mortgage originations generally decline in response to higher interest rates and generally increase in response to lower interest rates, particularly refinancing activity. Mortgage banking results are also impacted by the valuation of MSRs and related hedge positions. See the “Risk Management – Asset/Liability Management – Mortgage Banking Interest Rate and Market Risk” section in this Report for additional information.

Interest rate sensitive noninterest income also results from changes in earnings credit for noninterest-bearing deposits that

reduce treasury management deposit service fees. Additionally, our trading assets are (before the effects of certain economic hedges) generally less sensitive to changes in interest rates than the related funding liabilities. As a result, net interest income from the trading portfolio contracts and expands as interest rates rise and fall, respectively. The impact to net interest income does not include the fair value changes of trading securities, which, along with the effects of related economic hedges, are recorded in noninterest income. For more information on our trading assets and liabilities, see Note 2 (Trading Activities) to Financial Statements in this Report.

We use the debt securities portfolio and exchange-traded and over-the-counter (OTC) interest rate derivatives to manage our interest rate exposures. See Note 1 (Summary of Significant Accounting Policies) and Note 3 (Available-for-Sale and Held-to-Maturity Debt Securities) to Financial Statements in this Report for additional information on the use of the debt securities portfolios. The notional or contractual amount, credit risk amount and fair value of the derivatives used to hedge our interest rate risk exposures as of December 31, 2020, and December 31, 2019, are presented in Note 16 (Derivatives) to Financial Statements in this Report. We use derivatives for asset/liability management in two main ways:

- to convert the cash flows from selected asset and/or liability instruments/portfolios including investments, commercial loans and long-term debt, from fixed-rate payments to floating-rate payments, or vice versa; and
- to economically hedge our mortgage origination pipeline, funded mortgage loans, and MSRs.

MORTGAGE BANKING INTEREST RATE AND MARKET RISK We originate, fund and service mortgage loans, which subjects us to various risks, including credit, liquidity and interest rate risks. Based on market conditions and other factors, we reduce credit and liquidity risks by selling or securitizing mortgage loans. We determine whether mortgage loans will be held for investment or held for sale at the time of commitment, but may change our intent to hold loans for investment or sale as part of our corporate asset/liability management activities. We may also retain securities in our investment portfolio at the time we securitize mortgage loans.

We typically originate agency residential mortgage loans as held for sale and certain prime non-agency residential mortgage loans as held for investment. Occasionally, we designate some of our non-agency residential mortgage loan originations as held for sale in support of future issuances of private label residential mortgage-backed securities (RMBS). We issued \$2.6 billion and \$2.4 billion of RMBS in 2020 and 2019, respectively.

Interest rate and market risk can be substantial in our mortgage businesses. Changes in interest rates may impact origination and servicing fees, the fair value of our residential MSRs, LHFS, and derivative loan commitments (interest rate “locks”) extended to mortgage applicants, as well as the associated income or loss in mortgage banking noninterest income, including the gains or losses related to economic hedges of MSRs and LHFS. Given the time it takes for customer behavior to fully react to interest rate changes, as well as the time required for processing a new application, providing the commitment, and securitizing and selling the loan, interest rate changes will generally affect our mortgage banking noninterest income on a lagging basis. The amount and timing of the impact will depend on the magnitude, speed and duration of the changes in interest rates.

The valuation of our residential MSRs can be highly subjective and involve complex judgments by management

about matters that are inherently unpredictable. See the “Critical Accounting Policies – Valuation of Residential Mortgage Servicing Rights” section in this Report for additional information. Changes in interest rates influence a variety of significant assumptions included in the periodic valuation of residential MSR, including prepayment speeds, expected returns and potential risks on the servicing asset portfolio, costs to service, the value of escrow balances and other servicing valuation elements. For additional information on mortgage banking, including key economic assumptions and the sensitivity of the fair value of MSR, see Note 9 (Mortgage Banking Activities) and Note 17 (Fair Values of Assets and Liabilities) to Financial Statements in this Report.

An increase in interest rates generally reduces the propensity for refinancing, extends the expected duration of the servicing portfolio and, therefore, increases the estimated fair value of the MSR. However, an increase in interest rates can also reduce mortgage loan demand, which reduces noninterest income from origination activities. A decline in interest rates would generally have an opposite impact.

To reduce our exposure to changes in interest rates, our residential MSR are economically hedged with a combination of derivative instruments, including highly liquid mortgage forward contracts, interest rate swaps and interest rate options. MSR hedging results include a combination of directional gain or loss due to market changes as well as any carry income related to mortgage forward contracts. Carry income represents accretion from the forward delivery price to the spot price including both the yield earned on the reference securities and the market implied cost of financing during the period. A steep yield curve generally produces higher carry income while a flat or inverted yield curve can result in lower or potentially negative carry income.

The size of the hedge and the particular combination of forward hedging instruments at any point in time is designed to reduce the volatility of our earnings over various time frames within a range of mortgage interest rates. Because market factors, the composition of the mortgage servicing portfolio and the relationship between the origination and servicing sides of our mortgage businesses change continually, the types of instruments used in our hedging are reviewed daily and rebalanced based on our evaluation of current market factors and the interest rate risk inherent in our portfolio.

Hedging the various sources of interest rate risk in mortgage banking is a complex process that requires sophisticated modeling and constant monitoring. There are several potential risks to earnings from mortgage banking related to origination volumes and mix, valuation of MSR and associated hedging results, the relationship and degree of volatility between short-term and long-term interest rates, and changes in servicing and foreclosures costs. While we attempt to balance our mortgage banking interest rate and market risks, the financial instruments we use may not perfectly correlate with the values and income being hedged.

MARKET RISK Market risk is the risk of possible economic loss from adverse changes in market risk factors such as interest rates, credit spreads, foreign exchange rates, equity and commodity prices, and the risk of possible loss due to counterparty exposure. This applies to implied volatility risk, basis risk, and market liquidity risk. It also includes price risk in the trading book, mortgage servicing rights and the hedge effectiveness risk associated with the mortgage book, and impairment on private equity investments.

The Board’s Finance Committee has primary oversight responsibility for market risk and oversees the Company’s market risk exposure and market risk management strategies. In addition, the Board’s Risk Committee has certain oversight responsibilities with respect to market risk, including adjusting the Company’s market risk appetite with input from the Finance Committee. The Finance Committee also reports key market risk matters to the Risk Committee.

At the management level, the Market and Counterparty Risk Management function, which is part of IRM, has oversight responsibility for market risk. The Market and Counterparty Risk Management function reports into the CRO and provides periodic reports related to market risk to the Board’s Finance Committee.

MARKET RISK – TRADING ACTIVITIES We engage in trading activities to accommodate the investment and risk management activities of our customers and to execute economic hedging to manage certain balance sheet risks. These trading activities predominantly occur within our CIB businesses and to a lesser extent other businesses of the Company. Debt securities held for trading, equity securities held for trading, trading loans and trading derivatives are financial instruments used in our trading activities, and all are carried at fair value. Income earned on the financial instruments used in our trading activities include net interest income, changes in fair value and realized gains and losses. Net interest income earned from our trading activities is reflected in the interest income and interest expense components of our consolidated statement of income. Changes in fair value of the financial instruments used in our trading activities are reflected in net gains from trading activities. For more information on the financial instruments used in our trading activities and the income from these trading activities, see Note 2 (Trading Activities) to Financial Statements in this Report.

Value-at-risk (VaR) is a statistical risk measure used to estimate the potential loss from adverse moves in the financial markets. The Company uses VaR metrics complemented with sensitivity analysis and stress testing in measuring and monitoring market risk. These market risk measures are monitored at both the business unit level and at aggregated levels on a daily basis. Our corporate market risk management function aggregates and monitors all exposures to ensure risk measures are within our established risk appetite. Changes to the market risk profile are analyzed and reported on a daily basis. The Company monitors various market risk exposure measures from a variety of perspectives, including line of business, product, risk type, and legal entity.

Trading VaR is the measure used to provide insight into the market risk exhibited by the Company’s trading positions. The Company calculates Trading VaR for risk management purposes to establish line of business and Company-wide risk limits. Trading VaR is calculated based on all trading positions on our consolidated balance sheet.

Table 36 shows the Company’s Trading General VaR by risk category. Our Trading General VaR uses a historical simulation model which assumes that historical changes in market values are representative of the potential future outcomes and measures the expected earnings loss of the Company over a 1-day time interval at a 99% confidence level. Our historical simulation model is based on equally weighted data from a 12-month historical look-back period. We believe using a 12-month look-back period helps ensure the Company’s VaR is responsive to current market conditions. The 99% confidence level equates to an expectation that the Company would incur

Risk Management – Asset/Liability Management (continued)

single-day trading losses in excess of the VaR estimate on average once every 100 trading days.

Average Company Trading General VaR was \$123 million for the year ended December 31, 2020, compared with \$22 million for the year ended December 31, 2019. The increase in average

Company Trading General VaR for the year ended December 31, 2020, was driven by market volatility due to the COVID-19 pandemic, in particular changes in interest rate curves and a significant widening of credit spreads entering the 12-month historical look-back window used to calculate VaR.

Table 36: Trading 1-Day 99% General VaR by Risk Category

(in millions)	Year ended December 31,							
	2020				2019			
	Period end	Average	Low	High	Period end	Average	Low	High
Company Trading General VaR Risk Categories								
Credit	\$ 106	72	15	121	15	17	11	30
Interest rate	81	104	5	241	14	27	9	49
Equity	32	14	4	35	5	5	4	11
Commodity	3	3	1	8	2	2	1	6
Foreign exchange	1	1	1	6	1	1	1	1
Diversification benefit (1)	(126)	(71)			(13)	(30)		
Company Trading General VaR	\$ 97	123			24	22		

(1) The period-end VaR was less than the sum of the VaR components described above, which is due to portfolio diversification. The diversification effect arises because the risks are not perfectly correlated causing a portfolio of positions to usually be less risky than the sum of the risks of the positions alone. The diversification benefit is not meaningful for low and high metrics since they may occur on different days.

Sensitivity Analysis Given the inherent limitations of the VaR models, the Company uses other measures, including sensitivity analysis, to measure and monitor risk. Sensitivity analysis is the measure of exposure to a single risk factor, such as a 0.01% increase in interest rates or a 1% increase in equity prices. We conduct and monitor sensitivity on interest rates, credit spreads, volatility, equity, commodity, and foreign exchange exposure. Sensitivity analysis complements VaR as it provides an indication of risk relative to each factor irrespective of historical market moves.

Stress Testing While VaR captures the risk of loss due to adverse changes in markets using recent historical market data, stress testing is designed to capture the Company's exposure to extreme but low probability market movements. Stress scenarios estimate the risk of losses based on management's assumptions of abnormal but severe market movements such as severe credit spread widening or a large decline in equity prices. These scenarios assume that the market moves happen instantaneously and no repositioning or hedging activity takes place to mitigate losses as events unfold (a conservative approach since experience demonstrates otherwise).

An inventory of scenarios is maintained representing both historical and hypothetical stress events that affect a broad range of market risk factors with varying degrees of correlation and differing time horizons. Hypothetical scenarios assess the impact of large movements in financial variables on portfolio values. Typical examples include a 1% (100 basis point) increase across the yield curve or a 10% decline in equity market indexes. Historical scenarios utilize an event-driven approach: the stress scenarios are based on plausible but rare events, and the analysis addresses how these events might affect the risk factors relevant to a portfolio.

The Company's stress testing framework is also used in calculating results in support of the Federal Reserve Board's Comprehensive Capital Analysis and Review (CCAR) and internal stress tests. Stress scenarios are regularly reviewed and updated to address potential market events or concerns. For more detail on the CCAR process, see the "Capital Management" section in this Report.

MARKET RISK – EQUITY SECURITIES We are directly and indirectly affected by changes in the equity markets. We make and manage direct investments in start-up businesses, emerging growth companies, management buy-outs, acquisitions and corporate recapitalizations. We also invest in non-affiliated funds that make similar private equity investments. These private equity investments are made within capital allocations approved by management and the Board. The Board's policy is to review business developments, key risks and historical returns for the private equity investment portfolio at least annually. Management reviews these investments at least quarterly to assess them for impairment and observable price changes. For nonmarketable equity securities, the analysis is based on facts and circumstances of each individual investment and the expectations for that investment's cash flows, capital needs, the viability of its business model, our exit strategy, and observable price changes that are similar to the investments held. Investments in nonmarketable equity securities include private equity investments accounted for under the equity method, fair value through net income, and the measurement alternative.

In conjunction with the March 2008 initial public offering (IPO) of Visa, Inc. (Visa), we received approximately 20.7 million shares of Visa Class B common stock, the class which was apportioned to member banks of Visa at the time of the IPO. To manage our exposure to Visa and realize the value of the appreciated Visa shares, we incrementally sold these shares through a series of sales, thereby eliminating this position as of September 30, 2015. As part of these sales, we agreed to compensate the buyer for any additional contributions to a litigation settlement fund for the litigation matters associated with the Class B shares we sold. Our exposure to this retained litigation risk has been updated quarterly and is reflected on our consolidated balance sheet. For additional information about the associated litigation matters, see the "Interchange Litigation" section in Note 15 (Legal Actions) to Financial Statements in this Report.

As part of our business to support our customers, we trade public equities, listed/OTC equity derivatives and convertible bonds. We have parameters that govern these activities. We also have marketable equity securities that include investments relating to our venture capital activities. We manage these

marketable equity securities within capital risk limits approved by management and the Board and monitored by Corporate ALCO and the Market Risk Committee. The fair value changes in these marketable equity securities are recognized in net income. For additional information, see Note 6 (Equity Securities) to Financial Statements in this Report.

Changes in equity market prices may also indirectly affect our net income by (1) the value of third-party assets under management and, hence, fee income, (2) borrowers whose ability to repay principal and/or interest may be affected by the stock market, or (3) brokerage activity, related commission income and other business activities. Each business line monitors and manages these indirect risks.

LIQUIDITY RISK AND FUNDING In the ordinary course of business, we enter into contractual obligations that may require future cash payments, including funding for customer loan requests, customer deposit maturities and withdrawals, debt service, leases for premises and equipment, and other cash commitments. The objective of effective liquidity management is to ensure that we can meet our contractual obligations and other cash commitments efficiently under both normal operating conditions and under periods of Wells Fargo-specific and market stress. For more information on these obligations, see the following sections and Notes to Financial Statements in this Report:

- “Commitments to Lend” section within Loans and Related Allowance for Credit Losses (Note 4)
- Leasing Activity (Note 5)
- Deposits (Note 11)
- Long-Term Debt (Note 12)
- Guarantees and Other Commitments (Note 13)
- Employee Benefits and Other Expenses (Note 21)
- Income Taxes (Note 23)

To help achieve this objective, the Board establishes liquidity guidelines that require sufficient asset-based liquidity to cover potential funding requirements and to avoid over-dependence on volatile, less reliable funding markets. These guidelines are monitored on a monthly basis by the Corporate ALCO and on a quarterly basis by the Board. These guidelines are established and monitored for both the consolidated company and for the Parent on a stand-alone basis to ensure that the Parent is a source of strength for its regulated, deposit-taking banking subsidiaries. The Parent acts as a source of funding for the Company through the issuance of long-term debt and equity, and WFC Holdings, LLC, an intermediate holding company and subsidiary of the Parent (the “IHC”), provides funding support for the ongoing operational requirements of the Parent and certain of its direct and indirect subsidiaries. For more information on the IHC, see the “Regulatory Matters – ‘Living Will’ Requirements and Related Matters” section in this Report.

Liquidity Stress Tests Liquidity stress tests are performed to help ensure that the Company has sufficient liquidity to meet contractual and contingent outflows modeled under a variety of stress scenarios. Our scenarios utilize market-wide as well as corporate-specific events, including a range of stress conditions and time horizons. Stress testing results facilitate evaluation of the Company’s projected liquidity position during stress and inform future needs in the Company’s funding plan.

Contingency Funding Plan Our contingency funding plan (CFP), which is approved by Corporate ALCO and the Board’s Risk Committee, sets out the Company’s strategies and action plans

to address potential liquidity needs during market-wide or idiosyncratic liquidity events. The CFP establishes measures for monitoring emerging liquidity events and describes the processes for communicating and managing stress events should they occur. The CFP also identifies alternate funding and liquidity strategies available to the Company in a period of stress.

Liquidity Standards We are subject to a rule, issued by the FRB, OCC and FDIC, that establishes a quantitative minimum liquidity requirement consistent with the liquidity coverage ratio (LCR) established by the Basel Committee on Banking Supervision (BCBS). The rule requires a covered banking organization, such as Wells Fargo, to hold high-quality liquid assets (HQLA), predominantly consisting of central bank deposits, government debt securities, and mortgage-backed securities of federal agencies that can be converted easily and quickly into cash, in an amount equal to or greater than its projected net cash outflows during a 30-day stress period. The LCR applies to the Company on a consolidated basis and to our insured depository institutions (IDIs) with total assets of \$10 billion or more. In addition, rules issued by the FRB impose enhanced liquidity risk management standards on large BHCs, such as Wells Fargo.

The FRB, OCC and FDIC have also issued a rule implementing a stable funding requirement, known as the net stable funding ratio (NSFR), which requires a covered banking organization, such as Wells Fargo, to maintain a minimum amount of stable funding, including common equity, long-term subordinated debt and most types of deposits, in relation to its assets, derivative exposures and commitments over a one-year horizon period. The NSFR will become effective on July 1, 2021, and applies to the Company on a consolidated basis and to our IDIs with total assets of \$10 billion or more. Based on our liquidity profile at December 31, 2020, we expect to be compliant with the NSFR requirement.

Liquidity Coverage Ratio As of December 31, 2020, the consolidated Company, Wells Fargo Bank, N.A., and Wells Fargo National Bank West exceeded the minimum LCR requirement of 100%, which is calculated as HQLA divided by projected net cash outflows, as each is defined under the LCR rule. Table 37 presents the Company’s quarterly average values for the daily-calculated LCR and its components calculated pursuant to the LCR rule requirements.

Table 37: Liquidity Coverage Ratio

(in millions, except ratio)	Average for Quarter ended		
	Dec 31, 2020	Sep 30, 2020	Dec 31, 2019
HQLA (1):			
Eligible cash	\$ 213,937	210,715	117,693
Eligible securities (2)	201,060	213,358	255,669
Total HQLA	414,997	424,073	373,362
Projected net cash outflows	312,697	317,064	312,019
LCR	133%	134	120

(1) Excludes excess HQLA at certain subsidiaries that is not transferable to other Wells Fargo entities.

(2) Net of applicable haircuts required under the LCR rule.

Liquidity Sources We maintain liquidity in the form of cash, cash equivalents and unencumbered high-quality, liquid debt securities. These assets make up our primary sources of liquidity. Our primary sources of liquidity are substantially the same in composition as HQLA under the LCR rule; however, our primary sources of liquidity will generally exceed HQLA calculated under the LCR rule due to the applicable haircuts to HQLA and the

Risk Management – Asset/Liability Management (continued)

exclusion of excess HQLA at our subsidiary IDIs required under the LCR rule. Our primary sources of liquidity are presented in Table 38, which also includes encumbered securities that are not included as available HQLA in the calculation of the LCR.

Our cash is predominantly on deposit with the Federal Reserve. Debt securities included as part of our primary sources of liquidity are comprised of U.S. Treasury and federal agency

debt, and MBS issued by federal agencies within our debt securities portfolio. We believe these debt securities provide quick sources of liquidity through sales or by pledging to obtain financing, regardless of market conditions. Some of these debt securities are within our HTM portfolio and, as such, are not intended for sale but may be pledged to obtain financing.

Table 38: Primary Sources of Liquidity

(in millions)	December 31, 2020			December 31, 2019		
	Total	Encumbered	Unencumbered	Total	Encumbered	Unencumbered
Interest-earning deposits with banks	\$ 236,376	—	236,376	119,493	—	119,493
Debt securities of U.S. Treasury and federal agencies	70,756	5,370	65,386	61,099	3,107	57,992
Mortgage-backed securities of federal agencies	258,668	49,156	209,512	258,589	41,135	217,454
Total	\$ 565,800	54,526	511,274	439,181	44,242	394,939

In addition to our primary sources of liquidity shown in Table 38, liquidity is also available through the sale or financing of other debt securities including trading and/or AFS debt securities, as well as through the sale, securitization or financing of loans, to the extent such debt securities and loans are not encumbered. As of December 31, 2020, we also maintained approximately \$244.1 billion of available borrowing capacity at various Federal Home Loan Banks and the Federal Reserve Discount Window.

Deposits have historically provided a sizable source of relatively low-cost funds. Deposits were 158% and 137% of total loans at December 31, 2020 and 2019, respectively. Additional funding is provided by long-term debt and short-term borrowings. Table 39 shows selected information for short-term borrowings, which generally mature in less than 30 days. We pledge certain financial instruments that we own to collateralize repurchase agreements and other securities financings. For additional information, see the “Pledged Assets” section of Note 14 (Pledged Assets and Collateral) to Financial Statements in this Report.

Table 39: Short-Term Borrowings

(in millions)	2020		2019		2018	
	Amount	Rate	Amount	Rate	Amount	Rate
As of December 31,						
Federal funds purchased and securities sold under agreements to repurchase	\$ 46,362	(0.03)%	\$ 92,403	1.54 %	\$ 92,430	2.65 %
Other short-term borrowings	12,637	(0.29)	12,109	0.60	13,357	1.63
Total	\$ 58,999	(0.09)	\$ 104,512	1.43	\$ 105,787	2.52
Year ended December 31,						
Average daily balance						
Federal funds purchased and securities sold under agreements to repurchase	\$ 58,971	0.47	\$ 102,888	2.11	\$ 90,348	1.78
Other short-term borrowings	11,235	(0.22)	12,449	1.20	13,919	0.79
Total	\$ 70,206	0.36	\$ 115,337	2.01	\$ 104,267	1.65
Maximum month-end balance						
Federal funds purchased and securities sold under agreements to repurchase (1)	\$ 91,121	N/A	\$ 111,726	N/A	\$ 93,918	N/A
Other short-term borrowings (2)	13,253	N/A	14,129	N/A	16,924	N/A

N/A – Not applicable

(1) Highest month-end balance in each of the last three years was February 2020, October 2019 and November 2018.

(2) Highest month-end balance in each of the last three years was March 2020, February 2019 and January 2018.

Long-Term Debt We access domestic and international capital markets for long-term funding (generally greater than one year) through issuances of registered debt securities, private placements and asset-backed secured funding. We issue long-term debt in a variety of maturities and currencies to achieve cost-efficient funding and to maintain an appropriate maturity profile. Proceeds from securities issued were used for general corporate purposes, and, unless otherwise specified in the applicable prospectus or prospectus supplement, we expect the proceeds from securities issued in the future will be used for the same purposes. Depending on market conditions, we may purchase our outstanding debt securities from time to time in privately negotiated or open market transactions, by tender offer, or otherwise. We issued \$38.1 billion of long-term debt in 2020. For additional information, see Note 12 (Long-Term Debt) to Financial Statements in this Report.

Credit Ratings Investors in the long-term capital markets, as well as other market participants, generally will consider, among other factors, a company's debt rating in making investment

decisions. Rating agencies base their ratings on many quantitative and qualitative factors, including capital adequacy, liquidity, asset quality, business mix, the level and quality of earnings, and rating agency assumptions regarding the probability and extent of federal financial assistance or support for certain large financial institutions. Adverse changes in these factors could result in a reduction of our credit rating; however, our debt securities do not contain credit rating covenants.

There were no actions undertaken by the rating agencies with regard to our credit ratings during fourth quarter 2020.

See the "Risk Factors" section in this Report for additional information regarding our credit ratings and the potential impact a credit rating downgrade would have on our liquidity and operations, as well as Note 16 (Derivatives) to Financial Statements in this Report for information regarding additional collateral and funding obligations required for certain derivative instruments in the event our credit ratings were to fall below investment grade.

The credit ratings of the Parent and Wells Fargo Bank, N.A., as of December 31, 2020, are presented in Table 40.

Table 40: Credit Ratings as of December 31, 2020

	Wells Fargo & Company		Wells Fargo Bank, N.A.	
	Senior debt	Short-term borrowings	Long-term deposits	Short-term borrowings
Moody's	A2	P-1	Aa1	P-1
S&P Global Ratings	BBB+	A-2	A+	A-1
Fitch Ratings, Inc.	A+	F1	AA	F1+
DBRS Morningstar	AA (low)	R-1 (middle)	AA	R-1 (high)

FEDERAL HOME LOAN BANK MEMBERSHIP The Federal Home Loan Banks (the FHLBs) are a group of cooperatives that lending institutions use to finance housing and economic development in local communities. We are a member of the FHLBs based in Dallas, Des Moines and San Francisco. FHLB members are required to maintain a minimum investment in capital stock of the applicable FHLB. The board of directors of each FHLB can increase the minimum investment requirements in the event it has concluded that additional capital is required to allow it to meet its own regulatory capital requirements. Any increase in the minimum investment requirements outside of specified ranges requires the approval of the Federal Housing Finance Agency. Because the extent of any obligation to increase our investment in any of the FHLBs depends entirely upon the occurrence of a future event, the amount of any future investment in the capital stock of the FHLBs is not determinable.

Capital Management

We have an active program for managing capital through a comprehensive process for assessing the Company's overall capital adequacy. Our objective is to maintain capital at an amount commensurate with our risk profile and risk tolerance objectives, and to meet both regulatory and market expectations. We primarily fund our capital needs through the retention of earnings net of both dividends and share repurchases, as well as through the issuance of preferred stock and long- and short-term debt. Retained earnings at December 31, 2020, decreased \$3.8 billion from December 31, 2019, predominantly as a result of common and preferred stock dividends of \$6.3 billion, partially offset by \$3.3 billion of Wells Fargo net income. During 2020, we issued \$2.7 billion of common stock, substantially all of which was issued in connection with employee stock ownership plans, excluding conversions of preferred shares. During 2020, we repurchased 75.7 million shares of common stock at a cost of \$3.4 billion, substantially all of which occurred in first quarter 2020. For additional information about capital planning, including the FRB's recent restrictions on capital distributions, see the "Capital Planning and Stress Testing" section below.

In 2020, we issued \$3.2 billion of preferred stock and redeemed \$3.3 billion of preferred stock. In January 2021, we issued \$3.5 billion of our Preferred Stock, Series BB, and in February 2021, we issued \$1.05 billion of our Preferred Stock, Series CC. Additionally, in February 2021, we announced the redemption of our Preferred Stock, Series I, Series P and Series W, and a partial redemption of our Preferred Stock, Series N, for an aggregate cost of \$4.5 billion. For additional information, see Note 18 (Preferred Stock) to Financial Statements in this Report.

Regulatory Capital Requirements

The Company and each of our IDIs are subject to various regulatory capital adequacy requirements administered by the FRB and the OCC. Risk-based capital rules establish risk-adjusted ratios relating regulatory capital to different categories of assets and off-balance sheet exposures as discussed below.

RISK-BASED CAPITAL AND RISK-WEIGHTED ASSETS The Company is subject to rules issued by federal banking regulators to implement Basel III capital requirements for U.S. banking organizations. The rules contain two frameworks for calculating capital requirements, a Standardized Approach and an Advanced Approach applicable to certain institutions, including Wells Fargo. Our capital adequacy is assessed based on the lower of our risk-based capital ratios calculated under the two approaches. The Company is required to satisfy the risk-based capital ratio requirements to avoid restrictions on capital distributions and discretionary bonus payments. Table 41 and Table 42 present the risk-based capital requirements applicable to the Company on a fully phased-in basis under the Standardized Approach and Advanced Approach, respectively, as of December 31, 2020.

Table 41: Risk-Based Capital Requirements – Standardized Approach

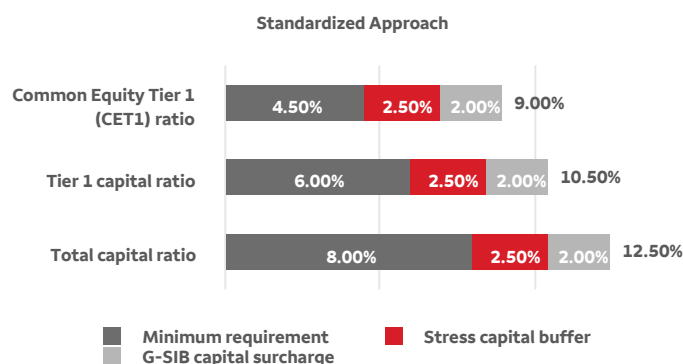
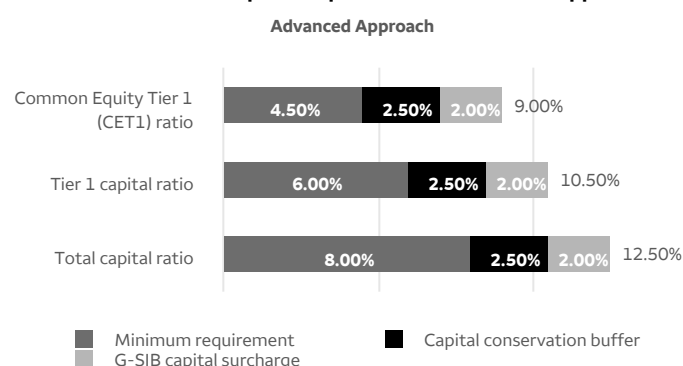


Table 42: Risk-Based Capital Requirements – Advanced Approach



In addition to the risk-based capital requirements described in Table 41 and Table 42, if the FRB determines that a period of excessive credit growth is contributing to an increase in systemic risk, a countercyclical buffer of up to 2.50% could be added to the risk-based capital ratio requirements under federal banking regulations.

The capital conservation buffer is applicable to certain institutions, including Wells Fargo, under the Advanced Approach and is intended to absorb losses during times of economic or financial stress.

The stress capital buffer, which replaced the capital conservation buffer under the Standardized Approach beginning October 1, 2020, is calculated based on the decrease in a BHC's risk-based capital ratios under the severely adverse scenario in the FRB's annual supervisory stress test and related Comprehensive Capital Analysis and Review (CCAR), plus four quarters of planned common stock dividends. Because the stress capital buffer is calculated annually based on data that can differ over time, our stress capital buffer, and thus our risk-based capital ratio requirements under the Standardized Approach, are subject to change in future years. In August 2020, the FRB announced that the Company's stress capital buffer for the period October 1, 2020, through September 30, 2021, is 2.50%. However, in December 2020, in conjunction with a capital plan resubmission process, the FRB announced that it was extending through March 31, 2021, the time period during which it can recalculate the stress capital buffers of large BHCs.

As a global systemically important bank (G-SIB), we are also subject to the FRB's rule implementing an additional capital surcharge of between 1.00-4.50% on the risk-based capital ratio requirements of G-SIBs. Under the rule, we must annually calculate our surcharge under two methods and use the higher of the two surcharges. The first method (method one) considers our size, interconnectedness, cross-jurisdictional activity, substitutability, and complexity, consistent with the methodology developed by the BCBS and the Financial Stability Board (FSB). The second method (method two) uses similar inputs, but replaces substitutability with use of short-term wholesale funding and will generally result in higher surcharges than under method one. Because the G-SIB capital surcharge is calculated annually based on data that can differ over time, the amount of the surcharge is subject to change in future years.

The Basel III capital requirements for calculating CET1 and tier 1 capital, along with risk-weighted assets (RWAs), are fully phased-in. However, the requirements for determining tier 2 and total capital are still in accordance with Transition Requirements and are scheduled to be fully phased-in by the end of 2021.

Under the risk-based capital rules, on-balance sheet assets and credit equivalent amounts of derivatives and off-balance sheet items are assigned to one of several broad risk categories according to the obligor, or, if relevant, the guarantor or the

nature of any collateral. The aggregate dollar amount in each risk category is then multiplied by the risk weight associated with that category. The resulting weighted values from each of the risk categories are aggregated for determining total RWAs.

The tables that follow provide information about our risk-based capital and related ratios as calculated under Basel III capital rules. Although we report certain capital amounts and ratios in accordance with Transition Requirements for bank regulatory reporting purposes, we manage our capital on a fully phased-in basis. For information about our capital requirements calculated in accordance with Transition Requirements, see Note 28 (Regulatory Capital Requirements and Other Restrictions) to Financial Statements in this Report.

Table 43 summarizes our CET1, tier 1 capital, total capital, RWAs and capital ratios on a fully phased-in basis at December 31, 2020 and 2019. Fully phased-in total capital amounts and ratios are considered non-GAAP financial measures that are used by management, bank regulatory agencies, investors and analysts to assess and monitor the Company's capital position. See Table 44 for information regarding the calculation and components of our CET1, tier 1 capital, total capital and RWAs, as well as a corresponding reconciliation to GAAP financial measures for our fully phased-in total capital amounts.

Table 43: Capital Components and Ratios (Fully Phased-In)

(in millions, except ratios)		Required Capital Ratios (1)	December 31, 2020		December 31, 2019	
			Advanced Approach	Standardized Approach	Advanced Approach	Standardized Approach
Common Equity Tier 1	(A)		\$ 138,297	138,297	138,760	138,760
Tier 1 Capital	(B)		158,196	158,196	158,949	158,949
Total Capital	(C)		186,803	196,529	187,813	195,703
Risk-Weighted Assets (2)	(D)		1,158,355	1,193,744	1,165,079	1,245,853
Common Equity Tier 1 Capital Ratio (2)	(A)/(D)	9.00 %	11.94	11.59 *	11.91	11.14 *
Tier 1 Capital Ratio (2)	(B)/(D)	10.50	13.66	13.25 *	13.64	12.76 *
Total Capital Ratio (2)	(C)/(D)	12.50	16.13 *	16.46	16.12	15.71 *

* Denotes the binding ratio based on the lower calculation under the Advanced and Standardized Approaches.

(1) Represents the minimum ratios required to avoid restrictions on capital distributions and discretionary bonus payments. The required ratios were the same under both the Standardized and Advanced Approaches at December 31, 2020.

(2) RWAs and capital ratios for December 31, 2019, have been revised as a result of a decrease in RWAs under the Advanced Approach due to the correction of duplicated operational loss amounts.

Capital Management (continued)

Table 44 provides information regarding the calculation and composition of our risk-based capital under the Advanced and Standardized Approaches at December 31, 2020 and 2019.

Table 44: Risk-Based Capital Calculation and Components

(in millions)	December 31, 2020		December 31, 2019	
	Advanced Approach	Standardized Approach	Advanced Approach	Standardized Approach
Total equity	\$ 185,920	185,920	187,984	187,984
Adjustments:				
Preferred stock	(21,136)	(21,136)	(21,549)	(21,549)
Additional paid-in capital on preferred stock	152	152	(71)	(71)
Unearned ESOP shares	875	875	1,143	1,143
Noncontrolling interests	(1,033)	(1,033)	(838)	(838)
Total common stockholders' equity	164,778	164,778	166,669	166,669
Adjustments:				
Goodwill	(26,392)	(26,392)	(26,390)	(26,390)
Certain identifiable intangible assets (other than MSRs)	(342)	(342)	(437)	(437)
Goodwill and other intangibles on nonmarketable equity securities (included in other assets)	(1,965)	(1,965)	(2,146)	(2,146)
Applicable deferred taxes related to goodwill and other intangible assets (1)	856	856	810	810
CECL transition provision (2)	1,720	1,720	—	—
Other	(358)	(358)	254	254
Common Equity Tier 1	\$ 138,297	138,297	138,760	138,760
Preferred stock	21,136	21,136	21,549	21,549
Additional paid-in capital on preferred stock	(152)	(152)	71	71
Unearned ESOP shares	(875)	(875)	(1,143)	(1,143)
Other	(210)	(210)	(288)	(288)
Total Tier 1 capital	(A) \$ 158,196	158,196	158,949	158,949
Long-term debt and other instruments qualifying as Tier 2	24,387	24,387	26,515	26,515
Qualifying allowance for credit losses (3)	4,408	14,134	2,566	10,456
Other	(188)	(188)	(217)	(217)
Total Tier 2 capital (Fully Phased-In)	(B) \$ 28,607	38,333	28,864	36,754
Effect of Basel III Transition Requirements	131	131	520	520
Total Tier 2 capital (Basel III Transition Requirements)	\$ 28,738	38,464	29,384	37,274
Total qualifying capital (Fully Phased-In)	(A)+(B) \$ 186,803	196,529	187,813	195,703
Total Effect of Basel III Transition Requirements	131	131	520	520
Total qualifying capital (Basel III Transition Requirements)	\$ 186,934	196,660	188,333	196,223
Risk-Weighted Assets (RWAs)(4):				
Credit risk (5)	\$ 752,999	1,125,813	790,784	1,210,209
Market risk	67,931	67,931	35,644	35,644
Operational risk (6)	337,425	—	338,651	—
Total RWAs (6)	\$ 1,158,355	1,193,744	1,165,079	1,245,853

- (1) Determined by applying the combined federal statutory rate and composite state income tax rates to the difference between book and tax basis of the respective goodwill and intangible assets at period end.
- (2) At December 31, 2020, the impact of the CECL transition provision issued by federal banking regulators on our regulatory capital was an increase in capital of \$1.7 billion, reflecting a \$991 million (post-tax) increase in capital recognized upon our initial adoption of CECL, offset by 25% of the \$10.8 billion increase in our ACL under CECL from January 1, 2020, through December 31, 2020.
- (3) Under the Advanced Approach the allowance for credit losses that exceeds expected credit losses is eligible for inclusion in tier 2 capital, to the extent the excess allowance does not exceed 0.60% of Advanced credit RWAs, and under the Standardized Approach, the allowance for credit losses is includable in tier 2 capital up to 1.25% of Standardized credit RWAs, in each case with any excess allowance for credit losses being deducted from the respective total RWAs.
- (4) RWAs calculated under the Advanced Approach utilize a risk-sensitive methodology, which relies upon the use of internal credit models based upon our experience with internal rating grades. Advanced Approach also includes an operational risk component, which reflects the risk of loss resulting from inadequate or failed internal processes, people and systems, or from external events.
- (5) Includes an increase of \$1.4 billion under the Standardized Approach and a decrease of \$1.4 billion under the Advanced Approach related to the impact of the CECL transition provision on our excess allowance for credit losses as of December 31, 2020. See footnote (3) to this table.
- (6) Amounts for December 31, 2019, have been revised as a result of a decrease in RWAs under the Advanced Approach due to the correction of duplicated operational loss amounts.

Table 45 presents the changes in CET1 under the Advanced Approach for the year ended December 31, 2020.

Table 45: Analysis of Changes in Common Equity Tier 1 (Advanced Approach)

(in millions)		
Common Equity Tier 1 at December 31, 2019	\$	138,760
Net income applicable to common stock		1,710
Common stock dividends		(5,015)
Common stock issued, repurchased, and stock compensation-related items		(1,256)
Changes in cumulative other comprehensive income		1,505
Cumulative effect from change in accounting policies (1)		991
Goodwill		(2)
Certain identifiable intangible assets (other than MSRs)		95
Goodwill and other intangibles on nonmarketable equity securities (included in other assets)		181
Applicable deferred taxes related to goodwill and other intangible assets (2)		46
CECL transition provision (3)		1,720
Other		(438)
Change in Common Equity Tier 1		(463)
Common Equity Tier 1 at December 31, 2020	\$	138,297

- (1) Effective January 1, 2020, we adopted CECL. For additional information, see Note 1 (Summary of Significant Accounting Policies) to Financial Statements in this Report.
- (2) Determined by applying the combined federal statutory rate and composite state income tax rates to the difference between book and tax basis of the respective goodwill and intangible assets at period end.
- (3) At December 31, 2020, the impact of the CECL transition provision issued by federal banking regulators on our regulatory capital was an increase in capital of \$1.7 billion, reflecting a \$991 million (post-tax) increase in capital recognized upon our initial adoption of CECL, offset by 25% of the \$10.8 billion increase in our ACL under CECL from January 1, 2020, through December 31, 2020.

Table 46 presents net changes in the components of RWAs under the Advanced and Standardized Approaches for the year ended December 31, 2020.

Table 46: Analysis of Changes in RWAs

(in millions)		
	Advanced Approach	Standardized Approach
RWAs at December 31, 2019 (1)	\$ 1,165,079	1,245,853
Net change in credit risk RWAs (2)	(37,785)	(84,396)
Net change in market risk RWAs	32,287	32,287
Net change in operational risk RWAs	(1,226)	—
Total change in RWAs	(6,724)	(52,109)
RWAs at December 31, 2020	\$ 1,158,355	1,193,744

- (1) Amount for December 31, 2019, has been revised as a result of a decrease in RWAs under the Advanced Approach due to the correction of duplicated operational loss amounts.
- (2) Includes an increase of \$1.4 billion under the Standardized Approach and a decrease of \$1.4 billion under the Advanced Approach related to the impact of the CECL transition provision on our excess allowance for credit losses. See Table 44 for additional information.

Capital Management (continued)

TANGIBLE COMMON EQUITY We also evaluate our business based on certain ratios that utilize tangible common equity. Tangible common equity is a non-GAAP financial measure and represents total equity less preferred equity, noncontrolling interests, goodwill, certain identifiable intangible assets (other than MSRs) and goodwill and other intangibles on nonmarketable equity securities, net of applicable deferred taxes. The ratios are (i) tangible book value per common share, which represents tangible common equity divided by common shares outstanding; and (ii) return on average tangible common equity (ROTCE),

which represents our annualized earnings as a percentage of tangible common equity. The methodology of determining tangible common equity may differ among companies. Management believes that tangible book value per common share and return on average tangible common equity, which utilize tangible common equity, are useful financial measures because they enable management, investors, and others to assess the Company's use of equity.

Table 47 provides a reconciliation of these non-GAAP financial measures to GAAP financial measures.

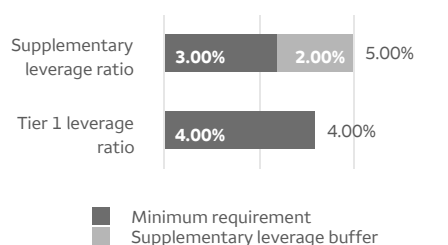
Table 47: Tangible Common Equity

(in millions, except ratios)		Balance at period end			Average balance		
		Dec 31, 2020	Dec 31, 2019	Dec 31, 2018	Dec 31, 2020	Dec 31, 2019	Dec 31, 2018
Total equity		\$ 185,920	187,984	197,066	185,214	197,621	203,356
Adjustments:							
Preferred stock		(21,136)	(21,549)	(23,214)	(21,364)	(22,522)	(24,956)
Additional paid-in capital on preferred stock		152	(71)	(95)	148	(81)	(125)
Unearned ESOP shares		875	1,143	1,502	1,007	1,306	2,159
Noncontrolling interests		(1,033)	(838)	(900)	(769)	(962)	(929)
Total common stockholders' equity	(A)	164,778	166,669	174,359	164,236	175,362	179,505
Adjustments:							
Goodwill		(26,392)	(26,390)	(26,418)	(26,387)	(26,409)	(26,453)
Certain identifiable intangible assets (other than MSRs)		(342)	(437)	(559)	(389)	(493)	(1,088)
Goodwill and other intangibles on nonmarketable equity securities (included in other assets)		(1,965)	(2,146)	(2,187)	(2,002)	(2,174)	(2,197)
Applicable deferred taxes related to goodwill and other intangible assets (1)		856	810	785	834	792	866
Tangible common equity	(B)	\$ 136,935	138,506	145,980	136,292	147,078	150,633
Common shares outstanding	(C)	4,144.0	4,134.4	4,581.3	N/A	N/A	N/A
Net income applicable to common stock	(D)	N/A	N/A	N/A	\$ 1,710	17,938	20,689
Book value per common share	(A)/(C)	\$ 39.76	40.31	38.06	N/A	N/A	N/A
Tangible book value per common share	(B)/(C)	33.04	33.50	31.86	N/A	N/A	N/A
Return on average common stockholders' equity (ROE)	(D)/(A)	N/A	N/A	N/A	1.04 %	10.23	11.53
Return on average tangible common equity (ROTCE)	(D)/(B)	N/A	N/A	N/A	1.25	12.20	13.73

(1) Determined by applying the combined federal statutory rate and composite state income tax rates to the difference between book and tax basis of the respective goodwill and intangible assets at period end.

LEVERAGE REQUIREMENTS As a BHC, we are required to maintain a supplementary leverage ratio (SLR) to avoid restrictions on capital distributions and discretionary bonus payments and maintain a minimum tier 1 leverage ratio. Table 48 presents the leverage requirements applicable to the Company as of December 31, 2020.

Table 48: Leverage Requirements Applicable to the Company



In addition, our IDIs are required to maintain an SLR of at least 6.00% to be considered well capitalized under applicable regulatory capital adequacy rules and maintain a minimum tier 1 leverage ratio of 4.00%.

The FRB and OCC have proposed rules (Proposed SLR rules) that would replace the 2.00% supplementary leverage buffer with a buffer equal to one-half of our G-SIB capital surcharge. The Proposed SLR rules would similarly tailor the current 6.00% SLR requirement for our IDIs.

In April 2020, the FRB issued an interim final rule that temporarily allows a BHC to exclude on-balance sheet amounts of U.S. Treasury securities and deposits at Federal Reserve Banks from the calculation of its total leverage exposure in the denominator of the SLR. This interim final rule became effective on April 1, 2020, and expires on March 31, 2021.

At December 31, 2020, the Company's SLR was 8.05%, and each of our IDIs exceeded their applicable SLR requirements. In addition, the Company's SLR at December 31, 2020, would have been 7.10% without relying on the FRB's April 2020 interim final rule that temporarily allows for the exclusion of specific on-balance sheet amounts. Table 49 presents information regarding the calculation and components of the Company's SLR and tier 1 leverage ratio.

Table 49: Leverage Ratios for the Company

(in millions, except ratio)	Quarter ended December 31, 2020	
Tier 1 capital	(A)	\$ 158,196
Total average assets		1,928,592
Less: Goodwill and other permitted Tier 1 capital deductions (net of deferred tax liabilities)		28,334
Less: Other SLR exclusions		265,323
Total adjusted average assets		1,634,935
Plus adjustments for off-balance sheet exposures:		
Derivatives (1)		62,320
Repo-style transactions (2)		2,914
Other (3)		263,802
Total off-balance sheet exposures		329,036
Total leverage exposure	(B)	\$ 1,963,971
Supplementary leverage ratio	(A)/(B)	8.05%
Tier 1 leverage ratio (4)		8.32%

- (1) Adjustment represents derivatives and collateral netting exposures as defined for supplementary leverage ratio determination purposes.
- (2) Adjustment represents counterparty credit risk for repo-style transactions where Wells Fargo & Company is the principal counterparty facing the client.
- (3) Adjustment represents credit equivalent amounts of other off-balance sheet exposures not already included as derivatives and repo-style transactions exposures.
- (4) The tier 1 leverage ratio consists of tier 1 capital divided by total average assets, excluding goodwill and certain other items as determined under the rule.

TOTAL LOSS ABSORBING CAPACITY As a G-SIB, we are required to have a minimum amount of equity and unsecured long-term debt for purposes of resolvability and resiliency, often referred to as Total Loss Absorbing Capacity (TLAC). U.S. G-SIBs are required to have a minimum amount of TLAC (consisting of CET1 capital and additional tier 1 capital issued directly by the top-tier or covered BHC plus eligible external long-term debt) to avoid restrictions on capital distributions and discretionary bonus payments, as well as a minimum amount of eligible unsecured long-term debt. Our minimum TLAC and eligible unsecured long-term debt requirements as of December 31, 2020, are presented in Table 50.

Table 50: TLAC and Eligible Unsecured Long-Term Debt Requirements

TLAC requirement	
Greater of:	
18.00% of RWAs + TLAC buffer (equal to 2.50% of RWAs + method one G-SIB capital surcharge + any countercyclical buffer)	7.50% of total leverage exposure (the denominator of the SLR calculation) + External TLAC leverage buffer (equal to 2.00% of total leverage exposure)
Minimum amount of eligible unsecured long-term debt	
Greater of:	
6.00% of RWAs + Method two G-SIB capital surcharge	4.50% of total leverage exposure

Under the Proposed SLR rules, the 2.00% external TLAC leverage buffer would be replaced with a buffer equal to one-half of our applicable G-SIB capital surcharge, and the leverage component for calculating the minimum amount of eligible unsecured long-term debt would be modified from 4.50% of total leverage exposure to 2.50% of total leverage exposure plus one-half of our applicable G-SIB capital surcharge.

As of December 31, 2020, our eligible external TLAC as a percentage of total RWAs was 25.74%, compared with a required minimum of 22.00%. Effective January 1, 2021, the Company's G-SIB capital surcharge calculated under method one, which is a component of our TLAC buffer requirement, decreased from 1.50% to 1.00%. Accordingly, effective January 1, 2021, our TLAC requirement as a percentage of total RWAs decreased from 22.00% to 21.50%. Similar to the risk-based capital requirements, our minimum TLAC requirement is assessed based on the greater of RWAs determined under the Standardized and Advanced Approaches.

OTHER REGULATORY CAPITAL AND LIQUIDITY MATTERS As discussed in the "Risk Management – Asset/ Liability Management – Liquidity Risk and Funding – Liquidity Standards" section in this Report, federal banking regulators have issued final rules regarding the U.S. implementation of the Basel III LCR and NSFR.

Capital Planning and Stress Testing

Our planned long-term capital structure is designed to meet regulatory and market expectations. We believe that our long-term targeted capital structure enables us to invest in and grow our business, satisfy our customers' financial needs in varying environments, access markets, and maintain flexibility to return capital to our shareholders. Our long-term targeted capital structure also considers capital levels sufficient to exceed capital requirements including the G-SIB capital surcharge. Accordingly, we currently target a long-term CET1 capital ratio at or in excess of 10.00%. Our capital targets are subject to change based on various factors, including changes to the regulatory capital framework and expectations for large banks promulgated by bank regulatory agencies, changes to the regulatory requirements for our capital ratios, planned capital actions, changes in our risk profile and other factors.

The FRB capital plan rule establishes capital planning and other requirements that govern capital distributions, including dividends and share repurchases, by certain BHCs, including Wells Fargo. The FRB assesses, among other things, the overall financial condition, risk profile, and capital adequacy of BHCs when evaluating their capital plans.

We submitted our 2020 capital plan to the FRB on April 3, 2020. As part of the 2020 CCAR, the FRB also generated a supervisory stress test. The FRB reviewed the supervisory stress test results as required under the Dodd-Frank Act using a common set of capital actions for all large BHCs and also reviewed the Company's proposed capital actions. The FRB published its supervisory stress test results on June 25, 2020.

On June 25, 2020, the FRB also announced that it was requiring large BHCs, including Wells Fargo, to update and resubmit their capital plans. We updated and resubmitted our capital plan on November 2, 2020, and the FRB published its resubmission supervisory stress test results on December 18, 2020.

On December 18, 2020, the FRB announced that it was extending, with certain adjustments, measures it announced on June 25, 2020, limiting large BHCs, including Wells Fargo, from making any capital distribution (excluding any capital distribution arising from the issuance of a capital instrument eligible for inclusion in the numerator of a regulatory capital ratio), unless otherwise approved by the FRB. For first quarter 2021, the FRB has generally authorized BHCs to (i) provided that the BHC does not increase the amount of its common stock dividends to be larger than the level paid in second quarter 2020, pay common stock dividends and make share repurchases that, in the

Capital Management (continued)

aggregate, do not exceed an amount equal to the average of the BHC's net income for the four preceding calendar quarters; (ii) make share repurchases that equal the amount of share issuances related to expensed employee compensation; and (iii) redeem and make scheduled payments on additional tier 1 and tier 2 capital instruments. The FRB is expected to announce by March 31, 2021, whether these capital distribution limitations will be extended for another quarter.

Concurrently with CCAR, federal banking regulators also require large BHCs and banks to conduct their own stress tests to evaluate whether the institution has sufficient capital to continue to operate during periods of adverse economic and financial conditions. We submitted the results of our stress test to the FRB and disclosed a summary of the results in June 2020.

Securities Repurchases

From time to time the Board authorizes the Company to repurchase shares of our common stock. Although we announce when the Board authorizes share repurchases, we typically do not give any public notice before we repurchase our shares. Various factors determine the amount of our share repurchases, including our capital requirements, the number of shares we

expect to issue for employee benefit plans and acquisitions, market conditions (including the trading price of our stock), and regulatory and legal considerations, including under the FRB's capital plan rule. Due to the various factors that may impact the amount of our share repurchases and the fact that we tend to be in the market regularly to satisfy repurchase considerations under our capital plan, our share repurchases occur at various price levels. We may suspend share repurchase activity at any time.

As discussed in the "Capital Planning and Stress Testing" section above, on December 18, 2020, the FRB announced that it was extending, with certain adjustments, measures prohibiting large BHCs subject to the FRB's capital plan rule from making capital distributions subject to certain limited exceptions.

At December 31, 2020, we had remaining Board authority to repurchase approximately 167 million shares, subject to regulatory and legal conditions. On January 15, 2021, we announced that the Board approved an increase in the Company's authority to repurchase common stock by an additional 500 million shares. For more information about share repurchases during fourth quarter 2020, see Part II, Item 5 in our 2020 Form 10-K.

Regulatory Matters

The U.S. financial services industry is subject to significant regulation and regulatory oversight initiatives. This regulation and oversight may continue to impact how U.S. financial services companies conduct business and may continue to result in increased regulatory compliance costs. The following highlights the more significant regulations and regulatory oversight initiatives that have affected or may affect our business. For additional information about the regulatory matters discussed below and other regulations and regulatory oversight matters, see Part I, Item 1 "Regulation and Supervision" of our 2020 Form 10-K, and the "Capital Management," "Forward-Looking Statements" and "Risk Factors" sections and Note 28 (Regulatory Capital Requirements and Other Restrictions) to Financial Statements in this Report.

Dodd-Frank Act

The Dodd-Frank Act is the most significant financial reform legislation since the 1930s. The following provides additional information on the Dodd-Frank Act, including certain of its rulemaking initiatives.

- *Enhanced supervision and regulation of systemically important firms.* The Dodd-Frank Act grants broad authority to federal banking regulators to establish enhanced supervisory and regulatory requirements for systemically important firms. The FRB has finalized a number of regulations implementing enhanced prudential requirements for large bank holding companies (BHCs) like Wells Fargo regarding risk-based capital and leverage, risk and liquidity management, single counterparty credit limits, and imposing debt-to-equity limits on any BHC that regulators determine poses a grave threat to the financial stability of the United States. The FRB and OCC have also finalized rules implementing stress testing requirements for large BHCs and national banks. In addition, the FRB has proposed a rule to establish remediation requirements for large BHCs experiencing financial distress and has proposed additional requirements regarding effective risk management practices at large BHCs, including its expectations for boards of directors and

senior management. The OCC, under separate authority, has also finalized guidelines establishing heightened governance and risk management standards for large national banks such as Wells Fargo Bank, N.A. The OCC guidelines require covered banks to establish and adhere to a written risk governance framework to manage and control their risk-taking activities. The guidelines also formalize roles and responsibilities for risk management practices within covered banks and create certain risk oversight responsibilities for their boards of directors. In addition to the authorization of enhanced supervisory and regulatory requirements for systemically important firms, the Dodd-Frank Act also established the Financial Stability Oversight Council and the Office of Financial Research, which may recommend new systemic risk management requirements and require new reporting of systemic risks.

- *Regulation of consumer financial products.* The Dodd-Frank Act established the Consumer Financial Protection Bureau (CFPB) to ensure that consumers receive clear and accurate disclosures regarding financial products and are protected from unfair, deceptive or abusive practices. The CFPB has issued a number of rules impacting consumer financial products, including rules regarding the origination, notification, disclosure and other requirements with respect to residential mortgage lending, as well as rules impacting prepaid cards, credit cards, and other financial products. In addition to these rulemaking activities, the CFPB is continuing its ongoing supervisory examination activities of the financial services industry with respect to a number of consumer businesses and products, including mortgage lending and servicing, fair lending requirements, and auto finance.
- *Regulation of swaps and other derivatives activities.* The Dodd-Frank Act established a comprehensive framework for regulating over-the-counter derivatives, and, pursuant to authority granted by the Dodd-Frank Act, the CFTC and the SEC have adopted comprehensive sets of rules regulating swaps and security-based swaps, respectively, and the OCC

and other federal regulatory agencies have adopted margin requirements for uncleared swaps and security-based swaps. Wells Fargo Bank, N.A., as a provisionally-registered swap dealer, is subject to the CFTC's swap rules and will become subject to the SEC's security-based swap rules if it registers as a security-based swap dealer, which it is currently expected to do by November 1, 2021. These rules, as well as others adopted or under consideration by regulators in the United States and other jurisdictions, may negatively impact customer demand for over-the-counter derivatives, impact our ability to offer customers new derivatives or amendments to existing derivatives, and may increase our costs for engaging in swaps, security-based swaps, and other derivatives activities.

Regulatory Capital, Leverage, and Liquidity Requirements

The Company and each of our IDIs are subject to various regulatory capital adequacy requirements administered by the FRB and the OCC. For example, the Company is subject to rules issued by federal banking regulators to implement Basel III risk-based capital requirements for U.S. banking organizations. The Company and its IDIs are also required to maintain specified leverage and supplementary leverage ratios. In addition, the Company is required to have a minimum amount of total loss absorbing capacity for purposes of resolvability and resiliency. Federal banking regulators have also issued final rules requiring a liquidity coverage ratio and a net stable funding ratio. For more information on the final risk-based capital, leverage and liquidity rules, and additional capital requirements applicable to us, see the "Capital Management" and "Risk Management – Asset/Liability Management – Liquidity Risk and Funding – Liquidity Standards" sections in this Report.

"Living Will" Requirements and Related Matters

Rules adopted by the FRB and the FDIC under the Dodd-Frank Act require large financial institutions, including Wells Fargo, to prepare and periodically submit resolution plans, also known as "living wills," that would facilitate their rapid and orderly resolution in the event of material financial distress or failure. Under the rules, rapid and orderly resolution means a reorganization or liquidation of the covered company under the U.S. Bankruptcy Code that can be accomplished in a reasonable period of time and in a manner that substantially mitigates the risk that failure would have serious adverse effects on the financial stability of the United States. In addition to the Company's resolution plan, our national bank subsidiary, Wells Fargo Bank, N.A. (the "Bank"), is also required to prepare and periodically submit a resolution plan. If the FRB and/or FDIC determine that our resolution plan has deficiencies, they may impose more stringent capital, leverage or liquidity requirements on us or restrict our growth, activities or operations until we adequately remedy the deficiencies. If the FRB and/or FDIC ultimately determine that we have been unable to remedy any deficiencies, they could require us to divest certain assets or operations. On June 27, 2019, we submitted our resolution plan to the FRB and FDIC. On December 17, 2019, the FRB and FDIC announced that the Company's 2019 resolution plan did not have any deficiencies, but they identified a specific shortcoming that would need to be addressed.

If Wells Fargo were to fail, it may be resolved in a bankruptcy proceeding or, if certain conditions are met, under the resolution regime created by the Dodd-Frank Act known as the "orderly liquidation authority." The orderly liquidation authority allows for the appointment of the FDIC as receiver for a systemically important financial institution that is in default or in danger of

default if, among other things, the resolution of the institution under the U.S. Bankruptcy Code would have serious adverse effects on financial stability in the United States. If the FDIC is appointed as receiver for Wells Fargo & Company (the "Parent"), then the orderly liquidation authority, rather than the U.S. Bankruptcy Code, would determine the powers of the receiver and the rights and obligations of our security holders. The FDIC's orderly liquidation authority requires that security holders of a company in receivership bear all losses before U.S. taxpayers are exposed to any losses, and allows the FDIC to disregard the strict priority of creditor claims under the U.S. Bankruptcy Code in certain circumstances.

The strategy described in our most recent resolution plan is a single point of entry strategy, in which the Parent would likely be the only material legal entity to enter resolution proceedings. However, we are not obligated to maintain a single point of entry strategy, and the strategy described in our resolution plan is not binding in the event of an actual resolution of Wells Fargo, whether conducted under the U.S. Bankruptcy Code or by the FDIC under the orderly liquidation authority. The FDIC has announced that a single point of entry strategy may be a desirable strategy under its implementation of the orderly liquidation authority, but not all aspects of how the FDIC might exercise this authority are known and additional rulemaking is possible.

To facilitate the orderly resolution of systemically important financial institutions in case of material distress or failure, federal banking regulations require that institutions, such as Wells Fargo, maintain a minimum amount of equity and unsecured debt to absorb losses and recapitalize operating subsidiaries. Federal banking regulators have also required measures to facilitate the continued operation of operating subsidiaries notwithstanding the failure of their parent companies, such as limitations on parent guarantees, and have issued guidance encouraging institutions to take legally binding measures to provide capital and liquidity resources to certain subsidiaries to facilitate an orderly resolution. In response to the regulators' guidance and to facilitate the orderly resolution of the Company, on June 28, 2017, the Parent entered into a support agreement, as amended and restated on June 26, 2019 (the "Support Agreement"), with WFC Holdings, LLC, an intermediate holding company and subsidiary of the Parent (the "IHC"), the Bank, Wells Fargo Securities, LLC ("WFS"), Wells Fargo Clearing Services, LLC ("WFCS"), and certain other direct and indirect subsidiaries of the Parent designated as material entities for resolution planning purposes (the "Covered Entities") or identified as related support entities in our resolution plan (the "Related Support Entities"). Pursuant to the Support Agreement, the Parent transferred a significant amount of its assets, including the majority of its cash, deposits, liquid securities and intercompany loans (but excluding its equity interests in its subsidiaries and certain other assets), to the IHC and will continue to transfer those types of assets to the IHC from time to time. In the event of our material financial distress or failure, the IHC will be obligated to use the transferred assets to provide capital and/or liquidity to the Bank, WFS, WFCS, and the Covered Entities pursuant to the Support Agreement. Under the Support Agreement, the IHC will also provide funding and liquidity to the Parent through subordinated notes and a committed line of credit, which, together with the issuance of dividends, is expected to provide the Parent, during business as usual operating conditions, with the same access to cash necessary to service its debts, pay dividends, repurchase its shares, and perform its other obligations as it would have had if it had not entered into these arrangements and transferred any assets. If certain liquidity and/or capital metrics fall below

Regulatory Matters (continued)

defined triggers, or if the Parent's board of directors authorizes it to file a case under the U.S. Bankruptcy Code, the subordinated notes would be forgiven, the committed line of credit would terminate, and the IHC's ability to pay dividends to the Parent would be restricted, any of which could materially and adversely impact the Parent's liquidity and its ability to satisfy its debts and other obligations, and could result in the commencement of bankruptcy proceedings by the Parent at an earlier time than might have otherwise occurred if the Support Agreement were not implemented. The respective obligations under the Support Agreement of the Parent, the IHC, the Bank, and the Related Support Entities are secured pursuant to a related security agreement.

In addition to our resolution plans, we must also prepare and submit to the FRB a recovery plan that identifies a range of options that we may consider during times of idiosyncratic or systemic economic stress to remedy any financial weaknesses and restore market confidence without extraordinary government support. Recovery options include the possible sale, transfer or disposal of assets, securities, loan portfolios or businesses. The Bank must also prepare and submit to the OCC a recovery plan that sets forth the Bank's plan to remain a going concern when the Bank is experiencing considerable financial or operational stress, but has not yet deteriorated to the point where liquidation or resolution is imminent. If either the FRB or the OCC determines that our recovery plan is deficient, they may impose fines, restrictions on our business or ultimately require us to divest assets.

Other Regulatory Related Matters

- *Regulatory actions.* The Company is subject to a number of consent orders and regulatory agreements, which may require the Company, among other things, to undertake certain changes to its business, products and services, and risk management practices, and include the following:
 - *FRB consent order regarding governance oversight and compliance and operational risk management.* On February 2, 2018, the Company entered into a consent order with the FRB. As required by the consent order, the Board submitted to the FRB a plan to further enhance the Board's governance and oversight of the Company, and the Company submitted to the FRB a plan to further improve the Company's compliance and operational risk management program. The Company continues to engage with the FRB as the Company works to address the consent order provisions. The consent order also requires the Company, following the FRB's acceptance and approval of the plans and the Company's adoption and implementation of the plans, to complete an initial third-party review of the enhancements and improvements provided for in the plans. Until this third-party review is complete and the plans are approved and implemented to the satisfaction of the FRB, the Company's total consolidated assets as defined under the consent order will be limited to the level as of December 31, 2017. Compliance with this asset cap is measured on a two-quarter daily average basis to allow for management of temporary fluctuations. Due to the COVID-19 pandemic, on April 8, 2020, the FRB amended the consent order to allow the Company to exclude from the asset cap any on-balance sheet exposure resulting from loans made by the Company in connection with the Small Business Administration's Paycheck Protection Program and the FRB's Main Street Lending Program. As required under the amendment to the consent order, to the extent the Company chooses to exclude these exposures from the asset cap, certain fees and other economic benefits received by the Company from loans made in connection with these programs shall be transferred to the U.S. Treasury or to non-profit organizations approved by the FRB that support small businesses. After removal of the asset cap, a second third-party review must also be conducted to assess the efficacy and sustainability of the enhancements and improvements.
 - *Consent orders with the CFPB and OCC regarding compliance risk management program, automobile collateral protection insurance policies, and mortgage interest rate lock extensions.* On April 20, 2018, the Company entered into consent orders with the CFPB and the OCC to pay an aggregate of \$1 billion in civil money penalties to resolve matters regarding the Company's compliance risk management program and past practices involving certain automobile collateral protection insurance policies and certain mortgage interest rate lock extensions. As required by the consent orders, the Company submitted to the CFPB and OCC an enterprise-wide compliance risk management plan and a plan to enhance the Company's internal audit program with respect to federal consumer financial law and the terms of the consent orders. In addition, as required by the consent orders, the Company submitted for non-objection plans to remediate customers affected by the automobile collateral protection insurance and mortgage interest rate lock matters, as well as a plan for the management of remediation activities conducted by the Company.
 - *OCC approval of director and senior executive officer appointments and certain post-termination payments.* Under the April 2018 consent order with the OCC, Wells Fargo Bank, N.A., remains subject to requirements that were originally imposed in November 2016 to provide prior written notice to, and obtain non-objection from, the OCC with respect to changes in directors and senior executive officers, and remains subject to certain regulatory limitations on post-termination payments to certain individuals and employees.
- *Regulatory Developments Related to COVID-19.* In response to the COVID-19 pandemic and related events, federal banking regulators undertook a number of measures to help stabilize the banking sector, support the broader economy, and facilitate the ability of banking organizations like Wells Fargo to continue lending to consumers and businesses. For example, in order to facilitate the Coronavirus Aid, Relief and Economic Security Act (CARES Act), federal banking regulators issued rules designed to encourage financial institutions to participate in stimulus measures, such as the Small Business Administration's Paycheck Protection Program. Similarly, the FRB launched a number of lending facilities designed to enhance liquidity and the functioning of markets, including facilities covering money market mutual funds and term asset-backed securities loans. Federal banking regulators also issued several rules amending the regulatory capital and TLAC rules and other prudential regulations to ease certain restrictions on banking organizations and encourage the use of certain FRB-established facilities in order to further promote lending to consumers and businesses.

In addition, the OCC and the FRB issued guidelines for banks and BHCs related to working with customers affected by the COVID-19 pandemic, including guidance with respect to waiving fees, offering repayment accommodations, and providing payment deferrals. Any current or future rules,

regulations, and guidance related to the COVID-19 pandemic and its impacts could require us to change certain of our business practices, reduce our revenue and earnings, impose additional costs on us, or otherwise adversely affect our business operations and/or competitive position.

Critical Accounting Policies

Our significant accounting policies (see Note 1 (Summary of Significant Accounting Policies) to Financial Statements in this Report) are fundamental to understanding our results of operations and financial condition because they require that we use estimates and assumptions that may affect the value of our assets or liabilities and financial results. Six of these policies are critical because they require management to make difficult, subjective and complex judgments about matters that are inherently uncertain and because it is likely that materially different amounts would be reported under different conditions or using different assumptions. These policies govern:

- the allowance for credit losses;
- the valuation of residential MSRs;
- the fair value of financial instruments;
- income taxes;
- liability for contingent litigation losses; and
- goodwill impairment.

Beginning in fourth quarter 2020, goodwill impairment was designated as one of our critical accounting policies.

Management has discussed these critical accounting policies and the related estimates and judgments with the Board's Audit Committee.

Allowance for Credit Losses

We maintain an ACL for loans, which is management's estimate of the expected credit losses in the loan portfolio and unfunded credit commitments, at the balance sheet date, excluding loans and unfunded credit commitments carried at fair value or held for sale. Additionally, we maintain an ACL for debt securities classified as either HTM or AFS, other financial assets measured at amortized cost, net investments in leases, and other off-balance sheet credit exposures. In connection with our adoption of CECL, we updated our approach for estimating expected credit losses, which includes new areas for management judgment, described more fully below, and updated relevant accounting policies. For additional information, see Note 1 (Summary of Significant Accounting Policies) to Financial Statements in this Report.

For loans and HTM debt securities, the ACL is measured based on the remaining contractual term of the financial asset (including off-balance sheet credit exposures) adjusted, as appropriate, for prepayments and permitted extension options using historical experience, current conditions, and forecasted information. For AFS debt securities, the ACL is measured using a discounted cash flow approach and is limited to the difference between the fair value of the security and its amortized cost.

Changes in the ACL and, therefore, in the related provision for credit losses can materially affect net income. In applying the judgment and review required to determine the ACL, management considerations include the evaluation of past events, historical experience, changes in economic forecasts and conditions, customer behavior, collateral values, the length of the initial loss forecast period, and other influences. From time to time, changes in economic factors or assumptions, business strategy, products or product mix, or debt security investment

strategy, may result in a corresponding increase or decrease in our ACL. While our methodology attributes portions of the ACL to specific financial asset classes (loan and debt security portfolios) or loan portfolio segments (commercial and consumer), the entire ACL is available to absorb credit losses of the Company.

Judgment is specifically applied in:

- *Economic assumptions and the length of the initial loss forecast period.* We forecast a wide range of economic variables to estimate expected credit losses. Our key economic variables include gross domestic product (GDP), unemployment rate, and collateral asset prices. While many of these economic variables are evaluated at the macro-economy level, some economic variables are forecasted at more granular levels, for example, using the metro statistical area (MSA) level for unemployment rates, home prices and commercial real estate prices. Quarterly, we assess the length of the initial loss forecast period and have currently set the period to two years. For the initial loss forecast period, we forecast multiple economic scenarios that generally include a base scenario with an optimistic (upside) and one or more pessimistic (downside) scenarios. Management exercises judgment when assigning weight to the economic scenarios that are used to estimate future credit losses.
- *Reversion to historical loss expectations.* Our long-term average loss expectations are estimated by reverting to the long-term average, on a linear basis, for each of the forecasted economic variables. These long-term averages are based on observations over multiple economic cycles. The reversion period, which may be up to two years, is assessed on a quarterly basis.
- *Credit risk ratings applied to individual commercial loans, unfunded credit commitments, and debt securities.* Individually assessed credit risk ratings are considered key credit variables in our modeled approaches to help assess probability of default and loss given default. Borrower quality ratings are aligned to the borrower's financial strength and contribute to forecasted probability of default curves. Collateral quality ratings combined with forecasted collateral prices (as applicable) contribute to the forecasted severity of loss in the event of default. These credit risk ratings are reviewed by experienced senior credit officers and subjected to reviews by an internal team of credit risk specialists.
- *Usage of credit loss estimation models.* We use internally developed models that incorporate credit attributes and economic variables to generate estimates of credit losses. Management uses a combination of judgment and quantitative analytics in the determination of segmentation, modeling approach, and variables that are leveraged in the models. These models are validated in accordance with the Company's policies by an internal model validation group. We routinely assess our model performance and apply adjustments when necessary to improve the accuracy of loss estimation. We also assess our models for limitations against the company-wide risk inventory to help ensure that

Critical Accounting Policies (continued)

we appropriately capture known and emerging risks in our estimate of expected credit losses and apply overlays as needed.

- *Valuation of collateral.* The current fair value of collateral is utilized to assess the expected credit losses when a financial asset is considered to be collateral dependent. We apply judgment when valuing the collateral either through appraisals, evaluation of the cash flows of the property, or other quantitative techniques. Decreases in collateral valuations support incremental charge-downs and increases in collateral valuation are included in the ACL as a negative allowance when the financial asset has been previously written-down below current recovery value.
- *Contractual term considerations.* The remaining contractual term of a loan is adjusted for expected prepayments and certain expected extensions, renewals, or modifications. We extend the contractual term when we are not able to unconditionally cancel contractual renewals or extension options. We also incorporate any scenarios where we reasonably expect to provide an extension through a TDR. Credit card loans have indeterminate maturities, which requires that we determine a contractual life by estimating the application of future payments to the outstanding loan amount.
- *Qualitative factors which may not be adequately captured in the loss models.* These amounts represent management's judgment of risks inherent in the processes and assumptions used in establishing the ACL. We also consider economic environmental factors, modeling assumptions and performance, process risk, and other subjective factors, including industry trends and emerging risk assessments.

Sensitivity The ACL for loans is sensitive to changes in key assumptions which requires significant judgment to be used by management. Future amounts of the ACL for loans will be based on a variety of factors, including loan balance changes, portfolio credit quality, and general economic conditions. General economic conditions are forecasted using economic variables, which could have varying impacts on different financial assets or portfolios. Additionally, throughout numerous credit cycles, there are observed changes in economic variables such as the unemployment rate, GDP and real estate prices which may not move in a correlated manner as variables may move in opposite directions or differ across portfolios or geography.

Our sensitivity analysis does not represent management's view of expected credit losses at the balance sheet date. We applied 100% weight to the downside scenario in our sensitivity analysis to reflect the potential for further economic deterioration from a COVID-19 resurgence. The outcome of the scenario was influenced by the duration, severity, and timing of changes in economic variables within the scenario. The sensitivity analysis resulted in a hypothetical increase in the ACL for loans of approximately \$2.6 billion at December 31, 2020. The hypothetical increase in our ACL for loans does not incorporate the impact of management judgment for qualitative factors applied in the current ACL for loans, which may have a positive or negative effect on the results. It is possible that others performing similar sensitivity analyses could reach different conclusions or results.

The sensitivity analysis excludes the ACL for debt securities and other financial assets given its size relative to the overall ACL. Management believes that the estimate for the ACL for loans was appropriate at the balance sheet date.

Valuation of Residential Mortgage Servicing Rights (MSRs)

MSRs are assets that represent the rights to service mortgage loans for others. We recognize MSRs when we purchase servicing rights from third parties, or retain servicing rights in connection with the sale or securitization of loans we originate (asset transfers). We also have acquired MSRs in the past under co-issuer agreements that provide for us to service loans that were originated and securitized by third-party correspondents.

We carry our MSRs related to residential mortgage loans at fair value. Periodic changes in our residential MSRs and the economic hedges used to hedge our residential MSRs are reflected in earnings.

We use a model to estimate the fair value of our residential MSRs. The model is validated in accordance with Company policies by an internal model validation group. The model calculates the present value of estimated future net servicing income and incorporates inputs and assumptions that market participants use in estimating fair value. Certain significant inputs and assumptions generally are not observable in the market and require judgment to determine. If observable market indications do become available, these are factored into the estimates as appropriate:

- *The mortgage loan prepayment speed used to estimate future net servicing income.* The prepayment speed is the annual rate at which borrowers are forecasted to repay their mortgage loan principal; this rate also includes estimated borrower defaults. We use models to estimate prepayment speeds and borrower defaults which are influenced by changes in mortgage interest rates and borrower behavior.
- *The discount rate used to present value estimated future net servicing income.* The discount rate is the required rate of return investors in the market would expect for an asset with similar risk. To determine the discount rate, we consider the risk premium for uncertainties in the cash flow estimates such as from servicing operations (e.g., possible changes in future servicing costs, ancillary income and earnings on escrow accounts).
- *The expected cost to service loans used to estimate future net servicing income.* The cost to service loans includes estimates for unreimbursed expenses, such as delinquency and foreclosure costs, which considers the number of defaulted loans as well as changes in servicing processes associated with default and foreclosure management.

Both prepayment speed and discount rate assumptions can, and generally will, change quarterly as market conditions and mortgage interest rates change. For example, an increase in either the prepayment speed or discount rate assumption results in a decrease in the fair value of the MSRs, while a decrease in either assumption would result in an increase in the fair value of the MSRs. In recent years, there have been significant market-driven fluctuations in loan prepayment speeds and the discount rate. These fluctuations can be rapid and may be significant in the future. Additionally, while our current valuation reflects our best estimate of servicing costs, future regulatory or investor changes in servicing standards, as well as changes in individual state foreclosure legislation or additional market participant information regarding servicing cost assumptions, may have an impact on our servicing cost assumption and our MSR valuation in future periods. We periodically benchmark our MSR fair value estimate to independent appraisals.

For a description of our valuation and sensitivity of MSRs, see Note 1 (Summary of Significant Accounting Policies), Note 8 (Securitized and Variable Interest Entities), Note 9 (Mortgage Banking Activities) and Note 17 (Fair Values of Assets and Liabilities) to Financial Statements in this Report.

Fair Value of Financial Instruments

Fair value represents the price that would be received to sell the financial asset or paid to transfer the financial liability in an orderly transaction between market participants at the measurement date.

We use fair value measurements to record fair value adjustments to certain financial instruments and to determine fair value disclosures. For example, assets and liabilities held for trading purposes, marketable equity securities, AFS debt securities, derivatives and a majority of our LHFS are carried at fair value each period. Other financial instruments, such as certain LHFS, a majority of nonmarketable equity securities, and loans held for investment, are not carried at fair value each period but may require nonrecurring fair value adjustments due to application of lower-of-cost-or-market accounting, measurement alternative accounting or write-downs of individual assets. We also disclose our estimate of fair value for financial instruments not recorded at fair value, such as loans held for investment or issuances of long-term debt.

The accounting requirements for fair value measurements include a three-level hierarchy for disclosure of assets and liabilities recorded at fair value. The classification of assets and liabilities within the hierarchy is based on whether the inputs to the valuation methodology used for measurement are observable or unobservable. Observable inputs reflect market-derived or market-based information obtained from independent sources, while unobservable inputs reflect our estimates about market data.

When developing fair value measurements, we maximize the use of observable inputs and minimize the use of unobservable inputs. When available, we use quoted prices in active markets to measure fair value. If quoted prices in active markets are not available, fair value measurement is based upon models that generally use market-based or independently sourced market parameters, including interest rate yield curves, prepayment speeds, option volatilities and currency rates. However, when observable market data is limited or not available, fair value estimates are typically determined using internally-developed models based on unobservable inputs. Internal models used to determine fair value are validated in accordance with Company policies by an internal model validation group. Additionally, we use third-party pricing services to obtain fair values, which are used to either record the price of an instrument or to corroborate internally-developed prices. Third-party price validation procedures are performed over the reasonableness of the fair value measurements.

When using internally-developed models based on unobservable inputs, management judgment is necessary as we are required to make judgments about significant assumptions market participants would use to estimate fair value. Determination of these assumptions includes consideration of market conditions and liquidity levels. Changes in the market conditions, such as reduced liquidity in the capital markets or changes in secondary market activities, may reduce the availability and reliability of quoted prices or observable data used to determine fair value. In such cases, it may be appropriate to adjust available quoted prices or observable market data. For example, we may adjust a price received from a third-party pricing service using internal models based on discounted cash

flows when the impact of illiquid markets has not already been incorporated in the fair value measurement. Additionally, for certain residential LHFS and certain debt and equity securities where the significant inputs have become unobservable due to illiquid markets and a third-party pricing service is not used, our discounted cash flow model uses a discount rate that reflects what we believe a market participant would require in light of the illiquid market.

We continually assess the level and volume of market activity in our debt and equity security classes in determining adjustments, if any, to price quotes. Given market conditions can change over time, our determination of which securities markets are considered active or inactive can change. If we determine a market to be inactive, the degree to which price quotes require adjustment, can also change.

Significant judgment is also required to determine whether certain assets measured at fair value are classified as Level 2 or Level 3 of the fair value hierarchy. When making this judgment, we consider available information, including observable market data, indications of market liquidity and orderliness, and our understanding of the valuation techniques and significant inputs used to estimate fair value. The classification as Level 2 or Level 3 is based upon the specific facts and circumstances of each instrument or instrument category and judgments are made regarding the significance of unobservable inputs to each instrument's fair value measurement in its entirety. If unobservable inputs are considered significant, the instrument is classified as Level 3.

Table 51 presents our (1) assets and liabilities recorded at fair value on a recurring basis and (2) Level 3 assets and liabilities recorded at fair value on a recurring basis, both presented as a percentage of our total assets and total liabilities.

Table 51: Fair Value Level 3 Summary

(\$ in billions)	December 31, 2020		December 31, 2019	
	Total balance	Level 3 (1)	Total balance	Level 3 (1)
Assets recorded at fair value on a recurring basis	\$ 380.3	21.9	428.4	24.1
As a percentage of total assets	19 %	1	22	1
Liabilities recorded at fair value on a recurring basis	\$ 39.0	2.0	26.5	1.8
As a percentage of total liabilities	2 %	*	2	*

* Less than 1%.

(1) Before derivative netting adjustments.

See Note 17 (Fair Values of Assets and Liabilities) to Financial Statements in this Report for a complete discussion on our fair value of financial instruments, our related measurement techniques and the impact to our financial statements.

Income Taxes

We file income tax returns in the jurisdictions in which we operate and evaluate income tax expense in two components: current and deferred income tax expense. Current income tax expense represents our estimated taxes to be paid or refunded for the current period and includes income tax expense related to uncertain tax positions. Uncertain tax positions that meet the more likely than not recognition threshold are measured to determine the amount of benefit to recognize. An uncertain tax position is measured at the largest amount of benefit that management believes has a greater than 50% likelihood of

Critical Accounting Policies (continued)

realization upon settlement. Tax benefits not meeting our realization criteria represent unrecognized tax benefits.

Deferred income taxes are based on the balance sheet method and deferred income tax expense results from changes in deferred tax assets and liabilities between periods. Under the balance sheet method, the net deferred tax asset or liability is based on the tax effects of the differences between the book and tax basis of assets and liabilities, and recognizes enacted changes in tax rates and laws in the period in which they occur. Deferred tax assets are recognized subject to management's judgment that realization is more likely than not. A valuation allowance reduces deferred tax assets to the realizable amount.

The income tax laws of the jurisdictions in which we operate are complex and subject to different interpretations by management and the relevant government taxing authorities. In establishing a provision for income tax expense, we must make judgments about the application of these inherently complex tax laws. We must also make estimates about when in the future certain items will affect taxable income in the various tax jurisdictions. Our interpretations may be subjected to review during examination by taxing authorities and disputes may arise over the respective tax positions. We attempt to resolve these disputes during the tax examination and audit process and ultimately through the court systems when applicable.

We monitor relevant tax authorities and revise our estimate of accrued income taxes due to changes in income tax laws and their interpretation by the courts and regulatory authorities on a quarterly basis. Revisions of our estimate of accrued income taxes also may result from our own income tax planning and from the resolution of income tax controversies. Such revisions in our estimates may be material to our operating results for any given quarter.

See Note 23 (Income Taxes) to Financial Statements in this Report for a further description of our provision for income taxes and related income tax assets and liabilities.

Liability for Contingent Litigation Losses

The Company is involved in a number of judicial, regulatory, governmental, arbitration and other proceedings or investigations concerning matters arising from the conduct of its business activities, and many of those proceedings and investigations expose the Company to potential financial loss. We establish accruals for legal actions when potential losses associated with the actions become probable and the costs can be reasonably estimated. For such accruals, we record the amount we consider to be the best estimate within a range of potential losses that are both probable and estimable; however, if we cannot determine a best estimate, then we record the low end of the range of those potential losses. The actual costs of resolving legal actions may be substantially higher or lower than the amounts accrued for those actions.

We apply judgment when establishing an accrual for potential losses associated with legal actions and in establishing the range of reasonably possible losses in excess of the accrual. Our judgment in establishing accruals and the range of reasonably possible losses in excess of the Company's accrual for probable and estimable losses is influenced by our understanding of information currently available related to the legal evaluation and potential outcome of actions, including input and advice on these matters from our internal counsel, external counsel and senior management. These matters may be in various stages of investigation, discovery or proceedings. They may also involve a wide variety of claims across our businesses, legal entities and jurisdictions. The eventual outcome may be a scenario that was not considered or was considered remote in anticipated

occurrence. Accordingly, our estimate of potential losses will change over time and the actual losses may vary significantly.

The outcomes of legal actions are unpredictable and subject to significant uncertainties, and it is inherently difficult to determine whether any loss is probable or even possible. It is also inherently difficult to estimate the amount of any loss and there may be matters for which a loss is probable or reasonably possible but not currently estimable. Accordingly, actual losses may be in excess of the established accrual or the range of reasonably possible loss.

See Note 15 (Legal Actions) to Financial Statements in this Report for further information.

Goodwill Impairment

We test goodwill for impairment annually in the fourth quarter or more frequently as macroeconomic and other business factors warrant. These factors may include trends in short-term or long-term interest rates, negative trends from reduced revenue generating activities or increased costs, adverse actions by regulators, and company specific factors such as a decline in market capitalization. In first and second quarter 2020, we performed interim, quantitative impairment assessments of our goodwill and concluded that there was no impairment of goodwill. In third quarter 2020, we performed a qualitative assessment of goodwill impairment and concluded that it was more likely than not that the fair values of our reporting units were greater than their carrying amounts as of September 30, 2020.

In 2020, we reorganized our management reporting structure, which resulted in newly defined reportable operating segments. We identify reporting units to be assessed for goodwill impairment at the reportable operating segment level or one level below. Goodwill balances were allocated to the reporting units based on the relative fair value of realigned businesses.

For our quantitative goodwill impairment assessments, we calculate carrying amounts as net equity for each reporting unit based on allocated capital plus assigned goodwill and other intangible assets. We allocate capital to the reporting units under a risk-sensitive framework that is primarily based on aspects of our regulatory capital requirements. The estimated fair values of the reporting units are established based on a balanced weighting of fair values using both an income approach and a market approach and are intended to reflect Company performance and expectations as well as external market conditions. The methodologies for calculating carrying amounts and estimating fair values are periodically assessed by senior management and revised as necessary.

The income approach is a discounted cash flow (DCF) analysis, which uses the present value of future cash flows associated with each reporting unit to estimate fair value. There is significant judgment applied in a DCF analysis based on financial forecasts for our lines of business, which include future expectations of economic conditions and balance sheet changes, and assumptions related to future business activities. The near-term forecasts are reviewed by senior management and the Board as part of our annual budgeting process. For periods after our financial forecasts, we use a terminal value calculation based on an assumed long-term growth rate. We apply a discount rate to these forecasted cash flows using the capital asset pricing model which produces an estimated cost of equity specific to that reporting unit. The discount rates used in our fourth quarter 2020 assessment, which ranged from 10% to 12%, were intended to reflect the risks and uncertainties in the financial markets and in our internally generated business projections.

The market approach utilizes observable market data from comparable publicly traded companies, such as price-to-earnings or price-to-tangible book value ratios, to estimate a reporting unit's fair value. The market data is adjusted with a control premium that would be applied in a hypothetical acquisition of the reporting unit. Management uses judgment in the selection of comparable companies for each reporting unit based on the similarity of peer business activities to those of the applicable reporting unit.

The aggregate fair value of our reporting units exceeded our market capitalization for our fourth quarter 2020 assessment. Factors that we considered in our assessment and contributed to this difference included: (i) an overall premium that would be paid to gain control of the operating and financial decisions of the Company, (ii) synergies that we believe may not be reflected in the price of the Company's common stock, (iii) market position or opportunities that a potential buyer would take into consideration when estimating the fair value of an individual reporting unit, (iv) a higher degree of complexity and execution risk at the Company level, compared with the individual reporting unit level, and (v) risks or benefits at the Company level that may not be reflected in the fair value of the individual reporting units.

Based on our fourth quarter 2020 assessment, there was no impairment of goodwill at December 31, 2020. The fair value of

each reporting unit exceeded its carrying amount by 10% or higher based on forecasts and valuations. Although the fair value of our Commercial Banking reporting unit exceeded its carrying amount by over 20%, it was the most sensitive to adverse changes in valuation assumptions. An adverse change to valuation assumptions could result in an impairment of the goodwill allocated to the Commercial Banking reporting unit, which was \$2.9 billion at December 31, 2020.

Declines in our ability to generate revenue, significant increases in credit losses or other expenses, or adverse actions from regulators are factors that could result in material goodwill impairment in a future period. Given the uncertainty of the severity or length of the current economic downturn, we will continue to monitor our performance against our internal forecasts as well as market conditions for circumstances that could have a further negative effect on the estimated fair values of our reporting units.

For additional information on goodwill and our reportable operating segments, see Note 1 (Summary of Significant Accounting Policies), Note 10 (Intangible Assets), and Note 26 (Operating Segments) to Financial Statements in this Report.

Current Accounting Developments

Table 52 provides the significant accounting updates applicable to us that have been issued by the Financial Accounting Standards Board (FASB) but are not yet effective.

Table 52: Current Accounting Developments – Issued Standards

Description	Effective date and financial statement impact
ASU 2018-12 – Financial Services – Insurance (Topic 944): Targeted Improvements to the Accounting for Long-Duration Contracts and subsequent related updates	
The Update requires all features in long-duration insurance contracts that meet the definition of a market risk benefit to be measured at fair value through earnings with changes in fair value attributable to our own credit risk recognized in other comprehensive income. The Update requires the use of a standardized discount rate and routine updates for insurance assumptions used in valuing the liability for future policy benefits for traditional long-duration contracts. The Update also simplifies the amortization of deferred acquisition costs.	ASU 2020-11, Financial Services – Insurance (Topic 944): Effective Date and Early Application, issued in fourth quarter 2020, delayed the effective date of this standard to January 1, 2023. Certain of our variable annuity reinsurance products meet the definition of market risk benefits and will require the associated insurance related reserves to be measured at fair value as of the earliest period presented, with the cumulative effect of the difference between fair value and carrying value, excluding the effect of our own credit, to be recognized in the opening balance of retained earnings. The cumulative effect on fair value for changes attributable to our own credit risk will be recognized in the beginning balance of accumulated other comprehensive income. As of December 31, 2020, we held \$1.2 billion in insurance-related reserves of which \$588 million was in scope of the Update. A total of \$531 million was associated with products that meet the definition of market risk benefits, and of this amount, \$26 million was measured at fair value under current accounting standards. The market risk benefits are primarily indexed to U.S. equity and fixed income markets. Upon adoption, we may incur periodic earnings volatility from changes in the fair value of market risk benefits generally due to the long duration of these contracts. We plan to economically hedge this volatility, where feasible. The ultimate impact of these changes will depend on the composition of our market risk benefits portfolio at the date of adoption. Changes in the accounting for the liability of future policy benefits for traditional long-duration contracts and deferred acquisition costs will be applied to all outstanding long-duration contracts on the basis of their existing carrying amounts at the beginning of the earliest period presented, and are not expected to be material.

Other Accounting Developments

The following Updates are applicable to us but are not expected to have a material impact on our consolidated financial statements:

- ASU 2021-01 – Reference Rate Reform (Topic 848): Scope
- ASU 2020-10 – Codification Improvements
- ASU 2020-08 – Codification Improvements to Subtopic 310-20, *Receivables-Nonrefundable Fees and Other Costs*
- ASU 2020-06 – Debt – Debt with Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging – Contracts in Entity's Own Equity (Subtopic 815-40):

Accounting for Convertible Instruments and Contracts in an Entity's Own Equity

- ASU 2020-01 – Investments – Equity Securities (Topic 321), Investments – Equity Method and Joint Ventures (Topic 323), and Derivatives and Hedging (Topic 815): *Clarifying the Interactions between Topic 321, Topic 323, and Topic 815 (a consensus of the FASB Emerging Issues Task Force)*
- ASU 2019-12 – Income Taxes (Topic 740): *Simplifying the Accounting for Income Taxes*

Forward-Looking Statements

This document contains forward-looking statements. In addition, we may make forward-looking statements in our other documents filed or furnished with the Securities and Exchange Commission, and our management may make forward-looking statements orally to analysts, investors, representatives of the media and others. Forward-looking statements can be identified by words such as “anticipates,” “intends,” “plans,” “seeks,” “believes,” “estimates,” “expects,” “target,” “projects,” “outlook,” “forecast,” “will,” “may,” “could,” “should,” “can” and similar references to future periods. In particular, forward-looking statements include, but are not limited to, statements we make about: (i) the future operating or financial performance of the Company, including our outlook for future growth; (ii) our noninterest expense and efficiency ratio; (iii) future credit quality and performance, including our expectations regarding future loan losses, our allowance for credit losses, and the economic scenarios considered to develop the allowance; (iv) our expectations regarding net interest income and net interest margin; (v) loan growth or the reduction or mitigation of risk in our loan portfolios; (vi) future capital or liquidity levels, ratios or targets; (vii) the performance of our mortgage business and any related exposures; (viii) the expected outcome and impact of legal, regulatory and legislative developments, as well as our expectations regarding compliance therewith; (ix) future common stock dividends, common share repurchases and other uses of capital; (x) our targeted range for return on assets, return on equity, and return on tangible common equity; (xi) expectations regarding our effective income tax rate; (xii) the outcome of contingencies, such as legal proceedings; and (xiii) the Company’s plans, objectives and strategies.

Forward-looking statements are not based on historical facts but instead represent our current expectations and assumptions regarding our business, the economy and other future conditions. Because forward-looking statements relate to the future, they are subject to inherent uncertainties, risks and changes in circumstances that are difficult to predict. Our actual results may differ materially from those contemplated by the forward-looking statements. We caution you, therefore, against relying on any of these forward-looking statements. They are neither statements of historical fact nor guarantees or assurances of future performance. While there is no assurance that any list of risks and uncertainties or risk factors is complete, important factors that could cause actual results to differ materially from those in the forward-looking statements include the following, without limitation:

- current and future economic and market conditions, including the effects of declines in housing prices, high unemployment rates, U.S. fiscal debt, budget and tax matters, geopolitical matters, and any slowdown in global economic growth;
- the effect of the COVID-19 pandemic, including on our credit quality and business operations, as well as its impact on general economic and financial market conditions;
- our capital and liquidity requirements (including under regulatory capital standards, such as the Basel III capital standards) and our ability to generate capital internally or raise capital on favorable terms;
- current, pending or future legislation or regulation that could have a negative effect on our revenue and businesses, including rules and regulations relating to bank products and financial services;
- developments in our mortgage banking business, including the extent of the success of our mortgage loan modification efforts, the amount of mortgage loan repurchase demands that we receive, any negative effects relating to our mortgage servicing, loan modification or foreclosure practices, and the effects of regulatory or judicial requirements or guidance impacting our mortgage banking business and any changes in industry standards;
- our ability to realize any efficiency ratio or expense target as part of our expense management initiatives, including as a result of business and economic cyclicality, seasonality, changes in our business composition and operating environment, growth in our businesses and/or acquisitions, and unexpected expenses relating to, among other things, litigation and regulatory matters;
- the effect of the current interest rate environment or changes in interest rates or in the level or composition of our assets or liabilities on our net interest income, net interest margin and our mortgage originations, mortgage servicing rights and mortgage loans held for sale;
- significant turbulence or a disruption in the capital or financial markets, which could result in, among other things, reduced investor demand for mortgage loans, a reduction in the availability of funding or increased funding costs, and declines in asset values and/or recognition of impairments of securities held in our debt securities and equity securities portfolios;
- the effect of a fall in stock market prices on our investment banking business and our fee income from our brokerage, asset and wealth management businesses;
- negative effects from the retail banking sales practices matter and from other instances where customers may have experienced financial harm, including on our legal, operational and compliance costs, our ability to engage in certain business activities or offer certain products or services, our ability to keep and attract customers, our ability to attract and retain qualified employees, and our reputation;
- resolution of regulatory matters, litigation, or other legal actions, which may result in, among other things, additional costs, fines, penalties, restrictions on our business activities, reputational harm, or other adverse consequences;
- a failure in or breach of our operational or security systems or infrastructure, or those of our third-party vendors or other service providers, including as a result of cyber attacks;
- the effect of changes in the level of checking or savings account deposits on our funding costs and net interest margin;
- fiscal and monetary policies of the Federal Reserve Board;
- changes to U.S. tax guidance and regulations, as well as the effect of discrete items on our effective income tax rate;
- our ability to develop and execute effective business plans and strategies; and
- the other risk factors and uncertainties described under “Risk Factors” in this Report.

In addition to the above factors, we also caution that the amount and timing of any future common stock dividends or repurchases will depend on the earnings, cash requirements and financial condition of the Company, market conditions, capital requirements (including under Basel capital standards), common stock issuance requirements, applicable law and regulations

(including federal securities laws and federal banking regulations), and other factors deemed relevant by the Company's Board of Directors, and may be subject to regulatory approval or conditions.

For more information about factors that could cause actual results to differ materially from our expectations, refer to our reports filed with the Securities and Exchange Commission, including the discussion under "Risk Factors" in this Report, as filed with the Securities and Exchange Commission and available on its website at www.sec.gov.¹

Any forward-looking statement made by us speaks only as of the date on which it is made. Factors or events that could cause our actual results to differ may emerge from time to time, and it is not possible for us to predict all of them. We undertake no obligation to publicly update any forward-looking statement, whether as a result of new information, future developments or otherwise, except as may be required by law.

Forward-looking Non-GAAP Financial Measures. From time to time management may discuss forward-looking non-GAAP financial measures, such as forward-looking estimates or targets for return on average tangible common equity. We are unable to provide a reconciliation of forward-looking non-GAAP financial measures to their most directly comparable GAAP financial measures because we are unable to provide, without unreasonable effort, a meaningful or accurate calculation or estimation of amounts that would be necessary for the reconciliation due to the complexity and inherent difficulty in forecasting and quantifying future amounts or when they may occur. Such unavailable information could be significant to future results.

¹ We do not control this website. Wells Fargo has provided this link for your convenience, but does not endorse and is not responsible for the content, links, privacy policy, or security policy of this website.

Risk Factors

An investment in the Company involves risk, including the possibility that the value of the investment could fall substantially and that dividends or other distributions on the investment could be reduced or eliminated. We discuss below risk factors that could adversely affect our financial results and condition, and the value of, and return on, an investment in the Company.

ECONOMIC, FINANCIAL MARKETS, INTEREST RATES, AND LIQUIDITY RISKS

Our financial results have been, and will continue to be, materially affected by general economic conditions, and a deterioration in economic conditions or in the financial markets may materially adversely affect our lending and other businesses and our financial results and condition. We generate revenue from the interest and fees we charge on the loans and other products and services we sell, and a substantial amount of our revenue and earnings comes from the net interest income and fee income that we earn from our consumer and commercial lending and banking businesses, including our mortgage banking business. These businesses have been, and will continue to be, materially affected by the state of the U.S. economy, particularly unemployment levels and home prices. The negative effects and continued uncertainty stemming from U.S. fiscal and political matters, including concerns about deficit and debt levels, taxes and U.S. debt ratings, have impacted and may continue to impact the global economy. Moreover, geopolitical matters, including international political unrest or disturbances, the United Kingdom's exit from the European Union, as well as continued concerns over commodity prices, restrictions on international trade and corresponding retaliatory measures, and global economic difficulties, may impact the stability of financial markets and the global economy. In particular, the United Kingdom's exit from the European Union could increase economic barriers between the United Kingdom and the European Union, limit our ability to conduct business in the European Union, impose additional costs on us, subject us to different laws, regulations and/or regulatory authorities, or adversely impact our business, financial results and operating model. Although we have transitioned certain of our operations to countries within the European Union, there is no guarantee that we will be able to operate or conduct business in the European Union in the same manner or with the same effectiveness as before the United Kingdom's exit. A prolonged period of slow growth in the global economy, particularly in the U.S., or any deterioration in general economic conditions and/or the financial markets resulting from the above matters or any other events or factors that may disrupt or weaken the global economy, could materially adversely affect our financial results and condition.

A weakening in business or economic conditions, including higher unemployment levels or declines in home prices, can also adversely affect our borrowers' ability to repay their loans, which can negatively impact our credit performance. If unemployment levels worsen or if home prices fall we would expect to incur elevated charge-offs and provision expense from increases in our allowance for credit losses. These conditions may adversely affect not only consumer loan performance but also commercial and CRE loans, especially for those business borrowers that rely on the health of industries that may experience deteriorating economic conditions. The ability of these and other borrowers to

repay their loans may deteriorate, causing us, as one of the largest commercial and CRE lenders in the U.S., to incur significantly higher credit losses. In addition, weak or deteriorating economic conditions make it more challenging for us to increase our consumer and commercial loan portfolios by making loans to creditworthy borrowers at attractive yields. Furthermore, weak economic conditions, as well as competition and/or increases in interest rates, could soften demand for our loans resulting in our retaining a much higher amount of lower yielding liquid assets on our consolidated balance sheet. If economic conditions do not continue to improve or if the economy worsens and unemployment rises, which also would likely result in a decrease in consumer and business confidence and spending, the demand for our credit products, including our mortgages, may fall, reducing our interest and noninterest income and our earnings.

A deterioration in business and economic conditions, which may erode consumer and investor confidence levels, and/or increased volatility of financial markets, also could adversely affect financial results for our fee-based businesses, including our investment advisory, mutual fund, securities brokerage, wealth management, and investment banking businesses. For example, because investment management fees are often based on the value of assets under management, a fall in the market prices of those assets could reduce our fee income. Changes in stock market prices could affect the trading activity of investors, reducing commissions and other fees we earn from our brokerage business. In addition, adverse market conditions may negatively affect the performance of products we have provided to customers, which may expose us to legal actions or additional costs. The U.S. stock market experienced significant volatility in 2020 and there is no guarantee that high price levels will continue or that price levels will stabilize. Poor economic conditions and volatile or unstable financial markets also can negatively affect our debt and equity underwriting and advisory businesses, as well as our trading activities and venture capital businesses. Any deterioration in global financial markets and economies, including as a result of any international political unrest or disturbances, may adversely affect the revenues and earnings of our international operations, particularly our global financial institution and correspondent banking services.

For more information, refer to the "Risk Management – Asset/Liability Management" and "– Credit Risk Management" sections in this Report.

The COVID-19 pandemic has adversely impacted our business and financial results, and the ultimate impact will depend on future developments, which are highly uncertain and cannot be predicted, including the scope and duration of the pandemic and actions taken by governmental authorities in response to the pandemic. The COVID-19 pandemic has negatively impacted the global economy, disrupted global supply chains, affected equity market valuations, created significant volatility and disruption in financial markets, and increased unemployment levels. In addition, the pandemic has resulted in restrictions and closures for many businesses, as well as the institution of social distancing and sheltering in place requirements in many states and communities. As a result, the demand for our products and services may continue to be significantly impacted, which could adversely affect our revenue. Furthermore, the pandemic could continue to result in the recognition of credit losses in our loan portfolios and increases in our allowance for credit losses,

particularly for industries most directly and adversely affected by the pandemic, such as travel and entertainment, and/or if businesses remain closed, the impact on the global economy worsens, or more customers draw on their lines of credit or seek additional loans to help finance their businesses. Similarly, because of changing economic and market conditions affecting issuers, we may be required to recognize further impairments on the securities we hold, as well as reductions in other comprehensive income. Moreover, the persistence of adverse economic conditions and reduced revenue may adversely affect the fair value of our operating segments and underlying reporting units which may result in the impairment of goodwill or other long-lived assets. Our business operations may be further disrupted if significant portions of our workforce are unable to work effectively, including because of illness, quarantines, government actions, or other restrictions in connection with the pandemic, and we have already temporarily closed certain of our branches and offices.

Moreover, the pandemic has created additional operational and compliance risks, including the need to quickly implement and execute new programs and procedures for the products and services we offer our customers, provide enhanced safety measures for our employees and customers, comply with rapidly changing regulatory requirements, address any increased risk of fraudulent activity, and protect the integrity and functionality of our systems, networks and operations while a larger number of our employees and those of our third-party service providers work remotely. The pandemic could also result in or contribute to additional downgrades to our credit ratings or credit outlook. In response to the pandemic, we have temporarily suspended certain mortgage foreclosure activities, and provided fee waivers, payment deferrals, and other expanded assistance for mortgage, credit card, auto, small business, personal and commercial lending customers, and future governmental actions may require these and other types of customer-related responses. Our participation in governmental measures taken to address the economic impact from the COVID-19 pandemic could result in reputational harm, as well as continue to result in litigation and government investigations and proceedings. In addition, we reduced our common stock dividend and temporarily suspended share repurchases, and we could take, or be required to take, other capital actions in the future. The COVID-19 pandemic may also have the effect of increasing the likelihood and/or magnitude of the other risks described herein, including credit, market and operational related risks, particularly if the pandemic continues to adversely affect the global economy. The extent to which the COVID-19 pandemic impacts our business, results of operations, and financial condition, as well as our regulatory capital and liquidity ratios, will depend on future developments, which are highly uncertain and cannot be predicted, including the scope and duration of the pandemic, the effectiveness, availability and use of vaccines, and actions taken by governmental authorities and other third parties in response to the pandemic.

Changes in interest rates and financial market values could reduce our net interest income and earnings, as well as our other comprehensive income, including as a result of recognizing losses on the debt and equity securities that we hold in our portfolio or trade for our customers. Changes in either our net interest margin or the amount or mix of earning assets we hold, including as a result of the asset cap under the February 2018 consent order with the FRB, could affect our net interest income and our earnings. Changes in interest rates can affect our net interest margin. Although the yield we earn on our

assets and our funding costs tend to move in the same direction in response to changes in interest rates, one can rise or fall faster than the other, causing our net interest margin to expand or contract. If our funding costs rise faster than the yield we earn on our assets or if the yield we earn on our assets falls faster than our funding costs, our net interest margin could contract.

The amount and type of earning assets we hold can affect our yield and net interest margin. We hold earning assets in the form of loans and debt and equity securities, among other assets. As noted above, if the economy worsens we may see lower demand for loans by creditworthy customers, reducing our net interest income and yield. In addition, our net interest income and net interest margin can be negatively affected by a prolonged low interest rate environment as it may result in us holding lower yielding loans and securities on our consolidated balance sheet, particularly if we are unable to replace the maturing higher yielding assets with similar higher yielding assets. Increases in interest rates, however, may negatively affect loan demand and could result in higher credit losses as borrowers may have more difficulty making higher interest payments. As described below, changes in interest rates also affect our mortgage business, including the value of our MSRs.

Changes in the slope of the “yield curve” – or the spread between short-term and long-term interest rates – could also reduce our net interest margin. Normally, the yield curve is upward sloping, meaning short-term rates are lower than long-term rates. When the yield curve flattens, or even inverts, our net interest margin could decrease if the cost of our short-term funding increases relative to the yield we can earn on our long-term assets. Moreover, a negative interest rate environment, in which interest rates drop below zero, could reduce our net interest margin and net interest income due to a likely decline in the interest we could earn on loans and other earning assets, while also likely requiring us to pay to maintain our deposits with the FRB.

The interest we earn on our loans may be tied to U.S.-denominated interest rates such as the federal funds rate while the interest we pay on our debt may be based on international rates such as LIBOR. If the federal funds rate were to fall without a corresponding decrease in LIBOR, we might earn less on our loans without any offsetting decrease in our funding costs. This could lower our net interest margin and our net interest income.

We assess our interest rate risk by estimating the effect on our earnings under various scenarios that differ based on assumptions about the direction, magnitude and speed of interest rate changes and the slope of the yield curve. We may hedge some of that interest rate risk with interest rate derivatives. We also rely on the “natural hedge” that our mortgage loan originations and servicing rights can provide as their revenue impact tends to move in opposite directions based on changes in interest rates.

We generally do not hedge all of our interest rate risk. There is always the risk that changes in interest rates, credit spreads or option volatility could reduce our net interest income and earnings, as well as our other comprehensive income, in material amounts, especially if actual conditions turn out to be materially different than what we assumed. For example, if interest rates rise or fall faster than we assumed or the slope of the yield curve changes, we may incur significant losses on debt securities we hold as investments. To reduce our interest rate risk, we may rebalance our portfolios of debt securities, equity securities and loans, refinance our debt and take other strategic actions. We may incur losses when we take such actions.

We hold debt and equity securities, including U.S. Treasury and federal agency securities and federal agency MBS, securities

Risk Factors (continued)

of U.S. states and political subdivisions, residential and commercial MBS, corporate debt securities, other asset-backed securities and marketable equity securities, including securities relating to our venture capital activities. Because of changing economic and market conditions, as well as credit ratings, affecting issuers and the performance of any collateral underlying the securities, we may be required to recognize other-than-temporary impairment (OTTI) in future periods on the securities we hold. Furthermore, the value of the debt securities we hold can fluctuate due to changes in interest rates, issuer creditworthiness, and other factors. Our net income also is exposed to changes in interest rates, credit spreads, foreign exchange rates, and equity and commodity prices in connection with our trading activities, which are conducted primarily to accommodate the investment and risk management activities of our customers, as well as when we execute economic hedging to manage certain balance sheet risks. Trading debt securities and equity securities held for trading are carried at fair value with realized and unrealized gains and losses recorded in noninterest income. As part of our business to support our customers, we trade public debt and equity securities that are subject to market fluctuations with gains and losses recognized in net income. In addition, although high market volatility can increase our exposure to trading-related losses, periods of low volatility may have an adverse effect on our businesses as a result of reduced customer activity levels. Although we have processes in place to measure and monitor the risks associated with our trading activities, including stress testing and hedging strategies, there can be no assurance that our processes and strategies will be effective in avoiding losses that could have a material adverse effect on our financial results.

The value of our marketable and nonmarketable equity securities can fluctuate from quarter to quarter. Marketable equity securities are carried at fair value with unrealized gains and losses reflected in earnings. Nonmarketable equity securities are carried under the cost method, equity method, or measurement alternative, while others are carried at fair value with unrealized gains and losses reflected in earnings. Earnings from our equity securities portfolio may be volatile and hard to predict, and may have a significant effect on our earnings from period to period. When, and if, we recognize gains may depend on a number of factors, including general economic and market conditions, the prospects of the companies in which we invest, when a company goes public, the size of our position relative to the public float, and whether we are subject to any resale restrictions.

Nonmarketable equity securities include our private equity and venture capital investments that could result in significant OTTI losses for those investments carried under the measurement alternative or equity method. If we determine there is OTTI for an investment, we write-down the carrying value of the investment, resulting in a charge to earnings, which could be significant.

For more information, refer to the “Risk Management – Asset/Liability Management – Interest Rate Risk”, “– Mortgage Banking Interest Rate and Market Risk”, “– Market Risk – Trading Activities”, and “– Market Risk – Equity Securities” and the “Balance Sheet Analysis – Available-for-Sale and Held-to-Maturity Debt Securities” sections in this Report and Note 2 (Trading Activities), Note 3 (Available-for-Sale and Held-to-Maturity Debt Securities) and Note 6 (Equity Securities) to Financial Statements in this Report.

Uncertainty about the future of the London Interbank Offered Rate (LIBOR) may adversely affect our business, results of operations, and financial condition. Central banks and global

regulators have called for financial market participants to prepare for the discontinuation of LIBOR. The administrator of LIBOR published a consultation regarding its intention to cease the publication of LIBOR after December 31, 2021, with the exception of certain tenors of U.S. dollar LIBOR that it proposed would remain available for use in legacy contracts or as otherwise enumerated by financial regulators until June 30, 2023. We have a significant number of assets and liabilities referenced to LIBOR and other interbank offered rates such as commercial loans, adjustable-rate mortgage loans, derivatives, debt securities, and long-term debt. When any such benchmark rate or other referenced financial metric is significantly changed, replaced or discontinued, or ceases to be recognized as an acceptable market benchmark rate or financial metric, there may be uncertainty or differences in the calculation of the applicable interest rate or payment amount depending on the terms of the governing instrument.

This could impact the financial performance of previously booked transactions, result in losses on financial instruments we hold, require different hedging strategies or result in ineffective or increased basis risk on existing hedges, impact the overall interest rate environment and the availability or cost of floating-rate funding, affect our capital and liquidity planning and management, or have other adverse financial consequences. There can be no assurance that the transition to a new benchmark rate or other financial metric will be an adequate alternative to LIBOR or produce the economic equivalent of LIBOR. In addition, the transition to using any new benchmark rate or other financial metric may require changes to existing transaction data, products, systems, models, operations, and pricing processes, require substantial changes to existing documentation and the renegotiation of a substantial volume of previously booked transactions, and could result in significant operational, systems, or other practical challenges, increased compliance and operational costs, heightened expectations and scrutiny from regulators, litigation, reputational harm, or other adverse consequences. There can be no assurance that we will be able to modify all existing documentation or renegotiate all previously booked transactions before the discontinuation of LIBOR. Furthermore, the transition away from widely used benchmark rates like LIBOR could result in customers or other market participants challenging the determination of their interest payments, disputing the interpretation or implementation of contract “fallback” provisions and other transition related changes, or entering into fewer transactions or postponing their financing needs, which could reduce our revenue and adversely affect our business. Moreover, to the extent borrowers with loans referenced to LIBOR, such as adjustable rate mortgage loans, experience higher interest payments as a result of the transition to a new benchmark rate, our customers’ ability to repay their loans may be adversely affected, which can negatively impact our credit performance.

For additional information on the discontinuation of LIBOR and the steps we are taking to address and mitigate the risks we have identified, refer to the “Overview – Recent Developments – LIBOR Transition” section in this Report.

Effective liquidity management is essential for the operation of our business, and our financial results and condition could be materially adversely affected if we do not effectively manage our liquidity. We primarily rely on customer deposits to be a low-cost and stable source of funding for the loans we make and the operation of our business. In addition to customer deposits, our sources of liquidity include certain debt and equity securities, our ability to sell or securitize loans in secondary markets and to

pledge loans to access secured borrowing facilities through the FHLB and the FRB, and our ability to raise funds in domestic and international money through capital markets.

Our liquidity and our ability to fund and run our business could be materially adversely affected by a variety of conditions and factors, including financial and credit market disruption and volatility or a lack of market or customer confidence in financial markets in general similar to what occurred during the financial crisis in 2008 and early 2009, which may result in a loss of customer deposits or outflows of cash or collateral and/or our inability to access capital markets on favorable terms. Market disruption and volatility could impact our credit spreads, which are the amount in excess of the interest rate of U.S. Treasury securities, or other benchmark securities, of the same maturity that we need to pay to our funding providers. Increases in interest rates and our credit spreads could significantly increase our funding costs. Other conditions and factors that could materially adversely affect our liquidity and funding include a lack of market or customer confidence in the Company or negative news about the Company or the financial services industry generally which also may result in a loss of deposits and/or negatively affect our ability to access the capital markets; our inability to sell or securitize loans or other assets; disruptions or volatility in the repurchase market which also may increase our short-term funding costs; regulatory requirements or restrictions; and, as described below, reductions in one or more of our credit ratings. Many of the above conditions and factors may be caused by events over which we have little or no control. There can be no assurance that significant disruption and volatility in the financial markets will not occur in the future. For example, concerns over geopolitical issues, commodity and currency prices, as well as global economic conditions, may cause financial market volatility.

In addition, concerns regarding U.S. government debt levels and any associated downgrade of U.S. government debt ratings may cause uncertainty and volatility as well. A downgrade of the sovereign debt ratings of the U.S. government or the debt ratings of related institutions, agencies or instrumentalities, as well as other fiscal or political events could, in addition to causing economic and financial market disruptions, materially adversely affect the market value of the U.S. government securities that we hold, the availability of those securities as collateral for borrowing, and our ability to access capital markets on favorable terms, as well as have other material adverse effects on the operation of our business and our financial results and condition.

As noted above, we rely heavily on customer deposits for our funding and liquidity. We compete with banks and other financial services companies for deposits. If our competitors raise the rates they pay on deposits our funding costs may increase, either because we raise our rates to avoid losing deposits or because we lose deposits and must rely on more expensive sources of funding. Checking and savings account balances and other forms of customer deposits may decrease when customers perceive alternative investments, such as the stock market, as providing a better risk/return tradeoff. When customers move money out of bank deposits and into other investments, we may lose a relatively low-cost source of funds, increasing our funding costs and negatively affecting our liquidity.

If we are unable to continue to fund our assets through customer deposits or access capital markets on favorable terms or if we suffer an increase in our borrowing costs or otherwise fail to manage our liquidity effectively (including on an intra-day or intra-affiliate basis), our liquidity, net interest margin, financial results and condition may be materially adversely affected. As we did during the financial crisis, we may also need, or be required by

our regulators, to raise additional capital through the issuance of common stock, which could dilute the ownership of existing stockholders, or reduce or even eliminate our common stock dividend to preserve capital or to raise additional capital.

For more information, refer to the “Risk Management – Asset/Liability Management” section in this Report.

Adverse changes in our credit ratings could have a material adverse effect on our liquidity, cash flows, financial results and condition. Our borrowing costs and ability to obtain funding are influenced by our credit ratings. Reductions in one or more of our credit ratings could adversely affect our ability to borrow funds and raise the costs of our borrowings substantially and could cause creditors and business counterparties to raise collateral requirements or take other actions that could adversely affect our ability to raise funding. Credit ratings and credit ratings agencies’ outlooks are based on the ratings agencies’ analysis of many quantitative and qualitative factors, such as our capital adequacy, liquidity, asset quality, business mix, the level and quality of our earnings, rating agency assumptions regarding the probability and extent of federal financial assistance or support, and other rating agency specific criteria. In addition to credit ratings, our borrowing costs are affected by various other external factors, including market volatility and concerns or perceptions about the financial services industry generally. There can be no assurance that we will maintain our credit ratings and outlooks and that credit ratings downgrades in the future would not materially affect our ability to borrow funds and borrowing costs.

Downgrades in our credit ratings also may trigger additional collateral or funding obligations which could negatively affect our liquidity, including as a result of credit-related contingent features in certain of our derivative contracts. Although a one or two notch downgrade in our current credit ratings would not be expected to trigger a material increase in our collateral or funding obligations, a more severe credit rating downgrade of our long-term and short-term credit ratings could increase our collateral or funding obligations and the effect on our liquidity could be material.

For information on our credit ratings, see the “Risk Management – Asset/Liability Management – Liquidity Risk and Funding – Credit Ratings” section and for information regarding additional collateral and funding obligations required of certain derivative instruments in the event our credit ratings were to fall below investment grade, see Note 16 (Derivatives) to Financial Statements in this Report.

We rely on dividends from our subsidiaries for liquidity, and federal and state law, as well as certain contractual arrangements, can limit those dividends. Wells Fargo & Company, the parent holding company (the “Parent”), is a separate and distinct legal entity from its subsidiaries. It receives substantially all of its funding and liquidity from dividends and other distributions from its subsidiaries. We generally use these dividends and distributions, among other things, to pay dividends on our common and preferred stock and interest and principal on our debt. Federal and state laws limit the amount of dividends and distributions that our bank and some of our nonbank subsidiaries, including our broker-dealer subsidiaries, may pay to the Parent. In addition, under a Support Agreement dated June 28, 2017, as amended and restated on June 26, 2019, among the Parent, WFC Holdings, LLC, an intermediate holding company and subsidiary of the Parent (the “IHC”), Wells Fargo Bank, N.A. (the “Bank”), Wells Fargo Securities, LLC, Wells Fargo Clearing Services, LLC, and certain other direct and indirect

Risk Factors (continued)

subsidiaries of the Parent designated as material entities for resolution planning purposes or identified as related support entities in our resolution plan, the IHC may be restricted from making dividend payments to the Parent if certain liquidity and/or capital metrics fall below defined triggers or if the Parent's board of directors authorizes it to file a case under the U.S. Bankruptcy Code. Also, our right to participate in a distribution of assets upon a subsidiary's liquidation or reorganization is subject to the prior claims of the subsidiary's creditors.

For more information, refer to the "Regulation and Supervision – Dividend Restrictions" and "– Holding Company Structure" sections in our 2020 Form 10-K and to Note 28 (Regulatory Capital Requirements and Other Restrictions) to Financial Statements in this Report.

REGULATORY RISKS

Current and future legislation and/or regulation could require us to change certain of our business practices, reduce our revenue and earnings, impose additional costs on us or otherwise adversely affect our business operations and/or competitive position. Our parent company, our subsidiary banks and many of our nonbank subsidiaries such as those related to our brokerage and mutual fund businesses, are subject to significant and extensive regulation under state and federal laws in the U.S., as well as the applicable laws of the various jurisdictions outside of the U.S. where they conduct business. These regulations protect depositors, federal deposit insurance funds, consumers, investors, employees, and the banking and financial system as a whole, not necessarily our security holders. Economic, market and political conditions during the past few years have led to a significant amount of legislation and regulation in the U.S. and abroad affecting the financial services industry, as well as heightened expectations and scrutiny of financial services companies from banking regulators. These laws and regulations may continue to affect the manner in which we do business and the products and services that we provide, affect or restrict our ability to compete in our current businesses or our ability to enter into or acquire new businesses, reduce or limit our revenue, affect our compliance and risk management activities, increase our capital requirements, impose additional fees, assessments or taxes on us, intensify the regulatory supervision of us and the financial services industry, and adversely affect our business operations or have other negative consequences. Our businesses and revenues in non-U.S. jurisdictions are also subject to risks from political, economic and social developments in those jurisdictions, including sanctions or business restrictions, asset freezes or confiscation, unfavorable political or diplomatic developments, or financial or social instability. In addition, greater government oversight and scrutiny of financial services companies has increased our operational and compliance costs as we must continue to devote substantial resources to enhancing our procedures and controls and meeting heightened regulatory standards and expectations. Any failure to meet regulatory requirements, standards or expectations, either in the U.S. or in non-U.S. jurisdictions, could result in fees, penalties, restrictions on our ability to engage in certain business activities, or other adverse consequences.

Our consumer businesses, including our mortgage, auto, credit card and other consumer lending and non-lending businesses, are subject to numerous and, in many cases, highly complex consumer protection laws and regulations, as well as enhanced regulatory scrutiny and more and expanded regulatory examinations and/or investigations. In particular, the CFPB's rules may continue to increase our compliance costs and require

changes in our business practices, which could limit or negatively affect the products and services that we offer our customers. If we fail to meet enhanced regulatory requirements and expectations with respect to our consumer businesses, we may be subject to increased costs, fines, penalties, restrictions on our business activities including the products and services we can provide, and/or harm to our reputation.

In addition, the Dodd-Frank Act established a comprehensive framework for regulating over-the-counter derivatives, and the CFTC, SEC, and other federal regulatory agencies have adopted rules regulating swaps, security-based swaps, and derivatives activities. These rules may continue to negatively impact customer demand for over-the-counter derivatives, impact our ability to offer customers new derivatives or amendments to existing derivatives, and increase our costs for engaging in swaps, security-based swaps, and other derivatives activities.

We are also subject to various rules and regulations related to the prevention of financial crimes and combating terrorism, including the U.S. Patriot Act of 2001. These rules and regulations require us to, among other things, implement policies and procedures related to anti-money laundering, anti-bribery and corruption, fraud, compliance, suspicious activities, currency transaction reporting and due diligence on customers. Although we have policies and procedures designed to comply with these rules and regulations, to the extent they are not fully effective or do not meet heightened regulatory standards or expectations, we may be subject to fines, penalties, restrictions on certain activities, reputational harm, or other adverse consequences.

Our businesses are also subject to laws and regulations enacted by U.S. and non-U.S. regulators and governmental authorities relating to the privacy of the information of customers, employees and others. These laws and regulations, among other things, increase our compliance obligations; have a significant impact on our businesses' collection, processing, sharing, use, and retention of personal data and reporting of data breaches; and provide for significantly increased penalties for non-compliance.

In addition, we are subject to a number of consent orders and regulatory agreements with certain of our regulators, including a February 2018 consent order with the FRB regarding the Board's governance and oversight of the Company, and the Company's compliance and operational risk management program. This consent order limits the Company's total consolidated assets as defined under the consent order to the level as of December 31, 2017, until certain conditions are met. This limitation could continue to adversely affect our results of operations or financial condition. We are also subject to April 2018 consent orders with the CFPB and OCC regarding the Company's compliance risk management program and past practices involving certain automobile collateral protection insurance policies and certain mortgage interest rate lock extensions.

Under the April 2018 consent order with the OCC, the Bank remains subject to requirements that were originally imposed in November 2016 to provide prior written notice to, and obtain non-objection from, the OCC with respect to changes in directors and senior executive officers, and remains subject to certain regulatory limitations on post-termination payments to certain individuals and employees.

The Company may be subject to further actions, including the imposition of additional consent orders, regulatory agreements or civil money penalties, by federal regulators regarding similar or other issues. Compliance with the February 2018 FRB consent order, the April 2018 CFPB and OCC consent

orders, and any other consent orders or regulatory actions, as well as the implementation of their requirements, may continue to increase the Company's costs, require the Company to reallocate resources away from growing its existing businesses, negatively impact the Company's capital and liquidity, and require the Company to undergo significant changes to its business, products and services. For more information on the February 2018 FRB consent order and the April 2018 CFPB and OCC consent orders, refer to the "Regulatory Matters" section in this Report.

Other future regulatory initiatives that could significantly affect our business include proposals to reform the housing finance market in the United States. These proposals, among other things, consider ending the conservatorships of the GSEs and reducing or eliminating over time the role of the GSEs in buying mortgage loans or guaranteeing mortgage-backed securities (MBS), as well as the implementation of reforms relating to borrowers, lenders, and investors in the mortgage market. The extent and timing of any regulatory reform or the adoption of any legislation regarding the GSEs and/or the home mortgage market, as well as any effect on the Company's business and financial results, are uncertain.

Any other future legislation and/or regulation, if adopted, also could significantly change our regulatory environment and increase our cost of doing business, limit the activities we may pursue or affect the competitive balance among banks, savings associations, credit unions, and other financial services companies, and have a material adverse effect on our financial results and condition.

For more information on the significant regulations and regulatory oversight initiatives that have affected or may affect our business, refer to the "Regulatory Matters" section in this Report and the "Regulation and Supervision" section in our 2020 Form 10-K.

We could be subject to more stringent capital, leverage or liquidity requirements or restrictions on our growth, activities or operations if regulators determine that our resolution or recovery plan is deficient. Pursuant to rules adopted by the FRB and the FDIC, Wells Fargo has prepared and submitted a resolution plan, also known as a "living will," that is designed to facilitate our rapid and orderly resolution in the event of material financial distress or failure. There can be no assurance that the FRB or FDIC will respond favorably to the Company's resolution plans. If the FRB and/or FDIC determine that our resolution plan has deficiencies, they may impose more stringent capital, leverage or liquidity requirements on us or restrict our growth, activities or operations until we adequately remedy the deficiencies. If the FRB and/or FDIC ultimately determine that we have been unable to remedy any deficiencies, they could require us to divest certain assets or operations. On December 17, 2019, the FRB and FDIC announced that the Company's 2019 resolution plan did not have any deficiencies, but they identified a specific shortcoming that would need to be addressed.

In addition to our resolution plans, we must also prepare and submit to the FRB a recovery plan that identifies a range of options that we may consider during times of idiosyncratic or systemic economic stress to remedy any financial weaknesses and restore market confidence without extraordinary government support. The Bank must also prepare and submit to the OCC a recovery plan. If either the FRB or the OCC determines that our recovery plan is deficient, they may impose fines, restrictions on our business or ultimately require us to divest assets.

Our security holders may suffer losses in a resolution of Wells Fargo even if creditors of our subsidiaries are paid in full.

If Wells Fargo were to fail, it may be resolved in a bankruptcy proceeding or, if certain conditions are met, under the resolution regime created by the Dodd-Frank Act known as the "orderly liquidation authority." The orderly liquidation authority allows for the appointment of the FDIC as receiver for a systemically important financial institution that is in default or in danger of default if, among other things, the resolution of the institution under the U.S. Bankruptcy Code would have serious adverse effects on financial stability in the United States. If the FDIC is appointed as receiver for the Parent, then the orderly liquidation authority, rather than the U.S. Bankruptcy Code, would determine the powers of the receiver and the rights and obligations of our security holders. The FDIC's orderly liquidation authority requires that security holders of a company in receivership bear all losses before U.S. taxpayers are exposed to any losses, and allows the FDIC to disregard the strict priority of creditor claims under the U.S. Bankruptcy Code in certain circumstances.

The strategy described in our most recent resolution plan is a single point of entry strategy, in which the Parent would likely be the only material legal entity to enter resolution proceedings. However, we are not obligated to maintain a single point of entry strategy, and the strategy described in our resolution plan is not binding in the event of an actual resolution of Wells Fargo, whether conducted under the U.S. Bankruptcy Code or by the FDIC under the orderly liquidation authority. The FDIC has announced that a single point of entry strategy may be a desirable strategy under its implementation of the orderly liquidation authority, but not all aspects of how the FDIC might exercise this authority are known and additional rulemaking is possible.

To facilitate the orderly resolution of systemically important financial institutions in case of material distress or failure, federal banking regulations require that institutions, such as Wells Fargo, maintain a minimum amount of equity and unsecured debt to absorb losses and recapitalize operating subsidiaries. Federal banking regulators have also required measures to facilitate the continued operation of operating subsidiaries notwithstanding the failure of their parent companies, such as limitations on parent guarantees, and have issued guidance encouraging institutions to take legally binding measures to provide capital and liquidity resources to certain subsidiaries to facilitate an orderly resolution. In response to the regulators' guidance and to facilitate the orderly resolution of the Company, on June 28, 2017, the Parent entered into a support agreement, as amended and restated on June 26, 2019 (the "Support Agreement"), with WFC Holdings, LLC, an intermediate holding company and subsidiary of the Parent (the "IHC"), the Bank, and certain other direct and indirect subsidiaries of the Parent. Pursuant to the Support Agreement, the Parent transferred a significant amount of its assets to the IHC and will continue to transfer assets to the IHC from time to time. In the event of our material financial distress or failure, the IHC will be obligated to use the transferred assets to provide capital and/or liquidity to the Bank and certain other direct and indirect subsidiaries of the Parent. Under the Support Agreement, the IHC will provide funding and liquidity to the Parent through subordinated notes and a committed line of credit. If certain liquidity and/or capital metrics fall below defined triggers, or if the Parent's board of directors authorizes it to file a case under the U.S. Bankruptcy Code, the subordinated notes would be forgiven, the committed line of credit would terminate, and the IHC's ability to pay dividends to the Parent would be restricted, any of which could materially and adversely impact the

Risk Factors (continued)

Parent's liquidity and its ability to satisfy its debts and other obligations, and could result in the commencement of bankruptcy proceedings by the Parent at an earlier time than might have otherwise occurred if the Support Agreement were not implemented.

Any resolution of the Company will likely impose losses on shareholders, unsecured debt holders and other creditors of the Parent, while the Parent's subsidiaries may continue to operate. Creditors of some or all of our subsidiaries may receive significant or full recoveries on their claims, while the Parent's security holders could face significant or complete losses. This outcome may arise whether the Company is resolved under the U.S. Bankruptcy Code or by the FDIC under the orderly liquidation authority, and whether the resolution is conducted using a single point of entry strategy or using a multiple point of entry strategy, in which the Parent and one or more of its subsidiaries would each undergo separate resolution proceedings. Furthermore, in a single point of entry or multiple point of entry strategy, losses at some or all of our subsidiaries could be transferred to the Parent and borne by the Parent's security holders. Moreover, if either resolution strategy proved to be unsuccessful, our security holders could face greater losses than if the strategy had not been implemented.

For more information, refer to the "Regulatory Matters – 'Living Will' Requirements and Related Matters" section in this Report.

Bank regulations and rules may require higher capital and liquidity levels, limiting our ability to pay common stock dividends, repurchase our common stock, invest in our business, or provide loans or other products and services to our customers. The Company and each of our insured depository institutions are subject to various regulatory capital adequacy requirements administered by federal banking regulators. In particular, the Company is subject to rules issued by federal banking regulators to implement Basel III risk-based capital requirements for U.S. banking organizations. These capital rules, among other things, establish required minimum ratios relating capital to different categories of assets and exposures. Federal banking regulators have also finalized rules to impose a leverage ratio and a supplementary leverage ratio on large BHCs like Wells Fargo and our insured depository institutions. The FRB has also finalized rules to address the amount of equity and unsecured long-term debt a U.S. G-SIB must hold to improve its resolvability and resiliency, often referred to as total loss absorbing capacity (TLAC). Similarly, federal banking regulators have issued final rules that implement a liquidity coverage ratio and a net stable funding ratio.

In addition, as part of its obligation to impose enhanced capital and risk-management standards on large financial firms pursuant to the Dodd-Frank Act, the FRB has issued a capital plan rule that establishes capital planning and other requirements that govern capital distributions, including dividends and share repurchases, by certain BHCs, including Wells Fargo. The FRB has also finalized a number of regulations implementing enhanced prudential requirements for large BHCs like Wells Fargo regarding risk-based capital and leverage, risk and liquidity management, single counterparty credit limits, and imposing debt-to-equity limits on any BHC that regulators determine poses a grave threat to the financial stability of the United States. The FRB and OCC have also finalized rules implementing stress testing requirements for large BHCs and national banks. In addition, the FRB has proposed a rule to establish remediation requirements for large BHCs experiencing financial distress and has proposed additional requirements

regarding effective risk management practices at large BHCs, including its expectations for boards of directors and senior management. The OCC, under separate authority, has also established heightened governance and risk management standards for large national banks, such as the Bank.

The Basel standards and federal regulatory capital, leverage, liquidity, TLAC, and capital planning requirements may limit or otherwise restrict how we utilize our capital, including common stock dividends and stock repurchases, and may require us to increase our capital and/or liquidity. Any requirement that we increase our regulatory capital, regulatory capital ratios or liquidity, including as a result of business growth, acquisitions or a change in our risk profile, could require us to liquidate assets or otherwise change our business, product offerings and/or investment plans, which may negatively affect our financial results. Although not currently anticipated, proposed capital requirements and/or our regulators may require us to raise additional capital in the future. Issuing additional common stock may dilute the ownership of existing stockholders. In addition, federal banking regulations may continue to increase our compliance costs as well as limit our ability to invest in our business or provide loans or other products and services to our customers.

For more information, refer to the "Capital Management," "Risk Management – Asset/Liability Management – Liquidity Risk and Funding – Liquidity Standards," and "Regulatory Matters" sections in this Report and the "Regulation and Supervision" section in our 2020 Form 10-K.

FRB policies, including policies on interest rates, can significantly affect business and economic conditions and our financial results and condition. The FRB regulates the supply of money in the United States. Its policies determine in large part our cost of funds for lending and investing and the return we earn on those loans and investments, both of which affect our net interest income and net interest margin. The FRB's interest rate policies also can materially affect the value of financial instruments we hold, such as debt securities and MSRs. In addition, its policies can affect our borrowers, potentially increasing the risk that they may fail to repay their loans. Changes in FRB policies, including its target range for the federal funds rate or actions taken to increase or decrease the size of its balance sheet, are beyond our control and can be hard to predict. As noted above, a declining or low interest rate environment and a flattening yield curve which may result from the FRB's actions could negatively affect our net interest income and net interest margin as it may result in us holding lower yielding loans and debt securities on our consolidated balance sheet.

CREDIT RISKS

Increased credit risk, including as a result of a deterioration in economic conditions or changes in market conditions, could require us to increase our provision for credit losses and allowance for credit losses and could have a material adverse effect on our results of operations and financial condition.

When we loan money or commit to loan money we incur credit risk, or the risk of losses if our borrowers do not repay their loans. As one of the largest lenders in the U.S., the credit performance of our loan portfolios significantly affects our financial results and condition. As noted above, if the current economic environment were to deteriorate, more of our customers may have difficulty in repaying their loans or other obligations which could result in a higher level of credit losses and provision for credit losses. We reserve for credit losses by establishing an

allowance through a charge to earnings. The amount of this allowance is based on our assessment of credit losses inherent in our loan portfolio (including unfunded credit commitments). The process for determining the amount of the allowance is critical to our financial results and condition. It requires difficult, subjective and complex judgments about the future, including forecasts of economic or market conditions that might impair the ability of our borrowers to repay their loans. We might increase the allowance because of changing economic conditions, including falling home prices and higher unemployment, significant loan growth, changes in consumer behavior or other market conditions that adversely affect borrowers, or other factors. Additionally, the regulatory environment or external factors, such as natural disasters, disease pandemics, political or social matters, or trade policies, also can influence recognition of credit losses in our loan portfolios and impact our allowance for credit losses.

Future allowance levels may increase or decrease based on a variety of factors, including loan balance changes, portfolio credit quality and mix changes, and changes in general economic conditions. While we believe that our allowance for credit losses was appropriate at December 31, 2020, there is no assurance that it will be sufficient to cover future credit losses, especially if housing and employment conditions worsen. In the event of significant deterioration in economic conditions or if we experience significant loan growth, we may be required to build reserves in future periods, which would reduce our earnings.

For more information, refer to the “Risk Management – Credit Risk Management” and “Critical Accounting Policies – Allowance for Credit Losses” sections in this Report.

We may have more credit risk and higher credit losses to the extent our loans are concentrated by loan type, industry segment, borrower type, or location of the borrower or collateral. Our credit risk and credit losses can increase if our loans are concentrated to borrowers engaged in the same or similar activities or to borrowers who individually or as a group may be uniquely or disproportionately affected by economic or market conditions. Similarly, challenging economic or market conditions, or trade policies, affecting a particular industry or geography may also impact related or dependent industries or the ability of borrowers living in such affected areas or working in such industries to meet their financial obligations. We experienced the effect of concentration risk in 2009 and 2010 when we incurred greater than expected losses in our residential real estate loan portfolio due to a housing slowdown and greater than expected deterioration in residential real estate values in many markets, including the Central Valley California market and several Southern California metropolitan statistical areas. As California is our largest banking state in terms of loans and deposits, deterioration in real estate values and underlying economic conditions in those markets or elsewhere in California could result in materially higher credit losses. In addition, changes in consumer behavior or other market conditions, such as in response to climate change and other environmental and sustainability concerns, may adversely affect borrowers in certain industries or sectors, which may increase our credit risk and reduce the demand by these borrowers for our products and services. Moreover, deterioration in macro-economic conditions generally across the country could result in materially higher credit losses, including for our residential real estate loan portfolio, which includes nonconforming mortgage loans we retain on our balance sheet. We may experience higher delinquencies and higher loss rates as our consumer real estate

secured lines of credit reach their contractual end of draw period and begin to amortize.

We are currently one of the largest CRE lenders in the U.S. A deterioration in economic conditions that negatively affects the business performance of our CRE borrowers, including increases in interest rates, declines in commercial property values, and/or changes in consumer behavior or other market conditions, could result in materially higher credit losses and have a material adverse effect on our financial results and condition.

Challenges and/or changes in non-U.S. economic conditions may increase our non-U.S. credit risk. Economic difficulties in non-U.S. jurisdictions could also indirectly have a material adverse effect on our credit performance and results of operations and financial condition to the extent they negatively affect the U.S. economy and/or our borrowers who have non-U.S. operations.

Due to regulatory requirements, we must clear certain derivative transactions through central counterparty clearinghouses (CCPs), which results in credit exposure to these CCPs. Similarly, because we are a member of various CCPs, we may be required to pay a portion of any losses incurred by the CCP in the event that one or more members of the CCP defaults on its obligations. In addition, we are exposed to the risk of non-performance by our clients for which we clear transactions through CCPs to the extent such non-performance is not sufficiently covered by available collateral.

In order to reduce credit risk and obtain additional funding, from time to time we may securitize or sell similar types or categories of loans that we originate, such as mortgage loans and auto loans. The agreements under which we do this generally contain various representations and warranties regarding the origination and characteristics of the loans. We may be required to repurchase the loans, reimburse investors and others, or incur other losses, including regulatory fines and penalties, as a result of any breaches in these contractual representations and warranties. For more information about our repurchase obligations with respect to mortgage loans, refer to the “Risk Factors – Risks Related to Our Mortgage Business” section in this Report.

For more information regarding credit risk, refer to the “Risk Management – Credit Risk Management” section and Note 4 (Loans and Related Allowance for Credit Losses) to Financial Statements in this Report.

OPERATIONAL, STRATEGIC AND LEGAL RISKS

A failure in or breach of our operational or security systems, controls or infrastructure, or those of our third-party vendors and other service providers, could disrupt our businesses, damage our reputation, increase our costs and cause losses. As a large financial institution that serves customers through numerous physical locations, ATMs, the internet, mobile banking and other distribution channels across the U.S. and internationally, we depend on our ability to process, record and monitor a large number of customer transactions on a continuous basis. As our customer base and locations have expanded throughout the U.S. and internationally, as we have increasingly used the internet and mobile banking to provide products and services to our customers, and as customer, public, legislative and regulatory expectations regarding operational and information security have increased, our operational systems, controls and infrastructure must continue to be safeguarded and monitored for potential failures, disruptions and breakdowns. Our business, financial, accounting, data processing systems or other operating systems and facilities may stop operating

Risk Factors (continued)

properly, become insufficient based on our evolving business needs, or become disabled or damaged as a result of a number of factors including events that are wholly or partially beyond our control. For example, there could be sudden increases in customer transaction volume; electrical or telecommunications outages; degradation or loss of internet, website or mobile banking availability; climate change related impacts and natural disasters such as earthquakes, tornados, and hurricanes; disease pandemics; events arising from local or larger scale political or social matters, including terrorist acts; and, as described below, cyber attacks or other information security breaches. Furthermore, enhancements and upgrades to our infrastructure or operating systems may be time-consuming, entail significant costs, and create risks associated with implementing new systems and integrating them with existing ones. Due to the complexity and interconnectedness of our systems, the process of enhancing our infrastructure and operating systems, including their security measures and controls, can itself create a risk of system disruptions and security issues. Similarly, we may not be able to timely recover critical business processes or operations that have been disrupted, which may further increase any associated costs and consequences of such disruptions. Although we have business continuity plans and other safeguards in place to help provide operational resiliency, our business operations may be adversely affected by significant and widespread disruption to our physical infrastructure or operating systems that support our businesses and customers. For example, on February 7, 2019, we experienced system issues caused by an automatic power shutdown at one of our main data center facilities. Although applications and related workloads were systematically re-routed to back-up data centers throughout the day, certain of our services, including our online and mobile banking systems, certain mortgage origination systems, and certain ATM functions, experienced disruptions that delayed service to our customers.

As a result of financial institutions and technology systems becoming more interconnected and complex, any operational incident at a third party may increase the risk of loss or material impact to us or the financial industry as a whole. Furthermore, third parties on which we rely, including those that facilitate our business activities or to which we outsource operations, such as exchanges, clearing houses, financial intermediaries or vendors that provide services or security solutions for our operations, could also be sources of operational risk to us, including from information breaches or loss, breakdowns, disruptions or failures of their own systems or infrastructure, or any deficiencies in the performance of their responsibilities. We are also exposed to the risk that a disruption or other operational incident at a common service provider to those third parties could impede their ability to provide services or perform their responsibilities for us. In addition, we must meet regulatory requirements and expectations regarding our use of third-party service providers, and any failure by our third-party service providers to meet their obligations to us or to comply with applicable laws, rules, regulations, or Wells Fargo policies could result in fines, penalties, restrictions on our business, or other negative consequences.

Disruptions or failures in the physical infrastructure, controls or operating systems that support our businesses and customers, failures of the third parties on which we rely to adequately or appropriately provide their services or perform their responsibilities, or our failure to effectively manage or oversee our third-party relationships, could result in business disruptions, loss of revenue or customers, legal or regulatory proceedings, compliance and other costs, violations of applicable privacy and other laws, reputational damage, or other adverse

consequences, any of which could materially adversely affect our results of operations or financial condition.

A cyber attack or other information security breach of our technologies, computer systems or networks, or those of our third-party vendors and other service providers, could disrupt our businesses, result in the disclosure or misuse of confidential or proprietary information, damage our reputation, increase our costs and cause losses. Information security risks for large financial institutions such as Wells Fargo have generally increased in recent years in part because of the proliferation of new technologies, the use of the internet, mobile devices, and cloud technologies to conduct financial transactions, and the increased sophistication and activities of organized crime, hackers, terrorists, activists, and other external parties, including foreign state-sponsored parties. Those parties also may continue to attempt to misrepresent personal or financial information to obtain loans or other financial products from us or attempt to fraudulently induce employees, customers, or other users of our systems to disclose confidential information in order to gain access to our data or that of our customers. As noted above, our operations rely on the secure processing, transmission and storage of confidential information in our computer systems and networks. Our banking, brokerage, investment advisory, and capital markets businesses rely on our digital technologies, computer and email systems, software, hardware, and networks to conduct their operations. In addition, to access our products and services, our customers may use personal smartphones, tablets, and other mobile devices that are beyond our control systems. Although we believe we have robust information security procedures and controls, our technologies, systems, networks, and our customers' devices may become the target of cyber attacks or other information security breaches that could result in the unauthorized release, gathering, monitoring, misuse, loss or destruction of Wells Fargo's or our customers' confidential, proprietary and other information, or otherwise disrupt Wells Fargo's or its customers' or other third parties' business operations. For example, various retailers have reported they were victims of cyber attacks in which large amounts of their customers' data, including debit and credit card information, was obtained. In these situations, we generally incur costs to replace compromised cards and address fraudulent transaction activity affecting our customers. We are also exposed to the risk that an employee or other person acting on behalf of the Company fails to comply with applicable policies and procedures and inappropriately circumvents controls for personal gain or other improper purposes.

Due to the increasing interconnectedness and complexity of financial institutions and technology systems, an information security incident at a third party may increase the risk of loss or material impact to us or the financial industry as a whole. In addition, third parties on which we rely, including those that facilitate our business activities or to which we outsource operations, such as internet, mobile technology, hardware, software, and cloud service providers, could be sources of information security risk to us. If those third parties fail to adequately or appropriately safeguard their technologies, systems, networks, hardware, and software, we may suffer material harm, including business disruptions, losses or remediation costs, reputational damage, legal or regulatory proceedings, or other adverse consequences.

To date we have not experienced any material losses relating to cyber attacks or other information security breaches, but there can be no assurance that we will not suffer such losses in the future. Our risk and exposure to these matters remains

heightened because of, among other things, the evolving nature of these threats, the prominent size and scale of Wells Fargo and its role in the financial services industry, our plans to continue to implement our digital and mobile banking channel strategies and develop additional remote connectivity solutions to serve our customers when and how they want to be served, our geographic footprint and international presence, the outsourcing of some of our business operations, and the current global economic and political environment. For example, Wells Fargo and other financial institutions continue to be the target of various evolving and adaptive cyber attacks, including malware, ransomware, phishing, and denial-of-service, as part of an effort to disrupt the operations of financial institutions, potentially test their cybersecurity capabilities, commit fraud, or obtain confidential, proprietary or other information. Cyber attacks have also focused on targeting online applications and services, such as online banking, as well as cloud-based and other products and services provided by third parties, and have targeted the infrastructure of the internet, causing the widespread unavailability of websites and degrading website performance. As a result, information security and the continued development and enhancement of our controls, processes and systems designed to protect our networks, computers, software and data from attack, damage or unauthorized access remain a priority for Wells Fargo. We are also proactively involved in industry cybersecurity efforts and working with other parties, including our third-party service providers and governmental agencies, to continue to enhance defenses and improve resiliency to cybersecurity and other information security threats. As these threats continue to evolve, we may continue to be required to expend significant additional resources to continue to modify or enhance our protective measures or to investigate and remediate any information security vulnerabilities or incidents. Because the investigation of any information security breach is inherently unpredictable and would require time to complete, we may not be able to immediately address the consequences of a breach, which may further increase any associated costs and consequences. Moreover, to the extent our insurance covers aspects of information security risk, such insurance may not be sufficient to cover all losses associated with an information security breach.

Cyber attacks or other information security breaches affecting us or third parties on which we rely, including those that facilitate our business activities or to which we outsource operations, or security breaches of the networks, systems or devices that our customers use to access our products and services, could result in business disruptions, loss of revenue or customers, legal or regulatory proceedings, compliance and other costs, violations of applicable privacy and other laws, reputational damage, or other adverse consequences, any of which could materially adversely affect our results of operations or financial condition.

Our framework for managing risks may not be fully effective in mitigating risk and loss to us. Our risk management framework seeks to mitigate risk and loss to us. We have established processes and procedures intended to identify, measure, monitor, report and analyze the types of risk to which we are subject, including liquidity risk, credit risk, market risk, interest rate risk, operational risk, legal and compliance risk, and reputational risk, among others. However, as with any risk management framework, there are inherent limitations to our risk management strategies as there may exist, or develop in the future, risks that we have not appropriately anticipated, identified or managed. Our risk management framework is also

dependent on ensuring that effective operational controls and a sound culture exist throughout the Company. The inability to develop effective operational controls or to foster the appropriate culture in each of our lines of business, including the inability to align performance management and compensation to achieve the desired culture, could adversely impact the effectiveness of our risk management framework. Similarly, if we are unable to effectively manage our business or operations, we may be exposed to increased risks or unexpected losses. We are also exposed to risks if we do not accurately or completely execute a process or transaction, whether due to human error or otherwise, or if an employee fails to comply with applicable policies and procedures or inappropriately circumvents controls. In certain instances, we rely on models to measure, monitor and predict risks, such as market, interest rate and credit risks, as well as to help inform business decisions; however, there is no assurance that these models will appropriately or sufficiently capture all relevant risks or accurately predict future events or exposures. Furthermore, certain of our models are subject to regulatory review and approval, and any failure to meet regulatory standards or expectations could result in fines, penalties, restrictions on our ability to engage in certain business activities, or other adverse consequences, and any required modifications or changes to these models can impact our capital ratios and requirements and result in increased operational and compliance costs. In addition, we rely on data to aggregate and assess our various risk exposures and business activities, and any issues with the quality or effectiveness of our data, including our aggregation, management, and validation procedures, could result in ineffective risk management practices, business decisions or customer service, inefficient use of resources, or inaccurate regulatory or other risk reporting. We also use artificial intelligence to help further inform our business decisions and risk management practices, but there is no assurance that artificial intelligence will appropriately or sufficiently replicate certain outcomes or accurately predict future events or exposures. Previous financial and credit crises and resulting regulatory reforms highlighted both the importance and some of the limitations of managing unanticipated risks, and our regulators remain focused on ensuring that financial institutions build and maintain robust risk management policies and practices. If our risk management framework proves ineffective, we could suffer unexpected losses which could materially adversely affect our results of operations or financial condition.

We may be exposed to additional legal or regulatory proceedings, costs, and other adverse consequences related to sales practices and other instances where customers may have experienced financial harm. Various government entities and offices have undertaken formal or informal inquiries, investigations or examinations arising out of certain sales practices of the Company, and various non-governmental parties have filed lawsuits against us seeking damages or other remedies related to these sales practices. The Company has entered into various settlements to resolve certain of these investigations and proceedings, as a result of which we have incurred monetary penalties, costs, and restrictions. In connection with any still pending matters, we may incur additional monetary penalties and other sanctions or be required to make admissions of wrongdoing and comply with other conditions, which can lead to restrictions on our ability to engage in certain business activities or offer certain products or services, limitations on our ability to access capital markets, limitations on capital distributions, the loss of customers, and/or other direct and indirect adverse consequences. The ultimate resolution of any of these pending

Risk Factors (continued)

legal proceedings or government investigations, depending on the sanctions and remedy sought and granted, could materially adversely affect our results of operations and financial condition. We may continue to incur additional costs and expenses in order to address and defend these pending legal proceedings and government investigations, and we may continue to have increased compliance and other costs related to these matters. Furthermore, negative publicity or public opinion resulting from these matters may increase the risk of reputational harm to our business, which can impact our ability to keep and attract customers, affect our ability to attract and retain qualified employees, result in the loss of revenue, or have other material adverse effects on our results of operations and financial condition.

Furthermore, we may identify other areas or instances where customers may have experienced financial harm, including as a result of our continuing efforts to rebuild trust and to strengthen our risk and control infrastructure. For example, we have identified certain issues related to past practices involving certain automobile collateral protection insurance policies and certain issues related to the unused portion of guaranteed automobile protection waiver or insurance agreements. The identification of such other areas or instances where customers may have experienced financial harm could lead to, and in some cases has already resulted in, additional remediation costs, loss of revenue or customers, legal or regulatory proceedings, compliance and other costs, reputational damage, or other adverse consequences.

For more information, refer to the “Overview – Retail Sales Practices Matters” and “– Other Customer Remediation Activities” sections and Note 15 (Legal Actions) to Financial Statements in this Report.

We may incur fines, penalties and other negative consequences from regulatory violations or from any failure to meet regulatory standards or expectations.

We maintain systems and procedures designed to ensure that we comply with applicable laws and regulations. However, we are subject to heightened compliance and regulatory oversight and expectations, particularly due to the evolving and increasing regulatory landscape we operate in. We are also subject to consent orders and agreements with regulators that subject us to various conditions and restrictions. In addition, a single event or issue may give rise to numerous and overlapping investigations and proceedings, either by multiple federal and state agencies in the U.S. or by multiple regulators and other governmental entities in different jurisdictions. Also, the laws and regulations in jurisdictions in which we operate may be different or even conflict with each other, such as differences between U.S. federal and state law or differences between U.S. and non-U.S. laws as to the products and services we may offer or other business activities we may engage in, which can lead to compliance difficulties or issues. Furthermore, many legal and regulatory regimes require us to report transactions and other information to regulators and other governmental authorities, self-regulatory organizations, exchanges, clearing houses and customers. We may be subject to fines, penalties, restrictions on our business, or other negative consequences if we do not timely, completely, or accurately provide regulatory reports, customer notices or disclosures. Moreover, some legal/regulatory frameworks provide for the imposition of fines or penalties for noncompliance even though the noncompliance was inadvertent or unintentional and even though there were systems and procedures in place at the time designed to ensure compliance. For example, we are subject to regulations issued by the Office of

Foreign Assets Control (OFAC) that prohibit financial institutions from participating in the transfer of property belonging to the governments of certain non-U.S. countries and designated nationals of those countries. OFAC may impose penalties or restrictions on certain activities for inadvertent or unintentional violations even if reasonable processes are in place to prevent the violations. Any violation of these or other applicable laws or regulatory requirements, even if inadvertent or unintentional, or any failure to meet regulatory standards or expectations, including any failure to satisfy the conditions of any consent orders or regulatory agreements, could result in fees, penalties, restrictions on our ability to engage in certain business activities, reputational harm, loss of customers or other negative consequences.

Reputational harm, including as a result of our actual or alleged conduct or public opinion of the financial services industry generally, could adversely affect our business, results of operations, and financial condition.

Reputation risk, or the risk to our business, earnings and capital from negative public opinion, is inherent in our business and has increased substantially because of our size and profile in the financial services industry and sales practices related matters and other instances where customers may have experienced financial harm. Negative public opinion about the financial services industry generally or Wells Fargo specifically could adversely affect our reputation and our ability to keep and attract customers. Negative public opinion could result from our actual or alleged conduct in any number of activities, including sales practices; mortgage, auto or other consumer lending practices; loan origination or servicing activities; mortgage foreclosure actions; management of client accounts or investments; lending, investing or other business relationships; identification and management of potential conflicts of interest from transactions, obligations and interests with and among our customers; environmental, social and governance practices; regulatory compliance; risk management; incentive compensation practices; and disclosure, sharing or inadequate protection or improper use of customer information, and from actions taken by government regulators and community or other organizations in response to that conduct. Although we have policies and procedures in place intended to detect and prevent conduct by employees and third-party service providers that could potentially harm customers or our reputation, there is no assurance that such policies and procedures will be fully effective in preventing such conduct. Furthermore, our actual or perceived failure to address or prevent any such conduct or otherwise to effectively manage our business or operations could result in significant reputational harm. In addition, because we conduct most of our businesses under the “Wells Fargo” brand, negative public opinion about one business also could affect our other businesses. Moreover, actions by the financial services industry generally or by certain members or individuals in the industry also can adversely affect our reputation. The proliferation of social media websites utilized by Wells Fargo and other third parties, as well as the personal use of social media by our employees and others, including personal blogs and social network profiles, also may increase the risk that negative, inappropriate or unauthorized information may be posted or released publicly that could harm our reputation or have other negative consequences, including as a result of our employees interacting with our customers in an unauthorized manner in various social media outlets.

Wells Fargo and other financial institutions have been targeted from time to time by protests and demonstrations, which have included disrupting the operation of our retail

banking locations and have resulted in negative public commentary about financial institutions, including the fees charged for various products and services. Wells Fargo and other financial institutions have also been subject to negative publicity as a result of providing financial services to or making investments in industries or organizations subject to stakeholder concerns. There can be no assurance that continued protests or negative public opinion of the Company specifically or large financial institutions generally will not harm our reputation and adversely affect our business, results of operations, and financial condition.

If we are unable to develop and execute effective business plans or strategies or manage change effectively, our competitive standing and results of operations could suffer.

We are subject to rapid changes in technology, regulation, and product innovation, face intense competition for customers, sources of revenue, capital, services, qualified employees, and other essential business resources, and are subject to heightened regulatory expectations particularly with respect to compliance and risk management. In order to meet these challenges, we may undertake business plans or strategies related to, among other things, our organizational structure, our compliance and risk management framework, our expenses and efficiency, the types of products and services we offer, the types of businesses we engage in, the geographies in which we operate, the manner in which we serve our clients and customers, the third parties with which we do business, and the methods and distribution channels by which we offer our products and services. Accomplishing these business plans or strategies may be complex, time intensive, require significant financial, technological, management and other resources, may divert management attention and resources away from other areas of the Company, and may impact our expenses and ability to generate revenue. There is no guarantee that any business plans or strategies, including our current efficiency initiatives, will ultimately be successful. To the extent we are unable to develop or execute effective business plans or strategies or manage change effectively, our competitive position, reputation, prospects for growth, and results of operations may be adversely affected.

In addition, from time to time, we may decide to divest certain businesses or assets. Difficulties in executing a divestiture may cause us not to realize any expected cost savings or other benefits from the divestiture, or may result in higher than expected losses of employees or harm our ability to retain customers. The divestiture or winding down of certain businesses or assets may also result in the impairment of goodwill or other long-lived assets related to those businesses or assets.

Similarly, we may explore opportunities to expand our products, services, and assets through strategic acquisitions of companies or businesses in the financial services industry. We generally must receive federal regulatory approvals before we can acquire a bank, bank holding company, or certain other financial services businesses. We cannot be certain when or if, or on what terms and conditions, any required regulatory approvals will be granted. We might be required to sell banks, branches and/or business units or assets or issue additional equity as a condition to receiving regulatory approval for an acquisition. When we do announce an acquisition, our stock price may fall depending on the size of the acquisition, the type of business to be acquired, the purchase price, and the potential dilution to existing stockholders or our earnings per share if we issue common stock in connection with the acquisition. Furthermore, difficulty in integrating an acquired company or business may cause us not to realize expected revenue increases, cost savings,

increases in geographic or product presence, and other projected benefits from the acquisition. The integration could result in higher than expected deposit attrition, loss of key employees, an increase in our compliance costs or risk profile, disruption of our business or the acquired business, or otherwise harm our ability to retain customers and employees or achieve the anticipated benefits of the acquisition. Time and resources spent on integration may also impair our ability to grow our existing businesses. Many of the foregoing risks may be increased if the acquired company or business operates internationally or in a geographic location where we do not already have significant business operations and/or employees.

We are exposed to potential financial loss or other adverse consequences from legal actions. Wells Fargo and some of its subsidiaries are involved in judicial, regulatory, governmental, arbitration, and other proceedings or investigations concerning matters arising from the conduct of our business activities, and many of those proceedings and investigations expose Wells Fargo to potential financial loss. There can be no assurance as to the ultimate outcome of any of these legal actions. We establish accruals for legal actions when potential losses associated with the actions become probable and the costs can be reasonably estimated. We may still incur costs for a legal action even if we have not established an accrual. In addition, the actual cost of resolving a legal action may be substantially higher than any amounts accrued for that action. The ultimate resolution of a pending legal proceeding or investigation, depending on the remedy sought and granted, could materially adversely affect our results of operations and financial condition.

As noted above, we are subject to heightened regulatory oversight and scrutiny, which may lead to regulatory investigations, proceedings or enforcement actions. In addition to imposing monetary penalties and other sanctions, regulatory authorities may require criminal pleas or other admissions of wrongdoing and compliance with other conditions in connection with settling such matters, which can lead to reputational harm, loss of customers, restrictions on the ability to access capital markets, limitations on capital distributions, the inability to engage in certain business activities or offer certain products or services, and/or other direct and indirect adverse effects.

For more information, refer to Note 15 (Legal Actions) to Financial Statements in this Report.

MORTGAGE BUSINESS RISKS

Our mortgage banking revenue can be volatile from quarter to quarter, including from the impact of changes in interest rates, and we rely on the GSEs to purchase our conforming loans to reduce our credit risk and provide liquidity to fund new mortgage loans. We are one of the largest mortgage originators and residential mortgage servicers in the U.S., and we earn revenue from fees we receive for originating mortgage loans and for servicing mortgage loans. As a result of our mortgage servicing business, we have a sizable portfolio of MSRMs. Changes in interest rates can affect prepayment assumptions and thus the fair value of our MSRMs. When interest rates fall, borrowers are usually more likely to prepay their mortgage loans by refinancing them at a lower rate. As the likelihood of prepayment increases, the fair value of our MSRMs can decrease. We also measure at fair value certain residential mortgage loans within LHFS and other interests we hold related to residential loan sales and securitizations. Similar to other interest-bearing securities, the value of these residential mortgage LHFS and other interests may be negatively affected by changes in interest rates. For

Risk Factors (continued)

example, if market interest rates increase relative to the yield on these residential mortgage LHFS and other interests, their fair value may fall.

When rates rise, the demand for mortgage loans usually tends to fall, reducing the revenue we receive from loan originations. Under the same conditions, revenue from our MSR's can increase through increases in fair value. When rates fall, mortgage originations usually tend to increase and the value of our MSR's usually tends to decline, also with some offsetting revenue effect. Even though they can act as a "natural hedge," the hedge is not perfect, either in amount or timing. For example, the negative effect on revenue from a decrease in the fair value of residential MSR's is generally immediate, but any offsetting revenue benefit from more originations and the MSR's relating to the new loans would generally accrue over time. It is also possible that, because of economic conditions and/or a weak or deteriorating housing market, even if interest rates were to fall or remain low, mortgage originations may also fall or any increase in mortgage originations may not be enough to offset the decrease in the MSR's value caused by the lower rates.

We typically use derivatives and other instruments to hedge our mortgage banking interest rate risk. We may not hedge all of our risk, and we may not be successful in hedging any of the risk. Hedging is a complex process, requiring sophisticated models and constant monitoring, and is not a perfect science. We may use hedging instruments that may not perfectly correlate with the value or income being hedged. We could incur significant losses from our hedging activities. There may be periods where we elect not to use derivatives and other instruments to hedge mortgage banking interest rate risk.

We rely on the GSEs to guarantee or purchase mortgage loans that meet their conforming loan requirements and on government insuring agencies, such as the Federal Housing Administration (FHA) and the Department of Veterans Affairs (VA), to insure or guarantee loans that meet their policy requirements. In order to meet customer needs, we also originate loans that do not conform to either the GSEs or government insuring agency standards, which are referred to as "nonconforming" loans. We generally retain these nonconforming loans on our balance sheet. When we retain a loan on our balance sheet not only do we keep the credit risk of the loan but we also do not receive any sale proceeds that could be used to generate new loans. If we were unable or unwilling to retain nonconforming loans on our balance sheet, whether due to regulatory, business or other reasons, our ability to originate new nonconforming loans may be reduced, thereby reducing the interest income we could earn from these loans. Similarly, if the GSEs or government insuring agencies were to limit or reduce their purchases, insuring or guaranteeing of loans, our ability to fund, and thus originate new mortgage loans, could also be reduced. We cannot assure that the GSEs or government insuring agencies will not materially limit their purchases, insuring or guaranteeing of conforming loans or change their criteria for what constitutes a conforming loan (e.g., maximum loan amount or borrower eligibility). Each of the GSEs is currently in conservatorship, with its primary regulator, the Federal Housing Finance Agency (FHFA) acting as conservator. While the FHFA has stated that it intends to end the conservatorship, we cannot predict if, when or precisely how the conservatorship will end, or any associated changes to the GSEs business structure and operations that could result. As noted above, there are various proposals to reform the housing finance market in the U.S., including the role of the GSEs in the housing finance market. The impact of any such regulatory reform regarding the housing finance market and the GSEs, including any changes to the GSE's

structure, capital requirements, or market presence, as well as any effect on the Company's business and financial results, are uncertain.

For more information, refer to the "Risk Management – Asset/Liability Management – Mortgage Banking Interest Rate and Market Risk," "Critical Accounting Policies – Valuation of Residential Mortgage Servicing Rights" and "Critical Accounting Policies – Fair Value of Financial Instruments" sections in this Report.

We may be required to repurchase mortgage loans or reimburse investors and others as a result of breaches in contractual representations and warranties, and we may incur other losses as a result of real or alleged violations of statutes or regulations applicable to the origination of our residential mortgage loans. We often sell residential mortgage loans that we originate to various parties, including GSEs, SPEs that issue private label MBS, and other financial institutions that purchase mortgage loans for investment or private label securitization. We may also pool FHA-insured and VA-guaranteed mortgage loans which back securities guaranteed by GNMA. The agreements under which we sell mortgage loans and the insurance or guaranty agreements with the FHA and VA contain various representations and warranties regarding the origination and characteristics of the mortgage loans. We may be required to repurchase mortgage loans or indemnify or reimburse the securitization trust, investor or insurer for credit losses incurred on loans in the event of a breach of contractual representations or warranties. We establish a mortgage repurchase liability that reflects management's estimate of losses for loans for which we have a repurchase obligation. Because the level of mortgage loan repurchase losses depends upon economic factors, investor demand strategies and other external conditions that may change over the life of the underlying loans, the level of the liability for mortgage loan repurchase losses is difficult to estimate, requires considerable management judgment, and is subject to change. If economic conditions or the housing market worsen, we could have increased repurchase obligations and increased loss severity on repurchases, requiring significant additions to the repurchase liability.

Additionally, for residential mortgage loans that we originate, borrowers may allege that the origination of the loans did not comply with applicable laws or regulations in one or more respects and assert such violation as an affirmative defense to payment or to the exercise by us of our remedies, including foreclosure proceedings, or in an action seeking statutory and other damages in connection with such violation. If we are not successful in demonstrating that the loans in dispute were originated in accordance with applicable statutes and regulations, we could become subject to monetary damages and other civil penalties, including the loss of certain contractual payments or the inability to exercise certain remedies under the loans.

For more information, refer to the "Risk Management – Credit Risk Management – Liability for Mortgage Loan Repurchase Losses" section in this Report.

We may be terminated as a servicer or master servicer, be required to repurchase a mortgage loan or reimburse investors for credit losses on a mortgage loan, or incur costs, liabilities, fines and other sanctions if we fail to satisfy our servicing obligations, including our obligations with respect to mortgage loan foreclosure actions. We act as servicer and/or master servicer for mortgage loans included in securitizations and for unsecuritized mortgage loans owned by investors. As a servicer or master servicer for those loans we have certain

contractual obligations to the securitization trusts, investors or other third parties, including certain foreclosure obligations or, if applicable, considering alternatives to foreclosure such as loan modifications or short-sales, as well as certain servicing obligations for properties that fall within a flood zone. If we fail to satisfy our servicing obligations, we may face a number of consequences, including termination as servicer or master servicer, requirements to indemnify the securitization trustee against losses from any failure by us to perform our servicing obligations, and/or contractual obligations to repurchase a mortgage loan or reimburse investors for credit losses, any of which could significantly reduce our net servicing income.

We may incur costs, liabilities to borrowers, title insurers and/or securitization investors, legal proceedings, or other adverse consequences if we fail to meet our obligations with respect to mortgage foreclosure actions or we experience delays in the foreclosure process. Our net servicing income and the fair value of our MSRs may be negatively affected to the extent our servicing costs increase because of higher foreclosure or other servicing related costs. We may be subject to fines and other sanctions imposed by federal or state regulators as a result of actual or perceived deficiencies in our mortgage servicing practices, including with respect to our foreclosure, loan modification, or forbearance practices or our servicing of flood zone properties. Any of these actions may harm our reputation, negatively affect our residential mortgage origination or servicing business, or result in material fines, penalties, equitable remedies, or other enforcement actions.

For more information, refer to the “Risk Management – Credit Risk Management – Liability for Mortgage Loan Repurchase Losses” and “– Risks Relating to Servicing Activities,” and “Critical Accounting Policies – Valuation of Residential Mortgage Servicing Rights” sections and Note 14 (Pledged Assets and Collateral) and Note 15 (Legal Actions) to Financial Statements in this Report.

COMPETITIVE RISKS

We face significant and increasing competition in the rapidly evolving financial services industry. We compete with other financial institutions in a highly competitive industry that is undergoing significant changes as a result of financial regulatory reform, technological advances, increased public scrutiny, and current economic conditions. Our success depends on our ability to develop and maintain deep and enduring relationships with our customers based on the quality of our customer service, the wide variety of products and services that we can offer our customers and the ability of those products and services to satisfy our customers’ needs and preferences, the pricing of our products and services, the extensive distribution channels available for our customers, our innovation, and our reputation. Continued or increased competition in any one or all of these areas may negatively affect our customer relationships, market share and results of operations and/or cause us to increase our capital investment in our businesses in order to remain competitive. In addition, our ability to reposition or reprice our products and services from time to time may be limited and could be influenced significantly by the current economic, regulatory and political environment for large financial institutions as well as by the actions of our competitors. Furthermore, any changes in the types of products and services that we offer our customers and/or the pricing for those products and services could result in a loss of customer relationships and market share and could materially adversely affect our results of operations.

Continued technological advances and the growth of e-commerce have made it possible for non-depository institutions to offer products and services that traditionally were banking products, and for financial institutions and other companies to provide electronic and internet-based financial solutions, including electronic securities trading, lending and payment solutions. In addition, technological advances, including digital currencies, may diminish the importance of depository institutions and other financial intermediaries in the transfer of funds between parties. We may not respond effectively to these and other competitive threats from existing and new competitors and may be forced to sell products at lower prices, increase our investment in our business to modify or adapt our existing products and services, and/or develop new products and services to respond to our customers’ needs and preferences. To the extent we are not successful in developing and introducing new products and services or responding or adapting to the competitive landscape or to changes in customer preferences, we may lose customer relationships and our revenue growth and results of operations may be materially adversely affected.

Our ability to attract and retain qualified employees is critical to the success of our business and failure to do so could adversely affect our business performance, competitive position and future prospects. The success of Wells Fargo is heavily dependent on the talents and efforts of our employees, including our senior leaders, and in many areas of our business, including commercial banking, brokerage, investment advisory, capital markets, risk management and technology, the competition for highly qualified personnel is intense. We also seek to retain a pipeline of employees to provide continuity of succession for our senior leadership positions. In order to attract and retain highly qualified employees, we must provide competitive compensation, effectively manage employee performance and development, and foster a diverse and inclusive environment. As a large financial institution and additionally to the extent we remain subject to consent orders we may be subject to limitations on compensation by our regulators that may adversely affect our ability to attract and retain these qualified employees, especially if some of our competitors may not be subject to these same compensation limitations. If we are unable to continue to attract and retain qualified employees, including successors for senior leadership positions, our business performance, competitive position and future prospects may be adversely affected.

FINANCIAL REPORTING RISKS

Changes in accounting policies or accounting standards, and changes in how accounting standards are interpreted or applied, could materially affect how we report our financial results and condition. Our accounting policies are fundamental to determining and understanding our financial results and condition. As described below, some of these policies require use of estimates and assumptions that may affect the value of our assets or liabilities and financial results. Any changes in our accounting policies could materially affect our financial statements.

From time to time the FASB and the SEC change the financial accounting and reporting standards that govern the preparation of our external financial statements. For example, on January 1, 2020, we adopted Accounting Standards Update 2016-13 – *Financial Instruments-Credit Losses* (Topic 326), which replaced the previous “incurred loss” model for the allowance for

Risk Factors (continued)

credit losses with an “expected loss” model referred to as the Current Expected Credit Loss model, or CECL.

In addition, accounting standard setters and those who interpret the accounting standards (such as the FASB, SEC, banking regulators and our outside auditors) may change or even reverse their previous interpretations or positions on how these standards should be applied. Changes in financial accounting and reporting standards and changes in current interpretations may be beyond our control, can be hard to predict and could materially affect how we report our financial results and condition. We may be required to apply a new or revised standard retroactively or apply an existing standard differently, also retroactively, in each case potentially resulting in our restating prior period financial statements in material amounts.

For more information, refer to the “Current Accounting Developments” section in this Report.

Our financial statements are based in part on assumptions and estimates which, if wrong, could cause unexpected losses in the future, and our financial statements depend on our internal controls over financial reporting. Pursuant to U.S. GAAP, we are required to use certain assumptions and estimates in preparing our financial statements, including in determining credit loss reserves, reserves for mortgage repurchases, reserves related to litigation and the fair value of certain assets and liabilities, among other items. Several of our accounting policies are critical because they require management to make difficult, subjective and complex judgments about matters that are inherently uncertain and because it is likely that materially different amounts would be reported under different conditions or using different assumptions. For a description of these policies, refer to the “Critical Accounting Policies” section in this Report. If assumptions or estimates underlying our financial statements are incorrect, we may experience material losses.

Certain of our financial instruments, including derivative assets and liabilities, debt securities, certain loans, MSRs, private equity investments, structured notes and certain repurchase and resale agreements, among other items, require a determination of their fair value in order to prepare our financial statements. Where quoted market prices are not available, we may make fair value determinations based on internally developed models or other means which ultimately rely to some degree on management judgment, and there is no assurance that our models will capture or appropriately reflect all relevant inputs required to accurately determine fair value. Some of these and other assets and liabilities may have no direct observable price levels, making their valuation particularly subjective, being based on significant estimation and judgment. In addition, sudden illiquidity in markets or declines in prices of certain loans and securities may make it more difficult to value certain balance sheet items, which may lead to the possibility that such valuations will be subject to further change or adjustment and could lead to declines in our earnings.

The Sarbanes-Oxley Act of 2002 (Sarbanes-Oxley) requires our management to evaluate the Company’s disclosure controls and procedures and its internal control over financial reporting and requires our auditors to issue a report on our internal control over financial reporting. We are required to disclose, in our annual report on Form 10-K, the existence of any “material weaknesses” in our internal controls. We cannot assure that we will not identify one or more material weaknesses as of the end of any given quarter or year, nor can we predict the effect on our stock price of disclosure of a material weakness. In addition, our customers may rely on the effectiveness of our internal controls as a service provider, and any deficiency in those controls could affect our customers and damage our reputation or business. Sarbanes-Oxley also limits the types of non-audit services our outside auditors may provide to us in order to preserve their independence from us. If our auditors were found not to be “independent” of us under SEC rules, we could be required to engage new auditors and re-file financial statements and audit reports with the SEC. We could be out of compliance with SEC rules until new financial statements and audit reports were filed, limiting our ability to raise capital and resulting in other adverse consequences.

* * *

Any factor described in this Report or in any of our other SEC filings could by itself, or together with other factors, adversely affect our financial results and condition. Refer to our quarterly reports on Form 10-Q filed with the SEC in 2021 for material changes to the above discussion of risk factors. There are factors not discussed above or elsewhere in this Report that could adversely affect our financial results and condition.

Controls and Procedures

Disclosure Controls and Procedures

The Company's management evaluated the effectiveness, as of December 31, 2020, of the Company's disclosure controls and procedures. The Company's chief executive officer and chief financial officer participated in the evaluation. Based on this evaluation, the Company's chief executive officer and chief financial officer concluded that the Company's disclosure controls and procedures were effective as of December 31, 2020.

Internal Control Over Financial Reporting

Internal control over financial reporting is defined in Rule 13a-15(f) promulgated under the Securities Exchange Act of 1934 as a process designed by, or under the supervision of, the Company's principal executive and principal financial officers and effected by the Company's Board, management and other personnel, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with U.S. generally accepted accounting principles (GAAP) and includes those policies and procedures that:

- pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of assets of the Company;
- provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with GAAP, and that receipts and expenditures of the Company are being made only in accordance with authorizations of management and directors of the Company; and
- provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the Company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate. No change occurred during any quarter in 2020 that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting. Management's report on internal control over financial reporting is set forth below and should be read with these limitations in mind.

Management's Report on Internal Control Over Financial Reporting

The Company's management is responsible for establishing and maintaining adequate internal control over financial reporting for the Company. Management assessed the effectiveness of the Company's internal control over financial reporting as of December 31, 2020, using the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in *Internal Control – Integrated Framework (2013)*. Based on this assessment, management concluded that as of December 31, 2020, the Company's internal control over financial reporting was effective.

KPMG LLP, the independent registered public accounting firm that audited the Company's financial statements included in this Annual Report, issued an audit report on the Company's internal control over financial reporting. KPMG's audit report appears on the following page.

Report of Independent Registered Public Accounting Firm

To the Stockholders and Board of Directors
Wells Fargo & Company:

Opinion on Internal Control Over Financial Reporting

We have audited Wells Fargo & Company and subsidiaries' (the Company) internal control over financial reporting as of December 31, 2020, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2020, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of the Company as of December 31, 2020 and 2019, the related consolidated statements of income, comprehensive income, changes in equity, and cash flows for each of the years in the three-year period ended December 31, 2020, and the related notes (collectively, the consolidated financial statements), and our report dated February 23, 2021 expressed an unqualified opinion on those consolidated financial statements.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control Over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ KPMG LLP

San Francisco, California
February 23, 2021

Financial Statements

Wells Fargo & Company and Subsidiaries

Consolidated Statement of Income

(in millions, except per share amounts)	Year ended December 31,		
	2020	2019	2018
Interest income			
Debt securities	\$ 11,234	14,955	14,406
Loans held for sale (1)	947	892	917
Loans	34,109	44,146	43,974
Equity securities	554	962	992
Other interest income	954	5,128	4,358
Total interest income	47,798	66,083	64,647
Interest expense			
Deposits	2,804	8,635	5,622
Short-term borrowings	250	2,316	1,717
Long-term debt	4,471	7,350	6,703
Other interest expense	438	551	610
Total interest expense	7,963	18,852	14,652
Net interest income	39,835	47,231	49,995
Noninterest income (2)			
Deposit and lending-related fees	6,602	7,293	7,369
Brokerage fees	9,375	9,237	9,436
Trust and investment management fees	2,872	3,038	3,316
Investment banking fees	1,865	1,797	1,757
Card fees	3,544	4,016	3,907
Mortgage banking	3,493	2,715	3,017
Net gains on trading and securities	2,710	3,976	2,225
Other	2,044	5,760	5,386
Total noninterest income	32,505	37,832	36,413
Total revenue	72,340	85,063	86,408
Provision for credit losses	14,129	2,687	1,744
Noninterest expense (3)			
Personnel	34,811	35,128	33,085
Technology, telecommunications and equipment	3,099	3,276	2,903
Occupancy	3,263	2,945	2,888
Operating losses	3,523	4,321	3,124
Professional and outside services	6,706	6,745	6,588
Advertising and promotion	600	1,076	857
Restructuring charges	1,499	—	—
Other	4,129	4,687	6,681
Total noninterest expense	57,630	58,178	56,126
Income before income tax expense (benefit)	581	24,198	28,538
Income tax expense (benefit)	(3,005)	4,157	5,662
Net income before noncontrolling interests	3,586	20,041	22,876
Less: Net income from noncontrolling interests	285	492	483
Wells Fargo net income	\$ 3,301	19,549	22,393
Less: Preferred stock dividends and other	1,591	1,611	1,704
Wells Fargo net income applicable to common stock	\$ 1,710	17,938	20,689
Per share information			
Earnings per common share	\$ 0.42	4.08	4.31
Diluted earnings per common share	0.41	4.05	4.28
Average common shares outstanding	4,118.0	4,393.1	4,799.7
Diluted average common shares outstanding	4,134.2	4,425.4	4,838.4

- (1) In 2020, interest income on mortgage loans held for sale was reclassified into loans held for sale. Prior period balances have been revised to conform with the current period presentation.
- (2) In 2020, service charges on deposit accounts, service charges on deposit accounts, cash network fees, wire transfer and other remittance fees, certain other fees, and certain fees associated with lending activities were combined into a single line item for deposit and lending-related fees; insurance income, lease income and certain other fees were reclassified to other noninterest income; and net gains from trading activities, net gains on debt securities, and net gains from equity securities were combined into a single line for net gains on trading and securities. Prior period balances have been revised to conform with the current period presentation.
- (3) In 2020, personnel-related expenses were combined into a single line item, expenses for outside professional services, contract services, and outside data processing were combined into a single line item for professional and outside services expense; expenses for technology and equipment and telecommunications were combined into a single line item for technology, telecommunications and equipment expense; and certain other expenses were reclassified to other noninterest expense. Prior period balances have been revised to conform with the current period presentation.

The accompanying notes are an integral part of these statements.

Wells Fargo & Company and Subsidiaries

Consolidated Statement of Comprehensive Income

(in millions)	Year ended December 31,		
	2020	2019	2018
Net income before noncontrolling interests	\$ 3,586	20,041	22,876
Other comprehensive income (loss), after tax:			
Net change in debt securities	1,487	4,193	(3,206)
Net change in derivatives and hedging activities	149	207	(180)
Defined benefit plans adjustments	(181)	73	(135)
Net change in foreign currency translation adjustments	51	71	(155)
Other comprehensive income (loss), after tax	1,506	4,544	(3,676)
Total comprehensive income before noncontrolling interests	5,092	24,585	19,200
Less: Other comprehensive income (loss) from noncontrolling interests	1	—	(2)
Less: Net income from noncontrolling interests	285	492	483
Wells Fargo comprehensive income	\$ 4,806	24,093	18,719

The accompanying notes are an integral part of these statements.

Wells Fargo & Company and Subsidiaries

Consolidated Balance Sheet

(in millions, except shares)	Dec 31, 2020	Dec 31, 2019
Assets		
Cash and due from banks	\$ 28,236	21,757
Interest-earning deposits with banks	236,376	119,493
Total cash, cash equivalents, and restricted cash	264,612	141,250
Federal funds sold and securities purchased under resale agreements	65,672	102,140
Debt securities:		
Trading, at fair value	75,095	79,733
Available-for-sale, at fair value (includes amortized cost of \$215,533 and \$260,060, net of allowance for credit losses) (1)	220,392	263,459
Held-to-maturity, at amortized cost, net of allowance for credit losses (fair value \$212,307 and \$156,860) (1)	205,720	153,933
Loans held for sale (includes \$18,806 and \$17,578 carried at fair value) (2)	36,384	24,319
Loans	887,637	962,265
Allowance for loan losses	(18,516)	(9,551)
Net loans	869,121	952,714
Mortgage servicing rights (includes \$6,125 and \$11,517 carried at fair value) (2)	7,437	12,947
Premises and equipment, net	8,895	9,309
Goodwill	26,392	26,390
Derivative assets	25,846	14,203
Equity securities (includes \$34,009 and \$41,936 carried at fair value)	62,260	68,241
Other assets	87,337	78,917
Total assets (3)	\$ 1,955,163	1,927,555
Liabilities		
Noninterest-bearing deposits	\$ 467,068	344,496
Interest-bearing deposits	937,313	978,130
Total deposits	1,404,381	1,322,626
Short-term borrowings	58,999	104,512
Derivative liabilities	16,509	9,079
Accrued expenses and other liabilities (includes \$22,441 and \$17,430 carried at fair value)	76,404	75,163
Long-term debt	212,950	228,191
Total liabilities (4)	1,769,243	1,739,571
Equity		
Wells Fargo stockholders' equity:		
Preferred stock	21,136	21,549
Common stock – \$1-2/3 par value, authorized 9,000,000,000 shares; issued 5,481,811,474 shares	9,136	9,136
Additional paid-in capital	60,197	61,049
Retained earnings	162,890	166,697
Cumulative other comprehensive income (loss)	194	(1,311)
Treasury stock – 1,337,799,931 shares and 1,347,385,537 shares	(67,791)	(68,831)
Unearned ESOP shares	(875)	(1,143)
Total Wells Fargo stockholders' equity	184,887	187,146
Noncontrolling interests	1,033	838
Total equity	185,920	187,984
Total liabilities and equity	\$ 1,955,163	1,927,555

- (1) Prior to our adoption of CECL on January 1, 2020, the allowance for credit losses (ACL) related to available-for-sale (AFS) and held-to-maturity (HTM) debt securities was not applicable. For additional information, see Note 1 (Summary of Significant Accounting Policies) to Financial Statements in this Report.
- (2) In 2020, loans held for sale and mortgage loans held for sale were combined into a single line item, and mortgage servicing rights measured at fair value and at amortized cost were combined into a single line item. Prior period balances have been revised to conform with the current period presentation.
- (3) Our consolidated assets at December 31, 2020 and 2019, included the following assets of certain variable interest entities (VIEs) that can only be used to settle the liabilities of those VIEs: Debt securities, \$967 million and \$540 million; Net loans, \$10.9 billion and \$13.2 billion; All other assets, \$310 million and \$658 million; and Total assets, \$12.1 billion and \$14.4 billion, respectively. Prior period balances have been conformed to current period presentation.
- (4) Our consolidated liabilities at December 31, 2020 and 2019, include the following VIE liabilities for which the VIE creditors do not have recourse to Wells Fargo: Long-term debt, \$203 million and \$587 million; All other liabilities, \$900 million and \$639 million; and Total liabilities, \$1.1 billion and \$1.2 billion, respectively. Prior period balances have been conformed to current period presentation.

The accompanying notes are an integral part of these statements.

Wells Fargo & Company and Subsidiaries

Consolidated Statement of Changes in Equity

(\$ and shares in millions)	Wells Fargo stockholders' equity										
	Preferred stock		Common stock		Additional paid-in capital	Retained earnings	Cumulative other comprehensive income (loss)	Treasury stock	Unearned ESOP shares	Noncontrolling interests	Total equity
	Shares	Amount	Shares	Amount							
Balance December 31, 2017	11.7	\$ 25,358	4,891.6	\$ 9,136	60,893	145,263	(2,144)	(29,892)	(1,678)	1,143	208,079
Cumulative effect from change in accounting policies (1)						94	(118)				(24)
Balance January 1, 2018	11.7	25,358	4,891.6	9,136	60,893	145,357	(2,262)	(29,892)	(1,678)	1,143	208,055
Adoption of accounting standard (2)						400	(400)				—
Net income						22,393				483	22,876
Other comprehensive income (loss), net of tax							(3,674)			(2)	(3,676)
Noncontrolling interests					7					(724)	(717)
Common stock issued			41.2		(76)	(321)		2,073			1,676
Common stock repurchased			(375.5)		—			(20,633)			(20,633)
Preferred stock redeemed (3)	(2.2)	(1,995)				(155)					(2,150)
Preferred stock issued to ESOP	1.1	1,100			43				(1,143)		—
Preferred stock released by ESOP					(70)				1,319		1,249
Preferred stock converted to common shares	(1.2)	(1,249)	24.0		6			1,243			—
Common stock warrants repurchased/exercised					(325)						(325)
Preferred stock issued	—	—			—						—
Common stock dividends					66	(7,955)					(7,889)
Preferred stock dividends						(1,556)					(1,556)
Stock incentive compensation expense					1,041						1,041
Net change in deferred compensation and related plans					(900)			15			(885)
Net change	(2.3)	(2,144)	(310.3)	—	(208)	12,806	(4,074)	(17,302)	176	(243)	(10,989)
Balance December 31, 2018	9.4	\$ 23,214	4,581.3	\$ 9,136	60,685	158,163	(6,336)	(47,194)	(1,502)	900	197,066
Cumulative effect from change in accounting policies (4)						(492)	481				(11)
Balance January 1, 2019	9.4	23,214	4,581.3	9,136	60,685	157,671	(5,855)	(47,194)	(1,502)	900	197,055
Net income						19,549				492	20,041
Other comprehensive income (loss), net of tax							4,544			—	4,544
Noncontrolling interests					—					(554)	(554)
Common stock issued			48.7		9	(382)		2,530			2,157
Common stock repurchased			(502.4)		—			(24,533)			(24,533)
Preferred stock redeemed (5)	(1.6)	(1,330)				(220)					(1,550)
Preferred stock issued to ESOP	—	—			—				—		—
Preferred stock released by ESOP					(24)				359		335
Preferred stock converted to common shares	(0.3)	(335)	6.8		(16)			351			—
Common stock warrants repurchased/exercised					—						—
Preferred stock issued	—	—			—						—
Common stock dividends					86	(8,530)					(8,444)
Preferred stock dividends						(1,391)					(1,391)
Stock incentive compensation expense					1,234						1,234
Net change in deferred compensation and related plans					(925)			15			(910)
Net change	(1.9)	(1,665)	(446.9)	—	364	9,026	4,544	(21,637)	359	(62)	(9,071)
Balance December 31, 2019	7.5	\$ 21,549	4,134.4	\$ 9,136	61,049	166,697	(1,311)	(68,831)	(1,143)	838	187,984

- Effective January 1, 2018, we adopted Accounting Standards Update (ASU) 2016-04 – Liabilities – Extinguishments of Liabilities (Subtopic 405-20): *Recognition of Breakage for Certain Prepaid Stored-Value Products*, ASU 2016-01 – Financial Instruments – Overall (Subtopic 825-10): *Recognition and Measurement of Financial Assets and Financial Liabilities*, and ASU 2014-09 – Revenue from Contracts With Customers (Topic 606) and subsequent related Updates.
- Represents the reclassification from other comprehensive income to retained earnings as a result of our adoption of ASU 2018-02 – *Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income*, in third quarter 2018.
- Represents the impact of the redemption of preferred stock, Series J, in third quarter 2018.
- Effective January 1, 2019, we adopted ASU 2016-02 – Leases (Topic 842) and subsequent related Updates, ASU 2017-08 – Receivables – Nonrefundable Fees and Other Costs (Subtopic 310-20): *Premium Amortization on Purchased Callable Debt Securities*.
- Represents the impact of the partial redemption of preferred stock, Series K, in third quarter 2019.

The accompanying notes are an integral part of these statements.

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Wells Fargo & Company and Subsidiaries

Consolidated Statement of Changes in Equity

(\$ and shares in millions)	Wells Fargo stockholders' equity										
	Preferred stock		Common stock		Additional paid-in capital	Retained earnings	Cumulative other comprehensive income (loss)	Treasury stock	Unearned ESOP shares	Noncontrolling interests	Total equity
	Shares	Amount	Shares	Amount							
Balance December 31, 2019	7.5	\$ 21,549	4,134.4	\$ 9,136	61,049	166,697	(1,311)	(68,831)	(1,143)	838	187,984
Cumulative effect from change in accounting policies (1)						991					991
Balance January 1, 2020	7.5	21,549	4,134.4	9,136	61,049	167,688	(1,311)	(68,831)	(1,143)	838	188,975
Net income						3,301				285	3,586
Other comprehensive income (loss), net of tax							1,505			1	1,506
Noncontrolling interests										(91)	(91)
Common stock issued			75.6		207	(1,449)		3,961			2,719
Common stock repurchased			(75.7)					(3,415)			(3,415)
Preferred stock redeemed (2)	(1.9)	(3,347)			46	(301)					(3,602)
Preferred stock issued to ESOP	—	—			—				—		—
Preferred stock released by ESOP					(19)				268		249
Preferred stock converted to common shares	(0.2)	(249)	9.7		(243)			492			—
Common stock warrants repurchased/exercised					—						—
Preferred stock issued	0.1	3,183			(67)						3,116
Common stock dividends					44	(5,059)					(5,015)
Preferred stock dividends						(1,290)					(1,290)
Stock incentive compensation expense					643						643
Net change in deferred compensation and related plans					(1,463)			2			(1,461)
Net change	(2.0)	(413)	9.6	—	(852)	(4,798)	1,505	1,040	268	195	(3,055)
Balance December 31, 2020	5.5	\$ 21,136	4,144.0	\$ 9,136	60,197	162,890	194	(67,791)	(875)	1,033	185,920

(1) We adopted CECL effective January 1, 2020. For additional information, see Note 1 (Summary of Significant Accounting Policies) for more information.

(2) Represents the impact of the redemption of the remaining preferred stock, Series K, in first quarter 2020, and Series T and Series V in fourth quarter 2020.

The accompanying notes are an integral part of these statements.

Wells Fargo & Company and Subsidiaries

Consolidated Statement of Cash Flows

(in millions)	Year ended December 31,		
	2020	2019	2018
Cash flows from operating activities:			
Net income before noncontrolling interests	\$ 3,586	20,041	22,876
Adjustments to reconcile net income to net cash provided by operating activities:			
Provision for credit losses	14,129	2,687	1,744
Changes in fair value of MSRs and LHFS carried at fair value	4,321	3,702	453
Depreciation, amortization and accretion	8,736	7,075	5,593
Other net (gains) losses (1)	5,258	(5,513)	(7,551)
Stock-based compensation	1,766	2,274	2,255
Originations and purchases of loans held for sale (1)	(181,961)	(159,309)	(154,934)
Proceeds from sales of and paydowns on loans held for sale (1)	122,592	114,155	120,160
Net change in:			
Debt and equity securities, held for trading	43,214	22,066	35,054
Deferred income taxes	(3,314)	(3,246)	1,970
Derivative assets and liabilities	(5,492)	(2,665)	1,513
Other assets	(12,304)	3,034	7,805
Other accrued expenses and liabilities	1,520	2,429	(865)
Net cash provided by operating activities	2,051	6,730	36,073
Cash flows from investing activities:			
Net change in:			
Federal funds sold and securities purchased under resale agreements	36,468	(21,933)	(1,184)
Available-for-sale debt securities:			
Proceeds from sales	48,638	9,386	7,320
Prepayments and maturities	78,174	46,542	36,725
Purchases	(91,545)	(57,015)	(60,067)
Held-to-maturity debt securities:			
Paydowns and maturities	36,641	13,684	10,934
Purchases	(46,755)	(8,649)	—
Equity securities, not held for trading:			
Proceeds from sales and capital returns	12,187	6,143	6,242
Purchases	(8,677)	(6,865)	(6,433)
Loans:			
Loans originated by banking subsidiaries, net of principal collected	53,718	(23,698)	(18,619)
Proceeds from sales (including participations) of loans held for investment	9,359	12,038	16,294
Purchases (including participations) of loans	(1,313)	(2,033)	(2,088)
Principal collected on nonbank entities' loans	7,927	3,912	6,791
Loans originated by nonbank entities	(13,052)	(5,274)	(6,482)
Proceeds from sales of foreclosed assets and short sales	1,147	2,666	3,592
Other, net	(363)	1,465	(779)
Net cash provided (used) by investing activities	122,554	(29,631)	(7,754)
Cash flows from financing activities:			
Net change in:			
Deposits	81,755	36,137	(48,034)
Short-term borrowings	(45,513)	(1,275)	2,531
Long-term debt:			
Proceeds from issuance	38,136	53,381	47,595
Repayment	(65,347)	(60,996)	(40,565)
Preferred stock:			
Proceeds from issuance	3,116	—	—
Redeemed	(3,602)	(1,550)	(2,150)
Cash dividends paid	(1,290)	(1,391)	(1,622)
Common stock:			
Proceeds from issuance	571	380	632
Stock tendered for payment of withholding taxes	(340)	(302)	(331)
Repurchased	(3,415)	(24,533)	(20,633)
Cash dividends paid	(4,852)	(8,198)	(7,692)
Net change in noncontrolling interests	(102)	(513)	(462)
Other, net	(360)	(276)	(248)
Net cash used by financing activities	(1,243)	(9,136)	(70,979)
Net change in cash, cash equivalents, and restricted cash	123,362	(32,037)	(42,660)
Cash, cash equivalents, and restricted cash at beginning of year	141,250	173,287	215,947
Cash, cash equivalents, and restricted cash at end of year	\$ 264,612	141,250	173,287
Supplemental cash flow disclosures:			
Cash paid for interest	\$ 8,414	18,834	14,366
Cash paid for income taxes, net (2)	1,175	7,493	(135)

(1) Prior periods have been revised to conform to the current period presentation.

(2) In 2020, we presented cash paid for income taxes on a net basis with a reduction for cash received for refunds of income taxes paid. Prior period balances have been revised to conform with the current period presentation.

The accompanying notes are an integral part of these statements. See Note 1 (Summary of Significant Accounting Policies) for noncash activities.

Notes to Financial Statements

-See the Glossary of Acronyms at the end of this Report for terms used throughout the Financial Statements and related Notes.

Note 1: Summary of Significant Accounting Policies

Wells Fargo & Company is a diversified financial services company. We provide banking, investment and mortgage products and services, as well as consumer and commercial finance, through banking locations and offices, the internet and other distribution channels to individuals, businesses and institutions in all 50 states, the District of Columbia, and in countries outside the U.S. When we refer to “Wells Fargo,” “the Company,” “we,” “our” or “us,” we mean Wells Fargo & Company and Subsidiaries (consolidated). Wells Fargo & Company (the Parent) is a financial holding company and a bank holding company. We also hold a majority interest in a real estate investment trust, which has publicly traded preferred stock outstanding.

Our accounting and reporting policies conform with U.S. generally accepted accounting principles (GAAP) and practices in the financial services industry. To prepare the financial statements in conformity with GAAP, management must make estimates based on assumptions about future economic and market conditions (for example, unemployment, market liquidity, real estate prices, etc.) that affect the reported amounts of assets and liabilities at the date of the financial statements, income and expenses during the reporting period and the related disclosures. Although our estimates contemplate current conditions and how we expect them to change in the future, it is reasonably possible that actual conditions could be worse than anticipated in those estimates, which could materially affect our results of operations and financial condition. Management has made significant estimates in several areas, including:

- allowance for credit losses (Note 4 (Loans and Related Allowance for Credit Losses));
- valuations of residential mortgage servicing rights (MSRs) (Note 8 (Securitizations and Variable Interest Entities) and Note 9 (Mortgage Banking Activities));
- valuations of financial instruments (Note 16 (Derivatives) and Note 17 (Fair Values of Assets and Liabilities));
- liabilities for contingent litigation losses (Note 15 (Legal Actions));
- income taxes (Note 23 (Income Taxes)); and
- goodwill impairment (Note 10 (Intangible Assets)).

Actual results could differ from those estimates.

Accounting Standards Adopted in 2020

In 2020, we adopted the following new accounting guidance:

- Accounting Standards Update (ASU or Update) 2020-04 – Reference Rate Reform (Topic 848): *Facilitation of the Effects of Reference Rate Reform on Financial Reporting*
- ASU 2019-04 – Codification Improvements to Topic 326, *Financial Instruments – Credit Losses*, Topic 815, *Derivatives and Hedging*, and Topic 825, *Financial Instruments*. This Update includes guidance on recoveries of financial assets, which is included in the discussion for ASU 2016-13 below.
- ASU 2018-17 – Consolidation (Topic 810): *Targeted Improvements to Related Party Guidance for Variable Interest Entities*
- ASU 2018-15 – Intangibles – Goodwill and Other – Internal-Use Software (Subtopic 350-40): *Customer’s Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract (a consensus of the*

Financial Accounting Standards Board (FASB) Emerging Issues Task Force)

- ASU 2018-13 – Fair Value Measurement (Topic 820): *Disclosure Framework – Changes to the Disclosure Requirements for Fair Value Measurement*.
- ASU 2017-04 – Intangibles – Goodwill and Other (Topic 350): *Simplifying the Test for Goodwill Impairment*
- ASU 2016-13 – Financial Instruments – Credit Losses (Topic 326): *Measurement of Credit Losses on Financial Instruments* and related subsequent Updates

ASU 2020-04 provides optional, temporary relief to ease the burden of accounting for reference rate reform activities that affect contractual modifications of floating rate financial instruments indexed to interbank offering rates (IBORs) and hedge accounting relationships. Modifications of qualifying contracts are accounted for as the continuation of an existing contract rather than as a new contract. Modifications of qualifying hedging relationships will not require discontinuation of the existing hedge accounting relationships. The application of the relief for qualifying existing hedging relationships may be made on a hedge-by-hedge basis and across multiple reporting periods.

We adopted ASU 2020-04 in second quarter 2020, and the guidance will be followed until the Update terminates on December 31, 2022. This guidance is applied on a prospective basis. The Update did not have a material impact on our consolidated financial statements.

ASU 2018-17 updates the guidance used by decision-makers of VIEs. Indirect interests held through related parties in common control arrangements are to be considered on a proportional basis for determining whether fees paid to decision-makers and service providers are variable interests. This is consistent with how indirect interests held through related parties under common control are considered for determining whether a reporting entity must consolidate a VIE. We adopted the guidance in first quarter 2020. The Update did not have a material impact on our consolidated financial statements.

ASU 2018-15 clarifies the accounting for implementation costs related to a cloud computing arrangement that is a service contract and enhances disclosures around implementation costs for internal-use software and cloud computing arrangements. The guidance aligns the requirements for capitalizing implementation costs incurred in a hosting arrangement that is a service contract with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use software (and hosting arrangements that include an internal-use software license). It also requires the expense related to the capitalized implementation costs be presented in the same line item in the statement of income as the fees associated with the hosting element of the arrangement and capitalized implementation costs be presented in the balance sheet in the same line item that a prepayment for the fees of the associated hosting arrangement are presented. We adopted the guidance in first quarter 2020. The Update did not have a material impact on our consolidated financial statements.

Note 1: Summary of Significant Accounting Policies (continued)

ASU 2018-13 clarifies, eliminates and adds certain fair value measurement disclosure requirements for assets and liabilities, which affects our disclosures in Note 17 (Fair Values of Assets and Liabilities). Although the ASU became effective on January 1, 2020, it permitted early adoption of individual requirements without causing others to be early adopted and, as such, we partially adopted the Update during third quarter 2018 and the remainder of the requirements in first quarter 2020. The Update did not have a material impact on our consolidated financial statements.

ASU 2017-04 simplifies the goodwill impairment test by eliminating the requirement to assign the fair value of a reporting unit to all of the assets and liabilities of that unit (including any unrecognized intangible assets) as if the reporting unit had been acquired in a business combination. The Update requires that a goodwill impairment loss is recognized if the fair value of the reporting unit is less than the carrying amount, including goodwill. The goodwill impairment loss is limited to the amount of goodwill allocated to the reporting unit. The guidance did not change the qualitative assessment of goodwill. We adopted the guidance in first quarter 2020. This guidance is applied on a prospective basis, and accordingly, the Update did not have a material impact on our consolidated financial statements.

ASU 2016-13 changes the accounting for the measurement of credit losses on loans and debt securities. For loans and held-to-maturity (HTM) debt securities, the Update requires a current

expected credit loss (CECL) measurement to estimate the allowance for credit losses (ACL) for the remaining contractual term, adjusted for prepayments, of the financial asset (including off-balance sheet credit exposures) using historical experience, current conditions, and reasonable and supportable forecasts. Also, the Update eliminates the existing guidance for purchased credit-impaired (PCI) loans, but requires an allowance for purchased financial assets with more than an insignificant deterioration of credit since origination. In addition, the Update modifies the other-than-temporary impairment (OTTI) model for available-for-sale (AFS) debt securities to require an allowance for credit impairment instead of a direct write-down, which allows for reversal of credit impairments in future periods based on improvements in credit. Upon adoption in first quarter 2020, we recognized an overall decrease in our ACL of approximately \$1.3 billion (pre-tax) as a cumulative effect adjustment from a change in accounting policies, which increased our retained earnings and regulatory capital amounts and ratios. Loans previously classified as PCI were automatically transitioned to purchased credit-deteriorated (PCD) classification. We recognized an ACL for these new PCD loans and made a corresponding adjustment to the loan balance, with no impact to net income or transition adjustment to retained earnings. For more information on the impact of CECL by type of financial asset, see Table 1.1. Prior to adopting this Update, we recorded an allowance for loan losses based on management's estimate of probable credit losses inherent in the loan portfolio referred to as the incurred credit loss methodology.

Table 1.1: ASU 2016-13 Adoption Impact to Allowance for Credit Losses (1)

(in billions)	Dec 31, 2019			ASU 2016-13 Adoption Impact	Jan 1, 2020	
	Balance Outstanding	ACL Balance	Coverage		ACL Balance	Coverage
Total commercial (2)	\$ 515.7	6.2	1.2 %	\$ (2.9)	3.4	0.7 %
Residential mortgage (3)	323.4	0.9	0.3	—	0.9	0.3
Credit card (4)	41.0	2.3	5.5	0.7	2.9	7.1
Auto (4)	47.9	0.5	1.0	0.3	0.7	1.5
Other consumer (4)	34.3	0.6	1.6	0.6	1.2	3.5
Total consumer	446.5	4.2	0.9	1.5	5.7	1.3
Total loans	962.3	10.5	1.1	(1.3)	9.1	0.9
Available-for-sale and held-to-maturity debt securities and other assets (5)	420.0	0.1	NM	—	0.1	NM
Total	\$ 1,382.3	10.6	NM	\$ (1.3)	9.3	NM

NM – Not meaningful

(1) Amounts presented in this table may not equal the sum of its components due to rounding.

(2) Decrease reflecting shorter contractual maturities given limitation to contractual terms.

(3) Impact reflects an increase due to longer contractual terms, offset by expectation of recoveries in collateral value on mortgage loans previously written down significantly below current recovery value.

(4) Increase due to longer contractual terms or indeterminate maturities.

(5) Excludes other financial assets in the scope of CECL that do not have an ACL based on the nature of the asset.

Table 1.2 summarizes financial assets and liabilities by form and measurement accounting model.

Table 1.2: Accounting Model for Financial Assets and Financial Liabilities

Balance sheet caption	Measurement model(s)	Financial statement Note reference
Cash and due from banks	Amortized cost	Note 28: Regulatory Capital Requirements and Other Restrictions
Interest-earning deposits with banks	Amortized cost	Note 28: Regulatory Capital Requirements and Other Restrictions
Federal funds sold and securities purchased under resale agreements	Amortized cost	N/A
Debt securities:		
Trading	FV-NI (1)	Note 2: Trading Activities Note 17: Fair Values of Assets and Liabilities
Available-for-sale	FV-OCI (2)	Note 3: Available-for-Sale and Held-to-Maturity Debt Securities Note 17: Fair Values of Assets and Liabilities
Held-to-maturity	Amortized cost	Note 3: Available-for-Sale and Held-to-Maturity Debt Securities
Loans held for sale	FV-NI (1) LOCOM (3)	Note 17: Fair Values of Assets and Liabilities
Loans	Amortized cost FV-NI (1)	Note 4: Loans and Related Allowance for Credit Losses Note 17: Fair Values of Assets and Liabilities
Derivative assets and liabilities	FV-NI (1) FV-OCI (2)	Note 2: Trading Activities Note 16: Derivatives Note 17: Fair Values of Assets and Liabilities
Equity securities:		
Marketable	FV-NI (1)	Note 2: Trading Activities Note 6: Equity Securities Note 17: Fair Values of Assets and Liabilities
Nonmarketable	FV-NI (1) Cost method Equity method MA (4)	Note 2: Trading Activities Note 6: Equity Securities Note 17: Fair Values of Assets and Liabilities
Other assets	Amortized cost (5)	Note 7: Premises, Equipment, and Other Assets
Deposits	Amortized cost	Note 11: Deposits
Short-term borrowings	Amortized cost	N/A
Accrued expenses and other liabilities	Amortized cost (6)	Note 2: Trading Activities Note 5: Leasing Activity Note 17: Fair Values of Assets and Liabilities
Long-term debt	Amortized cost	Note 12: Long-Term Debt

(1) FV-NI represents the fair value through net income accounting model.

(2) FV-OCI represents the fair value through other comprehensive income accounting model.

(3) LOCOM represents the lower of cost or fair value accounting model.

(4) MA represents the measurement alternative accounting model.

(5) Other assets are generally measured at amortized cost, except for bank-owned life insurance which is measured at cash surrender value.

(6) Accrued expenses and other liabilities are generally measured at amortized cost, except for trading short-sale liabilities which are measured at FV-NI.

Consolidation

Our consolidated financial statements include the accounts of the Parent and our subsidiaries in which we have a controlling financial interest. When our consolidated subsidiaries follow specialized industry accounting, that accounting is retained in consolidation.

We are also a variable interest holder in certain entities in which equity investors do not have the characteristics of a controlling financial interest or where the entity does not have enough equity at risk to finance its activities without additional subordinated financial support from other parties (collectively referred to as variable interest entities (VIEs)). Our variable interest arises from contractual, ownership or other monetary interests in the entity, which change with fluctuations in the fair value of the entity's net assets. We consolidate a VIE if we are the primary beneficiary, which is when we have both the power to direct the activities that most significantly impact the VIE and a variable interest that could potentially be significant to the VIE. To determine whether or not a variable interest we hold could potentially be significant to the VIE, we consider both qualitative and quantitative factors regarding the nature, size and form of our involvement with the VIE. We assess whether or not we are the primary beneficiary of a VIE on an ongoing basis.

Significant intercompany accounts and transactions are eliminated in consolidation. When we have significant influence

over operating and financing decisions for a company but do not own a majority of the voting equity interests, we account for the investment using the equity method of accounting, which requires us to recognize our proportionate share of the company's earnings. If we do not have significant influence, we account for the equity security under the fair value method, cost method or measurement alternative.

Cash, Cash Equivalents, and Restricted Cash

Cash, cash equivalents and restricted cash include cash on hand, cash items in transit, and amounts due from or held with other depository institutions. See Note 28 (Regulatory Capital Requirements and Other Restrictions) for more information on the restrictions on cash and cash equivalents.

Trading Activities

We engage in trading activities to accommodate the investment and risk management activities of our customers. These activities predominantly occur in our Corporate and Investment Banking reportable operating segment. Trading assets and liabilities include debt securities, equity securities, loans, derivatives and short sales, which are reported within our consolidated balance sheet based on the accounting classification of the instrument. In addition, debt securities that

Note 1: Summary of Significant Accounting Policies (continued)

are held for investment purposes that we have elected to account for under the fair value method, are classified as trading.

Our trading assets and liabilities are carried on our consolidated balance sheet at fair value with changes in fair value recognized in net gains from trading activities and interest income and interest expense recognized in net interest income.

Customer accommodation trading activities include our actions as an intermediary to buy and sell financial instruments and market-making activities. We also take positions to manage our exposure to customer accommodation activities. We hold financial instruments for trading in long positions, as well as short positions, to facilitate our trading activities. As an intermediary, we interact with market buyers and sellers to facilitate the purchase and sale of financial instruments to meet the anticipated or current needs of our customers. For example, we may purchase or sell a derivative to a customer who wants to manage interest rate risk exposure. We typically enter into an offsetting derivative or security position to manage our exposure to the customer transaction. We earn income based on the transaction price difference between the customer transaction and the offsetting position, which is reflected in earnings where the fair value changes and related interest income and expense of the positions are recorded.

Our market-making activities include taking long and short trading positions to facilitate customer order flow. These activities are typically executed on a short-term basis. As a market-maker we earn income due to: (1) the difference between the price paid or received for the purchase and sale of the security (bid-ask spread), (2) the net interest income of the positions, and (3) the changes in fair value of the trading positions held on our consolidated balance sheet. Additionally, we may enter into separate derivative or security positions to manage our exposure related to our long and short trading positions taken in our market-making activities. Income earned on these market-making activities are reflected in earnings where the fair value changes and related interest income and expense of the positions are recorded.

Debt Securities

Our investments in debt securities that are not held for trading purposes are classified as either debt securities AFS or HTM.

Investments in debt securities for which the Company does not have the positive intent and ability to hold to maturity are classified as AFS. AFS debt securities are measured at fair value, with unrealized gains and losses reported in cumulative other comprehensive income (OCI). The amount reported in OCI is net of the ACL and applicable income taxes. Investments in debt securities for which the Company has the positive intent and ability to hold to maturity are classified as HTM. HTM debt securities are measured at amortized cost, net of ACL.

INTEREST INCOME AND GAIN/LOSS RECOGNITION Unamortized premiums and discounts are recognized in interest income over the contractual life of the security using the effective interest method, except for purchased callable debt securities carried at a premium. For purchased callable debt securities carried at a premium, the premium is amortized into interest income to the next call date using the effective interest method. As principal repayments are received on securities (e.g., mortgage-backed securities (MBS)), a proportionate amount of the related premium or discount is recognized in income so that the effective interest rate on the remaining portion of the security continues unchanged.

We recognize realized gains and losses on the sale of debt securities in net gains on trading and securities within noninterest income using the specific identification method.

IMPAIRMENT AND CREDIT LOSSES Unrealized losses on AFS debt securities are driven by a number of factors, including changes in interest rates and credit spreads which impact most types of debt securities, and prepayment rates which impact MBS and collateralized loan obligations (CLO). Additional considerations for certain types of AFS debt securities include:

- Debt securities of U.S. Treasury and federal agencies, including federal agency MBS, are not impacted by credit movements given the explicit or implicit guarantees provided by the U.S. government.
- Debt securities of U.S. states and political subdivisions are most impacted by changes in the relationship between municipal and term funding credit curves rather than by changes in the credit quality of the underlying securities.
- Structured securities, such as MBS and CLO, are also impacted by changes in projected collateral losses of assets underlying the security.

For AFS debt securities where fair value is less than amortized cost basis, we recognize impairment in earnings if we have the intent to sell the security or if it is more likely than not that we will be required to sell the security before recovery of its amortized cost basis. Impairment is recognized in net gains on trading and securities within noninterest income equal to the entire difference between the amortized cost basis, net of ACL, and the fair value of the AFS debt security. Following the recognition of this impairment, the AFS debt security's new amortized cost basis is fair value.

For AFS debt securities where fair value is less than amortized cost basis where we did not recognize impairment in earnings, we record an ACL as of the balance sheet date to the extent unrealized loss is due to credit losses. See the "Allowance for Credit Losses" section in this Note for our accounting policies relating to the ACL for debt securities, which also includes debt securities classified as HTM.

TRANSFERS BETWEEN CATEGORIES OF DEBT SECURITIES Upon transfer of a debt security from the AFS to HTM classification, the amortized cost is reset to fair value adjusted for any ACL previously recorded under the AFS debt security model. Unrealized gains or losses at the transfer date continue to be reported in cumulative OCI. The cumulative OCI balance is amortized into earnings over the same period as the unamortized premiums and discounts using the effective interest method. Any ACL previously recorded under the AFS debt security model is reversed and an ACL under the HTM debt security model is re-established. The reversal and re-establishment of the ACL are recorded to provision for credit losses.

NONACCRUAL AND PAST DUE, AND CHARGE-OFF POLICIES We generally place debt securities on nonaccrual status using factors similar to those described for loans. When we place a debt security on nonaccrual status, we reverse the accrued unpaid interest receivable against interest income and suspend the amortization of premiums and accretion of discounts. If the ultimate collectability of the principal is in doubt on a nonaccrual debt security, any cash collected is first applied to reduce the security's amortized cost basis to zero, followed by recovery of amounts previously charged off, and subsequently to interest income. Generally, we return a debt security to accrual status when all delinquent interest and principal become current under

the contractual terms of the security and collectability of remaining principal and interest is no longer doubtful.

Our debt securities are considered past due when contractually required principal or interest payments have not been made on the due dates.

Our charge-off policy for debt securities are similar to those described for loans. Subsequent to charge-off, the debt security will be designated as nonaccrual and follow the process described above for any cash received.

Securities Purchased and Sold Agreements

Securities purchased under resale agreements and securities sold under repurchase agreements are accounted for as collateralized financing transactions and are recorded at the acquisition or sale price plus accrued interest. We monitor the fair value of securities purchased and sold as well as the collateral pledged and received. Additional collateral is pledged or returned to maintain the appropriate collateral position for the transactions. These financing transactions do not create material credit risk given the collateral provided and the related monitoring process. We include securities sold under repurchase agreements in short-term borrowings on our consolidated balance sheet. At December 31, 2020, and 2019, short-term borrowings were primarily comprised of securities sold under repurchase agreements.

Loans Held for Sale

Loans held for sale (LHFS) generally includes commercial and residential mortgages originated for sale in the securitization or whole loan market. We have elected the fair value option for a majority of residential LHFS (see Note 17 (Fair Values of Assets and Liabilities)). The remaining residential LHFS are held at the lower of cost or fair value (LOCOM) and are measured on a pool level basis.

Commercial LHFS are generally held at LOCOM and are measured on an individual loan basis. We have elected the fair value option for certain commercial loans included in LHFS that are used in market-making activities for our trading business.

Gains and losses on residential LHFS are generally recorded in mortgage banking noninterest income. Gains and losses on trading LHFS are recognized in net gains from trading activities. Gains and losses on other LHFS are recognized in other noninterest income. Direct loan origination costs and fees for LHFS under the fair value option are recognized in earnings at origination. For LHFS recorded at LOCOM, loan costs and fees are deferred at origination and are recognized in earnings at time of sale. Interest income on LHFS is calculated based upon the note rate of the loan and is recorded in interest income.

When a determination is made at the time of commitment to originate loans as held for investment, it is our intent to hold these loans to maturity or for the foreseeable future, subject to periodic review under our management evaluation processes, including corporate asset/liability management. If subsequent changes occur, including changes in interest rates, our business strategy, or other market conditions, we may change our intent to hold these loans. When management makes this determination, we immediately transfer these loans to the LHFS portfolio at LOCOM.

Loans

Loans are reported at their outstanding principal balances net of any unearned income, cumulative charge-offs, unamortized deferred fees and costs on originated loans and unamortized premiums or discounts on purchased loans.

Unearned income, deferred fees and costs, and discounts and premiums are amortized to interest income over the contractual life of the loan using the effective interest method. Loan commitment fees are generally deferred and amortized into noninterest income on a straight-line basis over the commitment period.

Loans also include financing leases where we are the lessor. See the "Leasing Activity" section in this Note for our accounting policy for leases.

NONACCRUAL AND PAST DUE LOANS We generally place loans on nonaccrual status when:

- the full and timely collection of interest or principal becomes uncertain (generally based on an assessment of the borrower's financial condition and the adequacy of collateral, if any), such as in bankruptcy or other circumstances;
- they are 90 days (120 days with respect to residential mortgages) past due for interest or principal, unless the loan is both well-secured and in the process of collection or the loan is in an active payment deferral as a result of the COVID-19 pandemic;
- part of the principal balance has been charged off; or
- for junior lien mortgages, we have evidence that the related first lien mortgage may be 120 days past due or in the process of foreclosure regardless of the junior lien delinquency status.

Credit card loans are not placed on nonaccrual status, but are generally fully charged off when the loan reaches 180 days past due.

When we place a loan on nonaccrual status, we reverse the accrued unpaid interest receivable against interest income and suspend amortization of any net deferred fees. If the ultimate collectability of the recorded loan balance is in doubt on a nonaccrual loan, the cost recovery method is used and cash collected is applied to first reduce the carrying value of the loan. Otherwise, interest income may be recognized to the extent cash is received. Generally, we return a loan to accrual status when all delinquent interest and principal become current under the terms of the loan agreement and collectability of remaining principal and interest is no longer doubtful.

We typically re-underwrite modified loans at the time of a restructuring to determine if there is sufficient evidence of sustained repayment capacity based on the borrower's financial strength, including documented income, debt to income ratios and other factors. If the borrower has demonstrated performance under the previous terms and the underwriting process shows the capacity to continue to perform under the restructured terms, the loan will generally remain in accruing status. When a loan classified as a troubled debt restructuring (TDR) performs in accordance with its modified terms, the loan either continues to accrue interest (for performing loans) or will return to accrual status after the borrower demonstrates a sustained period of performance (generally six consecutive months of payments, or equivalent, inclusive of consecutive payments made prior to the modification). Loans will be placed on nonaccrual status and a corresponding charge-off is recorded if we believe it is probable that principal and interest contractually due under the modified terms of the agreement will not be collectible.

Our loans are considered past due when contractually required principal or interest payments have not been made on the due dates.

Note 1: Summary of Significant Accounting Policies (continued)

LOAN CHARGE-OFF POLICIES For commercial loans, we generally fully charge off or charge down to net realizable value (fair value of collateral, less estimated costs to sell) for loans secured by collateral when:

- management judges the loan to be uncollectible;
- repayment is deemed to be protracted beyond reasonable time frames;
- the loan has been classified as a loss by either our internal loan review process or our banking regulatory agencies;
- the customer has filed bankruptcy and the loss becomes evident owing to a lack of assets; or
- the loan is 180 days past due unless both well-secured and in the process of collection.

For consumer loans, we fully charge off or charge down to net realizable value when deemed uncollectible due to bankruptcy or other factors, or no later than reaching a defined number of days past due, as follows:

- Residential mortgages – We generally charge down to net realizable value when the loan is 180 days past due.
- Auto loans – We generally fully charge off when the loan is 120 days past due.
- Credit card loans – We generally fully charge off when the loan is 180 days past due.
- Unsecured loans (closed end) – We generally fully charge off when the loan is 120 days past due.
- Unsecured loans (open end) – We generally fully charge off when the loan is 180 days past due.
- Other secured loans – We generally fully or partially charge down to net realizable value when the loan is 120 days past due.

TROUBLED DEBT RESTRUCTURINGS In situations where, for economic or legal reasons related to a borrower's financial difficulties, we grant a concession for other than an insignificant period of time to the borrower that we would not otherwise consider, the related loan is classified as a TDR. These modified terms may include interest rate reductions, principal forgiveness, term extensions, payment forbearance and other actions intended to minimize our economic loss and to avoid foreclosure or repossession of the collateral, if applicable. For modifications where we forgive principal, the entire amount of such principal forgiveness is immediately charged off. Loans classified as TDRs, including loans in trial payment periods (trial modifications), are considered impaired loans. Other than resolutions such as foreclosures, sales and transfers to held-for-sale, we may remove loans held for investment from TDR classification, but only if they have been refinanced or restructured at market terms and qualify as a new loan.

TROUBLED DEBT RESTRUCTURINGS AND OTHER RELIEF RELATED TO COVID-19 On March 25, 2020, the U.S. Senate approved the *Coronavirus Aid, Relief, and Economic Security Act* (the CARES Act) providing optional, temporary relief from accounting for certain loan modifications as troubled debt restructurings (TDRs). Under the CARES Act, TDR relief is available to banks for loan modifications related to the adverse effects of Coronavirus Disease 2019 (COVID-19) (COVID-related modifications) granted to borrowers that are current as of December 31, 2019. TDR relief applies to COVID-related modifications made from March 1, 2020, until the earlier of December 31, 2020, or 60 days following the termination of the national emergency declared by the President of the United States. In first quarter 2020, we elected to apply the TDR relief provided by the CARES Act. On December 27, 2020, the Consolidated Appropriations Act, 2021

(CAA) was signed into law which extended the expiration of the TDR relief to no later than January 1, 2022.

On April 7, 2020, federal banking regulators issued the *Interagency Statement on Loan Modifications and Reporting for Financial Institutions Working with Customers Affected by the Coronavirus (Revised)* (the Interagency Statement). The guidance in the Interagency Statement provides additional TDR relief as it clarifies that it is not necessary to consider the impact of the COVID-19 pandemic on the financial condition of a borrower in connection with a short-term (e.g., six months or less) COVID-related modification provided the borrower is current at the date the modification program is implemented.

For COVID-related modifications in the form of payment deferrals or payment forbearance, delinquency status will not advance and loans that were accruing at the time the relief is provided will generally not be placed on nonaccrual status during the deferral period. Interest accrued during payment deferrals or payment forbearance may be included in the principal balance of the loans and charge-offs will generally be based on delinquency status after the loan exits the deferral or forbearance period. COVID-related modifications that do not meet the provisions of the CARES Act or the Interagency Statement will be assessed for TDR classification.

On April 10, 2020, the FASB Staff issued *Accounting for Lease Concessions Related to the Effects of the COVID-19 Pandemic*, a question and answer guide (the guide). The guide provided an election for leases accounted for under Accounting Standards Codification (ASC) 842, *Leases*, that were modified due to COVID-19 and met certain criteria so as to not require a new lease classification test upon modification. In second quarter 2020, we elected to apply the lease modification relief provided by the guide.

FORECLOSED ASSETS Foreclosed assets obtained through our lending activities primarily include real estate. Generally, loans have been written down to their net realizable value prior to foreclosure. Any further reduction to their net realizable value is recorded with a charge to the ACL at foreclosure. We allow up to 90 days after foreclosure to finalize determination of net realizable value. Thereafter, changes in net realizable value are recorded to noninterest expense. The net realizable value of these assets is reviewed and updated periodically depending on the type of property. Certain government-guaranteed mortgage loans upon foreclosure are included in accounts receivable, not foreclosed assets. These receivables were loans insured by the Federal Housing Administration (FHA) or guaranteed by the Department of Veterans Affairs (VA) and are measured based on the balance expected to be recovered from the FHA or VA.

Allowance for Credit Losses

The ACL is management's estimate of the current expected credit losses in the loan portfolio and unfunded credit commitments, at the balance sheet date, excluding loans and unfunded credit commitments carried at fair value or held for sale. Additionally, we maintain an ACL for AFS and HTM debt securities, other financing receivables measured at amortized cost, and other off-balance sheet credit exposures. While we attribute portions of the allowance to specific financial asset classes (loan and debt security portfolios), loan portfolio segments (commercial and consumer) or major security type, the entire ACL is available to absorb credit losses of the Company.

Our ACL process involves procedures to appropriately consider the unique risk characteristics of our financial asset classes, portfolio segments, and major security types. For each loan portfolio segment and each major HTM debt security type,

losses are estimated collectively for groups of loans or securities with similar risk characteristics. For loans and securities that do not share similar risk characteristics with other financial assets, the losses are estimated individually, which primarily includes our impaired large commercial loans and non-accruing HTM debt securities. For AFS debt securities, losses are estimated at the individual security level.

Our ACL amounts are influenced by a variety of factors, including changes in loan and debt security volumes, portfolio credit quality, and general economic conditions. General economic conditions are forecasted using economic variables which will create volatility as those variables change over time. See Table 1.3 for key economic variables used for our loan portfolios.

Table 1.3: Key Economic Variables

Loan Portfolio	Key economic variables
Total commercial	<ul style="list-style-type: none"> Gross domestic product Commercial real estate asset prices, where applicable Unemployment rate
Residential mortgage	<ul style="list-style-type: none"> Home price index Unemployment rate
Other consumer (including credit card, auto, and other consumer)	<ul style="list-style-type: none"> Unemployment rate

Our approach for estimating expected life-time credit losses for loans and debt securities includes the following key components:

- An initial loss forecast period of two years for all portfolio segments and classes of financing receivables and off-balance-sheet credit exposures. This period reflects management's expectation of losses based on forward-looking economic scenarios over that time. We forecast multiple economic scenarios that generally include a base scenario with an optimistic (upside) and one or more pessimistic (downside) scenarios, which are weighted by management to estimate future credit losses.
- Long-term average loss expectations estimated by reverting to the long-term average, on a linear basis, for each of the economic variables forecasted during the initial loss forecast period. These long-term averages are based on observations over multiple economic cycles. The reversion period, which may be up to two years, is assessed on a quarterly basis.
- The remaining contractual term of a loan is adjusted for expected prepayments and certain expected extensions, renewals, or modifications. We extend the contractual term when we are not able to unconditionally cancel contractual renewals or extension options. We also incorporate any scenarios where we reasonably expect to provide an extension through a TDR. Credit card loans have indeterminate maturities, which requires that we determine a contractual life by estimating the application of future payments to the outstanding loan amount.
- Utilization of discounted cash flow (DCF) methods to measure credit impairment for loans modified in a troubled debt restructuring, unless they are collateral dependent and measured at the fair value of the collateral. The DCF methods obtain estimated life-time credit losses using the initial and historical mean loss forecast periods described above.
- For AFS debt securities and certain beneficial interests classified as HTM, we utilize DCF methods to measure the ACL, which incorporate expected credit losses using the conceptual components described above. For most HTM debt securities, the ACL is measured using an expected loss model, similar to the methodology used for loans.

The ACL for financial assets held at amortized cost is a valuation account that is deducted from, or added to, the amortized cost basis of the financial assets to present the net amount expected to be collected. When credit expectations change, the valuation account is adjusted with changes reported in provision for credit losses. If amounts previously charged off are subsequently expected to be collected, we may recognize a

negative allowance, which is limited to the amount that was previously charged off. For financial assets with an ACL estimated using DCF methods, changes in the ACL due to the passage of time are recorded in interest income. The ACL for AFS debt securities reflects the amount of unrealized loss related to expected credit losses, limited by the amount that fair value is less than the amortized cost basis (fair value floor) and cannot have an associated negative allowance.

For certain financial assets, such as residential real estate loans guaranteed by the Government National Mortgage Association (GNMA), an agency of the federal government, U. S. Treasury and Agency mortgage backed debt securities, as well as certain sovereign debt securities, the Company has not recognized an ACL as our expectation of nonpayment of the amortized cost basis, based on historical losses, adjusted for current and forecasted conditions, is zero.

A financial asset is collateral-dependent when the borrower is experiencing financial difficulty and repayment is expected to be provided substantially through the sale or operation of the collateral. When a collateral-dependent financial asset is probable of foreclosure, we will measure the ACL based on the fair value of the collateral. If we intend to sell the underlying collateral, we will measure the ACL based on the collateral's net realizable value (fair value of collateral, less estimated costs to sell). In most situations, based on our charge-off policies, we will immediately write-down the financial asset to the fair value of the collateral or net realizable value. For consumer loans, collateral-dependent financial assets may have collateral in the form of residential real estate, autos or other personal assets. For commercial loans, collateral-dependent financial assets may have collateral in the form of commercial real estate or other business assets.

We do not generally record an ACL for accrued interest receivables because uncollectible accrued interest is reversed through interest income in a timely manner in line with our non-accrual and past due policies for loans and debt securities. For consumer credit card and certain consumer lines of credit, we include an ACL for accrued interest and fees since these loans are neither placed on nonaccrual status nor written off until the loan is 180 days past due. Accrued interest receivables are included in other assets, except for certain revolving loans, such as credit card loans.

COMMERCIAL LOAN PORTFOLIO SEGMENT ACL METHODOLOGY

Generally, commercial loans, which include net investments in lease financing, are assessed for estimated losses by grading each loan using various risk factors as identified through periodic reviews. Our estimation approach for the commercial portfolio

Note 1: Summary of Significant Accounting Policies (continued)

reflects the estimated probability of default in accordance with the borrower's financial strength and the severity of loss in the event of default, considering the quality of any underlying collateral. Probability of default, loss severity at the time of default, and exposure at default are statistically derived through historical observations of default and losses after default within each credit risk rating. These estimates are adjusted as appropriate for risks identified from current and forecasted economic conditions and credit quality trends. Unfunded credit commitments are evaluated based on a conversion factor to derive a funded loan equivalent amount. The estimated probability of default and loss severity at the time of default are applied to the funded loan equivalent amount to estimate losses for unfunded credit commitments.

CONSUMER LOAN PORTFOLIO SEGMENT ACL METHODOLOGY For consumer loans, we determine the allowance using a pooled approach based on the individual risk characteristics of the loans within those pools. Quantitative modeling methodologies that estimate probability of default, loss severity at the time of default and exposure at default are typically leveraged to estimate expected loss. These methodologies pool loans, generally by product types with similar risk characteristics, such as residential real estate mortgages, auto loans and credit cards. As appropriate and to achieve greater accuracy, we may further stratify selected portfolios by sub-product, risk pool, loss type, geographic location and other predictive characteristics. We use attributes such as delinquency status, Fair Isaac Corporation (FICO) scores, and loan-to-value ratios (where applicable) in the development of our consumer loan models, in addition to home price trends, unemployment trends, and other economic variables that may influence the frequency and severity of losses in the consumer portfolio.

OTHER QUALITATIVE FACTORS The ACL includes amounts for qualitative factors which may not be adequately reflected in our loss models. These amounts represent management's judgment of risks in the processes and assumptions used in establishing the ACL. Generally, these amounts are established at a granular level below our loan portfolio segments. We also consider economic environmental factors, modeling assumptions and performance, process risk, and other subjective factors, including industry trends and emerging risk assessments.

OFF-BALANCE SHEET CREDIT EXPOSURES Our off-balance sheet credit exposures include unfunded loan commitments (generally in the form of revolving lines of credit), financial guarantees not accounted for as insurance contracts or derivatives, including standby letters of credit, and other similar instruments. For off-balance sheet credit exposures, we recognize an ACL associated with the unfunded amounts. We do not recognize an ACL for commitments that are unconditionally cancelable at our discretion. Additionally, we recognize an ACL for financial guarantees that create off-balance sheet credit exposure, such as loans sold with credit recourse and factoring guarantees. ACL for off-balance sheet credit exposures are reported as a liability in accrued expenses and other liabilities on our consolidated balance sheet.

OTHER FINANCIAL ASSETS Other financial assets are evaluated for expected credit losses. These other financial assets include accounts receivable for fees, receivables from government-sponsored entities, such as Federal National Mortgage Association (FNMA) and Federal Home Loan Mortgage Corporation (FHLMC), and GNMA, and other accounts receivable

from high-credit quality counterparties, such as central clearing counterparties. Many of these financial assets are generally not expected to have an ACL as there is a zero loss expectation (for example, government guarantee) or no historical credit losses. Some financial assets, such as loans to employees, maintain an ACL that is presented on a net basis with the related amortized cost amounts in other assets on our consolidated balance sheet. Given the nature of these financial assets, provision for credit losses is not recognized separately from the regular income or expense associated with these financial assets.

Securities purchased under resale agreements are generally over-collateralized by securities or cash and are generally short-term in nature. We have elected the practical expedient for these financial assets given collateral maintenance provisions. These provisions require that we monitor the collateral value and customers are required to replenish collateral, if needed. Accordingly, we generally do not maintain an ACL for these financial assets.

Purchased Credit Deteriorated Financial Assets

Financial assets acquired that are of poor credit quality and with more than an insignificant evidence of credit deterioration since their origination or issuance are PCD assets. PCD assets include HTM and AFS debt securities and loans. PCD assets are recorded at their purchase price plus an ACL estimated at the time of acquisition. Under this approach, there is no provision for credit losses recognized at acquisition; rather, there is a gross-up of the purchase price of the financial asset for the estimate of expected credit losses and a corresponding ACL recorded. Changes in estimates of expected credit losses after acquisition are recognized as provision for credit losses in subsequent periods. In general, interest income recognition for PCD financial assets is consistent with interest income recognition for the similar non-PCD financial asset.

Leasing Activity

AS LESSOR We lease equipment to our customers under financing or operating leases. Financing leases are presented in loans and are recorded at the discounted amounts of lease payments receivable plus the estimated residual value of the leased asset. Leveraged leases, which are a form of financing leases, are reduced by related non-recourse debt from third-party investors. Lease payments receivable reflect contractual lease payments adjusted for renewal or termination options that we believe the customer is reasonably certain to exercise. The residual value reflects our best estimate of the expected sales price for the equipment at lease termination based on sales history adjusted for recent trends in the expected exit markets. Many of our leases allow the customer to extend the lease at prevailing market terms or purchase the asset for fair value at lease termination.

Our allowance for loan losses for financing leases considers both the collectability of the lease payments receivable as well as the estimated residual value of the leased asset. We typically purchase residual value insurance on our financing leases so that our risk of loss at lease termination will be less than 10% of the initial value of the lease. In addition, we have several channels for re-leasing or marketing those assets.

In connection with a lease, we may finance the customer's purchase of other products or services from the equipment vendor and allocate the contract consideration between the use of the asset and the purchase of those products or services based on information obtained from the vendor. Amounts allocated to financing of vendor products or services are reported in loans as commercial and industrial loans, rather than as lease financing.

Our primary income from financing leases is interest income recognized using the effective interest method. Variable lease revenues, such as reimbursement for property taxes associated with the leased asset, are included in lease income within noninterest income.

Operating lease assets are presented in other assets, net of accumulated depreciation. Periodic depreciation expense is recorded on a straight-line basis to the estimated residual value over the estimated useful life of the leased asset. On a periodic basis, operating lease assets are reviewed for impairment and impairment loss is recognized if the carrying amount of operating lease assets exceeds fair value and is not recoverable. The carrying amount of leased assets is deemed not recoverable if it exceeds the sum of the undiscounted cash flows expected to result from the lease payments and the estimated residual value upon the eventual disposition of the equipment. Depreciation of leased assets and impairment loss are presented in operating leases expense within other noninterest expense.

Operating lease rental income for leased assets is recognized in lease income within noninterest income on a straight-line basis over the lease term. Variable revenues on operating leases include reimbursements of costs, including property taxes, which fluctuate over time, as well as rental revenue based on usage. For leases of railcars, revenue for maintenance services provided under the lease is recognized in lease income.

We elected to exclude from revenues and expenses any sales tax incurred on lease payments which are reimbursed by the lessee. Substantially all of our leased assets are protected against casualty loss through third-party insurance.

AS LESSEE We enter into lease agreements to obtain the right to use assets for our business operations, substantially all of which are real estate. Lease liabilities and right-of-use (ROU) assets are recognized when we enter into operating or financing leases and represent our obligations and rights to use these assets over the period of the leases and may be re-measured for certain modifications, resolution of certain contingencies involving variable consideration, or our exercise of options (renewal, extension, or termination) under the lease.

Operating lease liabilities include fixed and in-substance fixed payments for the contractual duration of the lease, adjusted for renewals or terminations which were considered probable of exercise when measured. The lease payments are discounted using a rate determined when the lease is recognized. As we typically do not know the discount rate implicit in the lease, we estimate a discount rate that we believe approximates a collateralized borrowing rate for the estimated duration of the lease. The discount rate is updated when re-measurement events occur. The related operating lease ROU assets may differ from operating lease liabilities due to initial direct costs, deferred or prepaid lease payments and lease incentives.

We present operating lease liabilities in accrued expenses and other liabilities and the related operating lease ROU assets in other assets. The amortization of operating lease ROU assets and the accretion of operating lease liabilities are reported together as fixed lease expense and are included in net occupancy expense within noninterest expense. The fixed lease expense is recognized on a straight-line basis over the life of the lease.

Some of our operating leases include variable lease payments which are periodic adjustments of our payments for the use of the asset based on changes in factors such as consumer price indices, fair market value rents, tax rates imposed by taxing authorities, or lessor cost of insurance. To the extent not included in operating lease liabilities and operating lease ROU

assets, these variable lease payments are recognized as incurred in net occupancy expense within noninterest expense.

For substantially all of our leased assets, we account for consideration paid under the contract for maintenance or other services as lease payments. In addition, for certain asset classes, we have elected to exclude leases with original terms of less than one year from the operating lease ROU assets and lease liabilities. The related short-term lease expense is included in net occupancy expense.

Finance lease (formerly capital lease) liabilities are presented in long-term debt and the associated finance ROU assets are presented in premises and equipment.

Securitizations and Beneficial Interests

Securitizations are transactions in which financial assets are sold to a Special Purpose Entity (SPE), which then issues beneficial interests in the form of senior and subordinated interests collateralized by the transferred financial assets. In some cases, we may obtain beneficial interests issued by the SPE. Additionally, from time to time, we may re-securitize certain financial assets in a new securitization transaction.

The assets and liabilities transferred to a SPE are excluded from our consolidated balance sheet if the transfer qualifies as a sale and we are not required to consolidate the SPE.

For transfers of financial assets recorded as sales, we recognize and initially measure at fair value all assets obtained (including beneficial interests or mortgage servicing rights) and all liabilities incurred. We record a gain or loss in noninterest income for the difference between assets obtained (net of liabilities incurred) and the carrying amount of the assets sold. Interests obtained from, and liabilities incurred in, securitizations with off-balance sheet entities may include debt and equity securities, loans, MSR, derivative assets and liabilities, other assets, and other obligations such as liabilities for mortgage repurchase losses or long-term debt and are accounted for as described within this Note.

Mortgage Servicing Rights

We recognize MSR resulting from a sale or securitization of loans that we originate (asset transfers) or through a direct purchase of such rights. We initially record all of our MSR at fair value. Subsequently, residential loan MSR are carried at fair value. All of our MSR related to our commercial mortgage loans are subsequently measured at LOCOM. The valuation and sensitivity of MSR is discussed further in Note 8 (Securitizations and Variable Interest Entities), Note 9 (Mortgage Banking Activities) and Note 17 (Fair Values of Assets and Liabilities).

For MSR carried at fair value, changes in fair value are reported in mortgage banking noninterest income in the period in which the change occurs. MSR subsequently measured at LOCOM are amortized in proportion to, and over the period of, estimated net servicing income. The amortization of MSR is reported in mortgage banking noninterest income, analyzed monthly and adjusted to reflect changes in prepayment speeds, as well as other factors.

MSR accounted for at LOCOM are periodically evaluated for impairment based on the fair value of those assets. For purposes of impairment evaluation and measurement, we stratify MSR based on the predominant risk characteristics of the underlying loans, including investor and product type. If, by individual stratum, the carrying amount of these MSR exceeds fair value, a valuation allowance is established. The valuation allowance is adjusted as the fair value changes.

Note 1: Summary of Significant Accounting Policies (continued)

Premises and Equipment

Premises and equipment are carried at cost less accumulated depreciation and amortization. We use the straight-line method of depreciation and amortization. Estimated useful lives range up to 40 years for buildings, up to 10 years for furniture and equipment, and the shorter of the estimated useful life (up to 8 years) or the lease term for leasehold improvements.

Goodwill and Identifiable Intangible Assets

Goodwill is recorded for business combinations when the purchase price is higher than the fair value of the acquired net assets, including identifiable intangible assets.

We assess goodwill for impairment at a reporting unit level on an annual basis or more frequently in certain circumstances. We have determined that our reporting units are at the reportable operating segment level or one level below. We identify the reporting units based on how the segments and reporting units are managed, taking into consideration the economic characteristics, nature of the products and services, and customers of the segments and reporting units. We allocate goodwill to applicable reporting units based on their relative fair value at the time we acquire a business and when we have a significant business reorganization. If we sell a business, a portion of goodwill is included with the carrying amount of the divested business.

We have the option of performing a qualitative assessment of goodwill. We may also elect to bypass the qualitative test and proceed directly to a quantitative test. If we perform a qualitative assessment of goodwill to test for impairment and conclude it is more likely than not that a reporting unit's fair value is greater than its carrying amount, quantitative tests are not required. However, if we determine it is more likely than not that a reporting unit's fair value is less than its carrying amount, we complete a quantitative assessment to determine if there is goodwill impairment. We apply various quantitative valuation methodologies, including discounted cash flow and earnings multiple approaches, to determine the estimated fair value, which is compared with the carrying value of each reporting unit. A goodwill impairment loss is recognized if the fair value is less than the carrying amount, including goodwill. The goodwill impairment loss is limited to the amount of goodwill allocated to the reporting unit. We recognize impairment losses as a charge to other noninterest expense and a reduction to the carrying value of goodwill. Subsequent reversals of goodwill impairment are prohibited.

We amortize customer relationship intangible assets on an accelerated basis over useful lives not exceeding 10 years. We review intangible assets for impairment whenever events or changes in circumstances indicate that their carrying amounts may not be recoverable. Impairment is indicated if the sum of undiscounted estimated future net cash flows is less than the carrying value of the asset. Impairment is permanently recognized by writing down the asset to the extent that the carrying value exceeds the estimated fair value.

Derivatives and Hedging Activities

DERIVATIVES We recognize all derivatives on our consolidated balance sheet at fair value. On the date we enter into a derivative contract, we categorize the derivative as either an accounting hedge, economic hedge or part of our customer accommodation trading and other portfolio.

Accounting hedges are either fair value or cash flow hedges. Fair value hedges represent the hedge of the fair value of a recognized asset or liability or an unrecognized firm commitment, including hedges of foreign currency exposure.

Cash flow hedges represent the hedge of a forecasted transaction or the variability of cash flows to be paid or received related to a recognized asset or liability.

Economic hedges and customer accommodation trading and other derivatives do not qualify for, or we have elected not to apply, hedge accounting. Economic hedges are derivatives we use to manage interest rate, foreign currency and certain other risks associated with our non-trading activities. Customer accommodation trading and other derivatives primarily represents derivatives related to our trading business activities. We report changes in the fair values of these derivatives in noninterest income.

FAIR VALUE HEDGES We record changes in the fair value of the derivative in income, except for certain derivatives in which a portion is recorded to OCI. We record basis adjustments to the amortized cost of the hedged asset or liability due to the changes in fair value related to the hedged risk with the offset recorded in earnings. We present derivative gains or losses in the same income statement category as the hedged asset or liability, as follows:

- For fair value hedges of interest rate risk, amounts are reflected in net interest income;
- For hedges of foreign currency risk, amounts representing the fair value changes less the accrual for periodic cash flow settlements are reflected in noninterest income. The periodic cash flow settlements are reflected in net interest income;
- For hedges of both interest rate risk and foreign currency risk, amounts representing the fair value change less the accrual for periodic cash flow settlements is attributed to both net interest income and noninterest income. The periodic cash flow settlements are reflected in net interest income.

The entire derivative gain or loss is included in the assessment of hedge effectiveness for all fair value hedge relationships, except for hedges of foreign-currency denominated AFS debt securities and long-term debt liabilities hedged with cross-currency swaps. The change in fair value of these swaps attributable to cross-currency basis spread changes is excluded from the assessment of hedge effectiveness. The initial fair value of the excluded component is amortized to net interest income and the difference between changes in fair value of the excluded component and the amount recorded in earnings is recorded in OCI.

CASH FLOW HEDGES We record changes in the fair value of the derivative in OCI. We subsequently reclassify gains and losses from these changes in fair value from OCI to earnings in the same period(s) that the hedged transaction affects earnings and in the same income statement category as the hedged item. For cash flow hedges of interest rate risk associated with floating-rate commercial loans and long-term debt, these amounts are reflected in net interest income. For cash flow hedges of foreign currency risk associated with fixed-rate long-term debt, these amounts are reflected in net interest income. The entire gain or loss on these derivatives is included in the assessment of hedge effectiveness.

DOCUMENTATION AND EFFECTIVENESS ASSESSMENT FOR ACCOUNTING HEDGES For fair value and cash flow hedges qualifying for hedge accounting, we formally document at inception the relationship between hedging instruments and hedged items, our risk management objective, strategy and our

evaluation of effectiveness for our hedge transactions. This process includes linking all derivatives designated as fair value or cash flow hedges to specific assets and liabilities on our consolidated balance sheet or to specific forecasted transactions. We assess hedge effectiveness using regression analysis, both at inception of the hedging relationship and on an ongoing basis. For fair value hedges, the regression analysis involves regressing the periodic change in fair value of the hedging instrument against the periodic changes in fair value of the asset or liability being hedged due to changes in the hedged risk(s). For cash flow hedges, the regression analysis involves regressing the periodic changes in fair value of the hedging instrument against the periodic changes in fair value of a hypothetical derivative. The hypothetical derivative has terms that identically match and offset the cash flows of the forecasted transaction being hedged due to changes in the hedged risk(s). The initial assessment for fair value and cash flow hedges includes an evaluation of the quantitative measures of the regression results used to validate the conclusion of high effectiveness. Periodically, as required, we also formally assess whether the derivative we designated in each hedging relationship is expected to be and has been highly effective in offsetting changes in fair values or cash flows of the hedged item using the regression analysis method.

DISCONTINUING HEDGE ACCOUNTING We discontinue hedge accounting prospectively when (1) a derivative is no longer highly effective in offsetting changes in the fair value or cash flows of a hedged item, (2) a derivative expires or is sold, terminated or exercised, (3) we elect to discontinue the designation of a derivative as a hedge, or (4) in a cash flow hedge, a derivative is de-designated because it is no longer probable that a forecasted transaction will occur.

When we discontinue fair value hedge accounting, we no longer adjust the previously hedged asset or liability for changes in fair value. The remaining cumulative adjustments to the hedged item and accumulated amounts reported in OCI are accounted for in the same manner as other components of the carrying amount of the asset or liability. For example, for financial debt instruments such as AFS debt securities, loans or long-term debt, these amounts are amortized into net interest income over the remaining life of the asset or liability similar to other amortized cost basis adjustments. If the hedged item is derecognized, the accumulated amounts reported in OCI are immediately reclassified to net interest income. If the derivative continues to be held after fair value hedge accounting ceases, we carry the derivative on the consolidated balance sheet at its fair value with changes in fair value included in noninterest income.

When we discontinue cash flow hedge accounting and it is probable that the forecasted transaction will occur, the accumulated amount reported in OCI at the de-designation date continues to be reported in OCI until the forecasted transaction affects earnings at which point the related OCI amount is reclassified to net interest income. If cash flow hedge accounting is discontinued and it is probable the forecasted transaction will no longer occur, the accumulated gains and losses reported in OCI at the de-designation date is immediately reclassified to noninterest income. If the derivative continues to be held after cash flow hedge accounting ceases, we carry the derivative on our consolidated balance sheet at its fair value with changes in fair value included in noninterest income.

EMBEDDED DERIVATIVES We may purchase or originate financial instruments that contain an embedded derivative. At inception of the financial instrument, we assess (1) if the economic characteristics of the embedded derivative are not clearly and

closely related to the economic characteristics of the host contract, (2) if the financial instrument that embodies both the embedded derivative and the host contract is not measured at fair value with changes in fair value reported in earnings, and (3) if a separate instrument with the same terms as the embedded instrument would meet the definition of a derivative. If the embedded derivative meets all of these conditions, we separate it from the hybrid contract by recording the bifurcated derivative at fair value and the remaining host contract at the difference between the basis of the hybrid instrument and the fair value of the bifurcated derivative. The bifurcated derivative is carried at fair value with changes recorded in noninterest income and reported within our consolidated balance sheet as a derivative asset or liability. The accounting for the remaining host contract is the same as other assets and liabilities of a similar type and reported within our consolidated balance sheet based upon the accounting classification of the instrument.

COUNTERPARTY CREDIT RISK AND NETTING By using derivatives, we are exposed to counterparty credit risk, which is the risk that counterparties to the derivative contracts do not perform as expected. If a counterparty fails to perform, our counterparty credit risk is equal to the amount reported as a derivative asset on our consolidated balance sheet. The amounts reported as a derivative asset are derivative contracts in a gain position, and to the extent subject to legally enforceable master netting arrangements, net of derivatives in a loss position with the same counterparty and cash collateral received. We minimize counterparty credit risk through credit approvals, limits, monitoring procedures, executing master netting arrangements and obtaining collateral, where appropriate. Counterparty credit risk related to derivatives is considered in determining fair value and our assessment of hedge effectiveness. To the extent derivatives subject to master netting arrangements meet the applicable requirements, including determining the legal enforceability of the arrangement, it is our policy to present derivative balances and related cash collateral amounts net on our consolidated balance sheet. We incorporate adjustments to reflect counterparty credit risk (credit valuation adjustments (CVA)) in determining the fair value of our derivatives. CVA, which considers the effects of enforceable master netting agreements and collateral arrangements, reflects market-based views of the credit quality of each counterparty. We estimate CVA based on observed credit spreads in the credit default swap market and indices indicative of the credit quality of the counterparties to our derivatives.

Cash collateral exchanged related to our interest rate derivatives, and certain commodity and equity derivatives, with centrally cleared counterparties is recorded as a reduction of the derivative fair value asset and liability balances, as opposed to separate non-derivative receivables or payables. This cash collateral, also referred to as variation margin, is exchanged based upon derivative fair value changes, typically on a one-day lag. For additional information on our derivatives and hedging activities, see Note 16 (Derivatives).

Equity Securities

Equity securities exclude investments that represent a controlling interest in the investee. Marketable equity securities have readily determinable fair values and include, but are not limited to securities used in our trading activities. Marketable equity securities are recorded at fair value with realized and unrealized gains and losses recognized in net gains on trading and securities in noninterest income. Dividend income from marketable equity securities is recognized in interest income.

Note 1: Summary of Significant Accounting Policies (continued)

Nonmarketable equity securities do not have readily determinable fair values. These securities are accounted for under one of the following accounting methods:

- Fair value: This method is an election. The securities are recorded at fair value with unrealized gains or losses reflected in noninterest income;
- Equity method: This method is applied when we have the ability to exert significant influence over the investee. These securities are carried at cost and adjusted for our share of the investee's earnings or losses, less any dividends received and/or impairments;
- Cost method: This method is required for specific securities, such as Federal Reserve Bank stock and Federal Home Loan Bank stock. These investments are held at amortized cost less any impairments. If impaired, the carrying value is written down to the fair value of the security;
- Measurement alternative: This method is followed by all remaining nonmarketable equity securities. These securities are initially carried at amortized cost and are remeasured to fair value as of the date of an orderly observable transaction of the same or similar security of the same issuer. These securities are also adjusted for any impairments.

Equity method adjustments for our share of the investee's earnings or losses are recognized in other noninterest income. All other realized and unrealized gains and losses, including impairment losses, from nonmarketable equity securities are recognized in net gains on trading and securities in noninterest income. Dividends from equity method securities are recognized as a reduction of the investment carrying value. Dividend income from all other nonmarketable equity securities is recognized in interest income.

Our review for impairment for equity method, cost method and measurement alternative securities includes an analysis of the facts and circumstances of each security, the intent or requirement to sell the security, the expectations of cash flows, capital needs and the viability of its business model. For equity method and cost method investments, we reduce the asset's carrying value when we consider declines in value to be other than temporary. For securities accounted for under the measurement alternative, we reduce the asset's carrying value when the fair value is less than carrying value, without the consideration of recovery.

Pension Accounting

We sponsor a frozen noncontributory qualified defined benefit retirement plan, the Wells Fargo & Company Cash Balance Plan (Cash Balance Plan), which covers eligible employees of Wells Fargo. We also sponsor nonqualified defined benefit plans that provide supplemental defined benefit pension benefits to certain eligible employees. We account for our defined benefit pension plans using an actuarial model. Principal assumptions used in determining the net periodic pension cost and the pension obligation include the discount rate, the expected long-term rate of return on plan assets and projected mortality rates.

A discount rate is used to estimate the present value of our future pension benefit obligations. We use a consistent methodology to determine the discount rate using a yield curve with maturity dates that closely match the estimated timing of the expected benefit payments for our plans. The yield curve is derived from a broad-based universe of high-quality corporate bonds as of the measurement date.

Our determination of the reasonableness of our expected long-term rate of return on plan assets is highly quantitative by nature. We evaluate the current asset allocations and expected

returns under two sets of conditions: (1) projected returns using several forward-looking capital market assumptions, and (2) historical returns for the main asset classes dating back to 1970 or the earliest period for which historical data was readily available for the asset classes included. Using long-term historical data allows us to capture multiple economic environments, which we believe is relevant when using historical returns. We place greater emphasis on the forward-looking return and risk assumptions than on historical results. We use the resulting projections to derive a base line expected rate of return and risk level for the Cash Balance Plan's prescribed asset mix. We evaluate the portfolio based on: (1) the established target asset allocations over short term (one-year) and longer term (ten-year) investment horizons, and (2) the range of potential outcomes over these horizons within specific standard deviations. We perform the above analyses to assess the reasonableness of our expected long-term rate of return on plan assets. We consider the expected rate of return to be a long-term average view of expected returns.

Mortality rate assumptions are based on mortality tables published by the Society of Actuaries adjusted to reflect our specific experience.

At year end, we re-measure our defined benefit plan liabilities and related plan assets and recognize any resulting actuarial gain or loss in other comprehensive income. We generally amortize net actuarial gain or loss in excess of a 5% corridor from accumulated OCI into net periodic pension cost over the estimated average remaining participation period, which at December 31, 2020, is 19 years. See Note 21 (Employee Benefits and Other Expenses) for additional information on our pension accounting.

Income Taxes

We file income tax returns in the jurisdictions in which we operate and evaluate income tax expense in two components: current and deferred income tax expense. Current income tax expense represents our estimated taxes to be paid or refunded for the current period and includes income tax expense related to uncertain tax positions. Uncertain tax positions that meet the more likely than not recognition threshold are measured to determine the amount of benefit to recognize. An uncertain tax position is measured at the largest amount of benefit that management believes has a greater than 50% likelihood of realization upon settlement. Tax benefits not meeting our realization criteria represent unrecognized tax benefits.

Deferred income taxes are based on the balance sheet method and deferred income tax expense results from changes in deferred tax assets and liabilities between periods. Under the balance sheet method, the net deferred tax asset or liability is based on the tax effects of the differences between the book and tax basis of assets and liabilities, and enacted changes in tax rates and laws are recognized in the period in which they occur. Deferred tax assets are recognized subject to management's judgment that realization is more likely than not. A valuation allowance reduces deferred tax assets to the realizable amount.

See Note 23 (Income Taxes) to Financial Statements in this Report for a further description of our provision for income taxes and related income tax assets and liabilities.

Stock-Based Compensation

We have stock-based employee compensation plans as more fully discussed in Note 19 (Common Stock and Stock Plans). Our Long-Term Incentive Compensation Plan provides awards for employee services in the form of incentive and nonqualified stock options, stock appreciation rights, restricted shares,

restricted share rights (RSRs), performance share awards (PSAs) and stock awards without restrictions. Stock options have not been issued in the last three years and no stock options were outstanding at December 31, 2020. Stock-based awards are measured at fair value on the grant date. The cost is recognized in personnel expense, net of actual forfeitures, in our consolidated statement of income normally over the vesting period of the award; awards with graded vesting are expensed on a straight-line method. Awards to employees who are retirement eligible at the grant date are subject to immediate expensing upon grant. Awards to employees who become retirement eligible before the final vesting date are expensed between the grant date and the date the employee becomes retirement eligible. Except for retirement and other limited circumstances, RSRs are canceled when employment ends.

Beginning in 2013, certain RSRs and all PSAs granted include discretionary conditions that can result in forfeiture and are measured at fair value initially and subsequently until the discretionary conditions end. For these awards, the associated compensation expense fluctuates with changes in our stock price. For PSAs, compensation expense also fluctuates based on the estimated outcome of meeting the performance conditions. The total expense that will be recognized on these awards is finalized upon the completion of the performance period (the determination of which awards will vest is a combination of performance conditions and discretion).

Earnings Per Common Share

We compute earnings per common share by dividing net income applicable to common stock (net income less dividends on preferred stock and the excess of consideration transferred over carrying value of preferred stock redeemed, if any) by the average number of common shares outstanding during the period. We compute diluted earnings per common share using net income applicable to common stock and adding the effect of common stock equivalents (e.g., restricted share rights) that are dilutive to the average number of common shares outstanding during the period.

Fair Value of Assets and Liabilities

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Fair value is based on an exit price notion that maximizes the use of observable inputs and minimizes the use of unobservable inputs.

We measure our assets and liabilities at fair value when we are required to record them at fair value, when we have elected the fair value option, and to fulfill fair value disclosure requirements. Assets and liabilities are recorded at fair value on a recurring or nonrecurring basis. Assets and liabilities that are recorded at fair value on a recurring basis require a fair value measurement at each reporting period. Those that are recorded at fair value on a nonrecurring basis are adjusted to fair value only as required through the application of an accounting method such as LOCOM, the measurement alternative, or write-downs of individual assets.

We classify our assets and liabilities measured at fair value based upon a three-level hierarchy that assigns the highest priority to unadjusted quoted prices in active markets and the lowest priority to unobservable inputs. The three levels are as follows:

- Level 1 – Valuation is based upon quoted prices for identical instruments traded in active markets.
- Level 2 – Valuation is based upon quoted prices for similar instruments in active markets, quoted prices for identical or similar instruments in markets that are not active, and model-based valuation techniques for which all significant assumptions are observable in the market.
- Level 3 – Valuation is generated from techniques that use significant assumptions that are not observable in the market. These unobservable assumptions reflect our estimates of assumptions that market participants would use in pricing the asset or liability. Valuation techniques include use of discounted cash flow models, market comparable pricing, option pricing models, and similar techniques.

We monitor the availability of observable market data to assess the appropriate classification of financial instruments within the fair value hierarchy and transfers between Level 1, Level 2, and Level 3 accordingly. Observable market data includes but is not limited to quoted prices and market transactions. Changes in economic conditions or market liquidity generally will drive changes in availability of observable market data. Changes in availability of observable market data, which also may result in changing the valuation technique used, are generally the cause of transfers between Level 1, Level 2, and Level 3. The amounts reported as transfers represent the fair value as of the beginning of the quarter in which the transfer occurred.

See Note 17 (Fair Values of Assets and Liabilities) for a more detailed discussion of the valuation methodologies that we apply to our assets and liabilities.

Note 1: Summary of Significant Accounting Policies (continued)

Supplemental Cash Flow Information

Significant noncash activities are presented in Table 1.4.

Table 1.4: Supplemental Cash Flow Information

(in millions)	Year ended December 31,		
	2020	2019	2018
Available-for-sale debt securities purchased from securitization of LHFS (1)	\$ 21,768	—	—
Held-to-maturity debt securities purchased from securitization of LHFS (1)	9,912	289	149
Transfers from loans to LHFS (2)	19,975	6,453	7,984
Transfers from available-for-sale debt securities to held-to-maturity debt securities	31,815	13,833	16,479
Operating lease ROU assets acquired with operating lease liabilities (3)	658	5,804	—

(1) For the year ended December 31, 2020, predominantly represents agency mortgage-backed securities purchased upon settlement of the sale and securitization of our conforming residential mortgage loans. See Note 8 (Securitizations and Variable Interest Entities) for additional information.

(2) Prior periods have been revised to conform to the current period presentation.

(3) Includes amounts attributable to new leases and changes from modified leases. The year ended December 31, 2019, balance also includes \$4.9 billion from adoption of ASU 2016-02 – Leases (Topic 842).

Subsequent Events

We have evaluated the effects of events that have occurred subsequent to December 31, 2020, and, except as disclosed in Note 15 (Legal Actions) and Note 18 (Preferred Stock), there have been no material events that would require recognition in our 2020 consolidated financial statements or disclosure in the Notes to the consolidated financial statements.

Note 2: Trading Activities

Table 2.1 presents a summary of our trading assets and liabilities measured at fair value through earnings.

Table 2.1: Trading Assets and Liabilities

(in millions)	Dec 31, 2020	Dec 31, 2019
Trading assets:		
Debt securities	\$ 75,095	79,733
Equity securities	23,032	27,440
Loans held for sale	1,015	972
Gross trading derivative assets	58,767	34,825
Netting (1)	(34,301)	(21,463)
Total trading derivative assets	24,466	13,362
Total trading assets	123,608	121,507
Trading liabilities:		
Short sale	22,441	17,430
Gross trading derivative liabilities	53,285	33,861
Netting (1)	(39,444)	(26,074)
Total trading derivative liabilities	13,841	7,787
Total trading liabilities	\$ 36,282	25,217

(1) Represents balance sheet netting for trading derivative asset and liability balances, and trading portfolio level counterparty valuation adjustments.

Table 2.2 provides a summary of the net interest income earned from trading securities, and net gains and losses due to the realized and unrealized gains and losses from trading activities.

Net interest income also includes dividend income on trading securities and dividend expense on trading securities we have sold, but not yet purchased.

Table 2.2: Net Interest Income and Net Gains (Losses) on Trading Activities

(in millions)	Year ended December 31,		
	2020	2019	2018
Interest income:			
Debt securities	\$ 2,530	3,130	2,831
Equity securities	366	579	587
Loans held for sale	30	78	62
Total interest income	2,926	3,787	3,480
Less: Interest expense	442	525	587
Net interest income	2,484	3,262	2,893
Net gains (losses) from trading activities (1):			
Debt securities	2,697	1,053	(824)
Equity securities	(630)	4,795	(4,240)
Loans held for sale	28	12	(1)
Derivatives (2)	(923)	(4,867)	5,667
Total net gains from trading activities	1,172	993	602
Total trading-related net interest and noninterest income	\$ 3,656	4,255	3,495

(1) Represents realized gains (losses) from our trading activities and unrealized gains (losses) due to changes in fair value of our trading positions.

(2) Excludes economic hedging of mortgage banking and asset/liability management activities, for which hedge results (realized and unrealized) are reported with the respective hedged activities.

Note 3: Available-for-Sale and Held-to-Maturity Debt Securities

Table 3.1 provides the amortized cost, net of the ACL for debt securities, and fair value by major categories of AFS debt securities, which are carried at fair value, and HTM debt securities, which are carried at amortized cost, net of the ACL. The net unrealized gains (losses) for AFS debt securities are reported as a component of cumulative OCI, net of the ACL and applicable income taxes. Information on debt securities held for trading is included in Note 2 (Trading Activities).

Outstanding balances exclude accrued interest receivable on AFS and HTM debt securities which are included in other assets. During 2020, we reversed accrued interest receivable on our AFS and HTM debt securities by reversing interest income. The interest income reversed was insignificant. See Note 7 (Premises, Equipment and Other Assets) for additional information on accrued interest receivable.

Table 3.1: Available-for-Sale and Held-to-Maturity Debt Securities Outstanding

(in millions)	Amortized cost net (1)	Gross unrealized gains	Gross unrealized losses	Fair value
December 31, 2020				
Available-for-sale debt securities:				
Securities of U.S. Treasury and federal agencies	\$ 21,954	205	—	22,159
Non-U.S. government securities	16,816	—	(3)	16,813
Securities of U.S. states and political subdivisions (2)	19,263	224	(81)	19,406
Federal agency mortgage-backed securities	134,838	4,260	(28)	139,070
Non-agency mortgage-backed securities (3)	3,745	30	(46)	3,729
Collateralized loan obligations	9,058	4	(44)	9,018
Other debt securities	9,859	399	(61)	10,197
Total available-for-sale debt securities	215,533	5,122	(263)	220,392
Held-to-maturity debt securities:				
Securities of U.S. Treasury and federal agencies	47,295	1,472	(170)	48,597
Securities of U.S. states and political subdivisions	25,860	938	(5)	26,793
Federal agency mortgage-backed securities	115,437	4,182	(21)	119,598
Non-agency mortgage-backed securities	890	51	(8)	933
Collateralized loan obligations	16,238	148	—	16,386
Total held-to-maturity debt securities	205,720	6,791	(204)	212,307
Total (4)	\$ 421,253	11,913	(467)	432,699
December 31, 2019				
Available-for-sale debt securities:				
Securities of U.S. Treasury and federal agencies	\$ 14,948	13	(1)	14,960
Non-U.S. government securities	—	—	—	—
Securities of U.S. states and political subdivisions (2)	39,381	992	(36)	40,337
Federal agency mortgage-backed securities	160,318	2,299	(164)	162,453
Non-agency mortgage-backed securities (3)	4,713	55	(7)	4,761
Collateralized loan obligations	29,153	25	(123)	29,055
Other debt securities	11,547	402	(56)	11,893
Total available-for-sale debt securities	260,060	3,786	(387)	263,459
Held-to-maturity debt securities:				
Securities of U.S. Treasury and federal agencies	45,541	617	(19)	46,139
Securities of U.S. states and political subdivisions	13,486	286	(13)	13,759
Federal agency mortgage-backed securities	94,078	2,083	(25)	96,136
Non-agency mortgage-backed securities	791	10	(12)	789
Collateralized loan obligations	37	—	—	37
Total held-to-maturity debt securities	153,933	2,996	(69)	156,860
Total (4)	\$ 413,993	6,782	(456)	420,319

- Represents amortized cost of the securities, net of the ACL of \$28 million related to AFS debt securities and \$41 million related to HTM debt securities at December 31, 2020. Prior to our adoption of CECL on January 1, 2020, the allowance for credit losses related to AFS and HTM debt securities was not applicable and is therefore presented as \$0 at December 31, 2019. For additional information, see Note 1 (Summary of Significant Accounting Policies).
- Includes investments in tax-exempt preferred debt securities issued by investment funds or trusts that predominantly invest in tax-exempt municipal securities. The amortized cost net of allowance for credit losses and fair value of these types of securities was \$5.0 billion at December 31, 2020, and \$5.8 billion at December 31, 2019.
- Predominantly consists of commercial mortgage-backed securities at both December 31, 2020 and 2019.
- We held AFS and HTM debt securities from Federal National Mortgage Association (FNMA) and Federal Home Loan Mortgage Corporation (FHLMC) that each exceeded 10% of stockholders' equity, with an amortized cost of \$99.8 billion and \$88.7 billion and a fair value of \$103.2 billion and \$91.5 billion at December 31, 2020, and an amortized cost of \$98.5 billion and \$84.1 billion and a fair value of \$100.3 billion and \$85.5 billion at December 31, 2019, respectively.

Table 3.2 details the breakout of purchases of and transfers to HTM debt securities by major category of security.

Table 3.2: Held-to-Maturity Debt Securities Purchases and Transfers

(in millions)	Year ended December 31,		
	2020	2019	2018
Purchases of held-to-maturity debt securities (1):			
Securities of U.S. Treasury and federal agencies	\$ 3,016	757	—
Securities of U.S. states and political subdivisions	1,906	1,583	—
Federal agency mortgage-backed securities	51,320	6,610	—
Non-agency mortgage-backed securities	126	288	149
Collateralized loan obligations	688	—	—
Total purchases of held-to-maturity debt securities	57,056	9,238	149
Transfers from available-for-sale debt securities to held-to-maturity debt securities:			
Securities of U.S. states and political subdivisions	10,721	5,912	—
Federal agency mortgage-backed securities	5,522	7,921	16,479
Collateralized loan obligations	15,572	—	—
Total transfers from available-for-sale debt securities to held-to-maturity debt securities	\$ 31,815	13,833	16,479

(1) Inclusive of securities purchased but not yet settled and noncash purchases from securitization of LHFS.

Table 3.3 shows the composition of interest income, provision for credit losses, and gross realized gains and losses from sales and impairment write-downs included in earnings related to AFS and HTM debt securities (pre-tax).

Table 3.3: Income Statement Impacts for Available-for-Sale and Held-to-Maturity Debt Securities

(in millions)	Year ended December 31,		
	2020	2019	2018
Interest income (1):			
Available-for-sale	\$ 4,992	8,092	8,146
Held-to-maturity	3,712	3,733	3,429
Total interest income	8,704	11,825	11,575
Provision for credit losses (2):			
Available-for-sale	89	—	—
Held-to-maturity	35	—	—
Total provision for credit losses	124	—	—
Realized gains and losses (3):			
Gross realized gains	931	227	155
Gross realized losses	(43)	(24)	(19)
Impairment write-downs included in earnings:			
Credit-related (4)	—	(27)	(27)
Intent-to-sell	(15)	(36)	(1)
Total impairment write-downs included in earnings	(15)	(63)	(28)
Net realized gains	\$ 873	140	108

(1) Excludes interest income from trading debt securities, which is disclosed in Note 2 (Trading Activities).

(2) Prior to our adoption of CECL on January 1, 2020, the provision for credit losses from debt securities was not applicable and is therefore presented as \$0 for prior periods. For additional information, see Note 1 (Summary of Significant Accounting Policies).

(3) Realized gains and losses relate to AFS debt securities. There were no realized gains or losses from HTM debt securities in all periods presented.

(4) For the year ended December 31, 2020, credit-related impairment recognized in earnings is classified as provision for credit losses due to our adoption of CECL on January 1, 2020. For additional information, see Note 1 (Summary of Significant Accounting Policies).

Credit Quality

We monitor credit quality of debt securities by evaluating various attributes and utilize such information in our evaluation of the appropriateness of the ACL for debt securities. The credit quality indicators that we most closely monitor include credit ratings and delinquency status and are based on information as of our financial statement date.

CREDIT RATINGS Credit ratings express opinions about the credit quality of a debt security. We determine the credit rating of a security according to the lowest credit rating made available by

national recognized statistical rating organizations (NRSROs). Debt securities rated investment grade, that is those with ratings similar to BBB-/Baa3 or above, as defined by NRSROs, are generally considered by the rating agencies and market participants to be low credit risk. Conversely, debt securities rated below investment grade, labeled as “speculative grade” by the rating agencies, are considered to be distinctively higher credit risk than investment grade debt securities. For debt securities not rated by NRSROs, we determine an internal credit grade of the debt securities (used for credit risk management purposes) equivalent to the credit ratings assigned by major

Note 3: Available-for-Sale and Held-to-Maturity Debt Securities (continued)

credit agencies. Substantially all of our debt securities were rated by NRSROs at December 31, 2020, and December 31, 2019.

Table 3.4 shows the percentage of fair value of AFS debt securities and amortized cost of HTM debt securities determined

to be rated investment grade, inclusive of securities rated based on internal credit grades.

Table 3.4: Investment Grade Debt Securities

(\$ in millions)	Available-for-Sale		Held-to-Maturity	
	Fair value	% investment grade	Amortized cost	% investment grade
December 31, 2020				
Total portfolio (1)	\$ 220,392	99%	205,761	99%
Breakdown by category:				
Securities of U.S. Treasury and federal agencies (2)	\$ 161,229	100%	162,732	100%
Securities of U.S. states and political subdivisions	19,406	99	25,870	100
Collateralized loan obligations (3)	9,018	100	16,255	100
All other debt securities (4)	30,739	93	904	6
December 31, 2019				
Total portfolio (1)	\$ 263,459	99%	153,933	99%
Breakdown by category:				
Securities of U.S. Treasury and federal agencies (2)	\$ 177,413	100%	139,619	100%
Securities of U.S. states and political subdivisions	40,337	99	13,486	100
Collateralized loan obligations (3)	29,055	100	37	100
All other debt securities (4)	16,654	82	791	4

(1) 92% and 95% were rated AA- and above at December 31, 2020 and 2019, respectively.

(2) Includes federal agency mortgage-backed securities.

(3) 98% were rated AA- and above at both December 31, 2020 and 2019.

(4) Includes non-U.S. government, non-agency mortgage-backed, and all other debt securities.

DELINQUENCY STATUS AND NONACCRUAL DEBT SECURITIES

Debt security issuers that are delinquent in payment of amounts due under contractual debt agreements have a higher probability of recognition of credit losses. As such, as part of our monitoring of the credit quality of the debt security portfolio, we consider whether debt securities we own are past due in payment of principal or interest payments and whether any securities have been placed into nonaccrual status.

Debt securities that are past due and still accruing were insignificant at both December 31, 2020 and 2019. The carrying value of debt securities in nonaccrual status was insignificant at both December 31, 2020 and 2019. Charge-offs on debt securities were insignificant for the year ended December 31, 2020. Purchased debt securities with credit deterioration (PCD) are not considered to be in nonaccrual status, as payments from issuers of these securities remain current. PCD securities were insignificant during the year ended December 31, 2020.

Unrealized Losses of Available-for-Sale Debt Securities

Table 3.5 shows the gross unrealized losses and fair value of AFS debt securities by length of time those individual securities in each category have been in a continuous loss position. Debt securities on which we have recorded credit impairment are categorized as being “less than 12 months” or “12 months or

more” in a continuous loss position based on the point in time that the fair value declined to below the (1) for the current period presented, amortized cost basis net of allowance for credit losses, or the (2) for the prior period presented, amortized cost basis.

Table 3.5: Gross Unrealized Losses and Fair Value – Available-for-Sale Debt Securities

(in millions)	Less than 12 months		12 months or more		Total	
	Gross unrealized losses	Fair value	Gross unrealized losses	Fair value	Gross unrealized losses	Fair value
December 31, 2020						
Available-for-sale debt securities:						
Securities of U.S. Treasury and federal agencies	\$ —	—	—	—	—	—
Non-U.S. government securities	(3)	16,812	—	—	(3)	16,812
Securities of U.S. states and political subdivisions	(51)	3,681	(30)	1,101	(81)	4,782
Federal agency mortgage-backed securities	(27)	11,310	(1)	316	(28)	11,626
Non-agency mortgage-backed securities	(28)	1,366	(18)	534	(46)	1,900
Collateralized loan obligations	(27)	5,082	(17)	1,798	(44)	6,880
Other debt securities	(16)	647	(45)	1,604	(61)	2,251
Total available-for-sale debt securities	\$ (152)	38,898	(111)	5,353	(263)	44,251
December 31, 2019						
Available-for-sale debt securities:						
Securities of U.S. Treasury and federal agencies	\$ —	—	(1)	2,423	(1)	2,423
Non-U.S. government securities	—	—	—	—	—	—
Securities of U.S. states and political subdivisions	(10)	2,776	(26)	2,418	(36)	5,194
Federal agency mortgage-backed securities	(50)	16,807	(114)	10,641	(164)	27,448
Non-agency mortgage-backed securities	(4)	1,147	(3)	244	(7)	1,391
Collateralized loan obligations	(13)	5,001	(110)	16,789	(123)	21,790
Other debt securities	(21)	1,959	(35)	708	(56)	2,667
Total available-for-sale debt securities	\$ (98)	27,690	(289)	33,223	(387)	60,913

We have assessed each debt security with gross unrealized losses included in the previous table for credit impairment. As part of that assessment we evaluated and concluded that we do not intend to sell any of the debt securities, and that it is more likely than not that we will not be required to sell, prior to recovery of the amortized cost basis. We evaluate, where necessary, whether credit impairment exists by comparing the present value of the expected cash flows to the debt securities' amortized cost basis. In prior periods, credit impairment was recorded as a write-down to the amortized cost basis of the security. In the current period, credit impairment is recorded as an ACL for debt securities.

For descriptions of the factors we consider when analyzing debt securities for impairment as well as methodology and significant inputs used to measure credit losses, see Note 1 (Summary of Significant Accounting Policies).

Note 3: Available-for-Sale and Held-to-Maturity Debt Securities (continued)

Contractual Maturities

Table 3.6 and Table 3.7 show the remaining contractual maturities, amortized cost net of the ACL, fair value and weighted average effective yields of AFS and HTM debt securities, respectively. The remaining contractual principal

maturities for MBS do not consider prepayments. Remaining expected maturities will differ from contractual maturities because borrowers may have the right to prepay obligations before the underlying mortgages mature.

Table 3.6: Contractual Maturities – Available-for-Sale Debt Securities

By remaining contractual maturity (\$ in millions)	Total	Within one year	After one year through five years	After five years through ten years	After ten years
December 31, 2020					
Available-for-sale debt securities (1):					
Securities of U.S. Treasury and federal agencies					
Amortized cost, net	\$ 21,954	1,512	14,272	4,037	2,133
Fair value	22,159	1,512	14,306	4,042	2,299
Weighted average yield	0.47%	0.11	0.33	0.61	1.44
Non-U.S. government securities					
Amortized cost, net	\$ 16,816	16,816	—	—	—
Fair value	16,813	16,813	—	—	—
Weighted average yield	(0.14%)	(0.14)	—	—	—
Securities of U.S. states and political subdivisions					
Amortized cost, net	\$ 19,263	1,501	2,373	4,594	10,795
Fair value	19,406	1,494	2,420	4,630	10,862
Weighted average yield	2.09%	1.49	1.64	1.23	2.65
Federal agency mortgage-backed securities					
Amortized cost, net	\$ 134,838	8	239	3,312	131,279
Fair value	139,070	8	247	3,413	135,402
Weighted average yield	2.74%	2.36	2.07	2.12	2.76
Non-agency mortgage-backed securities					
Amortized cost, net	\$ 3,745	—	—	266	3,479
Fair value	3,729	—	—	266	3,463
Weighted average yield	2.17 %	—	—	1.90	2.19
Collateralized loan obligations					
Amortized cost, net	\$ 9,058	—	195	7,023	1,840
Fair value	9,018	—	194	6,996	1,828
Weighted average yield	1.75%	—	2.44	1.80	1.51
Other debt securities					
Amortized cost, net	\$ 9,859	381	2,762	3,202	3,514
Fair value	10,197	380	2,907	3,263	3,647
Weighted average yield	3.29%	3.89	4.46	3.22	2.37
Total available-for-sale debt securities					
Amortized cost, net	\$ 215,533	20,218	19,841	22,434	153,040
Fair value	\$ 220,392	20,207	20,074	22,610	157,501
Weighted average yield	2.21%	0.19	1.10	1.72	2.69

(1) Weighted average yields displayed by maturity bucket are weighted based on amortized cost without effect for any related hedging derivatives and are shown pre-tax.

Table 3.7: Contractual Maturities – Held-to-Maturity Debt Securities

By remaining contractual maturity (\$ in millions)	Total	Within one year	After one year through five years	After five years through ten years	After ten years
December 31, 2020					
Held-to-maturity debt securities (1):					
Securities of U.S. Treasury and federal agencies					
Amortized cost, net	\$ 47,295	30,759	12,755	—	3,781
Fair value	48,597	31,063	13,735	—	3,799
Weighted average yield	2.14%	2.13	2.34	—	1.57
Securities of U.S. states and political subdivisions					
Amortized cost, net	\$ 25,860	478	2,083	2,124	21,175
Fair value	26,793	481	2,154	2,228	21,930
Weighted average yield	2.16%	1.84	1.78	2.72	2.15
Federal agency mortgage-backed securities					
Amortized cost, net	\$ 115,437	—	—	700	114,737
Fair value	119,598	—	—	751	118,847
Weighted average yield	2.51%	—	—	1.41	2.52
Non-agency mortgage-backed securities					
Amortized cost, net	\$ 890	—	15	—	875
Fair value	933	—	14	—	919
Weighted average yield	3.16%	—	1.48	—	3.19
Collateralized loan obligations					
Amortized cost, net	\$ 16,238	—	29	8,441	7,768
Fair value	16,386	—	29	8,492	7,865
Weighted average yield	1.75%	—	2.31	1.72	1.78
Total held-to-maturity debt securities					
Amortized cost, net	\$ 205,720	31,237	14,882	11,265	148,336
Fair value	212,307	31,544	15,932	11,471	153,360
Weighted average yield	2.33%	2.13	2.26	1.89	2.41

(1) Weighted average yields displayed by maturity bucket are weighted based on amortized cost and are shown pre-tax.

Note 4: Loans and Related Allowance for Credit Losses

Table 4.1 presents total loans outstanding by portfolio segment and class of financing receivable. Outstanding balances include unearned income, net deferred loan fees or costs, and unamortized discounts and premiums. These amounts were less than 1% of our total loans outstanding at December 31, 2020, and December 31, 2019.

Outstanding balances exclude accrued interest receivable on loans, except for certain revolving loans, such as credit card loans.

During 2020, we reversed accrued interest receivable of \$43 million for our commercial portfolio segment and \$195 million for our consumer portfolio segment. See Note 7 (Premises, Equipment and Other Assets) for additional information on accrued interest receivable.

Table 4.1: Loans Outstanding

(in millions)	December 31,				
	2020	2019	2018	2017	2016
Commercial:					
Commercial and industrial	\$ 318,805	354,125	350,199	333,125	330,840
Real estate mortgage	121,720	121,824	121,014	126,599	132,491
Real estate construction	21,805	19,939	22,496	24,279	23,916
Lease financing	16,087	19,831	19,696	19,385	19,289
Total commercial	478,417	515,719	513,405	503,388	506,536
Consumer:					
Residential mortgage – first lien	276,674	293,847	285,065	284,054	275,579
Residential mortgage – junior lien	23,286	29,509	34,398	39,713	46,237
Credit card	36,664	41,013	39,025	37,976	36,700
Auto	48,187	47,873	45,069	53,371	62,286
Other consumer	24,409	34,304	36,148	38,268	40,266
Total consumer	409,220	446,546	439,705	453,382	461,068
Total loans	\$ 887,637	962,265	953,110	956,770	967,604

Our non-U.S. loans are reported by respective class of financing receivable in the table above. Substantially all of our non-U.S. loan portfolio is commercial loans. Table 4.2 presents total non-U.S. commercial loans outstanding by class of financing receivable.

Table 4.2: Non-U.S. Commercial Loans Outstanding

(in millions)	December 31,				
	2020	2019	2018	2017	2016
Non-U.S. commercial loans:					
Commercial and industrial	\$ 63,128	70,494	62,564	60,106	55,396
Real estate mortgage	7,278	7,004	6,731	8,033	8,541
Real estate construction	1,603	1,434	1,011	655	375
Lease financing	629	1,220	1,159	1,126	972
Total non-U.S. commercial loans	\$ 72,638	80,152	71,465	69,920	65,284

Loan Concentrations

Loan concentrations may exist when there are amounts loaned to borrowers engaged in similar activities or similar types of loans extended to a diverse group of borrowers that would cause them to be similarly impacted by economic or other conditions. Commercial and industrial loans and lease financing to borrowers in the financial institutions except banks industry represented 13% and 12% of total loans at December 31, 2020 and 2019, respectively. At December 31, 2020 and 2019, we did not have concentrations representing 10% or more of our total loan portfolio in the commercial real estate (CRE) portfolios (real estate mortgage and real estate construction) by state or property type. Residential mortgage loans to borrowers in the state of California represented 12% and 13% of total loans at December 31, 2020 and 2019, respectively. These California loans are generally diversified among the larger metropolitan areas in California, with no single area consisting of more than 4% of total loans. We continuously monitor changes in real estate values and underlying economic or market conditions for all geographic areas of our residential mortgage portfolio as part of our credit risk management process.

Some of our residential mortgage loans include an interest-only feature as part of the loan terms. These interest-only loans were approximately 3% of total loans at both December 31, 2020 and 2019. Substantially all of these interest-only loans at origination were considered to be prime or near prime. We do not offer option adjustable-rate mortgage (ARM) products, nor do we offer variable-rate mortgage products with fixed payment amounts, commonly referred to within the financial services industry as negative amortizing mortgage loans.

Our first and junior lien lines of credit products generally have draw periods of 10, 15 or 20 years, with variable interest rate and payment options during the draw period of (1) interest only or (2) 1.5% of total outstanding balance plus accrued interest. During the draw period, the borrower has the option of converting all or a portion of the line from a variable interest rate to a fixed rate with terms including interest-only payments for a fixed period between three to seven years or a fully amortizing payment with a fixed period between five to 30 years. At the end

of the draw period, a line of credit generally converts to an amortizing payment schedule with repayment terms of up to 30 years based on the balance at time of conversion. At December 31, 2020, our lines of credit portfolio had an outstanding balance of \$30.7 billion, of which \$7.3 billion, or 24%, is in its amortization period, another \$4.8 billion, or 16%, of our total outstanding balance, will reach their end of draw period during 2021 through 2022, \$8.6 billion, or 28%, during 2023 through 2025, and \$10.0 billion, or 32%, will convert in subsequent years. This portfolio had unfunded credit commitments of \$53.6 billion at December 31, 2020. The lines that enter their amortization period may experience higher delinquencies and higher loss rates than the lines in their draw period. At December 31, 2020, \$378 million, or 5%, of outstanding lines of credit that are in their amortization period were 30 or more days past due, compared with \$381 million, or 2%, for lines in their draw period. We have considered this increased inherent risk in our ACL estimate. In anticipation of our borrowers reaching the end of their contractual commitment, we have created a program to inform, educate and help these borrowers transition from interest-only to fully-amortizing payments or full repayment. We monitor the performance of the borrowers moving through the program in an effort to refine our ongoing program strategy.

Loan Purchases, Sales, and Transfers

Table 4.3 presents the proceeds paid or received for purchases and sales of loans and transfers from loans held for investment to mortgages/loans held for sale. The table excludes loans for which we have elected the fair value option and government insured/guaranteed residential mortgage – first lien loans because their loan activity normally does not impact the ACL. In 2020, we sold \$1.2 billion of residential mortgage – first lien loans for a gain of \$751 million, which is included in other noninterest income on our consolidated statement of income. These whole loans were designated as residential LHFS in 2019. In connection with the announced sale of our student loan portfolio, we transferred \$9.8 billion of student loans to LHFS in fourth quarter 2020.

Table 4.3: Loan Purchases, Sales, and Transfers

(in millions)	Year ended December 31,					
	2020			2019		
	Commercial	Consumer	Total	Commercial	Consumer	Total
Purchases	\$ 1,310	6	1,316	2,028	3,126	5,154
Sales	(4,141)	(114)	(4,255)	(1,797)	(530)	(2,327)
Transfers to LHFS	(1,294)	(11,198)	(12,492)	(123)	(1,889)	(2,012)

Note 4: Loans and Related Allowance for Credit Losses (continued)

Commitments to Lend

A commitment to lend is a legally binding agreement to lend to a customer, usually at a stated interest rate, if funded, and for specific purposes and time periods. We generally require a fee to extend such commitments. Certain commitments are subject to loan agreements with covenants regarding the financial performance of the customer or borrowing base formulas on an ongoing basis that must be met before we are required to fund the commitment. We may reduce or cancel consumer commitments, including home equity lines and credit card lines, in accordance with the contracts and applicable law. For unconditionally cancelable commitments at our discretion, we do not recognize an ACL.

We may, as a representative for other lenders, advance funds or provide for the issuance of letters of credit under syndicated loan or letter of credit agreements. Any advances are generally repaid in less than a week and would normally require default of both the customer and another lender to expose us to loss. The unfunded amount of these temporary advance arrangements totaled approximately \$79.2 billion at December 31, 2020.

We issue commercial letters of credit to assist customers in purchasing goods or services, typically for international trade. At December 31, 2020 and 2019, we had \$1.3 billion and \$862 million, respectively, of outstanding issued commercial letters of credit. We also originate multipurpose lending commitments under which borrowers have the option to draw on the facility for different purposes in one of several forms, including a standby letter of credit. See Note 13 (Guarantees and Other Commitments) for additional information on standby letters of credit.

When we enter into commitments, we are exposed to credit risk. The maximum credit risk for these commitments will generally be lower than the contractual amount because a significant portion of these commitments are not funded. We manage the potential risk in commitments to lend by limiting the total amount of commitments, both by individual customer and in total, by monitoring the size and maturity structure of these commitments and by applying the same credit standards for these commitments as for all of our credit activities.

For loans and commitments to lend, we generally require collateral or a guarantee. We may require various types of collateral, including commercial and consumer real estate, autos, other short-term liquid assets such as accounts receivable or inventory and long-lived assets, such as equipment and other business assets. Collateral requirements for each loan or commitment may vary based on the loan product and our assessment of a customer's credit risk according to the specific credit underwriting, including credit terms and structure.

The contractual amount of our unfunded credit commitments, including unissued standby and commercial letters of credit, is summarized by portfolio segment and class of financing receivable in Table 4.4. The table excludes the issued standby and commercial letters of credit and temporary advance arrangements described above.

Table 4.4: Unfunded Credit Commitments

(in millions)	Dec 31, 2020	Dec 31, 2019
Commercial:		
Commercial and industrial	\$ 378,167	346,991
Real estate mortgage	7,993	8,206
Real estate construction	15,650	17,729
Total commercial	401,810	372,926
Consumer:		
Residential mortgage – first lien	31,530	34,391
Residential mortgage – junior lien	32,820	36,916
Credit card	121,096	114,933
Other consumer	49,179	25,898
Total consumer	234,625	212,138
Total unfunded credit commitments	\$ 636,435	585,064

Allowance for Credit Losses

Table 4.5 presents the allowance for credit losses (ACL) for loans, which consists of the allowance for loan losses and the allowance for unfunded credit commitments. On January 1, 2020, we adopted CECL. Additional information regarding our adoption of CECL is included in Note 1 (Summary of Significant Accounting

Policies). The ACL for loans increased \$9.3 billion from December 31, 2019, driven by a \$10.6 billion increase in the ACL for loans during 2020 reflecting current and forecasted economic conditions due to the COVID-19 pandemic, partially offset by a \$1.3 billion decrease as a result of adopting CECL.

Table 4.5: Allowance for Credit Losses for Loans

(\$ in millions)	Year ended December 31,				
	2020	2019	2018	2017	2016
Balance, beginning of year	\$ 10,456	10,707	11,960	12,540	12,512
Cumulative effect from change in accounting policies (1)	(1,337)	—	—	—	—
Allowance for purchased credit-deteriorated (PCD) loans (2)	8	—	—	—	—
Balance, beginning of year, adjusted	9,127	10,707	11,960	12,540	12,512
Provision for credit losses	14,005	2,687	1,744	2,528	3,770
Interest income on certain impaired loans (3)	(153)	(147)	(166)	(186)	(205)
Loan charge-offs:					
Commercial:					
Commercial and industrial	(1,440)	(802)	(727)	(789)	(1,419)
Real estate mortgage	(302)	(38)	(42)	(38)	(27)
Real estate construction	—	(1)	—	—	(1)
Lease financing	(107)	(70)	(70)	(45)	(41)
Total commercial	(1,849)	(911)	(839)	(872)	(1,488)
Consumer:					
Residential mortgage – first lien	(90)	(129)	(179)	(240)	(452)
Residential mortgage – junior lien	(88)	(118)	(179)	(279)	(495)
Credit card	(1,504)	(1,714)	(1,599)	(1,481)	(1,259)
Auto	(536)	(647)	(947)	(1,002)	(845)
Other consumer	(458)	(674)	(685)	(713)	(708)
Total consumer	(2,676)	(3,282)	(3,589)	(3,715)	(3,759)
Total loan charge-offs	(4,525)	(4,193)	(4,428)	(4,587)	(5,247)
Loan recoveries:					
Commercial:					
Commercial and industrial	201	195	304	297	263
Real estate mortgage	19	32	70	82	116
Real estate construction	19	13	13	30	38
Lease financing	20	19	23	17	11
Total commercial	259	259	410	426	428
Consumer:					
Residential mortgage – first lien	95	179	267	288	373
Residential mortgage – junior lien	143	184	219	266	266
Credit card	365	344	307	239	207
Auto	266	341	363	319	325
Other consumer	108	124	118	121	128
Total consumer	977	1,172	1,274	1,233	1,299
Total loan recoveries	1,236	1,431	1,684	1,659	1,727
Net loan charge-offs	(3,289)	(2,762)	(2,744)	(2,928)	(3,520)
Other	23	(29)	(87)	6	(17)
Balance, end of year	\$ 19,713	10,456	10,707	11,960	12,540
Components:					
Allowance for loan losses	\$ 18,516	9,551	9,775	11,004	11,419
Allowance for unfunded credit commitments	1,197	905	932	956	1,121
Allowance for credit losses	\$ 19,713	10,456	10,707	11,960	12,540
Net loan charge-offs as a percentage of average total loans	0.35 %	0.29	0.29	0.31	0.37
Allowance for loan losses as a percentage of total loans	2.09	0.99	1.03	1.15	1.18
Allowance for credit losses for loans as a percentage of total loans	2.22	1.09	1.12	1.25	1.30

(1) Represents the overall decrease in our allowance for credit losses for loans as a result of our adoption of CECL on January 1, 2020.

(2) Represents the allowance estimated for PCI loans that automatically became PCD loans with the adoption of CECL. For additional information, see Note 1 (Summary of Significant Accounting Policies).

(3) Loans with an allowance measured by discounting expected cash flows using the loan's effective interest rate over the remaining life of the loan recognize changes in allowance attributable to the passage of time as interest income.

Note 4: Loans and Related Allowance for Credit Losses (continued)

Table 4.6 summarizes the activity in the ACL by our commercial and consumer portfolio segments.

Table 4.6: Allowance for Credit Losses for Loans Activity by Portfolio Segment

(in millions)	Year ended December 31,					
	2020			2019		
	Commercial	Consumer	Total	Commercial	Consumer	Total
Balance, beginning of year	\$ 6,245	4,211	10,456	6,417	4,290	10,707
Cumulative effect from change in accounting policies (1)	(2,861)	1,524	(1,337)	—	—	—
Allowance for purchased credit-deteriorated (PCD) loans (2)	—	8	8	—	—	—
Balance, beginning of year, adjusted	3,384	5,743	9,127	6,417	4,290	10,707
Provision for credit losses	9,770	4,235	14,005	518	2,169	2,687
Interest income on certain impaired loans (3)	(61)	(92)	(153)	(46)	(101)	(147)
Loan charge-offs	(1,849)	(2,676)	(4,525)	(911)	(3,282)	(4,193)
Loan recoveries	259	977	1,236	259	1,172	1,431
Net loan charge-offs	(1,590)	(1,699)	(3,289)	(652)	(2,110)	(2,762)
Other	13	10	23	8	(37)	(29)
Balance, end of year	\$ 11,516	8,197	19,713	6,245	4,211	10,456

(1) Represents the overall decrease in our allowance for credit losses for loans as a result of our adoption of CECL on January 1, 2020.

(2) Represents the allowance estimated for PCI loans that automatically became PCD loans with the adoption of CECL. For additional information, see Note 1 (Summary of Significant Accounting Policies).

(3) Loans with an allowance measured by discounting expected cash flows using the loan's effective interest rate over the remaining life of the loan recognize changes in allowance attributable to the passage of time as interest income.

Table 4.7 disaggregates our ACL and recorded investment in loans by impairment methodology. This information is no longer relevant after December 31, 2019 given our adoption of CECL on January 1, 2020, which has a single impairment model.

Table 4.7: Allowance for Credit Losses for Loans by Impairment Methodology

(in millions)	Allowance for credit losses			Recorded investment in loans		
	Commercial	Consumer	Total	Commercial	Consumer	Total
December 31, 2019						
Collectively evaluated (1)	\$ 5,778	3,364	9,142	512,586	436,081	948,667
Individually evaluated (2)	467	847	1,314	3,133	9,897	13,030
PCI (3)	—	—	—	—	568	568
Total	\$ 6,245	4,211	10,456	515,719	446,546	962,265

(1) Represents non-impaired loans evaluated collectively for impairment.

(2) Represents impaired loans evaluated individually for impairment.

(3) Represents the allowance for loan losses and related loan carrying value for PCI loans.

Credit Quality

We monitor credit quality by evaluating various attributes and utilize such information in our evaluation of the appropriateness of the ACL for loans. The following sections provide the credit quality indicators we most closely monitor. The credit quality indicators are generally based on information as of our financial statement date, with the exception of updated FICO scores and updated loan-to-value (LTV)/combined LTV (CLTV). We obtain FICO scores at loan origination and the scores are generally updated at least quarterly, except in limited circumstances, including compliance with the Fair Credit Reporting Act (FCRA). Generally, the LTV and CLTV indicators are updated in the second month of each quarter, with updates no older than September 30, 2020. Amounts disclosed in the credit quality tables that follow are not comparative between reported periods due to our adoption of CECL on January 1, 2020. For additional information, see Note 1 (Summary of Significant Accounting Policies).

COMMERCIAL CREDIT QUALITY INDICATORS We manage a consistent process for assessing commercial loan credit quality. Generally, commercial loans are subject to individual risk assessment using our internal borrower and collateral quality ratings, which is our primary credit quality indicator. Our ratings are aligned to regulatory definitions of pass and criticized categories with the criticized segmented among special mention, substandard, doubtful and loss categories.

Table 4.8 provides the outstanding balances of our commercial loan portfolio by risk category. In connection with our adoption of CECL, credit quality information is provided with the year of origination for term loans. Revolving loans may convert to term loans as a result of a contractual provision in the original loan agreement or if modified in a TDR. At December 31, 2020, we had \$445.6 billion and \$32.8 billion of pass and criticized commercial loans, respectively.

Table 4.8: Commercial Loan Categories by Risk Categories and Vintage (1)

(in millions)	Term loans by origination year						Revolving loans	Revolving loans converted to term loans	Total										
	2020	2019	2018	2017	2016	Prior													
December 31, 2020																			
Commercial and industrial																			
Pass	\$ 56,915	34,040	15,936	7,274	4,048	4,738	177,107	997	301,055										
Criticized	1,404	1,327	1,357	972	672	333	11,534	151	17,750										
Total commercial and industrial	58,319	35,367	17,293	8,246	4,720	5,071	188,641	1,148	318,805										
Real estate mortgage																			
Pass	22,444	26,114	18,679	11,113	11,582	14,663	5,152	6	109,753										
Criticized	2,133	2,544	1,817	1,287	1,625	2,082	479	—	11,967										
Total real estate mortgage	24,577	28,658	20,496	12,400	13,207	16,745	5,631	6	121,720										
Real estate construction																			
Pass	5,242	6,574	4,771	1,736	477	235	1,212	3	20,250										
Criticized	449	452	527	4	113	10	—	—	1,555										
Total real estate construction	5,691	7,026	5,298	1,740	590	245	1,212	3	21,805										
Lease financing																			
Pass	3,970	3,851	2,176	1,464	1,199	1,924	—	—	14,584										
Criticized	308	433	372	197	108	85	—	—	1,503										
Total lease financing	4,278	4,284	2,548	1,661	1,307	2,009	—	—	16,087										
Total commercial loans	\$ 92,865	75,335	45,635	24,047	19,824	24,070	195,484	1,157	478,417										
<table border="0"> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td>Commercial and industrial</td> <td>Real estate mortgage</td> <td>Real estate construction</td> <td>Lease financing</td> <td>Total</td> </tr> </table>															Commercial and industrial	Real estate mortgage	Real estate construction	Lease financing	Total
					Commercial and industrial	Real estate mortgage	Real estate construction	Lease financing	Total										
December 31, 2019																			
By risk category:																			
Pass					\$ 338,740	118,054	19,752	18,655	495,201										
Criticized					15,385	3,770	187	1,176	20,518										
Total commercial loans					\$ 354,125	121,824	19,939	19,831	515,719										

(1) Disclosure is not comparative due to our adoption of CECL on January 1, 2020. For additional information, see Note 1 (Summary of Significant Accounting Policies).

Note 4: Loans and Related Allowance for Credit Losses (continued)

Table 4.9 provides past due information for commercial loans, which we monitor as part of our credit risk management practices; however, delinquency is not a primary credit quality indicator for commercial loans. Payment deferral activities

instituted in response to the COVID-19 pandemic could continue to delay the recognition of delinquencies for customers who otherwise would have moved into past due status.

Table 4.9: Commercial Loan Categories by Delinquency Status

(in millions)	Commercial and industrial	Real estate mortgage	Real estate construction	Lease financing	Total
December 31, 2020					
By delinquency status:					
Current-29 days past due (DPD) and still accruing	\$ 315,493	119,561	21,532	15,595	472,181
30-89 DPD and still accruing	575	347	224	233	1,379
90+ DPD and still accruing	39	38	1	—	78
Nonaccrual loans	2,698	1,774	48	259	4,779
Total commercial loans	\$ 318,805	121,720	21,805	16,087	478,417
December 31, 2019					
By delinquency status:					
Current-29 DPD and still accruing	\$ 352,110	120,967	19,845	19,484	512,406
30-89 DPD and still accruing	423	253	53	252	981
90+ DPD and still accruing	47	31	—	—	78
Nonaccrual loans	1,545	573	41	95	2,254
Total commercial loans	\$ 354,125	121,824	19,939	19,831	515,719

CONSUMER CREDIT QUALITY INDICATORS We have various classes of consumer loans that present unique credit risks. Loan delinquency, FICO credit scores and LTV for residential mortgage loans are the primary credit quality indicators that we monitor and utilize in our evaluation of the appropriateness of the ACL for the consumer loan portfolio segment.

Many of our loss estimation techniques used for the ACL for loans rely on delinquency-based models; therefore, delinquency is an important indicator of credit quality in the establishment of our ACL for loans.

Table 4.10 provides the outstanding balances of our consumer loan portfolio by delinquency status. Payment deferral activities instituted in response to the COVID-19 pandemic could continue to delay the recognition of delinquencies for customers who otherwise would have moved into past due status.

In connection with our adoption of CECL, credit quality information is provided with the year of origination for term loans. Revolving loans may convert to term loans as a result of a contractual provision in the original loan agreement or if modified in a TDR. The revolving loans converted to term loans in the credit card loan category represent credit card loans with modified terms that require payment over a specific term.

Table 4.10: Consumer Loan Categories by Delinquency Status and Vintage (1)

(in millions)	Term loans by origination year						Revolving loans	Revolving loans converted to term loans	Total
	2020	2019	2018	2017	2016	Prior			
December 31, 2020									
Residential mortgage – first lien									
By delinquency status:									
Current-29 DPD	\$ 53,298	43,297	14,761	24,619	30,533	67,960	6,762	1,719	242,949
30-59 DPD	111	76	36	67	79	750	52	66	1,237
60-89 DPD	88	10	6	12	13	305	56	68	558
90-119 DPD	232	11	5	8	7	197	26	33	519
120-179 DPD	3	4	1	3	5	151	17	29	213
180+ DPD	3	1	4	11	15	758	21	145	958
Government insured/guaranteed loans (2)	215	639	904	1,076	2,367	25,039	—	—	30,240
Total residential mortgage – first lien	53,950	44,038	15,717	25,796	33,019	95,160	6,934	2,060	276,674
Residential mortgage – junior lien									
By delinquency status:									
Current-29 DPD	22	39	39	37	31	1,115	15,366	5,434	22,083
30-59 DPD	—	—	1	1	—	22	113	160	297
60-89 DPD	—	—	1	—	—	11	154	271	437
90-119 DPD	—	—	—	1	—	7	45	84	137
120-179 DPD	—	—	—	—	—	9	36	77	122
180+ DPD	—	—	—	—	1	25	29	155	210
Total residential mortgage – junior lien	22	39	41	39	32	1,189	15,743	6,181	23,286
Credit cards									
By delinquency status:									
Current-29 DPD	—	—	—	—	—	—	35,612	255	35,867
30-59 DPD	—	—	—	—	—	—	243	12	255
60-89 DPD	—	—	—	—	—	—	167	10	177
90-119 DPD	—	—	—	—	—	—	144	10	154
120-179 DPD	—	—	—	—	—	—	208	3	211
180+ DPD	—	—	—	—	—	—	—	—	—
Total credit cards	—	—	—	—	—	—	36,374	290	36,664
Auto									
By delinquency status:									
Current-29 DPD	19,625	14,561	6,307	3,459	2,603	697	—	—	47,252
30-59 DPD	120	183	114	80	107	46	—	—	650
60-89 DPD	32	60	36	25	35	16	—	—	204
90-119 DPD	13	26	14	9	12	6	—	—	80
120-179 DPD	—	1	—	—	—	—	—	—	1
180+ DPD	—	—	—	—	—	—	—	—	—
Total auto	19,790	14,831	6,471	3,573	2,757	765	—	—	48,187
Other consumer									
By delinquency status:									
Current-29 DPD	1,406	1,383	577	261	59	193	20,246	162	24,287
30-59 DPD	2	7	5	2	1	3	19	10	49
60-89 DPD	1	5	3	1	1	1	10	6	28
90-119 DPD	1	4	2	1	—	1	8	3	20
120-179 DPD	—	—	—	—	—	—	10	4	14
180+ DPD	—	—	—	—	—	2	3	6	11
Total other consumer	1,410	1,399	587	265	61	200	20,296	191	24,409
Total consumer loans	\$ 75,172	60,307	22,816	29,673	35,869	97,314	79,347	8,722	409,220

(continued on following page)

Note 4: Loans and Related Allowance for Credit Losses (continued)*(continued from previous page)*

	Residential mortgage – first lien	Residential mortgage – junior lien	Credit card	Auto	Other consumer	Total
December 31, 2019						
By delinquency status:						
Current-29 DPD	\$ 279,722	28,870	39,935	46,650	33,981	429,158
30-59 DPD	1,136	216	311	882	140	2,685
60-89 DPD	404	115	221	263	81	1,084
90-119 DPD	197	69	202	77	74	619
120-179 DPD	160	71	343	1	18	593
180+ DPD	503	155	1	—	10	669
Government insured/guaranteed loans (2)	11,170	—	—	—	—	11,170
Total consumer loans (excluding PCI)	293,292	29,496	41,013	47,873	34,304	445,978
Total consumer PCI loans (carrying value) (3)	555	13	—	—	—	568
Total consumer loans	\$ 293,847	29,509	41,013	47,873	34,304	446,546

(1) Disclosure is not comparative due to our adoption of CECL on January 1, 2020. For additional information, see Note 1 (Summary of Significant Accounting Policies).

(2) Represents loans whose repayments are predominantly insured by the Federal Housing Administration (FHA) or guaranteed by the Department of Veterans Affairs (VA). Loans insured/guaranteed by the FHA/VA and 90+ DPD totaled \$11.1 billion and \$6.4 billion at December 31, 2020 and 2019, respectively.

(3) 26% of the adjusted unpaid principal balance for consumer PCI loans was 30+ DPD at December 31, 2019.

Of the \$2.7 billion of consumer loans not government insured/guaranteed that are 90 days or more past due at December 31, 2020, \$612 million was accruing, compared with \$1.9 billion past due and \$855 million accruing at December 31, 2019.

Table 4.11 provides the outstanding balances of our consumer loan portfolio by FICO score. Substantially all of the scored consumer portfolio has an updated FICO score of 680 and above, reflecting a strong current borrower credit profile. FICO

scores are not available for certain loan types or may not be required if we deem it unnecessary due to strong collateral and other borrower attributes. Loans not requiring a FICO score totaled \$13.2 billion and \$9.1 billion at December 31, 2020 and 2019, respectively. Substantially all loans not requiring a FICO score are securities-based loans originated through retail brokerage.

Table 4.11: Consumer Loan Categories by FICO and Vintage (1)

(in millions)	Term loans by origination year						Revolving loans	Revolving loans converted to term loans	Total
	2020	2019	2018	2017	2016	Prior			
December 31, 2020									
By FICO:									
Residential mortgage – first lien									
800+	\$ 29,365	28,652	9,911	17,416	22,215	40,440	3,391	493	151,883
760-799	17,154	9,866	2,908	4,380	4,955	10,843	1,361	274	51,741
720-759	5,274	3,290	1,189	1,829	2,106	7,001	879	265	21,833
680-719	1,361	1,084	490	678	831	4,403	520	221	9,588
640-679	376	287	148	192	226	2,385	241	154	4,009
600-639	55	56	44	56	92	1,429	127	106	1,965
< 600	14	29	36	44	66	1,789	162	175	2,315
No FICO available	136	135	87	125	161	1,831	253	372	3,100
Government insured/guaranteed loans (2)	215	639	904	1,076	2,367	25,039	—	—	30,240
Total residential mortgage – first lien	53,950	44,038	15,717	25,796	33,019	95,160	6,934	2,060	276,674
Residential mortgage – junior lien									
800+	—	—	—	—	—	293	7,973	1,819	10,085
760-799	—	—	—	—	—	177	3,005	1,032	4,214
720-759	—	—	—	—	—	207	2,093	1,034	3,334
680-719	—	—	—	—	—	183	1,233	854	2,270
640-679	—	—	—	—	—	103	503	493	1,099
600-639	—	—	—	—	—	67	241	299	607
< 600	—	—	—	—	—	76	254	374	704
No FICO available	22	39	41	39	32	83	441	276	973
Total residential mortgage – junior lien	22	39	41	39	32	1,189	15,743	6,181	23,286
Credit card									
800+	—	—	—	—	—	—	3,860	1	3,861
760-799	—	—	—	—	—	—	5,438	7	5,445
720-759	—	—	—	—	—	—	7,897	29	7,926
680-719	—	—	—	—	—	—	8,854	60	8,914
640-679	—	—	—	—	—	—	5,657	64	5,721
600-639	—	—	—	—	—	—	2,242	46	2,288
< 600	—	—	—	—	—	—	2,416	82	2,498
No FICO available	—	—	—	—	—	—	10	1	11
Total credit card	—	—	—	—	—	—	36,374	290	36,664
Auto									
800+	2,875	2,606	1,211	731	452	104	—	—	7,979
760-799	3,036	2,662	1,122	579	349	81	—	—	7,829
720-759	3,162	2,514	1,095	576	395	98	—	—	7,840
680-719	3,534	2,542	1,066	545	400	105	—	—	8,192
640-679	3,381	1,948	763	395	334	94	—	—	6,915
600-639	2,208	1,165	479	274	276	87	—	—	4,489
< 600	1,581	1,357	730	463	533	186	—	—	4,850
No FICO available	13	37	5	10	18	10	—	—	93
Total auto	19,790	14,831	6,471	3,573	2,757	765	—	—	48,187
Other consumer									
800+	353	287	94	35	10	71	2,249	21	3,120
760-799	342	279	93	29	10	34	1,110	16	1,913
720-759	262	258	107	35	11	30	915	26	1,644
680-719	156	213	99	36	11	24	798	31	1,368
640-679	71	112	59	21	7	10	415	23	718
600-639	18	36	22	9	4	8	151	13	261
< 600	13	41	30	12	5	7	161	18	287
No FICO available	195	173	83	88	3	16	1,248	43	1,849
FICO not required	—	—	—	—	—	—	13,249	—	13,249
Total other consumer	1,410	1,399	587	265	61	200	20,296	191	24,409
Total consumer loans	\$ 75,172	60,307	22,816	29,673	35,869	97,314	79,347	8,722	409,220

(continued on following page)

Note 4: Loans and Related Allowance for Credit Losses (continued)

(continued from previous page)

	Residential mortgage – first lien	Residential mortgage – junior lien	Credit card	Auto	Other consumer	Total
December 31, 2019						
By FICO:						
800+	\$ 165,460	11,851	4,037	7,900	7,585	196,833
760-799	61,559	5,483	5,648	7,624	4,915	85,229
720-759	27,879	4,407	8,376	7,839	4,097	52,598
680-719	12,844	3,192	9,732	7,871	3,212	36,851
640-679	5,068	1,499	6,626	6,324	1,730	21,247
600-639	2,392	782	2,853	4,230	670	10,927
< 600	3,264	1,164	3,373	6,041	704	14,546
No FICO available	3,656	1,118	368	44	2,316	7,502
FICO not required	—	—	—	—	9,075	9,075
Government insured/guaranteed loans (2)	11,170	—	—	—	—	11,170
Total consumer loans (excluding PCI)	293,292	29,496	41,013	47,873	34,304	445,978
Total consumer PCI loans (carrying value) (3)	555	13	—	—	—	568
Total consumer loans	\$ 293,847	29,509	41,013	47,873	34,304	446,546

(1) Disclosure is not comparative due to our adoption of CECL on January 1, 2020. For additional information, see Note 1 (Summary of Significant Accounting Policies).

(2) Represents loans whose repayments are predominantly insured by the FHA or guaranteed by the VA.

(3) 41% of the adjusted unpaid principal balance for consumer PCI loans had FICO scores less than 680 and 19% where no FICO was available to us at December 31, 2019.

LTV refers to the ratio comparing the loan's unpaid principal balance to the property's collateral value. CLTV refers to the combination of first lien mortgage and junior lien mortgage (including unused line amounts for credit line products) ratios. LTVs and CLTVs are updated quarterly using a cascade approach which first uses values provided by automated valuation models (AVMs) for the property. If an AVM is not available, then the value is estimated using the original appraised value adjusted by the change in Home Price Index (HPI) for the property location. If an HPI is not available, the original appraised value is used. The HPI value is normally the only method considered for high value properties, generally with an original value of \$1 million or more, as the AVM values have proven less accurate for these properties.

Table 4.12 shows the most updated LTV and CLTV distribution of the residential mortgage – first lien and residential mortgage – junior lien loan portfolios. We consider the trends in residential real estate markets as we monitor credit risk and establish our ACL. In the event of a default, any loss should be limited to the portion of the loan amount in excess of the net realizable value of the underlying real estate collateral value. Certain loans do not have an LTV or CLTV due to industry data availability and portfolios acquired from or serviced by other institutions.

Table 4.12: Consumer Loan Categories by LTV/CLTV and Vintage (1)

(in millions)	Term loans by origination year						Revolving loans	Revolving loans converted to term loans	Total
	2020	2019	2018	2017	2016	Prior			
December 31, 2020									
Residential mortgage – first lien									
By LTV:									
0-60%	\$ 16,582	15,449	6,065	13,190	21,097	59,291	4,971	1,587	138,232
60.01-80%	34,639	24,736	7,724	10,745	8,970	9,333	1,323	326	97,796
80.01-100%	2,332	2,975	900	654	441	1,003	425	100	8,830
100.01-120% (2)	41	106	45	40	41	168	117	26	584
> 120% (2)	31	41	16	19	16	78	44	8	253
No LTV available	110	92	63	72	87	248	54	13	739
Government insured/guaranteed loans (3)	215	639	904	1,076	2,367	25,039	—	—	30,240
Total residential mortgage – first lien	53,950	44,038	15,717	25,796	33,019	95,160	6,934	2,060	276,674
Residential mortgage – junior lien									
By CLTV:									
0-60%	—	—	—	—	—	548	8,626	3,742	12,916
60.01-80%	—	—	—	—	—	335	5,081	1,554	6,970
80.01-100%	—	—	—	—	—	187	1,507	641	2,335
100.01-120% (2)	—	—	—	—	—	59	376	156	591
> 120% (2)	—	—	—	—	—	15	128	50	193
No CLTV available	22	39	41	39	32	45	25	38	281
Total residential mortgage – junior lien	22	39	41	39	32	1,189	15,743	6,181	23,286
Total	\$ 53,972	44,077	15,758	25,835	33,051	96,349	22,677	8,241	299,960
							Residential mortgage – first lien by LTV	Residential mortgage – junior lien by CLTV	Total
December 31, 2019									
By LTV/CLTV:									
0-60%							\$ 151,478	14,603	166,081
60.01-80%							114,795	9,663	124,458
80.01-100%							13,867	3,574	17,441
100.01-120% (2)							860	978	1,838
> 120% (2)							338	336	674
No LTV/CLTV available							784	342	1,126
Government insured/guaranteed loans (3)							11,170	—	11,170
Total consumer loans (excluding PCI)							293,292	29,496	322,788
Total consumer PCI loans (carrying value) (4)							555	13	568
Total consumer loans							\$ 293,847	29,509	323,356

(1) Disclosure is not comparative due to our adoption of CECL on January 1, 2020. For additional information, see Note 1 (Summary of Significant Accounting Policies).

(2) Reflects total loan balances with LTV/CLTV amounts in excess of 100%. In the event of default, the loss content would generally be limited to only the amount in excess of 100% LTV/CLTV.

(3) Represents loans whose repayments are predominantly insured by the FHA or guaranteed by the VA.

(4) 9% of the adjusted unpaid principal balance for consumer PCI loans have LTV/CLTV amounts greater than 80% at December 31, 2019.

Note 4: Loans and Related Allowance for Credit Losses (continued)

NONACCRUAL LOANS Table 4.13 provides loans on nonaccrual status. In connection with our adoption of CECL, nonaccrual loans may have an ACL or a negative allowance for credit losses from expected recoveries of amounts previously written off. Payment

deferral activities instituted in response to the COVID-19 pandemic could continue to delay the recognition of delinquencies for customers who otherwise would have moved into nonaccrual status.

Table 4.13: Nonaccrual Loans (1)

(in millions)	Nonaccrual loans	Amortized cost	Year ended
		Nonaccrual loans without related allowance for credit losses (2)	December 31, 2020
			Recognized interest income
December 31, 2020			
Commercial:			
Commercial and industrial	\$ 2,698	382	78
Real estate mortgage	1,774	93	31
Real estate construction	48	15	6
Lease financing	259	16	—
Total commercial	4,779	506	115
Consumer:			
Residential mortgage- first lien	2,957	1,908	151
Residential mortgage- junior lien	754	461	52
Auto	202	—	20
Other consumer	36	—	3
Total consumer	3,949	2,369	226
Total nonaccrual loans	\$ 8,728	2,875	341
December 31, 2019 (1)			
Commercial:			
Commercial and industrial	\$ 1,545		
Real estate mortgage	573		
Real estate construction	41		
Lease financing	95		
Total commercial	2,254		
Consumer:			
Residential mortgage- first lien	2,150		
Residential mortgage- junior lien	796		
Auto	106		
Other consumer	40		
Total consumer	3,092		
Total nonaccrual loans (excluding PCI)	\$ 5,346		

(1) Disclosure is not comparative due to our adoption of CECL on January 1, 2020. For additional information, see Note 1 (Summary of Significant Accounting Policies).

(2) Nonaccrual loans may not have an allowance for credit losses if the loss expectations are zero given solid collateral value.

LOANS IN PROCESS OF FORECLOSURE Our recorded investment in consumer mortgage loans collateralized by residential real estate property that are in process of foreclosure was \$2.1 billion and \$3.5 billion at December 31, 2020, and December 31, 2019, respectively, which included \$1.7 billion and \$2.8 billion, respectively, of loans that are government insured/guaranteed. Under the Consumer Financial Protection Bureau guidelines, we do not commence the foreclosure process on residential mortgage loans until after the loan is 120 days delinquent. Foreclosure procedures and timelines vary depending on whether the property address resides in a judicial or non-judicial state. Judicial states require the foreclosure to be processed through the state's courts while non-judicial states are processed without court intervention. Foreclosure timelines vary according to state law. In connection with our actions to support customers during the COVID-19 pandemic, we have suspended certain mortgage foreclosure activities.

LOANS 90 DAYS OR MORE PAST DUE AND STILL ACCRUING Certain loans 90 days or more past due are still accruing, because they are (1) well-secured and in the process of collection or (2) residential mortgage or consumer loans exempt under regulatory rules from being classified as nonaccrual until later delinquency, usually 120 days past due.

Table 4.14 shows loans 90 days or more past due and still accruing by class for loans not government insured/guaranteed.

Table 4.14: Loans 90 Days or More Past Due and Still Accruing

(in millions)	Dec 31, 2020	Dec 31, 2019
Total:	\$ 7,041	7,285
Less: FHA insured/VA guaranteed (1)	6,351	6,352
Total, not government insured/ guaranteed	\$ 690	933
By segment and class, not government insured/ guaranteed:		
Commercial:		
Commercial and industrial	\$ 39	47
Real estate mortgage	38	31
Real estate construction	1	—
Total commercial	78	78
Consumer:		
Residential mortgage – first lien	135	112
Residential mortgage – junior lien	19	32
Credit card	365	546
Auto	65	78
Other consumer	28	87
Total consumer	612	855
Total, not government insured/ guaranteed	\$ 690	933

(1) Represents loans whose repayments are predominantly insured by the FHA or guaranteed by the VA.

IMPAIRED LOANS In connection with our adoption of CECL, we no longer provide information on impaired loans. We have retained impaired loans information for the period ended December 31, 2019. Table 4.15 summarizes key information for impaired loans. Our impaired loans at December 31, 2019, predominantly included loans on nonaccrual status in the commercial portfolio segment and loans modified in a TDR, whether on accrual or nonaccrual status. Impaired loans generally had estimated losses which are included in the ACL for loans. We did have impaired loans with no ACL for loans when the loss content has been previously recognized through charge-offs, such as collateral dependent loans, or when loans are currently performing in accordance with their terms and no loss has been estimated. Impaired loans excluded PCI loans and loans that had been fully charged off or otherwise had zero recorded investment. Table 4.15 included trial modifications that totaled \$115 million at December 31, 2019.

Table 4.15: Impaired Loans Summary

(in millions)	Unpaid principal balance	Recorded investment		Related allowance for credit losses
		Impaired loans	Impaired loans with related allowance for credit losses	
December 31, 2019				
Commercial:				
Commercial and industrial	\$ 2,792	2,003	1,903	311
Real estate mortgage	1,137	974	803	110
Real estate construction	81	51	41	11
Lease financing	131	105	105	35
Total commercial	4,141	3,133	2,852	467
Consumer:				
Residential mortgage – first lien	8,107	7,674	4,433	437
Residential mortgage – junior lien	1,586	1,451	925	144
Credit card	520	520	520	209
Auto	138	81	42	8
Other consumer	178	171	155	49
Total consumer (1)	10,529	9,897	6,075	847
Total impaired loans (excluding PCI)	\$ 14,670	13,030	8,927	1,314

(1) Includes the recorded investment of \$1.2 billion at December 31, 2019 of government insured/guaranteed loans that are predominantly insured by the FHA or guaranteed by the VA and generally do not have an ACL. Impaired loans may also have limited, if any, ACL when the recorded investment of the loan approximates estimated net realizable value as a result of charge-offs prior to a TDR modification.

Note 4: Loans and Related Allowance for Credit Losses (continued)

Table 4.16 provides the average recorded investment in impaired loans and the amount of interest income recognized on impaired loans by portfolio segment and class.

Table 4.16: Average Recorded Investment in Impaired Loans

(in millions)	Year ended December 31,			
	2019		2018	
	Average recorded investment	Recognized interest income	Average recorded investment	Recognized interest income
Commercial:				
Commercial and industrial	2,150	129	2,287	173
Real estate mortgage	1,067	59	1,193	89
Real estate construction	52	6	60	7
Lease financing	93	1	125	1
Total commercial	3,362	195	3,665	270
Consumer:				
Residential mortgage – first lien	9,031	506	11,522	664
Residential mortgage – junior lien	1,586	99	1,804	116
Credit card	488	64	407	50
Auto	84	12	86	11
Other consumer	162	13	142	10
Total consumer	11,351	694	13,961	851
Total impaired loans (excluding PCI)	14,713	889	17,626	1,121
Interest income:				
Cash basis of accounting		241		338
Other (1)		648		783
Total interest income		889		1,121

(1) Includes interest recognized on accruing TDRs, interest recognized related to certain impaired loans which have an ACL calculated using discounting, and amortization of purchase accounting adjustments related to certain impaired loans.

TROUBLED DEBT RESTRUCTURINGS (TDRs) When, for economic or legal reasons related to a borrower's financial difficulties, we grant a concession for other than an insignificant period of time to a borrower that we would not otherwise consider, the related loan is classified as a TDR, the balance of which totaled \$14.5 billion and \$11.8 billion at December 31, 2020 and 2019, respectively. We do not consider loan resolutions such as foreclosure or short sale to be a TDR. In addition, COVID-related modifications are generally not classified as TDRs due to the relief under the CARES Act and the Interagency Statement. For additional information on the TDR relief, see Note 1 (Summary of Significant Accounting Policies).

We may require some consumer borrowers experiencing financial difficulty to make trial payments generally for a period of three to four months, according to the terms of a planned permanent modification, to determine if they can perform according to those terms. These arrangements represent trial modifications, which we classify and account for as TDRs. While loans are in trial payment programs, their original terms are not considered modified and they continue to advance through delinquency status and accrue interest according to their original terms.

Commitments to lend additional funds on loans whose terms have been modified in a TDR amounted to \$489 million and \$500 million at December 31, 2020 and 2019, respectively.

Table 4.17 summarizes our TDR modifications for the periods presented by primary modification type and includes the financial effects of these modifications. For those loans that modify more than once, the table reflects each modification that occurred during the period. Loans that both modify and are paid off or written-off within the period, as well as changes in recorded investment during the period for loans modified in prior periods, are not included in the table.

Table 4.17: TDR Modifications

(in millions)	Primary modification type (1)				Financial effects of modifications		
	Principal (2)	Interest rate reduction	Other concessions (3)	Total	Charge-offs (4)	Weighted average interest rate reduction	Recorded investment related to interest rate reduction (5)
Year ended December 31, 2020							
Commercial:							
Commercial and industrial	\$ 24	47	2,971	3,042	162	0.74 %	\$ 48
Real estate mortgage	—	34	677	711	5	1.00	34
Real estate construction	10	1	7	18	—	4.29	1
Lease financing	—	—	1	1	—	—	—
Total commercial	34	82	3,656	3,772	167	0.90	83
Consumer:							
Residential mortgage – first lien	41	14	4,115	4,170	4	1.76	39
Residential mortgage – junior lien	4	11	117	132	3	2.45	12
Credit card	—	272	—	272	—	14.12	272
Auto	4	6	166	176	93	4.65	6
Other consumer	—	23	34	57	1	8.28	23
Trial modifications (6)	—	—	3	3	—	—	—
Total consumer	49	326	4,435	4,810	101	11.80	352
Total	\$ 83	408	8,091	8,582	268	9.73 %	\$ 435
Year ended December 31, 2019							
Commercial:							
Commercial and industrial	\$ 13	90	1,286	1,389	104	0.40 %	\$ 90
Real estate mortgage	—	38	417	455	—	0.69	38
Real estate construction	13	1	32	46	—	1.00	1
Lease financing	—	—	2	2	—	—	—
Total commercial	26	129	1,737	1,892	104	0.49	129
Consumer:							
Residential mortgage – first lien	110	13	868	991	2	2.04	68
Residential mortgage – junior lien	5	37	82	124	3	2.35	39
Credit card	—	376	—	376	—	12.91	376
Auto	8	9	51	68	29	4.86	9
Other consumer	1	51	7	59	—	8.07	52
Trial modifications (6)	—	—	13	13	—	—	—
Total consumer	124	486	1,021	1,631	34	10.19	544
Total	\$ 150	615	2,758	3,523	138	8.33 %	\$ 673
Year ended December 31, 2018							
Commercial:							
Commercial and industrial	\$ 13	29	2,310	2,352	58	1.18 %	\$ 29
Real estate mortgage	—	44	375	419	—	0.88	44
Real estate construction	—	—	25	25	—	—	—
Lease financing	—	—	63	63	—	—	—
Total commercial	13	73	2,773	2,859	58	1.00	73
Consumer:							
Residential mortgage – first lien	209	26	1,042	1,277	4	2.25	119
Residential mortgage – junior lien	7	41	113	161	5	2.14	45
Credit card	—	336	—	336	—	12.54	336
Auto	13	16	55	84	30	6.21	16
Other consumer	—	49	12	61	—	7.95	49
Trial modifications (6)	—	—	8	8	—	—	—
Total consumer	229	468	1,230	1,927	39	8.96	565
Total	\$ 242	541	4,003	4,786	97	8.06 %	\$ 638

- Amounts represent the recorded investment in loans after recognizing the effects of the TDR, if any. TDRs may have multiple types of concessions, but are presented only once in the first modification type based on the order presented in the table above. The reported amounts include loans remodified of \$1.5 billion, \$1.1 billion and \$1.9 billion, for the years ended December 31, 2020, 2019 and 2018, respectively.
- Principal modifications include principal forgiveness at the time of the modification, contingent principal forgiveness granted over the life of the loan based on borrower performance, and principal that has been legally separated and deferred to the end of the loan, with a zero percent contractual interest rate.
- Other concessions include loans discharged in bankruptcy, loan renewals, term extensions and other interest and noninterest adjustments, but exclude modifications that also forgive principal and/or reduce the contractual interest rate.
- Charge-offs include write-downs of the investment in the loan in the period it is contractually modified. The amount of charge-off will differ from the modification terms if the loan has been charged down prior to the modification based on our policies. In addition, there may be cases where we have a charge-off/down with no legal principal modification. Modifications resulted in deferring or legally forgiving principal (actual or contingent) of \$49 million, \$24 million and \$28 million for the years ended December 31, 2020, 2019 and 2018, respectively.
- Recorded investment related to interest rate reduction reflects the effect of reduced interest rates on loans with an interest rate concession as one of their concession types, which includes loans reported as a principal primary modification type that also have an interest rate concession.
- Trial modifications are granted a delay in payments due under the original terms during the trial payment period. However, these loans continue to advance through delinquency status and accrue interest according to their original terms. Any subsequent permanent modification generally includes interest rate related concessions; however, the exact concession type and resulting financial effect are usually not known until the loan is permanently modified. Trial modifications for the period are presented net of previously reported trial modifications that became permanent in the current period.

Note 4: Loans and Related Allowance for Credit Losses (continued)

Table 4.18 summarizes permanent modification TDRs that have defaulted in the current period within 12 months of their permanent modification date. We are reporting these defaulted

TDRs based on a payment default definition of 90 days past due for the commercial portfolio segment and 60 days past due for the consumer portfolio segment.

Table 4.18: Defaulted TDRs

(in millions)	Recorded investment of defaults		
	Year ended December 31,		
	2020	2019	2018
Commercial:			
Commercial and industrial	\$ 677	111	198
Real estate mortgage	128	48	76
Real estate construction	—	17	36
Lease financing	1	—	—
Total commercial	806	176	310
Consumer:			
Residential mortgage – first lien	34	41	60
Residential mortgage – junior lien	12	13	14
Credit card	72	88	79
Auto	32	12	14
Other consumer	5	8	6
Total consumer	155	162	173
Total	\$ 961	338	483

Note 5: Leasing Activity

The information below provides a summary of our leasing activities as a lessor and lessee.

As a Lessor

Table 5.1 presents the composition of our leasing revenue and Table 5.2 provides the components of our investment in lease financing. Noninterest income on leases, included in Table 5.1 is included in other noninterest income on our consolidated statement of income. Lease expense, included in other noninterest expense on our consolidated statement of income, was \$1.0 billion, \$1.2 billion, and \$1.3 billion for the years ended December 31, 2020, 2019 and 2018, respectively.

Table 5.1: Leasing Revenue

(in millions)	Year ended December 31,	
	2020	2019
Interest income on lease financing	\$ 732	869
Other lease revenues:		
Variable revenues on lease financing	107	98
Fixed revenues on operating leases	1,169	1,393
Variable revenues on operating leases	47	66
Other lease-related revenues (1)	(78)	57
Noninterest income on leases	1,245	1,614
Total leasing revenue	\$ 1,977	2,483

(1) Predominantly includes net gains (losses) on disposition of assets leased under operating leases or lease financings.

Table 5.2: Investment in Lease Financing

(in millions)	Dec 31, 2020	Dec 31, 2019
Lease receivables	\$ 14,210	18,114
Residual asset values	3,810	4,208
Unearned income	(1,933)	(2,491)
Lease financing	\$ 16,087	19,831

Our net investment in financing and sales-type leases included \$1.7 billion and \$1.9 billion of leveraged leases at December 31, 2020 and 2019, respectively.

As shown in Table 7.2, included in Note 7 (Premises, Equipment and Other Assets), we had \$7.4 billion and \$8.2 billion in operating lease assets at December 31, 2020 and 2019, respectively, which was net of \$3.1 billion of accumulated depreciation for both years. Depreciation expense for the operating lease assets was \$755 million and \$848 million in 2020 and 2019, respectively.

Table 5.3 presents future lease payments owed by our lessees.

Table 5.3: Maturities of Lease Receivables

(in millions)	December 31, 2020	
	Direct financing and sales-type leases	Operating leases
2021	\$ 5,060	655
2022	3,650	461
2023	2,259	330
2024	1,274	227
2025	630	153
Thereafter	1,337	265
Total lease receivables	\$ 14,210	2,091

As a Lessee

Substantially all of our leases are operating leases. Table 5.4 presents balances for our operating leases.

Table 5.4: Operating Lease Right of Use (ROU) Assets and Lease Liabilities

(in millions)	Dec 31, 2020	Dec 31, 2019
ROU assets	\$ 4,306	4,724
Lease liabilities	4,962	5,297

Table 5.5 provides the composition of our lease costs, which are predominantly included in net occupancy expense.

Table 5.5: Lease Costs

(in millions)	Year ended December 31,	
	2020	2019
Fixed lease expense – operating leases	\$ 1,149	1,212
Variable lease expense	299	314
Other (1)	(77)	(68)
Total lease costs	\$ 1,371	1,458

(1) Predominantly includes gains recognized from sale leaseback transactions and sublease rental income.

Net operating lease rental expense was \$1.3 billion for the year 2018 and is predominantly included in net occupancy expense.

Table 5.6 provides the future lease payments under operating leases as well as information on the remaining average lease term and discount rate as of December 31, 2020.

Table 5.6: Lease Payments on Operating Leases

(in millions, except for weighted averages)	December 31, 2020
2021	\$ 994
2022	994
2023	856
2024	702
2025	520
Thereafter	1,421
Total lease payments	5,487
Less: imputed interest	525
Total operating lease liabilities	\$ 4,962
Weighted average remaining lease term (in years)	6.9
Weighted average discount rate	2.8 %

Our operating leases predominantly expire within the next 15 years, with the longest lease expiring in 2105. We do not include renewal or termination options in the establishment of the lease term when we are not reasonably certain that we will exercise them. As of December 31, 2020, we had additional operating leases commitments of \$54 million, predominantly for real estate, which leases had not yet commenced. These leases are expected to commence during 2022 and have lease terms of 3 years to 13 years.

Note 6: Equity Securities

Table 6.1 provides a summary of our equity securities by business purpose and accounting method, including equity securities with readily determinable fair values (marketable) and those without readily determinable fair values (nonmarketable).

Table 6.1: Equity Securities

(in millions)	Dec 31, 2020	Dec 31, 2019
Held for trading at fair value:		
Marketable equity securities	\$ 23,032	27,440
Not held for trading:		
Fair value:		
Marketable equity securities (1)	1,564	6,481
Nonmarketable equity securities	9,413	8,015
Total equity securities at fair value	10,977	14,496
Equity method:		
Low-income housing tax credit investments	11,628	11,343
Private equity	2,960	3,459
Tax-advantaged renewable energy	5,458	3,811
New market tax credit and other	409	387
Total equity method	20,455	19,000
Other:		
Federal Reserve Bank stock and other at cost (2)	3,588	4,790
Private equity (3)	4,208	2,515
Total equity securities not held for trading	39,228	40,801
Total equity securities	\$ 62,260	68,241

- (1) Includes \$239 million and \$3.8 billion at December 31, 2020 and 2019, respectively, related to securities held as economic hedges of our deferred compensation plan liabilities. In second quarter 2020, we entered into arrangements to transition our economic hedges of our deferred compensation plan liabilities from equity securities to derivative instruments.
- (2) Includes \$3.5 billion and \$4.8 billion at December 31, 2020 and 2019, respectively, related to investments in Federal Reserve Bank and Federal Home Loan Bank stock.
- (3) Represents nonmarketable equity securities accounted for under the measurement alternative.

Equity Securities Held for Trading

Equity securities held for trading purposes are marketable equity securities traded on organized exchanges. These securities are held as part of our customer accommodation trading activities. For additional information on these activities, see Note 2 (Trading Activities).

Equity Securities Not Held for Trading

We also hold equity securities unrelated to trading activities. These securities include private equity and tax credit investments, securities held as economic hedges or to meet regulatory requirements (for example, Federal Reserve Bank and Federal Home Loan Bank stock).

FAIR VALUE Marketable equity securities held for purposes other than trading consist of holdings of publicly traded equity securities held for investment purposes and, to a lesser extent, exchange-traded equity funds held to economically hedge obligations related to our deferred compensation plans. We account for certain nonmarketable equity securities under the fair value method, and substantially all of these securities are economically hedged with equity derivatives.

EQUITY METHOD Our equity method investments consist of tax credit and private equity investments, the majority of which are our low-income housing tax credit (LIHTC) investments.

We invest in affordable housing projects that qualify for the LIHTC, which are designed to promote private development of low-income housing. These investments typically generate a return through realization of federal tax credit and other tax benefits. We recognized pre-tax losses of \$1.4 billion, \$1.3 billion, and \$1.2 billion for 2020, 2019 and 2018, respectively, related to our LIHTC investments. These losses were recognized in other noninterest income. We also recognized total tax benefits of \$1.6 billion for 2020, and \$1.5 billion for both 2019 and 2018, which included tax credits recorded to income taxes of \$1.3 billion for 2020 and \$1.2 billion for both 2019 and 2018. We are periodically required to provide additional financial support during the investment period. A liability is recognized for unfunded commitments that are both legally binding and probable of funding. These commitments are predominantly funded within three years of initial investment. Our liability for these unfunded commitments was \$4.2 billion and \$4.3 billion at December 31, 2020 and 2019, respectively. This liability for unfunded commitments is included in long-term debt.

OTHER The remaining portion of our nonmarketable equity securities portfolio consists of securities accounted for using the cost or measurement alternative.

Realized Gains and Losses Not Held for Trading

Table 6.2 provides a summary of the net gains and losses from equity securities not held for trading, which excludes equity method adjustments for our share of the investee's earnings or

losses that are recognized in other noninterest income. Gains and losses for securities held for trading are reported in net gains on trading and securities.

Table 6.2: Net Gains (Losses) from Equity Securities Not Held for Trading

(in millions)	Year ended December 31,		
	2020	2019	2018
Net gains (losses) from equity securities carried at fair value:			
Marketable equity securities	\$ 63	1,067	(389)
Nonmarketable equity securities	1,414	2,413	709
Total equity securities carried at fair value	1,477	3,480	320
Net gains (losses) from nonmarketable equity securities not carried at fair value (1):			
Impairment write-downs	(1,655)	(245)	(352)
Net unrealized gains related to measurement alternative observable transactions	1,651	567	418
Net realized gains on sale	359	1,161	1,504
All other	—	—	33
Total nonmarketable equity securities not carried at fair value	355	1,483	1,603
Net losses from economic hedge derivatives (2)	(1,167)	(2,120)	(408)
Total net gains from equity securities not held for trading	\$ 665	2,843	1,515

(1) Includes impairment write-downs and net realized gains on sale related to private equity and venture capital investments in consolidated portfolio companies, which are not reported in equity securities on our consolidated balance sheet.

(2) Includes net gains (losses) on derivatives not designated as hedging instruments.

Measurement Alternative

Table 6.3 provides additional information about the impairment write-downs and observable price adjustments related to

nonmarketable equity securities accounted for under the measurement alternative. Gains and losses related to these adjustments are also included in Table 6.2.

Table 6.3: Net Gains (Losses) from Measurement Alternative Equity Securities

(in millions)	Year ended December 31,		
	2020	2019	2018
Net gains (losses) recognized in earnings during the period:			
Gross unrealized gains due to observable price changes	\$ 1,651	584	443
Gross unrealized losses due to observable price changes	—	(17)	(25)
Impairment write-downs	(954)	(116)	(33)
Realized net gains from sale	38	163	274
Total net gains recognized during the period	\$ 735	614	659

Table 6.4 presents cumulative carrying value adjustments to nonmarketable equity securities accounted for under the measurement alternative that were still held at the end of each reporting period presented.

Table 6.4: Measurement Alternative Cumulative Gains (Losses)

(in millions)	Year ended December 31,		
	2020	2019	2018
Cumulative gains (losses):			
Gross unrealized gains due to observable price changes	\$ 2,356	973	415
Gross unrealized losses due to observable price changes	(25)	(42)	(25)
Impairment write-downs	(969)	(134)	(33)

Note 7: Premises, Equipment and Other Assets

Table 7.1: Premises and Equipment

(in millions)	Dec 31, 2020	Dec 31, 2019
Land	\$ 1,808	1,857
Buildings	9,504	9,499
Furniture and equipment	7,449	7,189
Leasehold improvements	2,597	2,597
Finance lease ROU assets	32	33
Total premises and equipment	21,390	21,175
Less: Accumulated depreciation and amortization	12,495	11,866
Net book value, premises and equipment	\$ 8,895	9,309

Depreciation and amortization expense for premises and equipment was \$1.4 billion, \$1.4 billion and \$1.3 billion in 2020, 2019 and 2018, respectively.

Dispositions of premises and equipment resulted in net gains of \$71 million, \$82 million and \$32 million in 2020, 2019 and 2018, respectively, included in other noninterest expense.

Table 7.2 presents the components of other assets.

Table 7.2: Other Assets

(in millions)	Dec 31, 2020	Dec 31, 2019
Corporate/bank-owned life insurance	\$ 20,380	20,070
Accounts receivable	38,116	29,137
Interest receivable:		
AFS and HTM debt securities	1,368	1,729
Loans	2,838	3,099
Trading and other	415	758
Customer relationship and other amortized intangibles	328	423
Foreclosed assets:		
Residential real estate	73	222
Other	86	81
Operating lease assets (lessor)	7,391	8,221
Operating lease ROU assets (lessee)	4,306	4,724
Due from customers on acceptances	268	253
Other	11,768	10,200
Total other assets	\$ 87,337	78,917

Note 8: Securitizations and Variable Interest Entities

Involvement with Variable Interest Entities (VIEs)

In the normal course of business, we enter into various types of on- and off-balance sheet transactions with special purpose entities (SPEs), which are corporations, trusts, limited liability companies or partnerships that are established for a limited purpose. SPEs are often formed in connection with securitization transactions whereby financial assets are transferred to an SPE. SPEs formed in connection with securitization transactions are generally considered variable interest entities (VIEs). The VIE may alter the risk profile of the asset by entering into derivative transactions or obtaining credit support, and issues various forms of interests in those assets to investors. When we transfer financial assets from our consolidated balance sheet to a VIE in connection with a securitization, we typically receive cash and sometimes other interests in the VIE as proceeds for the assets we transfer. In certain transactions with VIEs, we may retain the right to service the transferred assets and repurchase the transferred assets if the outstanding balance of the assets falls below the level at which the cost to service the assets exceed the benefits. In addition, we may purchase the right to service loans transferred to a VIE by a third party.

In connection with our securitization or other VIE activities, we have various forms of ongoing involvement with VIEs, which may include:

- underwriting securities issued by VIEs and subsequently making markets in those securities;
- providing credit enhancement on securities issued by VIEs through the use of letters of credit or financial guarantees;
- entering into other derivative contracts with VIEs;
- holding senior or subordinated interests in VIEs;
- acting as servicer or investment manager for VIEs; and
- providing administrative or trustee services to VIEs.

Loan Sales and Securitization Activity

We periodically transfer consumer and commercial loans and other types of financial assets in securitization and whole loan sale transactions.

MORTGAGE LOANS SOLD TO U.S. GOVERNMENT SPONSORED ENTITIES AND TRANSACTIONS WITH GINNIE MAE In the normal course of business we sell originated and purchased residential and commercial mortgage loans to government-sponsored entities (GSEs). These loans are transferred into securitizations sponsored by the GSEs, which provide certain credit guarantees to investors and servicers. We also transfer mortgage loans into securitizations pursuant to GNMA guidelines which are insured by the Federal Housing Administration (FHA) or guaranteed by the Department of Veterans Affairs (VA). Mortgage loans eligible for securitization with the GSEs or GNMA are considered conforming loans. The GSEs or GNMA design the structure of these securitizations, sponsor the involved VIEs, and have power over the activities most significant to the VIE.

We account for loans transferred in conforming mortgage loan securitization transactions as sales and do not consolidate the VIEs as we are not the primary beneficiary. In exchange for the transfer of loans, we typically receive securities issued by the VIEs which we sell to third parties for cash or hold for investment purposes as HTM or AFS securities. We also retain servicing rights on the transferred loans. As a servicer, we retain the option to repurchase loans from GNMA loan securitization pools, which becomes exercisable when three scheduled loan payments remain unpaid by the borrower. During the years ended

December 31, 2020, 2019 and 2018, we repurchased loans of \$30.3 billion, \$6.3 billion, and \$7.9 billion, respectively, which predominantly represented repurchases of government insured loans. We recorded assets and related liabilities of \$176 million and \$556 million at December 31, 2020 and 2019, respectively, where we did not exercise our option to repurchase eligible loans.

Upon transfers of loans, we also provide indemnification for losses incurred due to material breaches of contractual representations and warranties, as well as other recourse arrangements. At December 31, 2020 and 2019, our liability associated with these provisions was \$221 million and \$169 million, respectively, and the maximum exposure to loss was \$13.7 billion and \$11.6 billion, respectively.

Off-balance sheet mortgage loans sold or securitized presented in Table 8.4 are predominantly loans securitized by the GSEs and GNMA. See Note 9 (Mortgage Banking Activities) for information about residential and commercial servicing rights, advances and servicing fees. Substantially all residential servicing activity is related to assets transferred to GSE and GNMA securitizations.

NONCONFORMING MORTGAGE LOAN SECURITIZATIONS In the normal course of business, we sell nonconforming residential and commercial mortgage loans in securitization transactions that we design and sponsor. Nonconforming mortgage loan securitizations do not involve a government credit guarantee, and accordingly, beneficial interest holders are subject to credit risk of the underlying assets held by the securitization VIE. We typically originate the transferred loans, account for the transfers as sales and do not consolidate the VIE. We also typically retain the right to service the loans and may hold other beneficial interests issued by the VIEs, such as debt securities held for investment purposes. Our servicing role related to nonconforming commercial mortgage loan securitizations is limited to primary or master servicer and the most significant decisions impacting the performance of the VIE are generally made by the special servicer or the controlling class security holder. For our residential nonconforming mortgage loan securitizations accounted for as sales, we either do not hold variable interests that we consider potentially significant or are not the primary servicer for a majority of the VIE assets. During the year ended December 31, 2019, we repurchased \$4.4 billion of nonconforming residential mortgage loans in connection with the exercise of cleanup calls on certain securitizations.

Table 8.1 presents information about transfers of assets during the period for which we recorded the transfers as sales and have continuing involvement with the transferred assets. In connection with these transfers, we received proceeds and recorded servicing assets and securities. Substantially all transfers were related to residential mortgage securitizations with the GSEs or GNMA and resulted in no gain or loss because the loans were already measured at fair value on a recurring basis. Each of these interests are initially measured at fair value. Servicing rights are classified as Level 3 measurements, and generally securities are classified as Level 2.

Note 8: Securitizations and Variable Interest Entities (continued)

Table 8.1: Transfers with Continuing Involvement

(in millions)	Year ended December 31,					
	2020		2019		2018	
	Residential mortgages	Commercial mortgages	Residential mortgages	Commercial mortgages	Residential mortgages	Commercial mortgages
Asset balances sold	\$ 177,441	11,744	142,469	18,191	146,614	17,653
Proceeds from transfer (1)	177,478	12,034	142,535	18,521	146,613	17,934
Net gains (losses) on sale	37	290	66	330	(1)	281
Continuing involvement (2):						
Servicing rights recognized	\$ 1,808	161	1,896	161	1,903	158
Securities recognized (3)	31,567	112	—	289	—	149

- (1) Represents cash proceeds and the fair value of non-cash beneficial interests recognized at securitization settlement. Prior periods have been revised to conform with the current period presentation.
(2) Represents assets or liabilities recognized at securitization settlement date related to our continuing involvement in the transferred assets.
(3) Represents debt securities obtained at securitization settlement held for investment purposes that are classified as available-for-sale or held-to-maturity, which predominantly relate to agency securities. Prior periods have been revised to conform with the current period presentation. Excludes trading debt securities held temporarily for market-marking purposes, which are sold to third parties at or shortly after securitization settlement, of \$37.6 billion, \$41.9 billion, and \$38.5 billion, during the years ended December 31, 2020, 2019 and 2018, respectively.

In the normal course of business we purchase certain non-agency securities at initial securitization or subsequently in the secondary market. During the years ended December 31, 2020, 2019 and 2018, we received cash flows of \$198 million, \$275 million, and \$449 million, respectively, predominantly related to principal and interest payments on these securities.

Table 8.2 presents the key weighted-average assumptions we used to initially measure residential MSRs recognized during the periods presented.

Table 8.2: Residential Mortgage Servicing Rights

	Year ended December 31,		
	2020	2019	2018
Prepayment speed (1)	15.4 %	12.8	10.6
Discount rate	6.5	7.5	7.4
Cost to service (\$ per loan) (2)	\$ 96	101	128

- (1) The prepayment speed assumption for residential MSRs includes a blend of prepayment speeds and default rates. Prepayment speed assumptions are influenced by mortgage interest rate inputs as well as our estimation of drivers of borrower behavior.
(2) Includes costs to service and unreimbursed foreclosure costs, which can vary period to period due to changes in model assumptions and the mix of modified government-guaranteed loans sold to GNMA.

See Note 17 (Fair Values of Assets and Liabilities) and Note 9 (Mortgage Banking Activities) for additional information on key economic assumptions for residential MSRs.

SECURITIES HELD FROM NONCONFORMING MORTGAGE LOAN SECURITIZATIONS As described above, when we securitize residential and commercial mortgage loans, we obtain at initial securitization settlement certain securities for investment purposes that are classified as available-for-sale or held-to-maturity. This includes securities obtained in our nonconforming mortgage loan securitizations. Table 8.3 provides key economic assumptions and the sensitivity of the current fair value of nonconforming mortgage-backed securities that we continue to hold related to unconsolidated VIEs, to immediate adverse changes in those assumptions. Excluded from the table are investments in conforming mortgage-backed securities obtained in securitizations issued through the GSEs or GNMA as these securities have a remote risk of credit loss due to the GSE or government guarantee and trading debt securities held temporarily for market-making purposes.

Table 8.3: Securities Held from Nonconforming Mortgage Loan Securitizations

(\$ in millions)	Dec 31, 2020	Dec 31, 2019
Fair value of interests held	\$ 1,056	909
Expected weighted-average life (in years)	6.7	7.3
Discount rate assumption	9.0 %	4.0
Impact on fair value from 100 basis point increase	\$ 57	53
Impact on fair value from 200 basis point increase	111	103
Credit loss assumption	4.6 %	3.1
Impact on fair value from 10% higher losses	\$ 34	1
Impact on fair value from 25% higher losses	38	4

RESECURITIZATION ACTIVITIES We enter into resecuritization transactions as part of our trading activities to accommodate the investment and risk management activities of our customers. In our resecuritization transactions, we transfer trading debt securities to VIEs in exchange for new beneficial interests that are sold to third parties at or shortly after securitization settlement. This activity is performed for customers seeking a specific return or risk profile. Substantially all of our transactions involve the resecuritization of conforming mortgage-backed securities issued by the GSEs or GNMA. We do not consolidate the resecuritization VIEs as we share in the decision-making power with third parties and do not hold significant economic interests in the VIEs other than for market-making activities. We transferred \$77.2 billion, \$27.9 billion, and \$31.4 billion of securities to re-securitization VIEs during the years ended December 31, 2020, 2019 and 2018, respectively. These amounts are not included in Table 8.1. Related total VIE assets were \$130.4 billion and \$111.4 billion at December 31, 2020 and 2019, respectively. As of December 31, 2020 and 2019 we held \$1.5 billion and \$532 million of securities, respectively, including \$1.1 billion and \$266 million related to resecuritizations transacted during the years ended December 31, 2020 and 2019, respectively.

Off-Balance Sheet Loans

Table 8.4 presents information about the principal balances of off-balance sheet loans that were sold or securitized, including residential mortgage loans sold to the GSEs, GNMA and other investors, for which we have some form of continuing involvement (including servicer). Delinquent loans include loans 90 days or more past due and loans in bankruptcy, regardless of delinquency status. In accordance with applicable servicing

guidelines, delinquency status continues to advance for loans with COVID-related payment deferrals. For loans sold or securitized where servicing is our only form of continuing involvement, we generally experience a loss only if we were required to repurchase a delinquent loan or foreclosed asset due to a breach in representations and warranties associated with our loan sale or servicing contracts.

Table 8.4: Off-Balance Sheet Loans Sold or Securitized

(in millions)	Total loans		Delinquent loans and foreclosed assets (1)		Net charge-offs (2)	
	December 31,		December 31,		Year ended	
	2020	2019	2020	2019	2020	2019
Commercial	\$ 114,134	112,507	2,217	776	136	179
Residential	818,886	1,008,459	29,962	6,666	78	229
Total off-balance sheet sold or securitized loans (3)	\$ 933,020	1,120,966	32,179	7,442	214	408

(1) Includes \$394 million and \$492 million of commercial foreclosed assets and \$204 million and \$356 million of residential foreclosed assets at December 31, 2020 and 2019, respectively.

(2) Net charge-offs exclude loans sold to FNMA, FHLMC and GNMA as we do not service or manage the underlying real estate upon foreclosure and, as such, do not have access to net charge-off information.

(3) At December 31, 2020 and 2019, the table includes total loans of \$864.8 billion and \$1.0 trillion, delinquent loans of \$28.5 billion and \$5.2 billion, and foreclosed assets of \$152 million and \$251 million, respectively, for FNMA, FHLMC and GNMA.

Transactions with Unconsolidated VIEs

MORTGAGE LOAN SECURITIZATIONS Table 8.5 includes nonconforming mortgage loan securitizations where we originate and transfer the loans to the unconsolidated securitization VIEs that we sponsor. For more information about these VIEs, see the “Loan Sales and Securitization Activity” section within this Note. Nonconforming mortgage loan securitizations also include commercial mortgage loan securitizations sponsored by third parties where we did not originate or transfer the loans but serve as master servicer and invest in securities that could be potentially significant to the VIE.

Conforming loan securitization transactions involving the GSEs and GNMA are excluded from table 8.5 because we are not the sponsor or we do not have power over the activities most significant to the VIEs. Additionally, due to the nature of the guarantees provided by the GSEs and the FHA and VA, our credit risk associated with these VIEs is limited. For more information about conforming mortgage loan securitizations, see the “Loan Sales and Securitization Activity” section within this Note.

TAX CREDIT STRUCTURES We co-sponsor and make investments in affordable housing and sustainable energy projects that are designed to generate a return primarily through the realization of federal tax credits. The projects are typically managed by project sponsors who have the power over the VIE’s assets. In some instances, our investments in these structures may require that we fund future capital commitments at the discretion of the project sponsors.

OTHER VIE STRUCTURES We engage in various forms of structured finance arrangements with other VIEs, including collateralized debt obligations, and other securitizations collateralized by asset classes other than mortgages. Collateral may include rental properties, asset-backed securities, and auto loans. We may participate in structuring or marketing the arrangements, as well as provide financing, service one or more of the underlying assets, or enter into derivatives with the VIEs. We may also receive fees for those services. We are not the primary beneficiary of these structures because we do not have power to direct the most significant activities of the VIEs.

Table 8.5 provides a summary of our exposure to the unconsolidated VIEs described above, which includes investments in securities, loans, guarantees, liquidity agreements, commitments and certain derivatives. We exclude certain transactions with unconsolidated VIEs when our continuing involvement is temporary or administrative in nature or insignificant in size.

In Table 8.5, “Total VIE assets” represents the remaining principal balance of assets held by unconsolidated VIEs using the most current information available. For VIEs that obtain exposure to assets synthetically through derivative instruments, the notional amount of the derivative is included in the asset balance. “Carrying value” is the amount in our consolidated balance sheet related to our involvement with the unconsolidated VIEs. “Maximum exposure to loss” is determined as the carrying value of our investment in the VIEs excluding the unconditional repurchase options that have not been exercised, plus the remaining undrawn liquidity and lending commitments, the notional amount of net written derivative contracts, and generally the notional amount of, or stressed loss estimate for, other commitments and guarantees.

Debt, guarantees and other commitments include amounts related to loans sold that we may be required to repurchase, or otherwise indemnify or reimburse the investor or insurer for losses incurred, due to material breach of contractual representations and warranties as well as other retained recourse arrangements. The maximum exposure to loss for material breach of contractual representations and warranties represents a stressed case estimate we utilize for determining stressed case regulatory capital needs and is considered to be a remote scenario.

“Maximum exposure to loss” represents estimated loss that would be incurred under severe, hypothetical circumstances, for which we believe the possibility is extremely remote, such as where the value of our interests and any associated collateral declines to zero, without any consideration of recovery or offset from any economic hedges. Accordingly, this disclosure is not an indication of expected loss.

Note 8: Securitizations and Variable Interest Entities (continued)

Table 8.5: Unconsolidated VIEs

(in millions)	Total VIE assets	Carrying value – asset (liability)				
		Debt securities (1)	Equity securities	All other assets (2)	Debt and other liabilities	Net assets
December 31, 2020						
Nonconforming residential mortgage loan securitizations	\$ 5,233	16	—	37	—	53
Nonconforming commercial mortgage loan securitizations	122,484	2,287	—	569	—	2,856
Tax credit structures	41,125	—	11,637	1,760	(4,202)	9,195
Other	1,991	—	51	151	(1)	201
Total	\$ 170,833	2,303	11,688	2,517	(4,203)	12,305
Maximum exposure to loss						
		Debt securities (1)	Equity securities	All other assets (2)	Debt, guarantees, and other commitments	Total exposure
Nonconforming residential mortgage loan securitizations		16	—	37	—	53
Nonconforming commercial mortgage loan securitizations		2,287	—	570	34	2,891
Tax credit structures		—	11,637	1,760	3,108	16,505
Other		—	51	151	230	432
Total		2,303	11,688	2,518	3,372	19,881
December 31, 2019 (3)						
Nonconforming residential mortgage loan securitizations	\$ 4,967	6	—	152	—	158
Nonconforming commercial mortgage loan securitizations	117,079	2,239	—	350	—	2,589
Tax credit structures	39,091	—	11,349	1,477	(4,260)	8,566
Other	2,522	62	52	156	(21)	249
Total	\$ 163,659	2,307	11,401	2,135	(4,281)	11,562
Maximum exposure to loss						
		Debt securities (1)	Equity securities	All other assets (2)	Debt, guarantees, and other commitments	Total exposure
Nonconforming residential mortgage loan securitizations		6	—	152	—	158
Nonconforming commercial mortgage loan securitizations		2,239	—	350	43	2,632
Tax credit structures		—	11,349	1,477	1,701	14,527
Other		62	52	156	249	519
Total		2,307	11,401	2,135	1,993	17,836

(1) Includes \$310 million and \$264 million of securities classified as trading at December 31, 2020 and 2019, respectively.

(2) All other assets includes loans, mortgage servicing rights, derivative assets, and other assets (predominantly servicing advances).

(3) Prior period has been revised to conform with the current period presentation to reflect the carrying value of assets/(liabilities) by financial statement line item. Additionally, the table no longer includes securitizations resulting from loans sold to U.S. GSEs and transactions with GNMA, or securitization activities, which are separately discussed within this Note.

Consolidated VIEs

We consolidate VIEs where we are the primary beneficiary. We are the primary beneficiary of the following structure types:

COMMERCIAL AND INDUSTRIAL LOANS AND LEASES We securitize dealer floor plan loans and leases in a revolving master trust entity and hold the subordinated notes and residual equity interests. As servicer and residual interest holder, we control the key decisions of the trust and consolidate the entity. The total VIE assets held by the master trust represent a majority of the total VIE assets presented for this category in Table 8.6. In a separate transaction structure, we also provide the majority of debt and equity financing to an SPE that engages in lending and leasing to specific vendors and service the underlying collateral.

COMMERCIAL REAL ESTATE LOANS We purchase local industrial development bonds and credit enhancement from the GSEs, which are placed with a custodian that issues beneficial interests. We own all of the beneficial interests and may also service the underlying mortgages. Through our ownership of the beneficial interests we control the key decisions of the trust including the decision to invest in or divest of a bond and whether to purchase or retain credit support.

OTHER VIE STRUCTURES Other VIEs are primarily related to municipal tender option bond (MTOB) transactions and

nonconforming mortgage loan securitizations that we sponsor. MTOBs are vehicles to finance the purchase of municipal bonds through the issuance of short-term debt to investors. Our involvement with MTOBs includes serving as the residual interest holder, which provides control over the key decisions of the VIE, as well as the remarketing agent or liquidity provider related to the debt issued to investors. We also securitize nonconforming mortgage loans, in which our involvement includes servicer of the underlying assets and holder of subordinate or senior securities issued by the VIE.

Table 8.6 presents a summary of financial assets and liabilities of our consolidated VIEs. The carrying value represents assets and liabilities recorded on our consolidated balance sheet. Carrying values of assets are presented using GAAP measurement methods, which may include fair value, credit impairment or other adjustments, and therefore in some instances will differ from "Total VIE assets." For VIEs that obtain exposure synthetically through derivative instruments, the notional amount of the derivative is included in "Total VIE assets."

On our consolidated balance sheet, we separately disclose (1) the consolidated assets of certain VIEs that can only be used to settle the liabilities of those VIEs, and (2) the consolidated liabilities of certain VIEs for which the VIE creditors do not have recourse to Wells Fargo.

Table 8.6: Transactions with Consolidated VIEs

(in millions)	Total VIE assets	Carrying value				
		Loans	Debt securities (1)	All other assets (2)	Long-term debt	All other liabilities (3)
December 31, 2020						
Commercial and industrial loans and leases	\$ 6,987	5,005	—	223	—	(200)
Commercial real estate loans	5,369	5,357	—	12	—	—
Other	1,627	507	967	75	(203)	(900)
Total consolidated VIEs	\$ 13,983	10,869	967	310	(203)	(1,100)
December 31, 2019						
Commercial and industrial loans and leases	\$ 8,054	7,543	—	499	(300)	(229)
Commercial real estate loans	4,836	4,823	—	13	—	—
Other	1,615	804	540	146	(287)	(410)
Total consolidated VIEs	\$ 14,505	13,170	540	658	(587)	(639)

(1) Includes \$269 million and \$339 million of securities classified as trading at December 31, 2020 and 2019, respectively.

(2) All other assets includes cash and due from banks, interest-earning deposits with banks, derivative assets, equity securities, and other assets.

(3) All other liabilities includes short-term borrowings, derivative liabilities, and accrued expenses and other liabilities.

Other Transactions

In addition to the transactions included in the previous tables, we have used wholly-owned trust preferred security VIEs to issue debt securities or preferred equity exclusively to third-party investors. As the sole assets of the VIEs are receivables from us, we do not consolidate the VIEs even though we own all of the voting equity shares of the VIEs, have fully guaranteed the obligations of the VIEs, and may have the right to redeem the third-party securities under certain circumstances. See Note 12 (Long-Term Debt) and Note 18 (Preferred Stock) for additional information about trust preferred securities.

Certain money market funds are also excluded from the previous tables because they are exempt from the consolidation analysis. We voluntarily waived a portion of our management fees for these money market funds to maintain a minimum level of daily net investment income. The amount of fees waived was not significant for the years ending December 31, 2020, 2019 and 2018.

Note 9: Mortgage Banking Activities

Mortgage banking activities consist of residential and commercial mortgage originations, sales and servicing.

We apply the amortization method to commercial MSR and apply the fair value method to residential MSRs. The amortized

cost of commercial MSRs was \$1.3 billion and \$1.4 billion with an estimated fair value of \$1.4 billion and \$1.9 billion at December 31, 2020 and 2019, respectively. Table 9.1 presents the changes in MSRs measured using the fair value method.

Table 9.1: Analysis of Changes in Fair Value MSRs

(in millions)	Year ended December 31,		
	2020	2019	2018
Fair value, beginning of year	\$ 11,517	14,649	13,625
Servicing from securitizations or asset transfers (1)	1,708	1,933	2,010
Sales and other (2)	(32)	(286)	(71)
Net additions	1,676	1,647	1,939
Changes in fair value:			
Due to valuation inputs or assumptions:			
Mortgage interest rates (3)	(3,946)	(2,406)	1,337
Servicing and foreclosure costs (4)	(175)	48	818
Discount rates	27	145	(830)
Prepayment estimates and other (5)	(599)	(356)	(365)
Net changes in valuation inputs or assumptions	(4,693)	(2,569)	960
Changes due to collection/realization of expected cash flows (6)	(2,375)	(2,210)	(1,875)
Total changes in fair value	(7,068)	(4,779)	(915)
Fair value, end of year	\$ 6,125	11,517	14,649

(1) Includes impacts associated with exercising cleanup calls on securitizations and our right to repurchase delinquent loans from GNMA loan securitization pools. MSRs may increase upon repurchase due to servicing liabilities associated with these delinquent GNMA loans.

(2) Includes sales and transfers of MSRs, which can result in an increase in MSRs if related to portfolios with servicing liabilities.

(3) Includes prepayment speed changes as well as other valuation changes due to changes in mortgage interest rates.

(4) Includes costs to service and unreimbursed foreclosure costs.

(5) Represents other changes in valuation model inputs or assumptions including prepayment speed estimation changes that are independent of mortgage interest rate changes.

(6) Represents the reduction in the MSR fair value for the cash flows expected to be collected during the period, net of income accreted due to the passage of time.

Table 9.2 provides key economic assumptions and sensitivity of the current fair value of residential MSRs to immediate adverse changes in those assumptions. Amounts for residential MSRs include purchased servicing rights as well as servicing

rights resulting from the transfer of loans. See Note 17 (Fair Values of Assets and Liabilities) for additional information on key economic assumptions for residential MSRs.

Table 9.2: Economic Assumptions and Sensitivity of Residential MSRs

(\$ in millions, except cost to service amounts)	Dec 31, 2020	Dec 31, 2019
Fair value of interests held	\$ 6,125	11,517
Expected weighted-average life (in years)	3.7	5.3
Key economic assumptions:		
Prepayment speed assumption	19.9 %	11.9
Impact on fair value from 10% adverse change	\$ 434	537
Impact on fair value from 25% adverse change	1,002	1,261
Discount rate assumption	5.8 %	7.2
Impact on fair value from 100 basis point increase	\$ 229	464
Impact on fair value from 200 basis point increase	440	889
Cost to service assumption (\$ per loan)	130	102
Impact on fair value from 10% adverse change	181	253
Impact on fair value from 25% adverse change	454	632

The sensitivities in the preceding table are hypothetical and caution should be exercised when relying on this data. Changes in value based on variations in assumptions generally cannot be extrapolated because the relationship of the change in the assumption to the change in value may not be linear. Also, the

effect of a variation in a particular assumption on the value of the other interests held is calculated independently without changing any other assumptions. In reality, changes in one factor may result in changes in others, which might magnify or counteract the sensitivities.

We present the components of our managed servicing portfolio in Table 9.3 at unpaid principal balance for loans serviced and subserviced for others and at book value for owned loans serviced.

Table 9.3: Managed Servicing Portfolio

(in billions)	Dec 31, 2020	Dec 31, 2019
Residential mortgage servicing:		
Serviced and subserviced for others	\$ 859	1,065
Owned loans serviced	323	343
Total residential servicing	1,182	1,408
Commercial mortgage servicing:		
Serviced and subserviced for others	583	575
Owned loans serviced	123	124
Total commercial servicing	706	699
Total managed servicing portfolio	\$ 1,888	2,107
Total serviced for others, excluding subserviced for others	\$ 1,431	1,629
MSRs as a percentage of loans serviced for others	0.52 %	0.79
Weighted average note rate (mortgage loans serviced for others)	4.03	4.25

At December 31, 2020, and December 31, 2019, we had servicer advances, net of an allowance for uncollectible amounts, of \$3.4 billion and \$2.0 billion, respectively. As the servicer of loans for others, we advance certain payments of principal, interest, taxes, insurance, and default-related expenses which are generally reimbursed within a short timeframe from cash flows from the trust, GSEs, insurer or borrower. The credit risk related to these advances is limited since the reimbursement is generally senior to cash payments to investors. We also advance payments of taxes and insurance for our owned loans which are collectible

from the borrower. We maintain an allowance for uncollectible amounts for advances on loans serviced for others that may not be reimbursed if the payments were not made in accordance with applicable servicing agreements or if the insurance or servicing agreements contain limitations on reimbursements. Servicing advances on owned loans are charged-off when deemed uncollectible.

Table 9.4 presents the components of mortgage banking noninterest income.

Table 9.4: Mortgage Banking Noninterest Income

(in millions)	Year ended December 31,		
	2020	2019	2018
Servicing fees:			
Contractually specified servicing fees, late charges and ancillary fees	\$ 3,250	3,660	3,957
Unreimbursed direct servicing costs (1)	(620)	(403)	(331)
Servicing fees	2,630	3,257	3,626
Amortization (2)	(308)	(274)	(266)
Changes due to collection/realization of expected cash flows (3)	(A) (2,375)	(2,210)	(1,875)
Net servicing fees	(53)	773	1,485
Changes in fair value of MSRs due to valuation inputs or assumptions (4)	(B) (4,693)	(2,569)	960
Net derivative gains (losses) from economic hedges (5)	4,607	2,318	(1,072)
Market-related valuation changes to MSRs, net of hedge results	(86)	(251)	(112)
Total servicing income (loss), net	(139)	522	1,373
Net gains on mortgage loan originations/sales (6)	3,632	2,193	1,644
Total mortgage banking noninterest income	\$ 3,493	2,715	3,017
Total changes in fair value of MSRs carried at fair value	(A)+(B) \$ (7,068)	(4,779)	(915)

(1) Includes costs associated with foreclosures, unreimbursed interest advances to investors, and other interest costs.

(2) Includes a \$37 million impairment recorded at December 31, 2020.

(3) Represents the reduction in the MSR fair value for the cash flows expected to be collected during the period, net of income accreted due to the passage of time.

(4) Refer to the analysis of changes in fair value MSRs presented in Table 9.1 in this Note for more detail.

(5) See Note 16 (Derivatives) for additional discussion and detail on economic hedges.

(6) Includes net gains (losses) of \$(1.8) billion, \$(141) million and \$857 million at December 31, 2020, 2019 and 2018, respectively, related to derivatives used as economic hedges of mortgage loans held for sale and derivative loan commitments.

Note 10: Intangible Assets

Table 10.1 presents the gross carrying value of intangible assets and accumulated amortization.

Table 10.1: Intangible Assets

(in millions)	December 31, 2020			December 31, 2019		
	Gross carrying value	Accumulated amortization	Net carrying value	Gross carrying value	Accumulated amortization	Net carrying value
Amortized intangible assets (1):						
MSRs (2)	\$ 4,612	(3,300)	1,312	4,422	(2,992)	1,430
Customer relationship and other intangibles	879	(551)	328	947	(524)	423
Total amortized intangible assets	\$ 5,491	(3,851)	1,640	5,369	(3,516)	1,853
Unamortized intangible assets:						
MSRs (carried at fair value) (2)	\$ 6,125			11,517		
Goodwill	26,392			26,390		
Trademark	14			14		

(1) Balances are excluded commencing in the period following full amortization.

(2) Includes a \$37 million valuation allowance recorded for amortized MSRs at December 31, 2020. See Note 9 (Mortgage Banking Activities) for additional information on MSRs.

Table 10.2 provides the current year and estimated future amortization expense for amortized intangible assets. We based our projections of amortization expense shown below on existing

asset balances at December 31, 2020. Future amortization expense may vary from these projections.

Table 10.2: Amortization Expense for Intangible Assets

(in millions)	Amortized MSRs	Customer relationship and other intangibles	Total
Year ended December 31, 2020 (actual)	\$ 308	95	403
Estimate for year ended December 31,			
2021	\$ 244	81	325
2022	216	68	284
2023	188	59	247
2024	163	48	211
2025	138	39	177

In 2020, we reorganized our management reporting structure into four reportable operating segments: Consumer Banking and Lending, Commercial Banking, Corporate and Investment Banking, and Wealth and Investment Management. As part of the reorganization, the Consumer Banking and Lending segment primarily retained the goodwill formerly assigned to the Community Banking segment and the former Wholesale Banking

segment was separated into the Commercial Banking and Corporate and Investment Banking segments. We also report Corporate, which includes goodwill assigned to certain lines of business that management has determined are no longer consistent with the long-term strategic goals of the Company. Table 10.3 shows the allocation of goodwill.

Table 10.3: Goodwill

(in millions)	Consumer Banking and Lending	Wholesale Banking	Commercial Banking	Corporate and Investment Banking	Wealth and Investment Management	Corporate	Consolidated Company
December 31, 2018	\$ 16,685	8,450	—	—	1,283	—	26,418
Change in goodwill related to divested businesses and foreign currency translation	—	(21)	—	—	(7)	—	(28)
December 31, 2019	\$ 16,685	8,429	—	—	1,276	—	26,390
Change in goodwill related to divested businesses and foreign currency translation	—	—	2	—	—	—	2
Reallocation due to change in segments	(267)	(8,429)	3,016	5,375	—	305	—
December 31, 2020	\$ 16,418	—	3,018	5,375	1,276	305	26,392

Note 11: Deposits

Table 11.1 presents a summary of the time certificates of deposit (CDs) and other time deposits issued by domestic and non-U.S. offices.

Table 11.1: Time Deposits

(in billions)	December 31,	
	2020	2019
Total domestic and Non-U.S.	\$ 52.8	118.8
Domestic:		
\$100,000 or more	11.8	43.7
\$250,000 or more	6.8	34.6
Non-U.S.:		
\$100,000 or more	2.2	4.0
\$250,000 or more	2.2	4.0

Substantially all CDs and other time deposits issued by domestic and non-U.S. offices were interest bearing. The contractual maturities of these deposits are presented in Table 11.2.

Table 11.2: Contractual Maturities of Time Deposits

(in millions)	December 31, 2020	
2021	\$	35,464
2022		8,521
2023		4,936
2024		2,084
2025		490
Thereafter		1,312
Total	\$	52,807

The contractual maturities of the domestic time deposits with a denomination of \$100,000 or more are presented in Table 11.3.

Table 11.3: Contractual Maturities of Domestic Time Deposits

(in millions)	December 31, 2020	
Three months or less	\$	6,491
After three months through six months		2,391
After six months through twelve months		1,402
After twelve months		1,522
Total	\$	11,806

Demand deposit overdrafts of \$326 million and \$542 million were included as loan balances at December 31, 2020 and 2019, respectively.

Note 12: Long-Term Debt

We issue long-term debt denominated in multiple currencies, primarily in U.S. dollars. Our issuances have both fixed and floating interest rates. As a part of our overall interest rate risk management strategy, we often use derivatives to manage our exposure to interest rate risk. We also use derivatives to manage our exposure to foreign currency risk. As a result, the majority of the long-term debt presented below is hedged in a fair value or cash flow hedge relationship. See Note 16 (Derivatives) for further information on qualifying hedge contracts.

Table 12.1 presents a summary of our long-term debt carrying values, reflecting unamortized debt discounts and premiums, and purchase accounting adjustments, where applicable. The interest rates displayed represent the range of contractual rates in effect at December 31, 2020. These interest rates do not include the effects of any associated derivatives designated in a hedge accounting relationship.

Table 12.1: Long-Term Debt

(in millions)	Maturity date(s)	Stated interest rate(s)	December 31,	
			2020	2019
Wells Fargo & Company (Parent only)				
Senior				
Fixed-rate notes	2021-2045	0.38-6.75%	\$ 84,892	86,618
Floating-rate notes	2021-2048	0.00-1.57%	13,736	16,800
FixFloat notes	2024-2051	1.34-5.01%	43,917	12,030
Structured notes (1)			8,081	8,390
Total senior debt – Parent			150,626	123,838
Subordinated				
Fixed-rate notes (2)	2023-2046	3.45-7.57%	29,874	27,195
Total subordinated debt – Parent			29,874	27,195
Junior subordinated				
Fixed-rate notes	2029-2036	5.95-7.95%	1,382	1,428
Floating-rate notes	2027	0.74-1.24%	330	318
Total junior subordinated debt – Parent (3)			1,712	1,746
Total long-term debt – Parent (2)			182,212	152,779
Wells Fargo Bank, N.A., and other bank entities (Bank)				
Senior				
Fixed-rate notes	2021-2023	2.60-3.63%	7,644	9,364
Floating-rate notes	2021-2053	0.00-0.89%	3,747	10,617
FixFloat notes	2022	2.08-2.90%	2,841	5,097
Fixed-rate advances – Federal Home Loan Bank (FHLB)	2021-2031	3.83-7.50%	31	41
Floating-rate advances – FHLB			—	32,950
Structured notes (1)			792	1,914
Finance leases	2021-2029	1.69-17.78%	28	32
Total senior debt – Bank			15,083	60,015
Subordinated				
Fixed-rate notes	2023-2038	5.25-7.74%	5,775	5,374
Total subordinated debt – Bank			5,775	5,374
Junior subordinated				
Floating-rate notes	2027	0.79-0.89%	375	363
Total junior subordinated debt – Bank (3)			375	363
Long-term debt issued by VIE – Fixed rate			—	17
Long-term debt issued by VIE – Floating rate	2037	0.31-0.32%	203	570
Mortgage notes and other debt (4)	2021-2059	0.24-9.20%	5,694	6,185
Total long-term debt – Bank			27,130	72,524

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(in millions)	Maturity date(s)	Stated interest rate(s)	December 31,	
			2020	2019
Other consolidated subsidiaries				
Senior				
Fixed-rate notes	2021-2023	3.04-3.46%	1,390	1,352
Structured notes (1)			2,186	1,503
Finance leases			—	1
Total senior debt – Other consolidated subsidiaries			3,576	2,856
Mortgage notes and other	2026	1.71%	32	32
Total long-term debt – Other consolidated subsidiaries			3,608	2,888
Total long-term debt			\$ 212,950	228,191

- (1) Included in the table are certain structured notes that have coupon or repayment terms linked to the performance of debt or equity securities, an embedded equity, commodity, or currency index, or basket of indices accounted for separately from the note as a free-standing derivative, and the maturity may be accelerated based on the value of a referenced index or security. For information on embedded derivatives, see the "Derivatives Not Designated as Hedging Instruments" section in Note 16 (Derivatives). In addition, a major portion consists of zero coupon notes where interest is paid as part of the final redemption amount.
- (2) Includes fixed-rate subordinated notes issued by the Parent at a discount of \$126 million and \$128 million in 2020 and 2019, respectively, and debt issuance costs of \$2 million in both 2020 and 2019, to effect a modification of Wells Fargo Bank, N.A., notes. These subordinated notes are carried at their par amount on the consolidated balance sheet of the Parent presented in Note 27 (Parent-Only Financial Statements). In addition, Parent long-term debt presented in Note 27 also includes affiliate related issuance costs of \$384 million and \$281 million in 2020 and 2019, respectively.
- (3) Includes junior subordinated debentures held by unconsolidated wholly-owned trusts formed for the sole purpose of issuing trust preferred securities of \$704 million and \$2.1 billion at December 31, 2020 and 2019, respectively. During first quarter 2020, we liquidated certain of our trust preferred securities, and as a result, the preferred securities issued by the trusts were canceled and junior subordinated debentures with a total carrying value of \$1.4 billion were distributed to the preferred security holders.
- (4) Primarily relates to unfunded commitments for LIHTC investments. For additional information, see Note 6 (Equity Securities).

We issue long-term debt in a variety of maturities and currencies to achieve cost-efficient funding and to maintain an appropriate maturity profile. Long-term debt of \$213.0 billion at December 31, 2020, decreased \$15.2 billion from December 31, 2019. We issued \$38.1 billion of long-term debt in 2020.

The aggregate carrying value of long-term debt that matures (based on contractual payment dates) as of December 31, 2020, in each of the following five years and thereafter is presented in Table 12.2.

Table 12.2: Maturity of Long-Term Debt

(in millions)	December 31, 2020						
	2021	2022	2023	2024	2025	Thereafter	Total
Wells Fargo & Company (Parent Only)							
Senior notes	\$ 20,328	17,105	11,609	12,480	14,742	74,362	150,626
Subordinated notes	—	—	3,750	764	1,134	24,226	29,874
Junior subordinated notes	—	—	—	—	—	1,712	1,712
Total long-term debt – Parent	20,328	17,105	15,359	13,244	15,876	100,300	182,212
Wells Fargo Bank, N.A., and other bank entities (Bank)							
Senior notes	6,865	4,877	2,904	5	191	241	15,083
Subordinated notes	—	—	1,105	—	172	4,498	5,775
Junior subordinated notes	—	—	—	—	—	375	375
Securitizations and other bank debt	2,192	1,177	700	223	125	1,480	5,897
Total long-term debt – Bank	9,057	6,054	4,709	228	488	6,594	27,130
Other consolidated subsidiaries							
Senior notes	1,892	202	516	125	440	401	3,576
Securitizations and other bank debt	—	—	—	—	—	32	32
Total long-term debt – Other consolidated subsidiaries	1,892	202	516	125	440	433	3,608
Total long-term debt	\$ 31,277	23,361	20,584	13,597	16,804	107,327	212,950

As part of our long-term and short-term borrowing arrangements, we are subject to various financial and operational covenants. Some of the agreements under which debt has been issued have provisions that may limit the merger or sale of certain subsidiary banks and the issuance of capital stock or convertible securities by certain subsidiary banks. At December 31, 2020, we were in compliance with all the covenants.

Note 13: Guarantees and Other Commitments

Guarantees are contracts that contingently require us to make payments to a guaranteed party based on an event or a change in an underlying asset, liability, rate or index. Guarantees are generally in the form of standby and direct pay letters of credit,

written options, recourse obligations, and other types of similar arrangements. Table 13.1 shows carrying value, maximum exposure to loss on our guarantees and the related non-investment grade amounts.

Table 13.1: Guarantees – Carrying Value and Maximum Exposure to Loss

(in millions)	Carrying value of obligation (asset)	Maximum exposure to loss						
		Expires in one year or less	Expires after one year through three years	Expires after three years through five years	Expires after five years	Total	Non-investment grade	
December 31, 2020								
Standby letters of credit	\$ 156	11,977	4,962	1,897	433	19,269	7,528	
Direct pay letters of credit	18	2,256	2,746	531	39	5,572	1,102	
Written options (1)	(538)	12,735	7,972	889	58	21,654	13,394	
Loans and LHFS sold with recourse (2)	33	177	819	1,870	9,723	12,589	10,332	
Exchange and clearing house guarantees	—	—	—	—	5,510	5,510	—	
Other guarantees and indemnifications (3)	—	734	1	1	1,414	2,150	590	
Total guarantees	\$ (331)	27,879	16,500	5,188	17,177	66,744	32,946	
December 31, 2019								
Standby letters of credit	\$ 36	11,569	4,460	2,812	467	19,308	7,104	
Direct pay letters of credit	—	1,861	3,815	824	105	6,605	1,184	
Written options (1)	(345)	17,088	10,869	2,341	273	30,571	18,113	
Loans and LHFS sold with recourse (2)	52	114	576	1,356	10,050	12,096	9,835	
Exchange and clearing house guarantees	—	—	—	—	4,817	4,817	—	
Other guarantees and indemnifications (3)	1	785	1	3	809	1,598	698	
Total guarantees	\$ (256)	31,417	19,721	7,336	16,521	74,995	36,934	

(1) Written options, which are in the form of derivatives, are also included in the derivative disclosures in Note 16 (Derivatives). Carrying value net asset position is a result of certain deferred premium option trades.

(2) Represent recourse provided, predominantly to the GSEs, on loans sold under various programs and arrangements.

(3) Includes indemnifications provided to certain third-party clearing agents. Outstanding customer obligations under these arrangements were \$144 million and \$80 million with related collateral of \$1.2 billion and \$696 million at December 31, 2020 and 2019, respectively.

“Maximum exposure to loss” and “Non-investment grade” are required disclosures under GAAP. Maximum exposure to loss represents the estimated loss that would be incurred under an assumed hypothetical circumstance, despite what we believe is a remote possibility, where the value of our interests and any associated collateral declines to zero. Maximum exposure to loss estimates in Table 13.1 do not reflect economic hedges or collateral we could use to offset or recover losses we may incur under our guarantee agreements. Accordingly, this required disclosure is not an indication of expected loss. We believe the carrying value is more representative of our exposure to loss than maximum exposure to loss. The carrying value represents the fair value of the guarantee, if any, and also includes an ACL for guarantees, if applicable.

Non-investment grade represents those guarantees on which we have a higher risk of performance under the terms of the guarantee. If the underlying assets under the guarantee are non-investment grade (that is, an external rating that is below investment grade or an internal credit default grade that is equivalent to a below investment grade external rating), we consider the risk of performance to be high. Internal credit default grades are determined based upon the same credit policies that we use to evaluate the risk of payment or performance when making loans and other extensions of credit. Credit quality indicators we usually consider in evaluating risk of payments or performance are described in Note 4 (Loans and Related Allowance for Credit Losses).

STANDBY LETTERS OF CREDIT We issue standby letters of credit, which include performance and financial guarantees, for customers in connection with contracts between our customers and third parties. We also originate multipurpose lending commitments under which borrowers have the option to draw on the facility in one of several forms, including as a standby letter of credit. Standby letters of credit are conditional lending commitments where we are obligated to make payment to a third party on behalf of a customer if the customer fails to meet their contractual obligations. Total maximum exposure to loss includes the portion of multipurpose lending facilities for which we have issued standby letters of credit under the commitments. We consider the credit risk in standby letters of credit and commercial and similar letters of credit in determining the ACL.

DIRECT PAY LETTERS OF CREDIT We issue direct pay letters of credit to serve as credit enhancements for certain bond issuances. Beneficiaries (bond trustees) may draw upon these instruments to make scheduled principal and interest payments, redeem all outstanding bonds because a default event has occurred, or for other reasons as permitted by the agreement. We consider the credit risk in direct pay letters of credit in determining the ACL.

WRITTEN OPTIONS We enter into certain derivative contracts that have the characteristics of a guarantee. These contracts include written put options that give the counterparty the right to sell to us an underlying instrument held by the counterparty at a specified price by a specified date. They also include certain written options that require us to make a payment for increases in fair value of assets held by the counterparty. These written option contracts generally permit or require net settlement. While these derivative transactions expose us to risk if the option is exercised, we manage this risk by entering into offsetting trades or by taking short positions in the underlying instrument. We offset market risk related to options written to customers with cash securities or other offsetting derivative transactions. Additionally, for certain of these contracts, we require the counterparty to pledge the underlying instrument as collateral for the transaction. Our ultimate obligation under written options is based on future market conditions and is only quantifiable at settlement. See Note 16 (Derivatives) for additional information regarding written derivative contracts.

LOANS AND LHFS SOLD WITH RECOURSE In certain sales and securitizations of loans, including mortgage loans, we provide recourse to the buyer whereby we are required to indemnify the buyer for any loss on the loan up to par value plus accrued interest. We provide recourse, predominantly to GSEs, on loans sold under various programs and arrangements. Substantially all of these programs and arrangements require that we share in the loans' credit exposure for their remaining life by providing recourse to the GSE, up to 33.33% of actual losses incurred on a pro-rata basis in the event of borrower default. Under the remaining recourse programs and arrangements, if certain events occur within a specified period of time from transfer date, we have to provide limited recourse to the buyer to indemnify them for losses incurred for the remaining life of the loans. The maximum exposure to loss reported in Table 13.1 represents the outstanding principal balance of the loans sold or securitized that are subject to recourse provisions or the maximum losses per the contractual agreements. However, we believe the likelihood of loss of the entire balance due to these recourse agreements is remote, and amounts paid can be recovered in whole or in part from the sale of collateral. We also provide representation and warranty guarantees on loans sold under the various recourse programs and arrangements. Our loss exposure relative to these guarantees is separately considered and provided for, as necessary, in determination of our liability for loan repurchases due to breaches of representation and warranties.

EXCHANGE AND CLEARING HOUSE GUARANTEES We are members of several securities and derivatives exchanges and clearing houses, both in the U.S. and in countries outside the U.S., that we use to clear our trades and those of our customers. It is common that all members in these organizations are required to collectively guarantee the performance of other members and of the organization. Our obligations under the guarantees are generally a pro-rata share based on either a fixed amount or a multiple of the guarantee fund we are required to maintain with these organizations. Some membership rules require members to assume a pro-rata share of losses resulting from another member's default or from non-member default losses after applying the guarantee fund. We have not recorded a liability for these arrangements as of the dates presented in Table 13.1 because we believe the likelihood of loss is remote.

OTHER GUARANTEES AND INDEMNIFICATIONS We have contingent performance arrangements related to various customer relationships and lease transactions. We are required to pay the counterparties to these agreements if third parties default on certain obligations.

Under certain factoring arrangements, we may be required to purchase trade receivables from third parties, if receivable debtors default on their payment obligations.

We use certain third-party clearing agents to clear and settle transactions on behalf of some of our institutional brokerage customers. We indemnify the clearing agents against loss that could occur for non-performance by our customers on transactions that are not sufficiently collateralized. Transactions subject to the indemnifications may include customer obligations related to the settlement of margin accounts and short positions, such as written call options and securities borrowing transactions.

We enter into other types of indemnification agreements in the ordinary course of business under which we agree to indemnify third parties against any damages, losses and expenses incurred in connection with legal and other proceedings arising from relationships or transactions with us. These relationships or transactions include those arising from service as a director or officer of the Company, underwriting agreements relating to our securities, acquisition agreements and various other business transactions or arrangements. Because the extent of our obligations under these agreements depends entirely upon the occurrence of future events, we are unable to determine our potential future liability under these agreements. We do, however, record a liability for residential mortgage loans that we expect to repurchase pursuant to various representations and warranties.

MERCHANT PROCESSING SERVICES We provide debit and credit card transaction processing services through payment networks directly for merchants and as a sponsor for merchant processing servicers, including our joint venture with a third party that is accounted for as an equity method investment. In our role as the merchant acquiring bank, we have a potential obligation in connection with payment and delivery disputes between the merchant and the cardholder that are resolved in favor of the cardholder. If we are unable to collect the amounts from the merchant, we incur a loss for the refund to the cardholder. We are secondarily obligated to make a refund for transactions involving sponsored merchant processing servicers. We generally have a low likelihood of loss in connection with our merchant processing services because most products and services are delivered when purchased and amounts are generally refunded when items are returned to the merchant. In addition, we may reduce our risk in connection with these transactions by withholding future payments and requiring cash or other collateral. For the year 2020, we processed card transaction volume of \$1.4 trillion as a merchant acquiring bank, and related losses, including those from our joint venture entity, were immaterial.

Note 13: Guarantees and Other Commitments (continued)

GUARANTEES OF SUBSIDIARIES In the normal course of business, the Parent may provide counterparties with guarantees related to its subsidiaries' obligations. These obligations are included in the Company's consolidated balance sheet or are reflected as off-balance sheet commitments, and therefore, the Parent has not recognized a separate liability for these guarantees.

The Parent fully and unconditionally guarantees the payment of principal, interest, and any other amounts that may be due on securities that its 100% owned finance subsidiary, Wells Fargo Finance LLC, may issue. These securities are not guaranteed by any other subsidiary of the Parent. The guaranteed liabilities were \$2.3 billion and \$1.6 billion at December 31, 2020 and 2019, respectively. These guarantees rank on parity with all of the Parent's other unsecured and unsubordinated indebtedness. The assets of the Parent consist primarily of equity in its subsidiaries, and the Parent is a separate and distinct legal entity from its subsidiaries. As a result, the Parent's ability to address claims of holders of these debt securities against the Parent under the guarantee depends on the Parent's receipt of dividends, loan payments and other funds from its subsidiaries. If any of the Parent's subsidiaries becomes insolvent, the direct creditors of that subsidiary will have a prior claim on that subsidiary's assets. The rights of the Parent and the rights of the Parent's creditors will be subject to that prior claim unless the Parent is also a direct creditor of that subsidiary. For a discussion regarding other restrictions on the Parent's ability to receive dividends, loan payments and other funds from its subsidiaries, see Note 28 (Regulatory Capital Requirements and Other Restrictions).

OTHER COMMITMENTS To meet the financing needs of our customers, we may enter into commitments to purchase debt and equity securities to provide capital for their funding, liquidity or other future needs. As of both December 31, 2020 and 2019, we had commitments to purchase debt securities of \$18 million and commitments to purchase equity securities of \$3.2 billion and \$2.7 billion, respectively.

As part of maintaining our memberships in certain clearing organizations, we are required to stand ready to provide liquidity to sustain market clearing activity in the event unforeseen events occur or are deemed likely to occur. Certain of these obligations are guarantees of other members' performance and accordingly are included in Table 13.1 in Other guarantees and indemnifications.

Also, we have commitments to purchase loans and securities under resale agreements from certain counterparties, including central clearing organizations. The amount of our unfunded contractual commitments was \$12.0 billion and \$7.5 billion as of December 31, 2020 and 2019, respectively.

Given the nature of these commitments, they are excluded from Table 4.4 (Unfunded Credit Commitments) in Note 4 (Loans and Related Allowance for Credit Losses).

Note 14: Pledged Assets and Collateral

Pledged Assets

Table 14.1 provides the carrying amount of on-balance sheet pledged assets and the fair value of other pledged collateral. Other pledged collateral is collateral we have received from third parties, have the right to repledge and is not recognized on our consolidated balance sheet.

TRADING RELATED ACTIVITY Our trading businesses may pledge debt and equity securities in connection with securities sold under agreements to repurchase (repurchase agreements) and securities lending arrangements. The collateral that we pledge related to our trading activities may include our own collateral as well as collateral that we have received from third parties and have the right to repledge. All of the trading activity pledged collateral is eligible to be repledged or sold by the secured party.

NON-TRADING RELATED ACTIVITY As part of our liquidity management strategy, we may pledge loans, debt securities, and

other financial assets to secure trust and public deposits, borrowings and letters of credit from the Federal Home Loan Bank (FHLB) and the Board of Governors of the Federal Reserve System (FRB) and for other purposes as required or permitted by law or insurance statutory requirements. Substantially all of the non-trading activity pledged collateral is not eligible to be repledged or sold by the secured party.

VIE RELATED We pledge assets in connection with various types of transactions entered into with VIEs. These pledged assets can only be used to settle the liabilities of those entities.

We also have loans recorded on our consolidated balance sheet which represent certain delinquent loans that are eligible for repurchase from GNMA loan securitizations. See Note 8 (Securitizations and Variable Interest Entities) for additional information on consolidated VIE assets.

Table 14.1: Pledged Assets

(in millions)	Dec 31, 2020	Dec 31, 2019
Related to trading activities:		
Repledged third-party owned debt and equity securities	\$ 44,765	60,083
Trading debt securities and other	19,572	51,083
Equity securities	470	1,379
Total pledged assets related to trading activities	64,807	112,545
Related to non-trading activities:		
Loans	344,220	406,106
Debt securities:		
Available-for-sale	57,289	61,126
Held-to-maturity	17,290	3,685
Other financial assets	230	2,266
Total pledged assets related to non-trading activities	419,029	473,183
Related to VIEs:		
Consolidated VIE assets	12,146	14,368
Loans eligible for repurchase from GNMA securitizations	179	568
Total pledged assets related to VIEs	12,325	14,936
Total pledged assets	\$ 496,161	600,664

Securities Financing Activities

We enter into resale and repurchase agreements and securities borrowing and lending agreements (collectively, “securities financing activities”) typically to finance trading positions (including securities and derivatives), acquire securities to cover short trading positions, accommodate customers’ financing needs, and settle other securities obligations. These activities are conducted through our broker-dealer subsidiaries and, to a lesser extent, through other bank entities. Our securities financing activities primarily involve high-quality, liquid securities such as U.S. Treasury securities and government agency securities and, to a lesser extent, less liquid securities, including equity securities, corporate bonds and asset-backed securities. We account for these transactions as collateralized financings in which we typically receive or pledge securities as collateral. We believe these financing transactions generally do not have material credit risk given the collateral provided and the related monitoring processes.

OFFSETTING OF SECURITIES FINANCING ACTIVITIES Table 14.2 presents resale and repurchase agreements subject to master repurchase agreements (MRA) and securities borrowing and lending agreements subject to master securities lending agreements (MSLA). Collateralized financings, and those with a single counterparty, are presented net on our consolidated balance sheet, provided certain criteria are met that permit balance sheet netting. Substantially all transactions subject to these agreements do not meet those criteria and thus are not eligible for balance sheet netting.

Collateral we pledged consists of non-cash instruments, such as securities or loans, and is not netted on the consolidated balance sheet against the related liability. Collateral we received includes securities or loans and is not recognized on our consolidated balance sheet. Collateral pledged or received may be increased or decreased over time to maintain certain contractual thresholds, as the assets underlying each arrangement fluctuate in value. Generally, these agreements require collateral to exceed the asset or liability recognized on the balance sheet. The following table includes the amount of

Note 14: Pledged Assets and Collateral (continued)

collateral pledged or received related to exposures subject to enforceable MRAs or MSLAs. While these agreements are typically over-collateralized, U.S. GAAP requires disclosure in this table to limit the reported amount of such collateral to the amount of the related recognized asset or liability for each counterparty.

In addition to the amounts included in Table 14.2, we also have balance sheet netting related to derivatives that is disclosed in Note 16 (Derivatives).

Table 14.2: Offsetting – Securities Financing Activities

(in millions)	Dec 31, 2020	Dec 31, 2019
Assets:		
Resale and securities borrowing agreements		
Gross amounts recognized	\$ 92,446	140,773
Gross amounts offset in consolidated balance sheet (1)	(11,513)	(19,180)
Net amounts in consolidated balance sheet (2)	80,933	121,593
Collateral not recognized in consolidated balance sheet (3)	(80,158)	(120,786)
Net amount (4)	\$ 775	807
Liabilities:		
Repurchase and securities lending agreements		
Gross amounts recognized	\$ 57,622	111,038
Gross amounts offset in consolidated balance sheet (1)	(11,513)	(19,180)
Net amounts in consolidated balance sheet (5)	46,109	91,858
Collateral pledged but not netted in consolidated balance sheet (6)	(45,819)	(91,709)
Net amount (4)	\$ 290	149

- (1) Represents recognized amount of resale and repurchase agreements with counterparties subject to enforceable MRAs that have been offset in the consolidated balance sheet.
- (2) Includes \$65.6 billion and \$102.1 billion classified on our consolidated balance sheet in federal funds sold and securities purchased under resale agreements at December 31, 2020 and 2019, respectively. Also includes securities purchased under long-term resale agreements (generally one year or more) classified in loans, which totaled \$15.3 billion and \$19.5 billion, at December 31, 2020 and 2019, respectively.
- (3) Represents the fair value of collateral we have received under enforceable MRAs or MSLAs, limited in the table above to the amount of the recognized asset due from each counterparty. At December 31, 2020 and 2019, we have received total collateral with a fair value of \$108.5 billion and \$150.9 billion, respectively, all of which we have the right to sell or repledge. These amounts include securities we have sold or repledged to others with a fair value of \$36.1 billion and \$59.1 billion at December 31, 2020 and 2019, respectively.
- (4) Represents the amount of our exposure (assets) or obligation (liabilities) that is not collateralized and/or is not subject to an enforceable MRA or MSLA.
- (5) Amount is classified in short-term borrowings on our consolidated balance sheet.
- (6) Represents the fair value of collateral we have pledged, related to enforceable MRAs or MSLAs, limited in the table above to the amount of the recognized liability owed to each counterparty. At December 31, 2020 and 2019, we have pledged total collateral with a fair value of \$59.2 billion and \$113.3 billion, respectively, substantially all of which may be sold or repledged by the counterparty.

REPURCHASE AND SECURITIES LENDING AGREEMENTS Securities sold under repurchase agreements and securities lending arrangements are effectively short-term collateralized borrowings. In these transactions, we receive cash in exchange for transferring securities as collateral and recognize an obligation to reacquire the securities for cash at the transaction's maturity. These types of transactions create risks, including (1) the counterparty may fail to return the securities at maturity, (2) the fair value of the securities transferred may decline below the amount of our obligation to reacquire the securities, and therefore create an obligation for us to pledge additional amounts, and (3) the counterparty may accelerate the maturity on demand, requiring us to reacquire the security prior to contractual maturity. We attempt to mitigate these risks in various ways. Our collateral primarily consists of highly liquid securities. In addition, we underwrite and monitor the financial strength of our counterparties, monitor the fair value of collateral pledged relative to contractually required repurchase amounts, and monitor that our collateral is properly returned through the clearing and settlement process in advance of our cash repayment. Table 14.3 provides the gross amounts recognized on the consolidated balance sheet (before the effects of offsetting) of our liabilities for repurchase and securities lending agreements disaggregated by underlying collateral type.

Table 14.3: Gross Obligations by Underlying Collateral Type

(in millions)	Dec 31, 2020	Dec 31, 2019
Repurchase agreements:		
Securities of U.S. Treasury and federal agencies	\$ 22,922	48,161
Securities of U.S. States and political subdivisions	4	104
Federal agency mortgage-backed securities	15,353	44,737
Non-agency mortgage-backed securities	1,069	1,818
Corporate debt securities	9,944	7,126
Asset-backed securities	1,054	1,844
Equity securities	1,500	1,674
Other	336	705
Total repurchases	52,182	106,169
Securities lending arrangements:		
Securities of U.S. Treasury and federal agencies	64	163
Federal agency mortgage-backed securities	23	—
Corporate debt securities	79	223
Equity securities (1)	5,189	4,481
Other	85	2
Total securities lending	5,440	4,869
Total repurchases and securities lending	\$ 57,622	111,038

(1) Equity securities are generally exchange traded and represent collateral received from third parties that has been repledged. We received the collateral through either margin lending agreements or contemporaneous securities borrowing transactions with other counterparties.

Table 14.4 provides the contractual maturities of our gross obligations under repurchase and securities lending agreements.

Table 14.4: Contractual Maturities of Gross Obligations

(in millions)	Overnight/ continuous	Up to 30 days	30-90 days	>90 days	Total gross obligation
December 31, 2020					
Repurchase agreements	\$ 36,946	5,251	5,100	4,885	52,182
Securities lending arrangements	4,690	400	350	—	5,440
Total repurchases and securities lending (1)	\$ 41,636	5,651	5,450	4,885	57,622
December 31, 2019					
Repurchase agreements	\$ 79,793	17,681	4,825	3,870	106,169
Securities lending arrangements	4,724	—	145	—	4,869
Total repurchases and securities lending (1)	\$ 84,517	17,681	4,970	3,870	111,038

(1) Securities lending is executed under agreements that allow either party to terminate the transaction without notice, while repurchase agreements have a term structure to them that technically matures at a point in time. The overnight/continuous repurchase agreements require election of both parties to roll the trade rather than the election to terminate the arrangement as in securities lending.

Note 15: Legal Actions

Wells Fargo and certain of our subsidiaries are involved in a number of judicial, regulatory, governmental, arbitration, and other proceedings or investigations concerning matters arising from the conduct of our business activities, and many of those proceedings and investigations expose Wells Fargo to potential financial loss. These proceedings and investigations include actions brought against Wells Fargo and/or our subsidiaries with respect to corporate-related matters and transactions in which Wells Fargo and/or our subsidiaries were involved. In addition, Wells Fargo and our subsidiaries may be requested to provide information or otherwise cooperate with government authorities in the conduct of investigations of other persons or industry groups.

Although there can be no assurance as to the ultimate outcome, Wells Fargo and/or our subsidiaries have generally denied, or believe we have a meritorious defense and will deny, liability in all significant legal actions pending against us, including the matters described below, and we intend to defend vigorously each case, other than matters we describe as having settled. We establish accruals for legal actions when potential losses associated with the actions become probable and the costs can be reasonably estimated. For such accruals, we record the amount we consider to be the best estimate within a range of potential losses that are both probable and estimable; however, if we cannot determine a best estimate, then we record the low end of the range of those potential losses. The actual costs of resolving legal actions may be substantially higher or lower than the amounts accrued for those actions.

ATM ACCESS FEE LITIGATION In October 2011, plaintiffs filed a putative class action, *Mackmin, et al. v. Visa, Inc. et al.*, against Wells Fargo & Company, Wells Fargo Bank, N.A., Visa, MasterCard, and several other banks in the United States District Court for the District of Columbia. Plaintiffs allege that the Visa and MasterCard requirement that if an ATM operator charges an access fee on Visa and MasterCard transactions, then that fee cannot be greater than the access fee charged for transactions on other networks, violates antitrust rules. Plaintiffs seek treble damages, restitution, injunctive relief, and attorneys' fees where available under federal and state law. Two other antitrust cases that make similar allegations were filed in the same court, but these cases did not name Wells Fargo as a defendant. On February 13, 2013, the district court granted defendants' motions to dismiss the three actions. Plaintiffs appealed the dismissals and, on August 4, 2015, the United States Court of Appeals for the District of Columbia Circuit vacated the district court's decisions and remanded the three cases to the district court for further proceedings. On June 28, 2016, the United States Supreme Court granted defendants' petitions for writ of certiorari to review the decisions of the United States Court of Appeals for the District of Columbia. On November 17, 2016, the United States Supreme Court dismissed the petitions as improvidently granted, and the three cases returned to the district court for further proceedings. The Company has entered into an agreement pursuant to which the Company will pay \$20.8 million to resolve the cases, subject to court approval.

AUTOMOBILE LENDING MATTERS On April 20, 2018, the Company entered into consent orders with the Office of the Comptroller of the Currency (OCC) and the Consumer Financial Protection Bureau (CFPB) to resolve, among other things, investigations by the agencies into the Company's compliance risk management

program and its past practices involving certain automobile collateral protection insurance (CPI) policies and certain mortgage interest rate lock extensions. The consent orders require remediation to customers and the payment of a total of \$1.0 billion in civil money penalties to the agencies. In July 2017, the Company announced a plan to remediate customers who may have been financially harmed due to issues related to automobile CPI policies purchased through a third-party vendor on their behalf. Multiple putative class action cases alleging, among other things, unfair and deceptive practices relating to these CPI policies, have been filed against the Company and consolidated into one multi-district litigation in the United States District Court for the Central District of California. The Company has reached an agreement to resolve the multi-district litigation pursuant to which the Company has agreed to pay, consistent with its remediation obligations under the consent orders, approximately \$689 million in remediation to customers with CPI policies placed between October 15, 2005, and September 30, 2016. The settlement amount is not incremental to the Company's remediation obligations under the consent orders, but instead encompasses those obligations, including remediation payments to date. The settlement amount is subject to change as the Company finalizes its remediation activity under the consent orders. In addition, the Company has agreed to contribute \$1 million to a common fund for the class. The district court granted final approval of the settlement on November 21, 2019. A putative class of shareholders also filed a securities fraud class action against the Company and its executive officers alleging material misstatements and omissions of CPI-related information in the Company's public disclosures. In January 2020, the court dismissed this action as to all defendants except the Company and a former executive officer and limited the action to two alleged misstatements. In addition, the Company is subject to a class action lawsuit in the United States District Court for the Central District of California alleging that customers are entitled to refunds related to the unused portion of guaranteed automobile protection (GAP) waiver or insurance agreements between the customer and dealer and, by assignment, the lender. Allegations related to the CPI and GAP programs are among the subjects of a shareholder derivative lawsuit pending in the United States District Court for the Northern District of California. These and other issues related to the origination, servicing, and collection of consumer auto loans, including related insurance products, have also subjected the Company to formal or informal inquiries, investigations, or examinations from federal and state government agencies. In December 2018, the Company entered into an agreement with all 50 state Attorneys General and the District of Columbia to resolve an investigation into the Company's retail sales practices, CPI and GAP, and mortgage interest rate lock matters, pursuant to which the Company paid \$575 million.

BANK SECRECY ACT/ANTI-MONEY LAUNDERING CONSENT ORDER INVESTIGATION On November 19, 2015, the Company entered into a consent order with the OCC, pursuant to which the Company was required to implement customer due diligence standards that include collection of current beneficial ownership information for certain business customers. On January 4, 2021, the OCC terminated the consent order. The Company has responded to inquiries from various federal government agencies regarding potentially inappropriate conduct in connection with the collection of beneficial ownership information.

COMMERCIAL LENDING SHAREHOLDER LITIGATION In October and November 2020, plaintiffs filed two putative class action lawsuits in the United States District Court for the Northern District of California alleging that the Company and certain of its former executive officers made false and misleading statements or omissions regarding, among other things, the Company's commercial lending underwriting practices, the credit quality of its commercial credit portfolios, and the value of its commercial loans, collateralized loan obligations and commercial mortgage-backed securities.

CONSENT ORDER DISCLOSURE LITIGATION Wells Fargo shareholders have brought a securities fraud class action in the United States District Court for the Southern District of New York alleging that the Company and certain of its current and former executive officers and directors made false or misleading statements regarding the Company's efforts to comply with the February 2018 consent order with the Federal Reserve Board and the April 2018 consent orders with the CFPB and OCC. Allegations related to the Company's efforts to comply with these three consent orders are also among the subjects of a shareholder derivative lawsuit pending in the United States District Court for the Northern District of California.

CONSUMER DEPOSIT ACCOUNT RELATED REGULATORY INVESTIGATION The CFPB is conducting an investigation into whether customers were unduly harmed by the Company's historical practices associated with the freezing (and, in many cases, closing) of consumer deposit accounts after the Company detected suspected fraudulent activity (by third parties or account holders) that affected those accounts.

CORONAVIRUS AID, RELIEF, AND ECONOMIC SECURITY ACT/ PAYCHECK PROTECTION PROGRAM Plaintiffs have filed putative class actions in various federal courts against the Company. The actions seek damages and injunctive relief related to the Company's offering of Paycheck Protection Program (PPP) loans under the Coronavirus Aid, Relief, and Economic Security Act, as well as claims for fees by purported agents who allegedly assisted customers with preparing PPP loan applications submitted to the Company. The Company has also received formal and informal inquiries from federal and state government agencies regarding its offering of PPP loans. In addition, Wells Fargo shareholders brought a securities fraud class action in the United States District Court for the Northern District of California alleging that the Company and certain of its executive officers made false or misleading statements regarding the Company's participation in the PPP and the Company's compliance with related regulations, which has been voluntarily dismissed.

FOREIGN EXCHANGE BUSINESS The United States Department of Justice (Department of Justice) is investigating certain activities in the Company's foreign exchange business, including whether customers may have received pricing inconsistent with commitments made to those customers. Previous investigations by other federal government agencies have been resolved.

INTERCHANGE LITIGATION Plaintiffs representing a putative class of merchants have filed putative class actions, and individual merchants have filed individual actions, against Wells Fargo Bank, N.A., Wells Fargo & Company, Wachovia Bank, N.A., and Wachovia Corporation regarding the interchange fees associated with Visa and MasterCard payment card transactions. Visa, MasterCard, and several other banks and bank holding companies are also named as defendants in these actions. These

actions have been consolidated in the United States District Court for the Eastern District of New York. The amended and consolidated complaint asserts claims against defendants based on alleged violations of federal and state antitrust laws and seeks damages, as well as injunctive relief. Plaintiff merchants allege that Visa, MasterCard, and payment card issuing banks unlawfully colluded to set interchange rates. Plaintiffs also allege that enforcement of certain Visa and MasterCard rules and alleged tying and bundling of services offered to merchants are anticompetitive. Wells Fargo and Wachovia, along with other defendants and entities, are parties to Loss and Judgment Sharing Agreements, which provide that they, along with other entities, will share, based on a formula, in any losses from the Interchange Litigation. On July 13, 2012, Visa, MasterCard, and the financial institution defendants, including Wells Fargo, signed a memorandum of understanding with plaintiff merchants to resolve the consolidated class action and reached a separate settlement in principle of the consolidated individual actions. The settlement payments to be made by all defendants in the consolidated class and individual actions totaled approximately \$6.6 billion before reductions applicable to certain merchants opting out of the settlement. The class settlement also provided for the distribution to class merchants of 10 basis points of default interchange across all credit rate categories for a period of eight consecutive months. The district court granted final approval of the settlement, which was appealed to the United States Court of Appeals for the Second Circuit by settlement objector merchants. Other merchants opted out of the settlement and are pursuing several individual actions. On June 30, 2016, the Second Circuit vacated the settlement agreement and reversed and remanded the consolidated action to the United States District Court for the Eastern District of New York for further proceedings. On November 23, 2016, prior class counsel filed a petition to the United States Supreme Court, seeking review of the reversal of the settlement by the Second Circuit, and the Supreme Court denied the petition on March 27, 2017. On November 30, 2016, the district court appointed lead class counsel for a damages class and an equitable relief class. The parties have entered into a settlement agreement to resolve the money damages class claims pursuant to which defendants will pay a total of approximately \$6.2 billion, which includes approximately \$5.3 billion of funds remaining from the 2012 settlement and \$900 million in additional funding. The Company's allocated responsibility for the additional funding is approximately \$94.5 million. The court granted final approval of the settlement on December 13, 2019, which was appealed to the United States Court of Appeals for the Second Circuit by settlement objector merchants. Several of the opt-out and direct action litigations have been settled while others remain pending. Discovery is proceeding in the opt-out litigations and the equitable relief class case.

LOW INCOME HOUSING TAX CREDITS Federal government agencies have undertaken formal or informal inquiries or investigations regarding the manner in which the Company purchased, and negotiated the purchase of, certain federal low income housing tax credits in connection with the financing of low income housing developments.

MOBILE DEPOSIT PATENT LITIGATION The Company is a defendant in two separate cases brought by United Services Automobile Association (USAA) in the United States District Court for the Eastern District of Texas alleging claims of patent infringement regarding mobile deposit capture technology patents held by USAA. Trial in the first case commenced on

Note 15: Legal Actions (continued)

October 30, 2019, and resulted in a \$200 million verdict against the Company. Trial in the second case commenced on January 6, 2020, and resulted in a \$102.7 million verdict against the Company. The Company has filed post-trial motions to, among other things, vacate the verdicts, and USAA has filed post-trial motions seeking future royalty payments and damages for willful infringement. In February 2021, the Company reached an agreement to settle the cases with USAA and obtained a license to the patents at issue.

MORTGAGE LOAN MODIFICATION MATTERS Plaintiffs representing a putative class of mortgage borrowers have filed separate putative class actions, *Hernandez v. Wells Fargo, et al.*, *Coordes v. Wells Fargo, et al.*, *Ryder v. Wells Fargo, Liguori v. Wells Fargo*, and *Dore v. Wells Fargo*, against Wells Fargo Bank, N.A., in the United States District Court for the Northern District of California, the United States District Court for the District of Washington, the United States District Court for the Southern District of Ohio, the United States District Court for the Southern District of New York, and the United States District Court for the Western District of Pennsylvania, respectively. Plaintiffs allege that Wells Fargo improperly denied mortgage loan modifications or repayment plans to customers in the foreclosure process due to the overstatement of foreclosure attorneys' fees that were included for purposes of determining whether a customer in the foreclosure process qualified for a mortgage loan modification or repayment plan. In March 2020, the Company entered into an agreement pursuant to which the Company paid \$18.5 million to resolve the claims of the initial certified class in the *Hernandez* case, which was approved by the district court in October 2020. The *Hernandez* settlement has been reopened to include additional borrowers who the Company determined should have been included in the settlement class because the Company identified a population of additional borrowers during the relevant class period whose loans had not previously been reviewed for inclusion in the original population of impacted customers. The identification of these additional borrowers will increase the potential class of mortgage borrowers in the other pending matters. In addition, government agencies have undertaken formal or informal inquiries or investigations regarding these and other mortgage servicing matters.

NOMURA/NATIXIS MORTGAGE-RELATED LITIGATION In August 2014 and August 2015, Nomura Credit & Capital Inc. (Nomura) and Natixis Real Estate Holdings, LLC (Natixis) filed a total of seven third-party complaints against Wells Fargo Bank, N.A., in New York state court. In the underlying first-party actions, Nomura and Natixis have been sued for alleged breaches of representations and warranties made in connection with residential mortgage-backed securities sponsored by them. In the third-party actions, Nomura and Natixis allege that Wells Fargo, as master servicer, primary servicer or securities administrator, failed to notify Nomura and Natixis of their own breaches, failed to properly oversee the primary servicers, and failed to adhere to accepted servicing practices. Natixis additionally alleges that Wells Fargo failed to perform default oversight duties. Wells Fargo has asserted counterclaims alleging that Nomura and Natixis failed to provide Wells Fargo notice of their representation and warranty breaches.

OFAC RELATED INVESTIGATION The Company has self-identified an issue whereby certain foreign banks utilized a Wells Fargo software-based solution to conduct import/export trade-related financing transactions with countries and entities prohibited by

the Office of Foreign Assets Control (OFAC) of the United States Department of the Treasury. We do not believe any funds related to these transactions flowed through accounts at Wells Fargo as a result of the aforementioned conduct. The Company has made voluntary self-disclosures to OFAC and is cooperating with an inquiry from the Department of Justice.

ORDER OF POSTING LITIGATION Plaintiffs filed a series of putative class actions against Wachovia Bank, N.A., and Wells Fargo Bank, N.A., as well as many other banks, challenging the "high to low" order in which the banks post debit card transactions to consumer deposit accounts. Most of these actions were consolidated in multi-district litigation proceedings (MDL proceedings) in the United States District Court for the Southern District of Florida. The court in the MDL proceedings has certified a class of putative plaintiffs, and Wells Fargo moved to compel arbitration of the claims of unnamed class members. The court denied the motions to compel arbitration in October 2016, and Wells Fargo appealed this decision to the United States Court of Appeals for the Eleventh Circuit. In May 2018, the Eleventh Circuit ruled in Wells Fargo's favor and found that Wells Fargo had not waived its arbitration rights and remanded the case to the district court for further proceedings. On September 26, 2019, the district court entered an order granting Wells Fargo's motion and dismissed the claims of unnamed class members in favor of arbitration. Plaintiffs appealed this decision to the United States Court of Appeals for the Eleventh Circuit.

RETAIL SALES PRACTICES MATTERS A number of bodies or entities, including (a) federal, state, and local government agencies, including the Department of Justice, the United States Securities and Exchange Commission (SEC), and the United States Department of Labor, (b) state attorneys general, including the New York Attorney General, and (c) Congressional committees, have undertaken formal or informal inquiries, investigations, or examinations arising out of certain retail sales practices of the Company that were the subject of settlements with the CFPB, the OCC, and the Office of the Los Angeles City Attorney announced by the Company on September 8, 2016. These matters are at varying stages. The Company has responded, and continues to respond, to requests from certain of the foregoing. In October 2018, the Company entered into an agreement to resolve the New York Attorney General's investigation pursuant to which the Company paid \$65 million to the State of New York. In December 2018, the Company entered into an agreement with all 50 state Attorneys General and the District of Columbia to resolve an investigation into the Company's retail sales practices, CPI and GAP, and mortgage interest rate lock matters, pursuant to which the Company paid \$575 million. On February 21, 2020, the Company entered into an agreement with the Department of Justice to resolve the Department of Justice's criminal investigation into the Company's retail sales practices, as well as a separate agreement to resolve the Department of Justice's civil investigation. As part of the Department of Justice criminal settlement, no charges will be filed against the Company provided the Company abides by all the terms of the agreement. The Department of Justice criminal settlement also includes the Company's agreement that the facts set forth in the settlement document constitute sufficient facts for the finding of criminal violations of statutes regarding bank records and personal information. On February 21, 2020, the Company also entered into an order to resolve the SEC's investigation arising out of the Company's retail sales practices. The SEC order contains a finding, to which the Company consented, that the facts set forth include violations of Section

10(b) of the Securities Exchange Act of 1934 and Rule 10b-5 thereunder. As part of the resolution of the Department of Justice and SEC investigations, the Company has agreed to make payments totaling \$3.0 billion. In addition, as part of the settlements and included in the \$3.0 billion amount, the Company has agreed to the creation of a \$500 million Fair Fund for the benefit of investors who were harmed by the conduct covered in the SEC settlement.

In addition, a number of lawsuits have been filed by non-governmental parties seeking damages or other remedies related to these retail sales practices. First, various class plaintiffs, purporting to represent consumers who allege that they received products or services without their authorization or consent, have brought separate putative class actions against the Company in the United States District Court for the Northern District of California and various other jurisdictions. On June 14, 2018, the district court granted final approval of a settlement entered into by the Company in the first-filed action, *Jabbari v. Wells Fargo Bank, N.A.*, pursuant to which the Company paid \$142 million to resolve claims regarding certain products or services provided without authorization or consent for the time period May 1, 2002 to April 20, 2017. On July 20, 2020, the United States Court of Appeals for the Ninth Circuit affirmed the district court's order granting final approval of the settlement. Second, the Company was subject to a consolidated securities fraud class action alleging certain misstatements and omissions in the Company's disclosures related to sales practices matters. The Company entered into a settlement agreement to resolve this matter pursuant to which the Company paid \$480 million. Third, Wells Fargo shareholders have brought numerous shareholder derivative lawsuits asserting breach of fiduciary duty claims against, among others, current and former directors and officers for their alleged involvement with and failure to detect and prevent sales practices issues. The parties have entered into settlement agreements to resolve these lawsuits pursuant to which insurance carriers will pay the Company approximately \$240 million for alleged damage to the Company, and the Company will pay plaintiffs' attorneys' fees. The settlement agreements have received final approval from the courts. Fourth, a purported Employee Retirement Income Security Act (ERISA) class action was filed in the United States District Court for the District of Minnesota on behalf of 401(k) plan participants. The district court dismissed the action, and on July 27, 2020, the United States Court of Appeals for the Eighth Circuit affirmed the dismissal. The 401(k) plan participants have filed a writ of certiorari to the United States Supreme Court.

RMBS TRUSTEE LITIGATION In December 2014, Phoenix Light SF Limited and certain related entities and the National Credit Union Administration (NCUA) filed complaints in the United States District Court for the Southern District of New York against Wells Fargo Bank, N.A., alleging claims against the Company in its capacity as trustee for a number of residential mortgage-backed securities trusts. Complaints raising similar allegations have been filed by Commerzbank AG in the Southern District of New York and by IKB International and IKB Deutsche Industriebank in New York state court. In each case, the plaintiffs allege that Wells Fargo Bank, N.A., as trustee, caused losses to investors, and plaintiffs assert causes of action based upon, among other things, the trustee's alleged failure to notify and enforce repurchase obligations of mortgage loan sellers for purported breaches of representations and warranties, notify investors of alleged events of default, and abide by appropriate standards of care following alleged events of default. The Company previously settled two class action lawsuits with similar allegations that

were filed in November 2014 and December 2016 by institutional investors in the Southern District of New York and New York state court, respectively.

SEMINOLE TRIBE TRUSTEE LITIGATION The Seminole Tribe of Florida filed a complaint in Florida state court alleging that Wells Fargo, as trustee, charged excess fees in connection with the administration of a minor's trust and failed to invest the assets of the trust prudently. The complaint was later amended to include three individual current and former beneficiaries as plaintiffs and to remove the Tribe as a party to the case. In December 2016, the Company filed a motion to dismiss the amended complaint on the grounds that the Tribe is a necessary party and that the individual beneficiaries lack standing to bring claims. The motion was denied in June 2018. The case is pending trial.

OUTLOOK As described above, the Company establishes accruals for legal actions when potential losses associated with the actions become probable and the costs can be reasonably estimated. The high end of the range of reasonably possible potential losses in excess of the Company's accrual for probable and estimable losses was approximately \$2.4 billion as of December 31, 2020. The outcomes of legal actions are unpredictable and subject to significant uncertainties, and it is inherently difficult to determine whether any loss is probable or even possible. It is also inherently difficult to estimate the amount of any loss and there may be matters for which a loss is probable or reasonably possible but not currently estimable. Accordingly, actual losses may be in excess of the established accrual or the range of reasonably possible loss. Wells Fargo is unable to determine whether the ultimate resolution of the retail sales practices matters will have a material adverse effect on its consolidated financial condition. Based on information currently available, advice of counsel, available insurance coverage, and established reserves, Wells Fargo believes that the eventual outcome of other actions against Wells Fargo and/or its subsidiaries will not, individually or in the aggregate, have a material adverse effect on Wells Fargo's consolidated financial condition. However, it is possible that the ultimate resolution of a matter, if unfavorable, may be material to Wells Fargo's results of operations for any particular period.

Note 16: Derivatives

We use derivatives to manage exposure to market risk, including interest rate risk, credit risk and foreign currency risk, and to assist customers with their risk management objectives. We designate certain derivatives as hedging instruments in qualifying hedge accounting relationships (fair value or cash flow hedges). Our remaining derivatives consist of economic hedges that do not qualify for hedge accounting and derivatives held for customer accommodation trading or other purposes.

Risk Management Derivatives

Our asset/liability management approach to interest rate, foreign currency and certain other risks includes the use of derivatives, which are typically designated as fair value or cash flow hedges, or economic hedges. We use derivatives to help minimize significant, unplanned fluctuations in earnings, fair values of assets and liabilities, and cash flows caused by interest rate, foreign currency and other market risk volatility. This approach involves modifying the repricing characteristics of certain assets and liabilities so that changes in interest rates, foreign currency and other exposures, which may cause the hedged assets and liabilities to gain or lose fair value, do not have a significant adverse effect on the net interest margin, cash flows and earnings. In a fair value or economic hedge, the effect of change in fair value will generally be offset by the unrealized gain or loss on the derivatives linked to the hedged assets and liabilities. In a cash flow hedge, where we manage the variability of cash payments due to interest rate or foreign currency fluctuations by the effective use of derivatives linked to hedged assets and liabilities, the hedged asset or liability is not adjusted and the unrealized gain or loss on the derivative is recorded in other comprehensive income.

Customer Accommodation Trading

We also use various derivatives, including interest rate, commodity, equity, credit and foreign exchange contracts, as an accommodation to our customers as part of our trading businesses. These derivative transactions, which involve engaging in market-making activities or acting as an intermediary, are conducted in an effort to help customers manage their market risks. We usually offset our exposure from such derivatives by entering into other financial contracts, such as separate derivative or security transactions. These customer accommodations and any offsetting derivatives are treated as customer accommodation trading and other derivatives in our disclosures. Additionally, embedded derivatives that are required to be accounted for separately from their host contracts are included in the customer accommodation trading and other derivatives disclosures, as applicable.

We mention derivative instruments within several other Notes in this Report. For more information on Derivatives, refer to the following areas:

- Note 1: Summary of Significant Accounting Policies
- Note 2: Trading Activities
- Note 6: Equity Securities
- Note 8: Securitizations and Variable Interest Entities
- Note 9: Mortgage Banking Activities
- Note 12: Long-Term Debt
- Note 13: Guarantees and Other Commitments
- Note 14: Pledged Assets and Collateral
- Note 17: Fair Values of Assets and Liabilities
- Note 25: Other Comprehensive Income
- Note 27: Parent-Only Financial Statements

Table 16.1 presents the total notional or contractual amounts and fair values for our derivatives. Derivative transactions can be measured in terms of the notional amount, but this amount is not recorded on our consolidated balance

sheet and is not, when viewed in isolation, a meaningful measure of the risk profile of the instruments. The notional amount is generally not exchanged, but is used only as the basis on which interest and other payments are determined.

Table 16.1: Notional or Contractual Amounts and Fair Values of Derivatives

(in millions)	December 31, 2020			December 31, 2019		
	Notional or contractual amount	Fair value		Notional or contractual amount	Fair value	
		Derivative assets	Derivative liabilities		Derivative assets	Derivative liabilities
Derivatives designated as hedging instruments						
Interest rate contracts	\$ 184,090	3,212	789	182,789	2,595	1,237
Foreign exchange contracts	47,331	1,381	607	32,386	341	1,170
Total derivatives designated as qualifying hedging instruments		4,593	1,396		2,936	2,407
Derivatives not designated as hedging instruments						
Economic hedges:						
Interest rate contracts	261,159	341	344	235,810	207	160
Equity contracts	25,997	1,363	490	19,263	1,126	224
Foreign exchange contracts	47,106	331	1,515	26,595	118	286
Credit contracts	73	31	—	1,400	27	—
Subtotal		2,066	2,349		1,478	670
Customer accommodation trading and other derivatives:						
Interest rate contracts	7,947,941	32,510	25,169	11,117,542	21,245	17,969
Commodity contracts	65,790	2,036	1,543	79,737	1,421	1,770
Equity contracts	280,195	17,522	21,516	272,145	7,410	10,240
Foreign exchange contracts	412,879	6,891	6,034	364,469	4,755	4,791
Credit contracts	34,329	64	58	36,245	81	83
Subtotal		59,023	54,320		34,912	34,853
Total derivatives not designated as hedging instruments		61,089	56,669		36,390	35,523
Total derivatives before netting		65,682	58,065		39,326	37,930
Netting		(39,836)	(41,556)		(25,123)	(28,851)
Total	\$	25,846	16,509		14,203	9,079

Note 16: Derivatives (continued)

Table 16.2 provides information on the gross fair values of derivative assets and liabilities, the balance sheet netting adjustments and the resulting net fair value amount recorded on our consolidated balance sheet, as well as the non-cash collateral associated with such arrangements. We execute substantially all of our derivative transactions under master netting arrangements and reflect all derivative balances and related cash collateral subject to enforceable master netting arrangements on a net basis within the consolidated balance sheet. The “Gross amounts recognized” column in the following table includes \$54.6 billion and \$50.1 billion of gross derivative assets and liabilities, respectively, at December 31, 2020, and \$33.7 billion and \$33.5 billion, respectively, at December 31, 2019, with counterparties subject to enforceable master netting arrangements that are eligible for balance sheet netting adjustments. The majority of these amounts are interest rate contracts executed in over-the-counter (OTC) markets. The remaining gross derivative assets and liabilities of \$11.1 billion and \$8.0 billion, respectively, at December 31, 2020, and \$5.6 billion and \$4.4 billion, respectively, at December 31, 2019, include those with counterparties subject to master netting arrangements for which we have not assessed the enforceability because they are with counterparties where we do not currently have positions to offset, those subject to master netting arrangements where we have not been able to confirm the enforceability and those not subject to master netting arrangements. As such, we do not net derivative balances or collateral within the consolidated balance sheet for these counterparties. Cash collateral receivables and payables that have not been offset against our derivatives were \$1.8 billion and \$984 million, respectively, at December 31, 2020, and \$6.3 billion and \$1.4 billion, respectively, at December 31, 2019.

We determine the balance sheet netting adjustments based on the terms specified within each master netting arrangement. We disclose the balance sheet netting amounts within the column titled “Gross amounts offset in consolidated balance sheet.” Balance sheet netting adjustments are determined at the counterparty level for which there may be multiple contract types. For disclosure purposes, we allocate these netting adjustments to the contract type for each counterparty proportionally based upon the “Gross amounts recognized” by counterparty. As a result, the net amounts disclosed by contract type may not represent the actual exposure upon settlement of the contracts.

We do not net non-cash collateral that we receive and pledge on our consolidated balance sheet. For disclosure purposes, we present the fair value of this non-cash collateral in the column titled “Gross amounts not offset in consolidated balance sheet (Disclosure-only netting)” within the table. We determine and allocate the Disclosure-only netting amounts in the same manner as balance sheet netting amounts.

The “Net amounts” column within Table 16.2 represents the aggregate of our net exposure to each counterparty after considering the balance sheet and Disclosure-only netting adjustments. We manage derivative exposure by monitoring the credit risk associated with each counterparty using counterparty specific credit risk limits, using master netting arrangements and obtaining collateral. Derivative contracts executed in OTC markets include bilateral contractual arrangements that are not cleared through a central clearing organization but are typically subject to master netting arrangements. The proportion of these derivative contracts relative to our total derivative assets and liabilities are presented in the “Percent exchanged in over-the-counter market” column in Table 16.2. In addition to the netting amounts included in the table, we also have balance sheet netting related to resale and repurchase agreements that are disclosed within Note 14 (Pledged Assets and Collateral).

Table 16.2: Gross Fair Values of Derivative Assets and Liabilities

(in millions)	Gross amounts recognized	Gross amounts offset in consolidated balance sheet (1)	Net amounts in consolidated balance sheet	Gross amounts not offset in consolidated balance sheet (Disclosure-only netting)	Net amounts	Percent exchanged in over-the-counter market
December 31, 2020						
Derivative assets						
Interest rate contracts	\$ 36,063	(21,968)	14,095	(1,274)	12,821	96 %
Commodity contracts	2,036	(940)	1,096	(4)	1,092	84
Equity contracts	18,885	(10,968)	7,917	(737)	7,180	74
Foreign exchange contracts	8,603	(5,887)	2,716	(141)	2,575	100
Credit contracts	95	(73)	22	(1)	21	90
Total derivative assets	\$ 65,682	(39,836)	25,846	(2,157)	23,689	
Derivative liabilities						
Interest rate contracts	\$ 26,302	(21,934)	4,368	(2,219)	2,149	95 %
Commodity contracts	1,543	(819)	724	—	724	69
Equity contracts	22,006	(12,283)	9,723	(837)	8,886	78
Foreign exchange contracts	8,156	(6,481)	1,675	(529)	1,146	100
Credit contracts	58	(39)	19	(3)	16	91
Total derivative liabilities	\$ 58,065	(41,556)	16,509	(3,588)	12,921	
December 31, 2019						
Derivative assets						
Interest rate contracts	\$ 24,047	(14,878)	9,169	(445)	8,724	95 %
Commodity contracts	1,421	(888)	533	(2)	531	80
Equity contracts	8,536	(5,570)	2,966	(69)	2,897	65
Foreign exchange contracts	5,214	(3,722)	1,492	(22)	1,470	100
Credit contracts	108	(65)	43	(1)	42	95
Total derivative assets	\$ 39,326	(25,123)	14,203	(539)	13,664	
Derivative liabilities						
Interest rate contracts	\$ 19,366	(16,595)	2,771	(545)	2,226	94 %
Commodity contracts	1,770	(677)	1,093	(2)	1,091	82
Equity contracts	10,464	(6,647)	3,817	(319)	3,498	81
Foreign exchange contracts	6,247	(4,866)	1,381	(169)	1,212	100
Credit contracts	83	(66)	17	(3)	14	97
Total derivative liabilities	\$ 37,930	(28,851)	9,079	(1,038)	8,041	

(1) Represents amounts with counterparties subject to enforceable master netting arrangements that have been offset in the consolidated balance sheet, including related cash collateral and portfolio level counterparty valuation adjustments. Counterparty valuation adjustments related to derivative assets were \$399 million and \$231 million and debit valuation adjustments related to derivative liabilities were \$201 million and \$100 million as of December 31, 2020 and 2019, respectively. Cash collateral totaled \$5.5 billion and \$7.5 billion, netted against derivative assets and liabilities, respectively, at December 31, 2020, and \$2.9 billion and \$6.8 billion, respectively, at December 31, 2019.

Note 16: Derivatives (continued)

Fair Value and Cash Flow Hedges

For fair value hedges, we use interest rate swaps to convert certain of our fixed-rate long-term debt and time certificates of deposit to floating rates to hedge our exposure to interest rate risk. We also enter into cross-currency swaps, cross-currency interest rate swaps and forward contracts to hedge our exposure to foreign currency risk and interest rate risk associated with the issuance of non-U.S. dollar denominated long-term debt. In addition, we use interest rate swaps, cross-currency swaps, cross-currency interest rate swaps and forward contracts to hedge against changes in fair value of certain investments in available-for-sale debt securities due to changes in interest rates, foreign currency rates, or both. For certain fair value hedges of foreign currency risk, changes in fair value of cross-currency swaps attributable to changes in cross-currency basis spreads are excluded from the assessment of hedge effectiveness and recorded in other comprehensive income. See Note 25 (Other Comprehensive Income) for the amounts recognized in other comprehensive income.

For cash flow hedges, we use interest rate swaps to hedge the variability in interest payments received on certain floating-

rate commercial loans and paid on certain floating-rate debt due to changes in the contractually specified interest rate. We also use cross-currency swaps to hedge variability in interest payments on fixed-rate foreign currency-denominated long-term debt due to changes in foreign exchange rates.

We estimate \$140 million pre-tax of deferred net losses related to cash flow hedges in OCI at December 31, 2020, will be reclassified into net interest income during the next twelve months. The deferred losses expected to be reclassified into net interest income are predominantly related to discontinued hedges of floating rate loans. For cash flow hedges as of December 31, 2020, we are hedging our foreign currency exposure to the variability of future cash flows for all forecasted transactions for a maximum of 10 years. For additional information on our accounting hedges, see Note 1 (Summary of Significant Accounting Policies).

Table 16.3 and Table 16.4 show the net gains (losses) related to derivatives in fair value and cash flow hedging relationships, respectively.

Table 16.3: Gains (Losses) Recognized on Fair Value Hedging Relationships

(in millions)	Net interest income			Noninterest income	Total recorded in net income	Total recorded in OCI
	Debt securities	Deposits	Long-term debt	Other	Derivative gains (losses)	Derivative gains (losses)
Year Ended December 31, 2020						
Total amounts presented in the consolidated statement of income and other comprehensive income	\$ 11,234	(2,804)	(4,471)	2,044	N/A	198
Interest contracts						
Amounts related to interest settlements on derivatives	(338)	503	1,704	—	1,869	—
Recognized on derivatives	(1,261)	161	6,691	—	5,591	—
Recognized on hedged items	1,317	(151)	(6,543)	—	(5,377)	—
Total gains (losses) (pre-tax) on interest rate contracts	(282)	513	1,852	—	2,083	—
Foreign exchange contracts						
Amounts related to interest settlements on derivatives	52	—	(139)	—	(87)	—
Recognized on derivatives	(1)	—	261	1,591	1,851	(31)
Recognized on hedged items	2	—	(201)	(1,575)	(1,774)	—
Total gains (losses) (pre-tax) on foreign exchange contracts	53	—	(79)	16	(10)	(31)
Total gains (losses) (pre-tax) recognized on fair value hedges	\$ (229)	513	1,773	16	2,073	(31)

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(in millions)	Net interest income			Noninterest income	Total recorded in net income	Total recorded in OCI
	Debt securities	Deposits	Long-term debt	Other	Derivative gains (losses)	Derivative gains (losses)
Year ended December 31, 2019						
Total amounts presented in the consolidated statement of income and other comprehensive income	\$ 14,955	(8,635)	(7,350)	5,760	N/A	275
Interest contracts						
Amounts related to interest settlements on derivatives	—	58	169	—	227	
Recognized on derivatives	(2,082)	463	5,001	—	3,382	—
Recognized on hedged items	2,096	(442)	(4,910)	—	(3,256)	
Total gains (losses) (pre-tax) on interest rate contracts	14	79	260	—	353	—
Foreign exchange contracts						
Amounts related to interest settlements on derivatives	35	—	(483)	—	(448)	
Recognized on derivatives	(5)	—	308	(358)	(55)	(3)
Recognized on hedged items	6	—	(289)	350	67	
Total gains (losses) (pre-tax) on foreign exchange contracts	36	—	(464)	(8)	(436)	(3)
Total gains (losses) (pre-tax) recognized on fair value hedges	\$ 50	79	(204)	(8)	(83)	(3)
Year ended December 31, 2018						
Total amounts presented in the consolidated statement of income and other comprehensive income	\$ 14,406	(5,622)	(6,703)	5,386	N/A	(238)
Interest contracts						
Amounts related to interest settlements on derivatives	(187)	(41)	292	—	64	
Recognized on derivatives	845	27	(1,923)	—	(1,051)	—
Recognized on hedged items	(877)	(33)	1,843	—	933	
Total gains (losses) (pre-tax) on interest rate contracts	(219)	(47)	212	—	(54)	—
Foreign exchange contracts						
Amounts related to interest settlements on derivatives	33	—	(434)	—	(401)	
Recognized on derivatives	7	—	135	(1,204)	(1,062)	(254)
Recognized on hedged items	(1)	—	(82)	1,114	1,031	
Total gains (losses) (pre-tax) on foreign exchange contracts	39	—	(381)	(90)	(432)	(254)
Total gains (losses) (pre-tax) recognized on fair value hedges	\$ (180)	(47)	(169)	(90)	(486)	(254)

Note 16: Derivatives (continued)

Table 16.4: Gains (Losses) Recognized on Cash Flow Hedging Relationships

(in millions)	Net interest income		Total recorded in net income	Total recorded in OCI
	Loans	Long-term debt	Derivative gains (losses)	Derivative gains (losses)
Year Ended December 31, 2020				
Total amounts presented in the consolidated statement of income and other comprehensive income	\$ 34,109	(4,471)	N/A	198
Interest rate contracts:				
Realized gains (losses) (pre-tax) reclassified from OCI into net income	(215)	4	(211)	211
Net unrealized gains (losses) (pre-tax) recognized in OCI	N/A	N/A	N/A	—
Total gains (losses) (pre-tax) on interest rate contracts	(215)	4	(211)	211
Foreign exchange contracts:				
Realized gains (losses) (pre-tax) reclassified from OCI into net income	—	(8)	(8)	8
Net unrealized gains (losses) (pre-tax) recognized in OCI	N/A	N/A	N/A	10
Total gains (losses) (pre-tax) on foreign exchange contracts	—	(8)	(8)	18
Total gains (losses) (pre-tax) recognized on cash flow hedges	\$ (215)	(4)	(219)	229
Year ended December 31, 2019				
Total amounts presented in the consolidated statement of income and other comprehensive income	\$ 44,146	(7,350)	N/A	275
Interest rate contracts:				
Realized gains (losses) (pre-tax) reclassified from OCI into net income	(291)	1	(290)	290
Net unrealized gains (losses) (pre-tax) recognized in OCI	N/A	N/A	N/A	—
Total gains (losses) (pre-tax) on interest rate contracts	(291)	1	(290)	290
Foreign exchange contracts:				
Realized gains (losses) (pre-tax) reclassified from OCI into net income	—	(9)	(9)	9
Net unrealized gains (losses) (pre-tax) recognized in OCI	N/A	N/A	N/A	(21)
Total gains (losses) (pre-tax) on foreign exchange contracts	—	(9)	(9)	(12)
Total gains (losses) (pre-tax) recognized on cash flow hedges	\$ (291)	(8)	(299)	278
Year ended December 31, 2018				
Total amounts presented in the consolidated statement of income and other comprehensive income	\$ 43,974	(6,703)	N/A	(238)
Interest rate contracts:				
Realized gains (losses) (pre-tax) reclassified from OCI into net income	(292)	1	(291)	291
Net unrealized gains (losses) (pre-tax) recognized in OCI	N/A	N/A	N/A	(266)
Total gains (losses) (pre-tax) on interest rate contracts	(292)	1	(291)	25
Foreign exchange contracts:				
Realized gains (losses) (pre-tax) reclassified from OCI into net income	—	(3)	(3)	3
Net unrealized gains (losses) (pre-tax) recognized in OCI	N/A	N/A	N/A	(12)
Total gains (losses) (pre-tax) on foreign exchange contracts	—	(3)	(3)	(9)
Total gains (losses) (pre-tax) recognized on cash flow hedges	\$ (292)	(2)	(294)	16

Table 16.5 shows the carrying amount and associated cumulative basis adjustment related to the application of hedge accounting that is included in the carrying amount of hedged assets and liabilities in fair value hedging relationships.

Table 16.5: Hedged Items in Fair Value Hedging Relationship

(in millions)	Hedged Items Currently Designated		Hedged Items No Longer Designated (1)	
	Carrying Amount of Assets/(Liabilities) (2)(4)	Hedge Accounting Basis Adjustment Assets/(Liabilities) (3)	Carrying Amount of Assets/(Liabilities) (4)	Hedge Accounting Basis Adjustment Assets/(Liabilities)
December 31, 2020				
Available-for-sale debt securities (5)	\$ 29,538	827	17,091	1,111
Deposits	(22,384)	(477)	—	—
Long-term debt	(156,907)	(12,466)	(14,468)	31
December 31, 2019				
Available-for-sale debt securities (5)	\$ 36,896	1,110	9,486	278
Deposits	(43,716)	(324)	—	—
Long-term debt	(127,423)	(5,827)	(25,750)	173

- (1) Represents hedged items no longer designated in qualifying fair value hedging relationships for which an associated basis adjustment exists at the balance sheet date.
(2) Does not include the carrying amount of hedged items where only foreign currency risk is the designated hedged risk. The carrying amount excluded for debt securities is \$17.6 billion and for long-term debt is \$(4.7) billion as of December 31, 2020, and \$1.2 billion for debt securities and \$(5.2) billion for long-term debt as of December 31, 2019.
(3) The balance includes \$205 million and \$130 million of debt securities and long-term debt cumulative basis adjustments as of December 31, 2020, respectively, and \$790 million and \$109 million of debt securities and long-term debt cumulative basis adjustments as of December 31, 2019, respectively, on terminated hedges whereby the hedged items have subsequently been re-designated into existing hedges.
(4) Represents the full carrying amount of the hedged asset or liability item as of the balance sheet date, except for circumstances in which only a portion of the asset or liability was designated as the hedged item in which case only the portion designated is presented.
(5) Carrying amount represents the amortized cost.

Derivatives Not Designated as Hedging Instruments

Derivatives not designated as hedging instruments include economic hedges and derivatives entered into for customer accommodation trading purposes.

We use economic hedge derivatives to manage our exposure to interest rate risk, equity price risk, foreign currency risk, and credit risk. We also use economic hedge derivatives to mitigate the periodic earnings volatility caused by mismatches between the changes in fair value of the hedged item and hedging instrument recognized on our fair value accounting hedges. In second quarter 2020, we entered into arrangements to transition the economic hedges of our deferred compensation plan liabilities from equity securities to derivative instruments. Changes in the fair values of derivatives used to economically hedge the deferred compensation plan are reported in personnel expense.

Mortgage Banking Activities

We use economic hedge derivatives in our mortgage banking business to hedge the risk of changes in the fair value of (1) certain residential MSRs measured at fair value, (2) residential mortgage LHFS, (3) derivative loan commitments, and (4) other interests held. The types of derivatives used include swaps, swaptions, constant maturity mortgages, forwards, Eurodollar and Treasury futures and options contracts. Loan commitments for mortgage loans that we intend to sell are considered derivatives. Residential MSRs, derivative loan commitments, certain residential mortgage LHFS, and our economic hedge derivatives are carried at fair value with changes in fair value included in mortgage banking noninterest income. See Note 9 (Mortgage Banking Activities) for additional information on this economic hedging activity and mortgage banking income.

Customer Accommodation Trading and Other

For customer accommodation trading purposes, we use swaps, futures, forwards, spots and options to assist our customers in managing their own risks, including interest rate, commodity, equity, foreign exchange, and credit contracts. These derivatives are not linked to specific assets and liabilities on the consolidated balance sheet or to forecasted transactions in an accounting hedge relationship and, therefore, do not qualify for hedge accounting. We also enter into derivatives for risk management that do not otherwise qualify for hedge accounting. They are carried at fair value with changes in fair value recorded in noninterest income.

Customer accommodation trading and other derivatives also include embedded derivatives that are required to be accounted for separately from their host contract. We periodically issue hybrid long-term notes and CDs where the performance of the hybrid instrument note is linked to an equity, commodity or currency index, or basket of such indices. These notes contain explicit terms that affect some or all of the cash flows or the value of the note in a manner similar to a derivative instrument and therefore are considered to contain an “embedded” derivative instrument. The indices on which the performance of the hybrid instrument is calculated are not clearly and closely related to the host debt instrument. The “embedded” derivative is separated from the host contract and accounted for as a derivative. Additionally, we may invest in hybrid instruments that contain embedded derivatives, such as credit derivatives, that are not clearly and closely related to the host contract. In such instances, we either elect fair value option for the hybrid instrument or separate the embedded derivative from the host contract and account for the host contract and derivative separately.

Note 16: Derivatives (continued)

Table 16.6 shows the net gains (losses), recognized by income statement lines, related to derivatives not designated as hedging instruments.

Table 16.6: Gains (Losses) on Derivatives Not Designated as Hedging Instruments

(in millions)	Noninterest income			Total	Noninterest expense Personnel expense
	Mortgage banking	Net gains on trading and securities	Other		
Year ended December 31, 2020					
Net gains (losses) recognized on economic hedges derivatives:					
Interest contracts (1)	\$ 2,787	—	(93)	2,694	—
Equity contracts	—	(1,167)	(25)	(1,192)	(778)
Foreign exchange contracts	—	—	(455)	(455)	—
Credit contracts	—	—	14	14	—
Subtotal	2,787	(1,167)	(559)	1,061	(778)
Net gains (losses) recognized on customer accommodation trading and other derivatives:					
Interest contracts	1,964	(1,021)	—	943	—
Commodity contracts	—	446	—	446	—
Equity contracts	—	(436)	(334)	(770)	—
Foreign exchange contracts	—	89	—	89	—
Credit contracts	—	(1)	—	(1)	—
Subtotal	1,964	(923)	(334)	707	—
Net gains (losses) recognized related to derivatives not designated as hedging instruments	\$ 4,751	(2,090)	(893)	1,768	(778)

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(in millions)	Noninterest income			
	Mortgage banking	Net gains on trading and securities	Other	Total
Year ended December 31, 2019				
Net gains (losses) recognized on economic hedges derivatives:				
Interest contracts (1)	\$ 2,177	—	1	2,178
Equity contracts	—	(2,120)	(2)	(2,122)
Foreign exchange contracts	—	—	(77)	(77)
Credit contracts	—	—	(5)	(5)
Subtotal	2,177	(2,120)	(83)	(26)
Net gains (losses) recognized on customer accommodation trading and other derivatives:				
Interest contracts	418	(95)	—	323
Commodity contracts	—	164	—	164
Equity contracts	—	(4,863)	(484)	(5,347)
Foreign exchange contracts	—	47	—	47
Credit contracts	—	(120)	—	(120)
Subtotal	418	(4,867)	(484)	(4,933)
Net gains (losses) recognized related to derivatives not designated as hedging instruments	\$ 2,595	(6,987)	(567)	(4,959)
Year ended December 31, 2018				
Net gains (losses) recognized on economic hedges derivatives:				
Interest contracts (1)	\$ (215)	—	(15)	(230)
Equity contracts	—	(408)	4	(404)
Foreign exchange contracts	—	—	669	669
Credit contracts	—	—	—	—
Subtotal	(215)	(408)	658	35
Net gains (losses) recognized on customer accommodation trading and other derivatives:				
Interest contracts	(352)	446	—	94
Commodity contracts	—	83	—	83
Equity contracts	—	4,499	(403)	4,096
Foreign exchange contracts	—	638	—	638
Credit contracts	—	1	—	1
Subtotal	(352)	5,667	(403)	4,912
Net gains (losses) recognized related to derivatives not designated as hedging instruments	\$ (567)	5,259	255	4,947

(1) Mortgage banking amounts for the years ended December 31, 2020, 2019 and 2018, are comprised of gains (losses) of \$4.6 billion, \$2.3 billion and \$(1.1) billion, respectively, related to derivatives used as economic hedges of MSRs measured at fair value offset by gains (losses) of \$(1.8) billion, \$(141) million and \$857 million, respectively, related to derivatives used as economic hedges of mortgage loans held for sale and derivative loan commitments.

Credit Derivatives

Credit derivative contracts are arrangements whose value is derived from the transfer of credit risk of a reference asset or entity from one party (the purchaser of credit protection) to another party (the seller of credit protection). We use credit derivatives to assist customers with their risk management objectives. We may also use credit derivatives in structured product transactions or liquidity agreements written to special purpose vehicles. The maximum exposure of sold credit derivatives is managed through posted collateral, purchased credit derivatives and similar products in order to achieve our desired credit risk profile. This credit risk management provides an ability to recover a significant portion of any amounts that would be paid under sold credit derivatives. We would be required to perform under the sold credit derivatives in the event of default by the referenced obligors. Events of default include events such as bankruptcy, capital restructuring or lack of principal and/or interest payment. In certain cases, other triggers may exist, such as the credit downgrade of the referenced

obligors or the inability of the special purpose vehicle for which we have provided liquidity to obtain funding.

Table 16.7 provides details of sold and purchased credit derivatives.

Note 16: Derivatives (continued)

Table 16.7: Sold and Purchased Credit Derivatives

(in millions)	Fair value asset	Fair value liability	Protection sold (A)	Protection sold – non-investment grade	Protection purchased with identical underlyings (B)	Notional amount		Range of maturities
						Net protection sold (A)-(B)	Other protection purchased	
December 31, 2020								
Credit default swaps on:								
Corporate bonds	\$ 7	2	3,767	971	2,709	1,058	3,012	2021 - 2029
Structured products	—	5	20	20	19	1	84	2034 - 2047
Credit protection on:								
Default swap index	—	—	1,582	731	559	1,023	3,925	2021 - 2030
Commercial mortgage-backed securities index	3	21	297	42	272	25	75	2047 - 2072
Asset-backed securities index	—	7	41	41	40	1	1	2045 - 2046
Other	—	4	6,378	6,262	—	6,378	11,621	2021 - 2040
Total credit derivatives	\$ 10	39	12,085	8,067	3,599	8,486	18,718	
December 31, 2019								
Credit default swaps on:								
Corporate bonds	\$ 8	1	2,855	707	1,885	970	2,447	2020 - 2029
Structured products	—	25	74	69	63	11	111	2022 - 2047
Credit protection on:								
Default swap index	1	—	2,542	120	550	1,992	8,105	2020 - 2029
Commercial mortgage-backed securities index	3	26	322	67	296	26	50	2047 - 2058
Asset-backed securities index	—	8	41	41	41	—	1	2045 - 2046
Other	—	5	6,381	5,738	—	6,381	11,881	2020 - 2049
Total credit derivatives	\$ 12	65	12,215	6,742	2,835	9,380	22,595	

Protection sold represents the estimated maximum exposure to loss that would be incurred under an assumed hypothetical circumstance, where the value of our interests and any associated collateral declines to zero, without any consideration of recovery or offset from any economic hedges. We believe this hypothetical circumstance to be an extremely remote possibility and accordingly, this required disclosure is not an indication of expected loss. The amounts under non-investment grade represent the notional amounts of those credit derivatives on which we have a higher risk of being required to perform under the terms of the credit derivative and are a function of the underlying assets.

We consider the risk of performance to be high if the underlying assets under the credit derivative have an external rating that is below investment grade or an internal credit default grade that is equivalent thereto. We believe the net protection sold, which is representative of the net notional amount of protection sold and purchased with identical underlyings, in combination with other protection purchased, is more representative of our exposure to loss than either non-investment grade or protection sold. Other protection purchased represents additional protection, which may offset the exposure to loss for protection sold, that was not purchased with an identical underlying of the protection sold.

Credit-Risk Contingent Features

Certain of our derivative contracts contain provisions whereby if the credit rating of our debt were to be downgraded by certain major credit rating agencies, the counterparty could demand additional collateral or require termination or replacement of derivative instruments in a net liability position. Table 16.8 illustrates our exposure to OTC bilateral derivative contracts with credit-risk contingent features, collateral we have posted, and the additional collateral we would be required to post if the credit rating of our debt was downgraded below investment grade.

Table 16.8: Credit-Risk Contingent Features

(in billions)	Dec 31, 2020	Dec 31, 2019
Net derivative liabilities with credit-risk contingent features	\$ 10.5	10.4
Collateral posted	9.0	9.1
Additional collateral to be posted upon a below investment grade credit rating (1)	1.5	1.3

(1) Any credit rating below investment grade requires us to post the maximum amount of collateral.

Note 17: Fair Values of Assets and Liabilities

We use fair value measurements to record fair value adjustments to certain assets and liabilities and to determine fair value disclosures. Assets and liabilities recorded at fair value on a recurring basis, such as derivatives, residential MSR, and trading or AFS debt securities, are presented in Table 17.1 in this Note. Additionally, from time to time, we record fair value adjustments on a nonrecurring basis. These nonrecurring adjustments typically involve application of LOCOM accounting, write-downs of individual assets or application of the measurement alternative for nonmarketable equity securities. Assets recorded at fair value on a nonrecurring basis are presented in Table 17.4 in this Note. We provide in Table 17.8 estimates of fair value for financial instruments that are not recorded at fair value, such as loans and debt liabilities carried at amortized cost.

FAIR VALUE HIERARCHY We classify our assets and liabilities recorded at fair value as either Level 1, 2, or 3 in the fair value hierarchy. The highest priority (Level 1) is assigned to valuations based on unadjusted quoted prices in active markets and the lowest priority (Level 3) is assigned to valuations based on significant unobservable inputs. See Note 1 (Summary of Significant Accounting Policies) for a detailed description of the fair value hierarchy.

In the determination of the classification of financial instruments in Level 2 or Level 3 of the fair value hierarchy, we consider all available information, including observable market data, indications of market liquidity and orderliness, and our understanding of the valuation techniques and significant inputs used. This determination is ultimately based upon the specific facts and circumstances of each instrument or instrument category and judgments are made regarding the significance of the unobservable inputs to the instruments' fair value measurement in its entirety. If unobservable inputs are considered significant, the instrument is classified as Level 3.

We do not classify nonmarketable equity securities in the fair value hierarchy if we use the non-published net asset value (NAV) per share (or its equivalent) as a practical expedient to measure fair value. Marketable equity securities with published NAVs are classified in the fair value hierarchy.

Assets

TRADING DEBT SECURITIES Trading debt securities are recorded at fair value on a recurring basis. These securities are valued using internal trader prices that are subject to price verification procedures, which includes comparing against multiple independent pricing sources, including prices obtained from third-party pricing services. These services compile prices from various sources and may apply matrix pricing for similar securities when no price is observable. We review pricing methodologies provided by pricing services to determine if observable market information is being used versus unobservable inputs. When evaluating the appropriateness of an internal trader price, compared with pricing service prices, considerations include the range and quality of pricing service prices in addition to observable trade data. Pricing service prices are used to ensure the reasonableness of a trader price; however, valuing financial instruments involves judgments acquired from knowledge of a particular market. If a trader asserts that a third-party pricing service price is not reflective of fair value, justification for using the trader price, including recent sales activity where possible, must be provided to and approved by the appropriate levels of

management. Substantially all of our trading debt securities are recorded using internal trader prices.

AVAILABLE-FOR-SALE DEBT SECURITIES AFS debt securities are recorded at fair value on a recurring basis. Fair value measurement for AFS debt securities is based upon various sources of market pricing. Where available, we use quoted prices in active markets. When instruments are traded in secondary markets and quoted prices in active markets do not exist for such securities, we use prices obtained from third-party pricing services and, to a lesser extent, may use prices obtained from independent broker-dealers (brokers), collectively vendor prices. Substantially all of our AFS debt securities are recorded using vendor prices. See the "Level 3 Asset and Liability Valuation Processes – Vendor Developed Valuations" section in this Note for additional discussion of our processes when using vendor prices to record fair value of AFS debt securities, which includes those classified as Level 2 or Level 3 within the fair value hierarchy.

When vendor prices are deemed inappropriate, they may be adjusted based on other market data or internal models. We also use internal models when no vendor prices are available. Internal models use discounted cash flow techniques or market comparable pricing techniques.

LOANS HELD FOR SALE (LHFS) LHFS generally includes commercial and residential mortgages originated for sale in the securitization or whole loan market. A majority of residential LHFS and our portfolio of commercial LHFS in our trading business are recorded at fair value on a recurring basis. The remaining LHFS are held at LOCOM which may be written down to fair value on a nonrecurring basis. Fair value for LHFS that are not part of our trading business is based on quoted market prices, where available, or the prices for other mortgage whole loans with similar characteristics. We may use securitization prices that are adjusted for typical securitization activities including servicing value, portfolio composition, market conditions and liquidity. Fair value for LHFS in our trading business is based on pending transactions when available. Where market pricing data or pending transactions are not available, we use a discounted cash flow model to estimate fair value.

LOANS Although loans are recorded at amortized cost, we record nonrecurring fair value adjustments to reflect partial write-downs that are based on the observable market price of the loan or current appraised value of the collateral.

MORTGAGE SERVICING RIGHTS (MSRs) Residential MSRs are carried at fair value on a recurring basis. Commercial MSRs are carried at LOCOM and may be written down to fair value on a nonrecurring basis. MSRs do not trade in an active market with readily observable prices. We determine the fair value of MSRs using a valuation model that estimates the present value of expected future net servicing income. The model incorporates assumptions that market participants use in estimating future net servicing income cash flows, including estimates of prepayment speeds (including housing price volatility for residential MSRs), discount rates, default rates, cost to service (including delinquency and foreclosure costs), escrow account earnings, contractual servicing fee income, ancillary income and late fees.

Note 17: Fair Values of Assets and Liabilities (continued)

DERIVATIVES Derivatives are recorded at fair value on a recurring basis. The fair value of substantially all exchange-traded derivatives, which include certain equity option contracts, are measured using available quoted market prices. The fair value of non-exchange-traded derivatives, which predominantly relate to derivatives traded in over-the-counter (OTC) markets, are measured using internal valuation techniques, as quoted market prices are not always readily available. Valuation techniques and inputs to internally-developed models depend on the type of derivative and nature of the underlying rate, price or index upon which the value of the derivative is based. Key inputs can include yield curves, credit curves, foreign exchange rates, prepayment rates, volatility measurements and correlation of certain of these inputs.

EQUITY SECURITIES Marketable equity securities and certain nonmarketable equity securities that we have elected to account for at fair value are recorded at fair value on a recurring basis. Our remaining nonmarketable equity securities are accounted for using the equity method, cost method or measurement alternative and can be subject to nonrecurring fair value adjustments to record impairment. Additionally, the carrying value of equity securities accounted for under the measurement alternative is also remeasured to fair value upon the occurrence of orderly observable transactions of the same or similar securities of the same issuer.

We use quoted prices to determine the fair value of marketable equity securities, as the securities are publicly traded. Quoted prices are typically not available for nonmarketable equity securities. We therefore use other methods, generally market comparable pricing techniques, to determine fair value for such securities. We use all available information in making this determination, which includes observable transaction prices for the same or similar security, prices from third-party pricing services, broker quotes, trading multiples of comparable public companies, and discounted cash flow models. Where appropriate, we make adjustments to observed market data to reflect the comparative differences between the market data and the attributes of our equity security, such as differences with public companies and other investment-specific considerations like liquidity, marketability or differences in terms of the instruments.

FORECLOSED ASSETS Foreclosed assets are carried at net realizable value, which represents fair value less costs to sell. Fair value is generally based upon independent market prices or appraised values of the collateral.

Liabilities

SHORT-SALE TRADING LIABILITIES Short-sale trading liabilities in our trading business are recorded at fair value on a recurring basis and are measured using quoted prices in active markets, where available. When quoted prices for the same instruments are not available or markets are not active, fair values are estimated using recent trades of similar securities.

Level 3 Asset and Liability Valuation Processes

We generally determine fair value of our Level 3 assets and liabilities by using internally-developed models and, to a lesser extent, prices obtained from vendors. Our valuation processes vary depending on which approach is utilized.

INTERNAL MODEL VALUATIONS Certain Level 3 fair value estimates are based on internally-developed models, such as discounted cash flow or market comparable pricing techniques. Some of the inputs used in these valuations are unobservable. Unobservable inputs are generally derived from or can be correlated to historic performance of similar portfolios or previous market trades in similar instruments where particular unobservable inputs may be implied. We attempt to correlate each unobservable input to historical experience and other third-party data where available.

Internal valuation models are subject to review prescribed within our model risk management policies and procedures, which include model validation. Model validation helps ensure our models are appropriate for their intended use and appropriate controls exist to help mitigate risk of invalid valuations. Model validation assesses the adequacy and appropriateness of our models, including reviewing its key components, such as inputs, processing components, logic or theory, output results and supporting model documentation. Validation also includes ensuring significant unobservable model inputs are appropriate given observable market transactions or other market data within the same or similar asset classes.

We also have ongoing monitoring procedures in place for our Level 3 assets and liabilities that use internal valuation models. These procedures, which are designed to provide reasonable assurance that models continue to perform as expected, include:

- ongoing analysis and benchmarking to market transactions and other independent market data (including pricing vendors, if available);
- back-testing of modeled fair values to actual realized transactions; and
- review of modeled valuation results against expectations, including review of significant or unusual fluctuations in value.

We update model inputs and methodologies periodically to reflect these monitoring procedures. Additionally, existing models are subject to periodic reviews and we perform full model revalidations as necessary.

Internal valuation models are subject to ongoing review by the appropriate principal line of business or enterprise function and monitoring oversight by Independent Risk Management. Independent Risk Management, through its Model Risk function, provides independent oversight of model risk management, and its responsibilities include governance, validation, periodic review, and monitoring of model risk across the Company and providing periodic reports to management and the Board's Risk Committee.

VENDOR-DEVELOPED VALUATIONS We routinely obtain pricing from third-party vendors to value our assets or liabilities. In certain limited circumstances, this includes assets and liabilities that we classify as Level 3. We have processes in place to approve and periodically review third-party vendors to ensure information obtained and valuation techniques used are appropriate. This review may consist of, among other things, obtaining and evaluating control reports issued and pricing methodology materials distributed. We monitor and review vendor prices on an ongoing basis to ensure the fair values are reasonable and in line with market experience in similar asset classes. While the inputs used to determine fair value are not provided by the pricing vendors, and therefore unavailable for our review, we perform one or more of the following procedures to validate the pricing information and determine appropriate classification within the fair value hierarchy:

- comparison to other pricing vendors (if available);
- variance analysis of prices;
- corroboration of pricing by reference to other independent market data, such as market transactions and relevant benchmark indices;
- review of pricing by Company personnel familiar with market liquidity and other market-related conditions; and
- investigation of prices on a specific instrument-by-instrument basis.

Assets and Liabilities Recorded at Fair Value on a Recurring Basis

Table 17.1 presents the balances of assets and liabilities recorded at fair value on a recurring basis.

Table 17.1: Fair Value on a Recurring Basis

(in millions)	December 31, 2020				December 31, 2019			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Trading debt securities:								
Securities of U.S. Treasury and federal agencies	\$ 32,060	3,197	—	35,257	32,335	4,382	—	36,717
Collateralized loan obligations	—	534	148	682	—	555	183	738
Corporate debt securities	—	10,696	13	10,709	—	11,006	38	11,044
Federal agency mortgage-backed securities	—	23,549	—	23,549	—	26,458	—	26,458
Non-agency mortgage-backed securities	—	1,039	12	1,051	—	1,254	—	1,254
Other debt securities	—	3,847	—	3,847	—	3,520	2	3,522
Total trading debt securities	32,060	42,862	173	75,095	32,335	47,175	223	79,733
Available-for-sale debt securities:								
Securities of U.S. Treasury and federal agencies	22,159	—	—	22,159	13,460	1,500	—	14,960
Non-U.S. government securities	—	16,813	—	16,813	—	—	—	—
Securities of U.S. states and political subdivisions	—	19,182	224	19,406	—	39,924	413	40,337
Federal agency mortgage-backed securities	—	139,070	—	139,070	—	162,453	—	162,453
Non-agency mortgage-backed securities	—	3,697	32	3,729	—	4,719	42	4,761
Collateralized loan obligations	—	9,018	—	9,018	—	29,055	—	29,055
Other debt securities	38	7,421	2,738	10,197	37	10,746	1,110	11,893
Total available-for-sale debt securities	22,197	195,201	2,994	220,392	13,497	248,397	1,565	263,459
Loans held for sale	—	17,572	1,234	18,806	—	16,364	1,214	17,578
Mortgage servicing rights (residential)	—	—	6,125	6,125	—	—	11,517	11,517
Derivative assets (gross):								
Interest rate contracts	11	35,590	462	36,063	26	23,792	229	24,047
Commodity contracts	—	1,997	39	2,036	—	1,413	8	1,421
Equity contracts	4,888	12,384	1,613	18,885	2,946	4,135	1,455	8,536
Foreign exchange contracts	19	8,573	11	8,603	12	5,197	5	5,214
Credit contracts	—	45	50	95	—	49	59	108
Total derivative assets (gross)	4,918	58,589	2,175	65,682	2,984	34,586	1,756	39,326
Equity securities:								
Marketable	23,995	596	5	24,596	33,702	216	3	33,921
Nonmarketable (1)	10	21	9,228	9,259	—	22	7,847	7,869
Total equity securities	24,005	617	9,233	33,855	33,702	238	7,850	41,790
Total assets prior to derivative netting	\$ 83,180	314,841	21,934	419,955	82,518	346,760	24,125	453,403
Derivative netting (2)				(39,836)				(25,123)
Total assets after derivative netting				380,119				428,280
Derivative liabilities (gross):								
Interest rate contracts	\$ (27)	(26,259)	(16)	(26,302)	\$ (23)	(19,328)	(15)	(19,366)
Commodity contracts	—	(1,503)	(40)	(1,543)	—	(1,746)	(24)	(1,770)
Equity contracts	(4,860)	(15,219)	(1,927)	(22,006)	(2,011)	(6,729)	(1,724)	(10,464)
Foreign exchange contracts	(10)	(8,134)	(12)	(8,156)	(11)	(6,213)	(23)	(6,247)
Credit contracts	—	(49)	(9)	(58)	—	(53)	(30)	(83)
Total derivative liabilities (gross)	(4,897)	(51,164)	(2,004)	(58,065)	(2,045)	(34,069)	(1,816)	(37,930)
Short-sale trading liabilities	(15,292)	(7,149)	—	(22,441)	(11,482)	(5,948)	—	(17,430)
Total liabilities prior to derivative netting	\$ (20,189)	(58,313)	(2,004)	(80,506)	(13,527)	(40,017)	(1,816)	(55,360)
Derivative netting (2)				41,556				28,851
Total liabilities after derivative netting				(38,950)				(26,509)

(1) Excludes \$154 million and \$146 million of nonmarketable equity securities as of December 31, 2020 and 2019, respectively, that are measured at fair value using non-published NAV per share (or its equivalent) as a practical expedient that are not classified in the fair value hierarchy.

(2) Represents balance sheet netting of derivative asset and liability balances, related cash collateral and portfolio level counterparty valuation adjustments. See Note 16 (Derivatives) for additional information.

Note 17: Fair Values of Assets and Liabilities (continued)

Level 3 Assets and Liabilities Recorded at Fair Value on a Recurring Basis

Table 17.2 presents the changes in Level 3 assets and liabilities measured at fair value on a recurring basis.

Table 17.2: Changes in Level 3 Fair Value Assets and Liabilities on a Recurring Basis

(in millions)	Balance, beginning of period	Net gains/ (losses) (1)	Purchases (2)	Sales	Settlements	Transfers into Level 3 (3)	Transfers out of Level 3 (4)	Balance, end of period	Net unrealized gains (losses) related to assets and liabilities held at period end (5)
Year ended December 31, 2020									
Trading debt securities	\$ 223	(53)	600	(589)	(12)	115	(111)	173	(36) (6)
Available-for-sale debt securities	1,565	(34)	43	(68)	(263)	2,255	(504)	2,994	1 (6)
Loans held for sale	1,214	(96)	1,312	(586)	(323)	1,927	(2,214)	1,234	(38) (6)
Mortgage servicing rights (residential) (8)	11,517	(7,068)	1,707	(32)	1	—	—	6,125	(4,693) (7)
Net derivative assets and liabilities:									
Interest rate contracts	214	2,074	—	—	(1,842)	—	—	446	334
Equity contracts	(269)	(316)	—	—	298	(22)	(5)	(314)	(19)
Other derivative contracts	(5)	(63)	8	3	73	22	1	39	11
Total derivative contracts	(60)	1,695	8	3	(1,471)	—	(4)	171	326 (9)
Equity securities	\$ 7,850	1,369	2	—	—	23	(11)	9,233	1,370 (6)
Year ended December 31, 2019									
Trading debt securities	\$ 290	(31)	391	(385)	(34)	1	(9)	223	(31) (6)
Available-for-sale debt securities	2,044	(6)	475	(9)	(743)	6	(202)	1,565	(4) (6)
Loans held for sale	1,057	56	356	(237)	(263)	354	(109)	1,214	51 (6)
Mortgage servicing rights (residential) (8)	14,649	(4,779)	1,933	(286)	—	—	—	11,517	(2,569) (7)
Net derivative assets and liabilities:									
Interest rate contracts	25	585	—	—	(396)	—	—	214	249
Equity contracts	(17)	(571)	—	—	292	6	21	(269)	(186)
Other derivative contracts	13	(176)	13	(12)	132	2	23	(5)	12
Total derivative contracts	21	(162)	13	(12)	28	8	44	(60)	75 (9)
Equity securities	\$ 5,468	2,383	—	(1)	—	12	(12)	7,850	2,386 (6)
Year ended December 31, 2018									
Trading debt securities	\$ 407	(16)	428	(352)	(161)	—	(16)	290	(15) (6)
Available-for-sale debt securities	2,994	71	364	(167)	(874)	—	(344)	2,044	(4) (6)
Loans held for sale	1,012	(25)	444	(360)	(156)	152	(10)	1,057	(21) (6)
Mortgage servicing rights (residential) (8)	13,625	(915)	2,010	(71)	—	—	—	14,649	960 (7)
Net derivative assets and liabilities:									
Interest rate contracts	71	(397)	—	—	351	—	—	25	(42)
Equity contracts	(511)	(108)	3	(37)	556	(1)	81	(17)	(169)
Other derivative contracts	62	(34)	12	(7)	(13)	(7)	—	13	(28)
Total derivative contracts	(378)	(539)	15	(44)	894	(8)	81	21	(239) (9)
Equity securities	\$ 5,203	703	—	(51)	(399)	16	(4)	5,468	642 (6)

(1) Includes net gains (losses) included in both net income and other comprehensive income. All amounts represent net gains (losses) included in net income except for \$0 million, \$(40) million, and \$(18) million included in other comprehensive income from available-for-sale debt securities for the years ended December 31, 2020, 2019 and 2018, respectively.

(2) Includes originations of mortgage servicing rights and loans held for sale.

(3) All assets and liabilities transferred into Level 3 were previously classified within Level 2.

(4) All assets and liabilities transferred out of Level 3 are classified as Level 2, except for \$153 million of available-for-sale debt securities that were transferred to loans during third quarter 2019.

(5) Includes net unrealized gains (losses) related to assets and liabilities held at period end included in both net income and other comprehensive income. All amounts represent net unrealized gains (losses) included in net income except for \$57 million included in other comprehensive income from available-for-sale debt securities for the year ended December 31, 2020.

(6) Included in net gains on trading and securities in the consolidated statement of income.

(7) Included in mortgage banking income and other noninterest income in the consolidated statement of income.

(8) For more information on the changes in mortgage servicing rights, see Note 9 (Mortgage Banking Activities).

(9) Included in mortgage banking income, net gains on trading and securities, and other noninterest income in the consolidated statement of income.

Table 17.3 provides quantitative information about the valuation techniques and significant unobservable inputs used in the valuation of our Level 3 assets and liabilities measured at fair value on a recurring basis for which we use an internal model.

The significant unobservable inputs for Level 3 assets and liabilities inherent in the fair values obtained from third-party vendors are not included in the table, as the specific inputs applied are not provided by the vendor (see discussion in the “Level 3 Asset and Liability Valuation Processes” section within this Note regarding vendor-developed valuations).

Weighted averages of inputs are calculated using outstanding unpaid principal balance for cash instruments, such as loans and securities, and notional amounts for derivative instruments.

Table 17.3: Valuation Techniques – Recurring Basis

(\$ in millions, except cost to service amounts)	Fair Value Level 3	Valuation Technique(s)	Significant Unobservable Inputs	Range of Inputs	Weighted Average
December 31, 2020					
Trading and available-for-sale debt securities	\$ 2,126	Discounted cash flow	Discount rate	0.4 - 14.7 %	3.6
	759	Vendor priced			
	173	Market comparable pricing	Comparability adjustment	(39.8) - 0.3	(8.4)
	109	Market comparable pricing	Multiples	7.2x - 12.1x	8.0x
Loans held for sale	1,234	Discounted cash flow	Default rate	0.0 - 31.6 %	1.7
			Discount rate	1.3 - 12.0	4.5
			Loss severity	0.0 - 32.3	18.4
			Prepayment rate	8.3 - 23.6	15.1
Mortgage servicing rights (residential)	6,125	Discounted cash flow	Cost to service per loan (1)	\$ 63 - 712	130
			Discount rate	4.9 - 8.3 %	5.8
			Prepayment rate (2)	14.3 - 22.8	19.9
Net derivative assets and (liabilities):					
Interest rate contracts	206	Discounted cash flow	Default rate	0.0 - 6.0	1.7
			Loss severity	50.0 - 50.0	50.0
			Prepayment rate	2.8 - 22.0	18.2
Interest rate contracts: derivative loan commitments	240	Discounted cash flow	Fall-out factor	1.0 - 99.0	28.8
			Initial-value servicing	(51.6) - 268.0 bps	65.5
Equity contracts	220	Discounted cash flow	Conversion factor	(8.6) - 0.0 %	(8.2)
			Weighted average life	0.5 - 2.0 yrs	1.0
	(534)	Option model	Correlation factor	(77.0) - 99.0 %	24.8
			Volatility factor	6.5 - 96.6	26.4
Nonmarketable equity securities	9,228	Market comparable pricing	Comparability adjustment	(20.3) - (3.2)	(13.8)
Insignificant Level 3 assets, net of liabilities	44				
Total Level 3 assets, net of liabilities	\$ 19,930 (3)				
December 31, 2019					
Trading and available-for-sale debt securities	\$ 693	Discounted cash flow	Discount rate	1.3 - 14.9 %	6.6
	852	Vendor priced			
	243	Market comparable pricing	Comparability adjustment	(19.7) - 19.2	0.5
Loans held for sale	1,214	Discounted cash flow	Default rate	0.0 - 15.5	0.7
			Discount rate	3.0 - 5.6	4.5
			Loss severity	0.0 - 43.5	21.7
			Prepayment rate	5.7 - 15.4	7.8
Mortgage servicing rights (residential)	11,517	Discounted cash flow	Cost to service per loan (1)	\$ 61 - 495	102
			Discount rate	6.0 - 13.6 %	7.2
			Prepayment rate (2)	9.6 - 24.4	11.9
Net derivative assets and (liabilities):					
Interest rate contracts	146	Discounted cash flow	Default rate	0.0 - 5.0	1.7
			Loss severity	50.0 - 50.0	50.0
			Prepayment rate	2.8 - 25.0	15.0
Interest rate contracts: derivative loan commitments	68	Discounted cash flow	Fall-out factor	1.0 - 99.0	16.7
			Initial-value servicing	(32.2) - 149.0 bps	36.4
Equity contracts	147	Discounted cash flow	Conversion factor	(8.8) - 0.0 %	(7.7)
			Weighted average life	0.5 - 3.0 yrs	1.5
	(416)	Option model	Correlation factor	(77.0) - 99.0 %	23.8
			Volatility factor	6.8 - 100.0	18.7
Nonmarketable equity securities	7,847	Market comparable pricing	Comparability adjustment	(20.2) - (4.2)	(14.6)
Insignificant Level 3 assets, net of liabilities	(2)				
Total Level 3 assets, net of liabilities	\$ 22,309 (3)				

(1) The high end of the range of inputs is for servicing modified loans. For non-modified loans the range is \$63 - \$252 at December 31, 2020, and \$61 - \$231 at December 31, 2019.

(2) Includes a blend of prepayment speeds and expected defaults. Prepayment speeds are influenced by mortgage interest rates as well as our estimation of drivers of borrower behavior.

(3) Consists of total Level 3 assets of \$21.9 billion and \$24.1 billion and total Level 3 liabilities of \$2.0 billion and \$1.8 billion, before netting of derivative balances, at December 31, 2020 and 2019, respectively.

Note 17: Fair Values of Assets and Liabilities (continued)

The internal valuation techniques used for our Level 3 assets and liabilities, as presented in Table 17.3, are described as follows:

- **Discounted cash flow** – Discounted cash flow valuation techniques generally consist of developing an estimate of future cash flows that are expected to occur over the life of an instrument and then discounting those cash flows at a rate of return that results in the fair value amount.
- **Market comparable pricing** – Market comparable pricing valuation techniques are used to determine the fair value of certain instruments by incorporating known inputs, such as recent transaction prices, pending transactions, financial metrics of comparable companies, or prices of other similar investments that require significant adjustment to reflect differences in instrument characteristics.
- **Option model** – Option model valuation techniques are generally used for instruments in which the holder has a contingent right or obligation based on the occurrence of a future event, such as the price of a referenced asset going above or below a predetermined strike price. Option models estimate the likelihood of the specified event occurring by incorporating assumptions such as volatility estimates, price of the underlying instrument and expected rate of return.

The unobservable inputs presented in the previous tables are those we consider significant to the fair value of the Level 3 asset or liability. We consider unobservable inputs to be significant if by their exclusion the fair value of the Level 3 asset or liability would be impacted by a predetermined percentage change. We also consider qualitative factors, such as nature of the instrument, type of valuation technique used, and the significance of the unobservable inputs relative to other inputs used within the valuation. Following is a description of the significant unobservable inputs provided in the table.

- **Comparability adjustment** – is an adjustment made to observed market data, such as a transaction price to reflect dissimilarities in underlying collateral, issuer, rating, or other factors used within a market valuation approach, expressed as a percentage of an observed price.
- **Conversion Factor** – is the risk-adjusted rate in which a particular instrument may be exchanged for another instrument upon settlement, expressed as a percentage change from a specified rate.
- **Correlation factor** – is the likelihood of one instrument changing in price relative to another based on an established relationship expressed as a percentage of relative change in price over a period over time.
- **Cost to service** – is the expected cost per loan of servicing a portfolio of loans, which includes estimates for unreimbursed expenses (including delinquency and foreclosure costs) that may occur as a result of servicing such loan portfolios.
- **Default rate** – is an estimate of the likelihood of not collecting contractual amounts owed expressed as a constant default rate (CDR).
- **Discount rate** – is a rate of return used to calculate the present value of the future expected cash flow to arrive at the fair value of an instrument. The discount rate consists of a benchmark rate component and a risk premium component. The benchmark rate component, for example, OIS, London Interbank Offered Rate (LIBOR) or U.S. Treasury rates, is generally observable within the market and is necessary to appropriately reflect the time value of money. The risk premium component reflects the amount of compensation market participants require due to the

uncertainty inherent in the instruments' cash flows resulting from risks such as credit and liquidity.

- **Fall-out factor** – is the expected percentage of loans associated with our interest rate lock commitment portfolio that are likely of not funding.
- **Initial-value servicing** – is the estimated value of the underlying loan, including the value attributable to the embedded servicing right, expressed in basis points of outstanding unpaid principal balance.
- **Loss severity** – is the estimated percentage of contractual cash flows lost in the event of a default.
- **Multiples** – are financial ratios of comparable public companies, such as ratios of enterprise value or market value of equity to earnings before interest, depreciation, and amortization (EBITDA), revenue, net income or book value, adjusted to reflect dissimilarities in operational, financial, or marketability to the comparable public company used in a market valuation approach.
- **Prepayment rate** – is the estimated rate at which forecasted prepayments of principal of the related loan or debt instrument are expected to occur, expressed as a constant prepayment rate (CPR).
- **Volatility factor** – is the extent of change in price an item is estimated to fluctuate over a specified period of time expressed as a percentage of relative change in price over a period over time.
- **Weighted average life** – is the weighted average number of years an investment is expected to remain outstanding based on its expected cash flows reflecting the estimated date the issuer will call or extend the maturity of the instrument or otherwise reflecting an estimate of the timing of an instrument's cash flows whose timing is not contractually fixed.

Interrelationships and Uncertainty of Inputs Used in Recurring Level 3 Fair Value Measurements

Usage of the valuation techniques presented in Table 17.3 requires determination of relevant inputs and assumptions, some of which represent significant unobservable inputs. Accordingly, changes in these unobservable inputs may have a significant impact on fair value.

Certain of these unobservable inputs will (in isolation) have a directionally consistent impact on the fair value of the instrument for a given change in that input. Alternatively, the fair value of the instrument may move in an opposite direction for a given change in another input. Where multiple inputs are used within the valuation technique of an asset or liability, a change in one input in a certain direction may be offset by an opposite change in another input having a potentially muted impact to the overall fair value of that particular instrument. Additionally, a change in one unobservable input may result in a change to another unobservable input (that is, changes in certain inputs are interrelated to one another), which may counteract or magnify the fair value impact.

DEBT SECURITIES AND LOANS HELD FOR SALE The internal models used to determine fair value for these Level 3 instruments use certain significant unobservable inputs within a discounted cash flow or market comparable pricing valuation technique. Such inputs include discount rate, prepayment rate, default rate, loss severity, multiples, and comparability adjustment.

These Level 3 assets would decrease (increase) in value based upon an increase (decrease) in discount rate, default rate or loss severity inputs and would generally decrease (increase) in value based upon an increase (decrease) in prepayment rate.

Conversely, these Level 3 assets would increase (decrease) in value based upon an increase (decrease) in multiples. The comparability adjustment input may have a positive or negative impact on fair value depending on the change in fair value of the item the comparability adjustment references.

Generally, a change in the assumption used for default rate is accompanied by a directionally similar change in the risk premium component of the discount rate (specifically, the portion related to credit risk) and a directionally opposite change in the assumption used for prepayment rates. Unobservable inputs for comparability adjustment, multiples, and loss severity do not increase or decrease based on movements in the other significant unobservable inputs for these Level 3 assets.

MORTGAGE SERVICING RIGHTS The discounted cash flow models used to determine fair value of Level 3 MSR's utilize certain significant unobservable inputs including prepayment rate, discount rate and costs to service. An increase in any of these unobservable inputs will reduce the fair value of the MSR's and alternatively, a decrease in any one of these inputs would result in the MSR's increasing in value. Generally, a change in the assumption used for the default rate is accompanied by a directionally similar change in the assumption used for cost to service and a directionally opposite change in the assumption used for prepayment. The sensitivity of our residential MSR's is discussed further in Note 9 (Mortgage Banking Activities).

DERIVATIVE INSTRUMENTS Level 3 derivative instruments are valued using market comparable pricing, option pricing and discounted cash flow valuation techniques which use certain unobservable inputs to determine fair value. Such inputs consist of prepayment rate, default rate, loss severity, initial-value servicing, fall-out factor, volatility factor, weighted average life, conversion factor, and correlation factor.

Level 3 derivative assets (liabilities) where we are long the underlying would decrease (increase) in value upon an increase (decrease) in default rate, fall-out factor, conversion factor, or loss severity inputs. Conversely, Level 3 derivative assets (liabilities) would generally increase (decrease) in value upon an increase (decrease) in prepayment rate, initial-value servicing, weighted average life or volatility factor inputs. The inverse of the above relationships would occur for instruments when we are short the underlying. The correlation factor input may have a

positive or negative impact on the fair value of derivative instruments depending on the change in fair value of the item the correlation factor references.

Generally, for derivative instruments for which we are subject to changes in the value of the underlying referenced instrument, a change in the assumption used for default rate is accompanied by directionally similar change in the risk premium component of the discount rate (specifically, the portion related to credit risk) and a directionally opposite change in the assumption used for prepayment rates. Unobservable inputs for loss severity, initial-value servicing, fall-out factor, volatility factor, weighted average life, conversion factor, and correlation factor do not increase or decrease based on movements in other significant unobservable inputs for these Level 3 instruments.

NONMARKETABLE EQUITY SECURITIES Level 3 nonmarketable equity securities are valued using a market comparable pricing valuation technique, with a comparability adjustment as the single significant unobservable input. The comparability adjustment input may have a positive or negative impact on fair value depending on the change in fair value of the item the comparability adjustment references.

Assets and Liabilities Recorded at Fair Value on a Nonrecurring Basis

We may be required, from time to time, to measure certain assets at fair value on a nonrecurring basis in accordance with GAAP. These adjustments to fair value usually result from application of LOCOM accounting, write-downs of individual assets or application of the measurement alternative for nonmarketable equity securities.

Table 17.4 provides the fair value hierarchy and fair value at the date of the nonrecurring fair value adjustment for all assets that were still held as of December 31, 2020 and 2019, and for which a nonrecurring fair value adjustment was recorded during the years then ended.

Table 17.5 presents the increase (decrease) in value of certain assets held at the end of the respective reporting periods presented for which a nonrecurring fair value adjustment was recognized during the periods presented.

Table 17.4: Fair Value on a Nonrecurring Basis

(in millions)	December 31, 2020			December 31, 2019		
	Level 2	Level 3	Total	Level 2	Level 3	Total
Loans held for sale (1)	2,672	2,945	5,617	2,039	3,803	5,842
Loans:						
Commercial	1,385	—	1,385	280	—	280
Consumer	395	—	395	213	1	214
Total loans	1,780	—	1,780	493	1	494
Mortgage servicing rights (commercial)	—	510	510	—	—	—
Nonmarketable equity securities	2,397	790	3,187	1,308	173	1,481
Other assets	1,350	428	1,778	359	27	386
Total assets at fair value on a nonrecurring basis	\$ 8,199	4,673	12,872	4,199	4,004	8,203

(1) Predominantly consists of commercial mortgages and residential mortgage – first lien loans.

Nonmarketable equity securities includes impairment on private equity and venture capital investments and gains or losses under the measurement alternative. Premises and equipment includes the full impairment of certain capitalized software projects. Other assets includes impairments of

operating lease ROU assets, valuation losses on foreclosed real estate and other collateral owned, and impairment on private equity and venture capital investments in consolidated portfolio companies.

Note 17: Fair Values of Assets and Liabilities (continued)

Table 17.5: Change in Value of Assets with Nonrecurring Fair Value Adjustment

(in millions)	Year ended December 31,		
	2020	2019	2018
Loans held for sale	\$ 12	11	(18)
Loans:			
Commercial	(754)	(291)	(221)
Consumer	(260)	(207)	(284)
Total loans	(1,014)	(498)	(505)
Mortgage servicing rights (commercial)	(37)	—	—
Nonmarketable equity securities	435	322	265
Premises and equipment	—	(170)	—
Other assets	(469)	(84)	(40)
Total	\$ (1,073)	(419)	(298)

Table 17.6 provides quantitative information about the valuation techniques and significant unobservable inputs used in the valuation of our Level 3 assets that are measured at fair value on a nonrecurring basis, a significant portion of which use an internal model. The table is limited to financial instruments that had nonrecurring fair value adjustments during the periods presented. Weighted averages of inputs are calculated using outstanding unpaid principal balance for cash instruments, such as loans, and carrying value prior to the nonrecurring fair value measurement for nonmarketable equity securities.

Table 17.6: Valuation Techniques – Nonrecurring Basis

(\$ in millions)	Fair Value Level 3	Valuation Technique(s) (1)	Significant Unobservable Inputs (1)	Range of Inputs Positive (Negative)	Weighted Average
December 31, 2020					
Loans held for sale (2)	\$ 1,628	Discounted cash flow	Default rate (3)	0.3 — 85.5 %	31.5
			Discount rate	0.6 — 11.9	3.0
			Loss severity	0.4 — 45.0	8.1
			Prepayment rate (4)	8.3 — 100.0	42.5
	1,317	Market comparable pricing	Comparability adjustment	(11.6) — (1.8)	(3.1)
Mortgage servicing rights (commercial)	510	Discounted cash flow	Cost to service per loan	\$ 150 — 3,377	2,779
			Discount rate	1.9 — 1.9 %	1.9
			Prepayment rate	0.0 — 20.0	5.4
Nonmarketable equity securities (5)	844	Market comparable pricing	Multiples	0.1x — 10.9x	5.0x
			188	Market comparable pricing	Comparability adjustment
	76	Other	Company risk factor	(100.0) — (20.0)	(57.7)
	91	Discounted cash flow	Discount rate	10.0 — 20.0	11.5
			Company risk factor	(62.6) — 0.0	(30.3)
			Crude oil prices (\$/barrel)	\$ 42 — 48	47
			Natural gas prices (\$/MMBtu)	2 — 2	2
Insignificant Level 3 assets	19				
Total	\$ 4,673				
December 31, 2019					
Loans held for sale (2)	\$ 3,803	Discounted cash flow	Default rate (3)	0.3 — 48.3 %	4.6
			Discount rate	1.5 — 9.4	4.3
			Loss severity	0.4 — 100.0	23.4
			Prepayment rate (4)	4.8 — 100.0	23.2
Insignificant Level 3 assets	201				
Total	\$ 4,004				

(1) Refer to the narrative following Table 17.3 for a definition of the valuation technique(s) and significant unobservable inputs used in the valuation of loans held for sale, mortgage servicing rights, and certain nonmarketable equity securities.

(2) Consists of approximately \$2.6 billion and \$1.3 billion of government insured/guaranteed loans purchased from GNMA-guaranteed mortgage securitizations at December 31, 2020 and 2019, respectively, and approximately \$300 million and \$2.5 billion of other mortgage loans that are not government insured/guaranteed at December 31, 2020 and 2019, respectively.

(3) Applies only to non-government insured/guaranteed loans.

(4) Includes the impact on prepayment rate of expected defaults for government insured/guaranteed loans, which impact the frequency and timing of early resolution of loans.

(5) Includes \$417 million of private equity and venture capital investments in consolidated portfolio companies classified in other assets on the consolidated balance sheet.

We typically use a market approach to estimate the fair value of our nonmarketable private equity and venture capital investments in portfolio companies. The market approach bases the fair value measurement on market data (for example, use of market comparable pricing techniques) that are used to derive the enterprise value of the portfolio company. Market comparable pricing techniques may include utilization of multiples and recent or anticipated transactions (for example, a financing round, merger, acquisition or bankruptcy) involving the

subject portfolio company, or participants in its industry or related industries. Based upon these recent or anticipated transactions, current market conditions and other factors specific to the issuer, we make adjustments to estimate the enterprise value of the portfolio company. As a result of the recent market environment, we also utilized other valuation techniques. These techniques included the use of company risk factors in the estimation of the fair value of certain nonmarketable equity securities. The company risk factors are

based upon entity-specific considerations including the debt and liquidity profile, projected cash flow or funding issues as well as other factors that may affect the company's outlook.

Fair Value Option

The fair value option is an irrevocable election, generally only permitted upon initial recognition of financial assets or liabilities, to measure eligible financial instruments at fair value with changes in fair value reflected in earnings. We may elect the fair value option to align the measurement model with how the financial assets or liabilities are managed or to reduce complexity or accounting asymmetry. Following is a discussion of the portfolios for which we elected the fair value option.

LOANS HELD FOR SALE (LHFS) LHFS measured at fair value include residential mortgage loan originations for which an active secondary market and readily available market prices exist to reliably support our valuations. Loan origination fees on these loans are recorded when earned, and related direct loan origination costs are recognized when incurred. We believe fair

value measurement for LHFS, which we economically hedge with derivatives along with our MSRs measured at fair value, reduces certain timing differences and better matches changes in the value of these assets with changes in the value of derivatives used as economic hedges for these assets.

Additionally we purchase loans for market-making purposes to support the buying and selling demands of our customers in our trading business. These loans are generally held for a short period of time and managed within parameters of internally approved market risk limits. Fair value measurement best aligns with our risk management practices. Fair value for these loans is generally determined using readily available market data based on recent transaction prices for similar loans.

Table 17.7 reflects differences between the fair value carrying amount of the assets for which we have elected the fair value option and the contractual aggregate unpaid principal amount at maturity. Nonaccrual loans and loans 90 days or more past due and still accruing included in LHFS which we have elected the fair value option are insignificant at December 31, 2020 and 2019.

Table 17.7: Fair Value Option

(in millions)	December 31, 2020			December 31, 2019		
	Fair value carrying amount	Aggregate unpaid principal	Fair value carrying amount less aggregate unpaid principal	Fair value carrying amount	Aggregate unpaid principal	Fair value carrying amount less aggregate unpaid principal
Loans held for sale	\$ 18,806	18,217	589	17,578	17,299	279

The changes in fair value related to initial measurement and subsequent changes in fair value included in earnings for LHFS accounted for under the fair value option were \$2.7 billion, \$1.1 billion, and \$462 million for the years ended December 31, 2020, 2019 and 2018, respectively. Substantially all of these amounts were included in the mortgage banking noninterest income line of the consolidated statement of income. For performing loans, instrument-specific credit risk gains or losses were derived principally by determining the change in fair value of the loans due to changes in the observable or implied credit spread. Credit spread is the market yield on the loans less the relevant risk-free benchmark interest rate. For nonperforming loans, we attribute all changes in fair value to instrument-specific credit risk. Gains and losses attributable to instrument-specific credit risk related to assets accounted for under the fair value option for the years ended December 31, 2020, 2019 and 2018 are insignificant.

Note 17: Fair Values of Assets and Liabilities (continued)

Disclosures about Fair Value of Financial Instruments

Table 17.8 presents a summary of fair value estimates for financial instruments that are not carried at fair value on a recurring basis. Some financial instruments are excluded from the scope of this table, such as certain insurance contracts and leases. This table also excludes assets and liabilities that are not financial instruments such as the value of the long-term relationships with our deposit, credit card and trust customers, MSRs, premises and equipment, goodwill and deferred taxes.

Loan commitments, standby letters of credit and commercial and similar letters of credit are not included in Table 17.8. A reasonable estimate of the fair value of these instruments is the carrying value of deferred fees plus the allowance for unfunded credit commitments, which totaled \$1.4 billion and \$1.0 billion at December 31, 2020 and 2019, respectively.

The total of the fair value calculations presented does not represent, and should not be construed to represent, the underlying fair value of the Company.

Table 17.8: Fair Value Estimates for Financial Instruments

(in millions)	Carrying amount	Estimated fair value			
		Level 1	Level 2	Level 3	Total
December 31, 2020					
Financial assets					
Cash and due from banks (1)	\$ 28,236	28,236	—	—	28,236
Interest-earning deposits with banks (1)	236,376	236,258	118	—	236,376
Federal funds sold and securities purchased under resale agreements (1)	65,672	—	65,672	—	65,672
Held-to-maturity debt securities	205,720	48,597	162,777	933	212,307
Loans held for sale	17,578	—	14,952	3,419	18,371
Loans, net (2)	853,595	—	56,270	817,827	874,097
Nonmarketable equity securities (cost method)	3,588	—	—	3,632	3,632
Total financial assets	\$ 1,410,765	313,091	299,789	825,811	1,438,691
Financial liabilities					
Deposits (3)	\$ 52,807	—	33,321	19,940	53,261
Short-term borrowings	58,999	—	58,999	—	58,999
Long-term debt (4)	212,922	—	219,321	1,381	220,702
Total financial liabilities	\$ 324,728	—	311,641	21,321	332,962
December 31, 2019					
Financial assets					
Cash and due from banks (1)	\$ 21,757	21,757	—	—	21,757
Interest-earning deposits with banks (1)	119,493	119,257	236	—	119,493
Federal funds sold and securities purchased under resale agreements (1)	102,140	—	102,140	—	102,140
Held-to-maturity debt securities	153,933	46,138	109,933	789	156,860
Loans held for sale	6,741	—	2,944	4,721	7,665
Loans, net (2)	933,042	—	54,125	891,714	945,839
Nonmarketable equity securities (cost method)	4,790	—	—	4,823	4,823
Total financial assets	\$ 1,341,896	187,152	269,378	902,047	1,358,577
Financial liabilities					
Deposits (3)	\$ 118,849	—	87,279	31,858	119,137
Short-term borrowings	104,512	—	104,513	—	104,513
Long-term debt (4)	228,159	—	231,332	1,720	233,052
Total financial liabilities	\$ 451,520	—	423,124	33,578	456,702

(1) Amounts consist of financial instruments for which carrying value approximates fair value.

(2) Excludes lease financing with a carrying amount of \$15.4 billion and \$19.5 billion at December 31, 2020 and 2019, respectively.

(3) Excludes deposit liabilities with no defined or contractual maturity of \$1.4 trillion and \$1.2 trillion at December 31, 2020 and 2019, respectively.

(4) Excludes capital lease obligations under capital leases of \$28 million and \$32 million at December 31, 2020 and 2019, respectively.

Note 18: Preferred Stock

We are authorized to issue 20 million shares of preferred stock and 4 million shares of preference stock, both without par value. Preferred shares outstanding rank senior to common shares both as to dividends and liquidation preference but have no general voting rights. We have not issued any preference shares under this authorization. If issued, preference shares would be limited to one vote per share. Our total authorized, issued and outstanding preferred stock is presented in the following two tables along with the Employee Stock Ownership Plan (ESOP) Cumulative Convertible Preferred Stock.

In January 2020, we issued \$2.0 billion of our Preferred Stock, Series Z. In March 2020, we redeemed the remaining outstanding shares of our Preferred Stock, Series K, and

redeemed 26,720 outstanding shares of our Preferred Stock, Series T. In October 2020, we issued \$1.2 billion of our Preferred Stock, Series AA. In December 2020, we redeemed the remaining outstanding shares of our Preferred Stock, Series T, and all of the outstanding shares of our Preferred Stock, Series V.

In January 2021, we issued \$3.5 billion of our Preferred Stock, Series BB, and in February 2021, we issued \$1.05 billion of our Preferred Stock, Series CC. Additionally, in February 2021, we announced the redemption of our Preferred Stock, Series I, Series P and Series W, and a partial redemption of our Preferred Stock, Series N, for an aggregate cost of \$4.5 billion. The redemptions are scheduled to occur on March 15, 2021.

Table 18.1: Preferred Stock Shares

	December 31, 2020		December 31, 2019	
	Liquidation preference per share	Shares authorized and designated	Liquidation preference per share	Shares authorized and designated
DEP Shares				
Dividend Equalization Preferred Shares (DEP)	\$ 10	97,000	\$ 10	97,000
Series I				
Floating Class A Preferred Stock (1)	100,000	25,010	100,000	25,010
Series K				
Floating Non-Cumulative Perpetual Class A Preferred Stock (2)	—	—	1,000	3,500,000
Series L				
7.50% Non-Cumulative Perpetual Convertible Class A Preferred Stock (3)	1,000	4,025,000	1,000	4,025,000
Series N				
5.20% Non-Cumulative Perpetual Class A Preferred Stock	25,000	30,000	25,000	30,000
Series O				
5.125% Non-Cumulative Perpetual Class A Preferred Stock	25,000	27,600	25,000	27,600
Series P				
5.25% Non-Cumulative Perpetual Class A Preferred Stock	25,000	26,400	25,000	26,400
Series Q				
5.85% Fixed-to-Floating Non-Cumulative Perpetual Class A Preferred Stock	25,000	69,000	25,000	69,000
Series R				
6.625% Fixed-to-Floating Non-Cumulative Perpetual Class A Preferred Stock	25,000	34,500	25,000	34,500
Series S				
5.90% Fixed-to-Floating Non-Cumulative Perpetual Class A Preferred Stock	25,000	80,000	25,000	80,000
Series T				
6.00% Non-Cumulative Perpetual Class A Preferred Stock (4)	—	—	25,000	32,200
Series U				
5.875% Fixed-to-Floating Non-Cumulative Perpetual Class A Preferred Stock	25,000	80,000	25,000	80,000
Series V				
6.00% Non-Cumulative Perpetual Class A Preferred Stock (5)	—	—	25,000	40,000
Series W				
5.70% Non-Cumulative Perpetual Class A Preferred Stock	25,000	40,000	25,000	40,000
Series X				
5.50% Non-Cumulative Perpetual Class A Preferred Stock	25,000	46,000	25,000	46,000
Series Y				
5.625% Non-Cumulative Perpetual Class A Preferred Stock	25,000	27,600	25,000	27,600
Series Z				
4.75% Non-Cumulative Perpetual Class A Preferred Stock	25,000	80,500	—	—
Series AA				
4.70% Non-Cumulative Perpetual Class A Preferred Stock	25,000	46,800	—	—
ESOP				
Cumulative Convertible Preferred Stock (6)	—	822,242	—	1,071,418
Total		5,557,652		9,251,728

- (1) Series I preferred stock issuance relates to trust preferred securities. See Note 8 (Securitizations and Variable Interest Entities) for additional information. This issuance has a floating interest rate that is the greater of three-month LIBOR plus 0.93% and 5.56975%.
- (2) Floating rate for Preferred Stock, Series K, is three-month LIBOR plus 3.77%. In first quarter 2020, the remaining \$1.8 billion of Preferred Stock, Series K, was redeemed.
- (3) Preferred Stock, Series L, may be converted at any time, at the option of the holder, into 6.3814 shares of our common stock, plus cash in lieu of fractional shares, subject to anti-dilution adjustments.
- (4) In first quarter 2020 and fourth quarter 2020, \$669 million and \$131 million, respectively, of Preferred Stock, Series T, was redeemed.
- (5) In fourth quarter 2020, \$1.0 billion of Preferred Stock, Series V, was redeemed.
- (6) See the "ESOP Cumulative Convertible Preferred Stock" section in this Note for additional information about the liquidation preference for the ESOP Cumulative Convertible Preferred Stock.

Note 18: Preferred Stock (continued)

Table 18.2: Preferred Stock – Shares Issued and Carrying Value

(in millions, except shares)	December 31, 2020				December 31, 2019			
	Shares issued and outstanding	Liquidation preference value	Carrying value	Discount	Shares issued and outstanding	Liquidation preference value	Carrying value	Discount
DEP Shares								
Dividend Equalization Preferred Shares (DEP)	96,546	\$ —	—	—	96,546	\$ —	—	—
Series I (1)								
Floating Class A Preferred Stock	25,010	2,501	2,501	—	25,010	2,501	2,501	—
Series K (2)								
Floating Non-Cumulative Perpetual Class A Preferred Stock	—	—	—	—	1,802,000	1,802	1,546	256
Series L (3)								
7.50% Non-Cumulative Perpetual Convertible Class A Preferred Stock	3,967,995	3,968	3,200	768	3,967,995	3,968	3,200	768
Series N								
5.20% Non-Cumulative Perpetual Class A Preferred Stock	30,000	750	750	—	30,000	750	750	—
Series O								
5.125% Non-Cumulative Perpetual Class A Preferred Stock	26,000	650	650	—	26,000	650	650	—
Series P								
5.25% Non-Cumulative Perpetual Class A Preferred Stock	25,000	625	625	—	25,000	625	625	—
Series Q								
5.85% Fixed-to-Floating Non-Cumulative Perpetual Class A Preferred Stock	69,000	1,725	1,725	—	69,000	1,725	1,725	—
Series R								
6.625% Fixed-to-Floating Non-Cumulative Perpetual Class A Preferred Stock	33,600	840	840	—	33,600	840	840	—
Series S								
5.90% Fixed-to-Floating Non-Cumulative Perpetual Class A Preferred Stock	80,000	2,000	2,000	—	80,000	2,000	2,000	—
Series T (4)								
6.00% Non-Cumulative Perpetual Class A Preferred Stock	—	—	—	—	32,000	800	800	—
Series U								
5.875% Fixed-to-Floating Non-Cumulative Perpetual Class A Preferred Stock	80,000	2,000	2,000	—	80,000	2,000	2,000	—
Series V (5)								
6.00% Non-Cumulative Perpetual Class A Preferred Stock	—	—	—	—	40,000	1,000	1,000	—
Series W								
5.70% Non-Cumulative Perpetual Class A Preferred Stock	40,000	1,000	1,000	—	40,000	1,000	1,000	—
Series X								
5.50% Non-Cumulative Perpetual Class A Preferred Stock	46,000	1,150	1,150	—	46,000	1,150	1,150	—
Series Y								
5.625% Non-Cumulative Perpetual Class A Preferred Stock	27,600	690	690	—	27,600	690	690	—
Series Z								
4.750% Non-Cumulative Perpetual Class A Preferred Stock	80,500	2,013	2,013	—	—	—	—	—
Series AA								
4.70% Non-Cumulative Perpetual Class A Preferred Stock	46,800	1,170	1,170	—	—	—	—	—
ESOP								
Cumulative Convertible Preferred Stock (6)	822,242	822	822	—	1,071,418	1,072	1,072	—
Total	5,496,293	\$ 21,904	21,136	768	7,492,169	\$ 22,573	21,549	1,024

(1) Floating rate for Preferred Stock, Series I, is the greater of three-month LIBOR plus 0.93% and 5.56975%

(2) Floating rate for Preferred Stock, Series K, is three-month LIBOR plus 3.77%. In first quarter 2020, the remaining \$1.8 billion of Preferred Stock, Series K, was redeemed.

(3) Preferred Stock, Series L, may be converted at any time, at the option of the holder, into 6.3814 shares of our common stock, plus cash in lieu of fractional shares, subject to anti-dilution adjustments.

(4) In first quarter 2020 and fourth quarter 2020, \$669 million and \$131 million respectively, of Preferred Stock, Series T, was redeemed.

(5) In fourth quarter 2020, \$1.0 billion of Preferred Stock, Series V, was redeemed.

(6) See the "ESOP Cumulative Convertible Preferred Stock" section in this Note for additional information about the liquidation preference for the ESOP Cumulative Convertible Preferred Stock.

ESOP CUMULATIVE CONVERTIBLE PREFERRED STOCK All shares of our ESOP Cumulative Convertible Preferred Stock (ESOP Preferred Stock) were issued to a trustee acting on behalf of the Wells Fargo & Company 401(k) Plan (the 401(k) Plan). Dividends on the ESOP Preferred Stock are cumulative from the date of initial issuance and are payable quarterly at annual rates based upon the year of issuance. Each share of ESOP Preferred Stock released from the unallocated reserve of the 401(k) Plan is converted into shares of our common stock based on the stated

value of the ESOP Preferred Stock and the then current market price of our common stock. The ESOP Preferred Stock is also convertible at the option of the holder at any time, unless previously redeemed. We have the option to redeem the ESOP Preferred Stock at any time, in whole or in part, at a redemption price per share equal to the higher of (a) \$1,000 per share plus accrued and unpaid dividends or (b) the fair market value, as defined in the Certificates of Designation for the ESOP Preferred Stock.

Table 18.3: ESOP Preferred Stock

(in millions, except shares)	Shares issued and outstanding		Carrying value		Adjustable dividend rate	
	Dec 31, 2020	Dec 31, 2019	Dec 31, 2020	Dec 31, 2019	Minimum	Maximum
ESOP Preferred Stock						
\$1,000 liquidation preference per share						
2018	221,945	254,945	\$ 222	255	7.00 %	8.00 %
2017	163,210	192,210	163	192	7.00	8.00
2016	162,450	197,450	162	198	9.30	10.30
2015	92,904	116,784	93	117	8.90	9.90
2014	99,151	136,151	99	136	8.70	9.70
2013	61,948	97,948	62	98	8.50	9.50
2012	20,634	49,134	21	49	10.00	11.00
2011	—	26,796	—	27	9.00	10.00
Total ESOP Preferred Stock (1)	822,242	1,071,418	\$ 822	1,072		
Unearned ESOP shares (2)			\$ (875)	(1,143)		

(1) At December 31, 2020 and 2019, additional paid-in capital included \$53 million and \$71 million, respectively, related to ESOP preferred stock.

(2) We recorded a corresponding charge to unearned ESOP shares in connection with the issuance of the ESOP Preferred Stock. The unearned ESOP shares are reduced as shares of the ESOP Preferred Stock are committed to be released.

Note 19: Common Stock and Stock Plans

Common Stock

Table 19.1 presents our reserved, issued and authorized shares of common stock at December 31, 2020.

Table 19.1: Common Stock Shares

	Number of shares
Dividend reinvestment and common stock purchase plans	3,871,110
Director plans	229,730
Stock plans (1)	431,463,336
Convertible securities and warrants	65,835,437
Total shares reserved	501,399,613
Shares issued	5,481,811,474
Shares not reserved or issued	3,016,788,913
Total shares authorized	9,000,000,000

(1) Includes employee restricted share rights, performance share awards, 401(k), and deferred compensation plans.

Dividend Reinvestment and Common Stock Purchase Plans

Participants in our dividend reinvestment and common stock direct purchase plans may purchase shares of our common stock at fair market value by reinvesting dividends and/or making optional cash payments under the plan's terms.

Employee Stock Plans

We offer stock-based employee compensation plans as described below. For information on our accounting for stock-based compensation plans, see Note 1 (Summary of Significant Accounting Policies).

LONG-TERM INCENTIVE COMPENSATION PLANS Since 2010, we have granted restricted share rights (RSRs) and performance share awards (PSAs) as our primary long-term incentive awards using our Long-Term Incentive Compensation Plan (LTICP).

Holders of RSRs and PSAs may be entitled to receive additional RSRs and PSAs (dividend equivalents) or cash payments equal to the cash dividends that would have been paid had the RSRs or PSAs been issued and outstanding shares of common stock. RSRs and PSAs granted as dividend equivalents are subject to the same vesting schedule and conditions as the underlying award.

Table 19.2 summarizes the major components of stock incentive compensation expense and the related recognized tax benefit.

Table 19.2: Stock Incentive Compensation Expense

(in millions)	Year ended December 31,		
	2020	2019	2018
RSRs (1)	\$ 732	1,109	1,013
Performance shares (2)	(110)	108	9
Total stock incentive compensation expense	\$ 622	1,217	1,022
Related recognized tax benefit	\$ 154	301	252

(1) In February 2018, a total of 11.9 million RSRs were granted to all eligible employees in the U.S., and eligible employees outside the U.S., referred to as broad-based RSRs.

(2) Compensation expense fluctuates with changes in our stock price and the estimated outcome of satisfying performance conditions.

For various acquisitions and mergers, we converted employee and director stock options of acquired or merged companies into stock options to purchase our common stock based on the terms of the original stock option plan and the agreed-upon exchange ratio. In addition, we converted restricted stock awards into awards that entitle holders to our stock after the vesting conditions are met. Holders receive cash dividends on outstanding awards if provided in the original award.

The total number of shares of common stock available for grant under the plans at December 31, 2020, was 202 million.

Restricted Share Rights

Holders of RSRs are entitled to the related shares of common stock at no cost generally vesting over three to five years after the RSRs are granted. A summary of the status of our RSRs at December 31, 2020, and changes during 2020 is presented in Table 19.3.

Table 19.3: Restricted Share Rights

	Number	Weighted-average grant-date fair value
Nonvested at January 1, 2020	50,915,461	\$ 52.30
Granted	23,504,261	42.53
Vested	(26,643,385)	54.22
Canceled or forfeited	(1,544,567)	49.95
Nonvested at December 31, 2020	46,231,770	46.30

The weighted-average grant date fair value of RSRs granted during 2019 and 2018 was \$49.32 and \$58.47, respectively.

At December 31, 2020, there was \$890 million of total unrecognized compensation cost related to nonvested RSRs. The cost is expected to be recognized over a weighted-average period of 2.4 years. The total fair value of RSRs that vested during 2020, 2019 and 2018 was \$981 million, \$773 million and \$824 million, respectively.

Performance Share Awards

Holders of PSAs are entitled to the related shares of common stock at no cost subject to the Company's achievement of specified performance criteria over a three-year period. PSAs are granted at a target number based on the Company's performance. The number of awards that vest can be adjusted downward to zero and upward to a maximum of either 125% or 150% of target. The awards vest in the quarter after the end of the performance period. For PSAs whose performance period ended December 31, 2020, the determination of the number of performance shares that will vest will occur in first quarter of 2021 after review of the Company's performance by the Human Resources Committee of the Board.

A summary of the status of our PSAs at December 31, 2020, and changes during 2020 is in Table 19.4, based on the performance adjustments recognized as of December 2020.

Table 19.4: Performance Share Awards

	Number	Weighted-average grant-date fair value (1)
Nonvested at January 1, 2020	6,504,213	\$ 49.81
Granted	1,509,410	\$ 40.39
Vested	(1,146,522)	\$ 55.79
Canceled or forfeited	(1,313,493)	\$ 52.20
Nonvested at December 31, 2020	5,553,608	\$ 45.45

(1) Reflects approval date fair value for grants subject to variable accounting.

Table 19.5: Stock Option Activity

	Number	Weighted-average exercise price	Weighted-average remaining contractual term (in years)	Aggregate intrinsic value (in millions)
Incentive compensation plans				
Options outstanding as of December 31, 2019	60,560	\$ 30.69		
Canceled or forfeited	(37,850)	31.72		
Exercised	(22,710)	31.72		
Options exercisable and outstanding as of December 31, 2020	—	—	0.0	\$ —

The total intrinsic value to option holders, which is the stock market value in excess of the option exercise price, of options exercised during 2020, 2019 and 2018 was \$0 million, \$291 million and \$375 million, respectively.

Cash received from the exercise of stock options for 2020, 2019 and 2018 was \$1 million, \$108 million and \$227 million, respectively.

We do not have a specific policy on repurchasing shares to satisfy share option exercises. Rather, we have a general policy on repurchasing shares to meet common stock issuance requirements for our benefit plans (including share option exercises), conversion of our convertible securities, acquisitions and other corporate purposes. Various factors determine the amount and timing of our share repurchases, including our capital requirements, the number of shares we expect to issue for acquisitions and employee benefit plans, market conditions (including the trading price of our stock), and regulatory and legal considerations. These factors can change at any time, and there can be no assurance as to the number of shares we will repurchase or when we will repurchase them.

The weighted-average grant date fair value of performance awards granted during 2019 and 2018 was \$49.26 and \$58.62, respectively.

At December 31, 2020, there was \$16 million of total unrecognized compensation cost related to nonvested performance awards. The cost is expected to be recognized over a weighted-average period of 1.9 years. The total fair value of PSAs that vested during 2020, 2019 and 2018 was \$35 million, \$82 million and \$107 million, respectively.

Director Awards

Beginning in 2011, we granted only common stock awards under the LTICP to non-employee directors elected or re-elected at the annual meeting of stockholders and prorated awards to directors who join the Board at any other time. Stock awards vest immediately. Options also were granted to directors prior to 2011 and can be exercised after 12 months through the tenth anniversary of the grant date.

Stock Options

Table 19.5 summarizes stock option activity and related information for the stock plans. Options assumed in mergers are included in the activity and related information for Incentive Compensation Plans if originally issued under an employee plan, and in the activity and related information for Director Awards if originally issued under a director plan.

Note 19: Common Stock and Stock Plans (continued)

Employee Stock Ownership Plan

The Wells Fargo & Company 401(k) Plan (401(k) Plan) is a defined contribution plan with an Employee Stock Ownership Plan (ESOP) feature. The ESOP feature enables the 401(k) Plan to borrow money to purchase our preferred or common stock. From 1994 through 2018, with the exception of 2009, we loaned money to the 401(k) Plan to purchase shares of our ESOP preferred stock. As our employer contributions are made to the 401(k) Plan and are used to make ESOP loan payments, the ESOP preferred stock in the 401(k) Plan is released and converted into our common stock shares. Dividends on the common stock shares allocated as a result of the release and conversion of the ESOP preferred stock reduce retained earnings, and the shares are considered outstanding for computing earnings per share. Dividends on the unallocated

ESOP preferred stock do not reduce retained earnings, and the shares are not considered to be common stock equivalents for computing earnings per share. Loan principal and interest payments are made from our employer contributions to the 401(k) Plan, along with dividends paid on the ESOP preferred stock. With each principal and interest payment, a portion of the ESOP preferred stock is released and converted to common stock shares, which are allocated to the 401(k) Plan participants and invested in the Wells Fargo ESOP Fund within the 401(k) Plan.

Table 19.6 presents the balance of common stock and unreleased preferred stock held in the Wells Fargo ESOP fund, the fair value of unreleased ESOP preferred stock and the dividends on allocated shares of common stock and unreleased ESOP Preferred Stock paid to the 401(k) Plan.

Table 19.6: Common Stock and Unreleased Preferred Stock in the Wells Fargo ESOP Fund

(in millions, except shares)	Shares outstanding		
	2020	2019	December 31, 2018
Allocated shares (common)	155,810,091	138,978,383	138,182,911
Unreleased shares (preferred)	822,242	1,071,418	1,406,460
Fair value of unreleased ESOP preferred shares	\$ 822	1,072	1,407

	Dividends paid		
	2020	2019	Year ended December 31, 2018
Allocated shares (common)	\$ 155	233	213
Unreleased shares (preferred)	77	101	159

Note 20: Revenue from Contracts with Customers

Our revenue includes net interest income on financial instruments and noninterest income. Table 20.1 presents our revenue by operating segment. For additional description of our

operating segments, including additional financial information and the underlying management accounting process, see Note 26 (Operating Segments).

Table 20.1: Revenue by Operating Segment

(in millions)	Year ended December 31, 2020						
	Consumer Banking and Lending	Commercial Banking	Corporate and Investment Banking	Wealth and Investment Management	Corporate	Reconciling Items (1)	Consolidated Company
Net interest income (2)	\$ 23,378	6,191	7,501	2,993	247	(475)	39,835
Noninterest income							
Deposit-related fees	2,904	1,219	1,062	27	9	—	5,221
Lending-related fees (2)	158	531	684	9	(1)	—	1,381
Brokerage fees:							
Asset-based revenue (3)	—	—	—	6,992	(1)	—	6,991
Transactional revenue	—	—	17	1,504	(8)	—	1,513
Other revenue	—	—	298	574	(1)	—	871
Total brokerage fees	—	—	315	9,070	(10)	—	9,375
Trust and investment management fees:							
Investment management fees	—	—	—	1,970	—	—	1,970
Trust fees	—	314	—	416	—	—	730
Other revenue	—	82	95	(3)	(2)	—	172
Total trust and investment management fees	—	396	95	2,383	(2)	—	2,872
Investment banking fees	(8)	76	1,952	14	(169)	—	1,865
Card fees:							
Card interchange and network revenues (4)	2,805	170	51	3	1	—	3,030
Other card fees (2)	513	—	—	—	1	—	514
Total card fees	3,318	170	51	3	2	—	3,544
Mortgage banking (2)	3,224	—	282	(13)	—	—	3,493
Net gains (losses) from trading activities (2)	1	(4)	1,190	5	(20)	—	1,172
Net gains on debt securities (2)	6	—	—	—	867	—	873
Net gains (losses) from equity securities (2)	10	(147)	212	(94)	684	—	665
Lease income (2)	—	646	20	—	579	—	1,245
Other (2)	1,025	660	456	115	1,277	(2,734)	799
Total noninterest income	10,638	3,547	6,319	11,519	3,216	(2,734)	32,505
Total revenue	\$ 34,016	9,738	13,820	14,512	3,463	(3,209)	72,340

(in millions)	Year ended December 31, 2019						
	Consumer Banking and Lending	Commercial Banking	Corporate and Investment Banking	Wealth and Investment Management	Corporate	Reconciling Items (1)	Consolidated Company
Net interest income (2)	\$ 25,786	8,184	8,005	3,917	1,950	(611)	47,231
Noninterest income							
Deposit-related fees	3,582	1,175	1,029	24	9	—	5,819
Lending-related fees (2)	230	524	710	8	2	—	1,474
Brokerage fees:							
Asset-based revenue (3)	—	—	—	6,777	(2)	—	6,775
Transactional revenue	—	—	26	1,534	—	—	1,560
Other revenue	—	—	266	636	—	—	902
Total brokerage fees	—	—	292	8,947	(2)	—	9,237
Trust and investment management fees:							
Investment management fees (5)	—	—	—	1,988	—	—	1,988
Trust fees (5)	—	313	—	423	179	—	915
Other revenue (5)	—	75	62	(4)	2	—	135
Total trust and investment management fees	—	388	62	2,407	181	—	3,038
Investment banking fees	(5)	85	1,804	6	(93)	—	1,797
Card fees:							
Card interchange and network revenues (4)	2,973	254	79	6	6	—	3,318
Other card fees (2)	699	—	—	—	(1)	—	698
Total card fees	3,672	254	79	6	5	—	4,016
Mortgage banking (2)	2,314	—	413	(12)	—	—	2,715
Net gains (losses) from trading activities (2)	2	(10)	1,022	53	(74)	—	993
Net gains (losses) on debt securities (2)	—	4	(5)	—	141	—	140
Net gains from equity securities (2)	4	115	297	272	2,155	—	2,843
Lease income (2)	—	931	22	—	661	—	1,614
Other (2)	2,306	688	498	104	2,874	(2,324)	4,146
Total noninterest income	12,105	4,154	6,223	11,815	5,859	(2,324)	37,832
Total revenue	\$ 37,891	12,338	14,228	15,732	7,809	(2,935)	85,063

(continued on following page)

Note 20: Revenue from Contracts with Customers (continued)

(continued from previous page)

	Year ended December 31, 2018							
	Consumer Banking and Lending	Commercial Banking	Corporate and Investment Banking	Wealth and Investment Management	Corporate	Reconciling Items (1)	Consolidated Company	
Net interest income (2)	\$ 26,985	8,748	8,345	4,317	2,259	(659)	49,995	
Noninterest income								
Deposit-related fees	3,431	1,219	1,057	24	10	—	5,741	
Lending-related fees (2)	258	604	742	8	16	—	1,628	
Brokerage fees:								
Asset-based revenue (3)	—	—	1	6,899	(2)	—	6,898	
Transactional revenue	—	—	70	1,618	(40)	—	1,648	
Other revenue	—	—	246	646	(2)	—	890	
Total brokerage fees	—	—	317	9,163	(44)	—	9,436	
Trust and investment management fees:								
Investment management fees (5)	—	—	—	2,079	—	—	2,079	
Trust fees (5)	—	301	—	442	386	—	1,129	
Other revenue (5)	—	58	54	(12)	8	—	108	
Total trust and investment management fees	—	359	54	2,509	394	—	3,316	
Investment banking fees	(1)	53	1,730	9	(34)	—	1,757	
Card fees:								
Card interchange and network revenues (4)	2,854	264	79	6	5	—	3,208	
Other card fees (2)	697	—	—	—	2	—	699	
Total card fees	3,551	264	79	6	7	—	3,907	
Mortgage banking (2)	2,666	—	362	(11)	—	—	3,017	
Net gains (losses) from trading activities (2)	6	(8)	561	57	(14)	—	602	
Net gains (losses) on debt securities (2)	—	—	(3)	9	102	—	108	
Net gains (losses) from equity securities (2)	5	37	277	(283)	1,479	—	1,515	
Lease income (2)	—	1,025	3	—	729	—	1,757	
Other (2)	3,014	779	547	61	1,368	(2,140)	3,629	
Total noninterest income	12,930	4,332	5,726	11,552	4,013	(2,140)	36,413	
Total revenue	\$ 39,915	13,080	14,071	15,869	6,272	(2,799)	86,408	

(1) Taxable-equivalent adjustments related to tax-exempt income on certain loans and debt securities are included in net interest income, while taxable-equivalent adjustments related to income tax credits for low-income housing and renewable energy investments are included in noninterest income, in each case with corresponding impacts to income tax expense (benefit). Adjustments are included in Corporate, Commercial Banking, and Corporate and Investment Banking and are eliminated to reconcile to the Company's consolidated financial results.

(2) These revenues are related to financial assets and liabilities, including loans, leases, securities and derivatives, with additional details included in other footnotes to our financial statements.

(3) We earned trailing commissions of \$1.1 billion, \$1.2 billion, and \$1.3 billion for the years ended December 31, 2020, 2019 and 2018, respectively.

(4) The cost of credit card rewards and rebates of \$1.3 billion, \$1.5 billion and \$1.4 billion for the years ended December 31, 2020, 2019 and 2018, respectively, are presented net against the related revenues.

(5) In 2020, we changed the classification of certain fees within trust and investment management fees. Prior periods have been revised to conform with the current period presentation.

We provide services to customers which have related performance obligations that we complete to recognize revenue. Our revenues are generally recognized either immediately upon the completion of our service or over time as we perform services. Any services performed over time generally require that we render services each period and therefore we measure our progress in completing these services based upon the passage of time.

DEPOSIT-RELATED FEES are earned in connection with depository accounts for commercial and consumer customers and include fees for account charges, overdraft services, cash network fees, wire transfer and other remittance fees, and safe deposit box fees. Account charges include fees for periodic account maintenance activities and event-driven services such as stop payment fees. Our obligation for event-driven services is satisfied at the time of the event when the service is delivered, while our obligation for maintenance services is satisfied over the course of each month. Our obligation for overdraft services is satisfied at the time of the overdraft. Cash network fees are earned for processing ATM transactions, and our obligation is completed upon settlement of ATM transactions. Wire transfer and other remittance fees consist of fees earned for providing funds transfer services and issuing cashier's checks and money orders. Our obligation is satisfied at the time of the performance of the funds transfer service or upon issuance of the cashier's check or money order. Safe deposit box fees are generally recognized over time as we provide the services.

BROKERAGE FEES are earned for providing brokerage services and include fees earned on asset-based and transactional brokerage accounts, as well as other brokerage services.

Asset-based revenues are charged based on the market value of the client's assets. The services and related obligations associated with certain of these revenues, which include investment advice, active management of client assets, and assistance with selecting and engaging a third-party advisory manager, are generally satisfied over a month or quarter. The remaining revenues include trailing commissions which are earned for selling shares to investors. Our obligation associated with earning trailing commissions is satisfied at the time shares are sold. However, these fees are received and recognized over time during the period the customer owns the shares and we remain the broker of record. The amount of trailing commissions is variable based on the length of time the customer holds the shares and on changes in the value of the underlying assets.

Transactional revenues are earned for executing transactions at the client's direction. Our obligation is generally satisfied upon the execution of the transaction and the fees are based on the size and number of transactions executed.

Other revenues earned from other brokerage advisory services include omnibus and networking fees received from mutual fund companies in return for providing record keeping and other administrative services, and annual account maintenance fees charged to customers.

TRUST AND INVESTMENT MANAGEMENT FEES are earned for providing trust, investment management and other related services.

Investment management services include managing and administering assets, including mutual funds, and institutional separate accounts. Fees for these services are generally determined based on a tiered scale relative to the market value of assets under management (AUM). In addition to AUM, we have client assets under administration (AUA) that earn various administrative fees which are generally based on the extent of the services provided to administer the account. Services with AUM and AUA-based fees are generally satisfied over time.

Trust services include acting as a trustee or agent for corporate trust, personal trust, and agency assets. Obligations for trust services are generally satisfied over time, while obligations for activities that are transactional in nature are satisfied at the time of the transaction.

Other related services include the custody and safekeeping of accounts. Our obligation for these services is generally satisfied over time.

INVESTMENT BANKING FEES are earned for underwriting debt and equity securities, arranging syndicated loan transactions and performing other advisory services. Our obligation for these services is generally satisfied at closing of the transaction.

CARD FEES include credit and debit card interchange and network revenues and various card-related fees. Credit and debit card interchange and network revenues are earned on credit and debit card transactions conducted through payment networks such as Visa, MasterCard, and American Express. Our obligation is satisfied concurrently with the delivery of services on a daily basis. Other card fees represent late fees, cash advance fees, balance transfer fees, and annual fees.

Note 21: Employee Benefits and Other Expenses

Pension and Postretirement Plans

We sponsor a frozen noncontributory qualified defined benefit retirement plan, the Wells Fargo & Company Cash Balance Plan (Cash Balance Plan), which covers eligible employees of Wells Fargo. The Cash Balance Plan was frozen on July 1, 2009, and no new benefits accrue after that date.

Prior to July 1, 2009, eligible employees' Cash Balance Plan accounts were allocated a compensation credit based on a percentage of their certified compensation; the freeze discontinued the allocation of compensation credits after June 30, 2009. Investment credits continue to be allocated to participants' accounts based on their accumulated balances.

We voluntarily made contributions of \$700 million to our Cash Balance Plan in 2020. We do not expect that we will be required to make a contribution to the Cash Balance Plan in 2021. For the nonqualified pension plans and postretirement benefit plans, there is no minimum required contribution beyond the amount needed to fund benefit payments.

We recognize settlement losses for our Cash Balance Plan based on an assessment of whether lump sum benefit payments will, in aggregate for the year, exceed the sum of its annual service and interest cost (threshold). Settlement losses of \$121 million and \$134 million were recognized during 2020 and 2018, respectively, representing the pro rata portion of the net loss in cumulative other comprehensive income based on the percentage reduction in the Cash Balance Plan's projected benefit obligation attributable to 2020 and 2018 lump sum payments (included in the "Benefits paid" line in Table 21.1). Settlement losses were not recognized in 2019 as lump sum payments did not exceed the 2019 threshold.

Our nonqualified defined benefit plans are unfunded and provide supplemental defined benefit pension benefits to certain eligible employees. The benefits under these plans were frozen in prior years.

We provide health care and life insurance benefits for certain retired employees, and we reserve the right to amend, modify or terminate any of the benefits at any time.

Note 21: Employee Benefits and Other Expenses (continued)

The information set forth in the following tables is based on current actuarial reports using the measurement date of December 31 for our pension and postretirement benefit plans.

Table 21.1 presents the changes in the benefit obligation and the fair value of plan assets, the funded status, and the

amounts recognized on the consolidated balance sheet. At both December 31, 2020 and 2019, changes in the benefit obligation for the qualified plans were primarily driven by the changes in the actuarial losses due to a decrease in the discount rates.

Table 21.1: Changes in Benefit Obligation and Fair Value of Plan Assets

(in millions)	December 31, 2020			December 31, 2019		
	Pension benefits		Other benefits	Pension benefits		Other benefits
	Qualified	Non-qualified		Qualified	Non-qualified	
Change in benefit obligation:						
Benefit obligation at beginning of year	\$ 11,116	572	525	10,129	557	555
Service cost	14	—	—	11	—	—
Interest cost	325	16	16	419	22	23
Plan participants' contributions	—	—	43	—	—	44
Actuarial loss (gain)	1,205	25	(15)	1,229	49	(11)
Benefits paid	(706)	(57)	(78)	(672)	(57)	(86)
Settlements, Curtailments, and Amendments	(1)	—	—	(2)	—	—
Foreign exchange impact	3	—	—	2	1	—
Benefit obligation at end of year	11,956	556	491	11,116	572	525
Change in plan assets:						
Fair value of plan assets at beginning of year	10,763	—	540	9,477	—	511
Actual return on plan assets	1,291	—	38	1,758	—	64
Employer contribution	712	57	6	199	57	7
Plan participants' contributions	—	—	43	—	—	44
Benefits paid	(706)	(57)	(78)	(672)	(57)	(86)
Settlement	(1)	—	—	(1)	—	—
Foreign exchange impact	2	—	—	2	—	—
Fair value of plan assets at end of year	12,061	—	549	10,763	—	540
Funded status at end of year	\$ 105	(556)	58	(353)	(572)	15
Amounts recognized on the consolidated balance sheet at end of year:						
Assets	\$ 181	—	84	1	—	44
Liabilities	(76)	(556)	(26)	(354)	(572)	(29)

Table 21.2 provides information for pension and post retirement plans with benefit obligations in excess of plan assets.

Table 21.2: Plans with Benefit Obligations in Excess of Plan Assets

(in millions)	December 31, 2020		December 31, 2019	
	Pension Benefits	Other Benefits	Pension Benefits	Other Benefits
Projected benefit obligation	\$ 715	N/A	11,653	N/A
Accumulated benefit obligation	684	26	11,634	29
Fair value of plan assets	82	—	10,727	—

Table 21.3 presents the components of net periodic benefit cost and other comprehensive income (OCI). Service cost is reported in personnel expense and all other components of net

periodic benefit cost are reported in other noninterest expense on the consolidated statement of income.

Table 21.3: Net Periodic Benefit Cost and Other Comprehensive Income

(in millions)	December 31, 2020			December 31, 2019			December 31, 2018		
	Pension benefits			Pension benefits			Pension benefits		
	Qualified	Non-qualified	Other benefits	Qualified	Non-qualified	Other benefits	Qualified	Non-qualified	Other benefits
Service cost	\$ 14	—	—	11	—	—	11	—	—
Interest cost	325	16	16	419	22	23	392	21	21
Expected return on plan assets	(603)	—	(21)	(567)	—	(28)	(641)	—	(31)
Amortization of net actuarial loss (gain)	157	14	(19)	148	10	(17)	131	14	(18)
Amortization of prior service credit	—	—	(10)	—	—	(10)	—	—	(10)
Settlement loss	121	3	—	—	2	—	134	2	—
Net periodic benefit cost	14	33	(34)	11	34	(32)	27	37	(38)
Other changes in plan assets and benefit obligations recognized in other comprehensive income:									
Net actuarial loss (gain)	517	25	(32)	38	49	(47)	445	(27)	15
Amortization of net actuarial gain (loss)	(157)	(14)	19	(148)	(10)	17	(131)	(14)	18
Prior service cost	—	—	—	—	—	—	1	—	—
Amortization of prior service credit	—	—	10	—	—	10	—	—	10
Settlement	(121)	(3)	—	—	(2)	—	(134)	(2)	—
Total recognized in other comprehensive income	239	8	(3)	(110)	37	(20)	181	(43)	43
Total recognized in net periodic benefit cost and other comprehensive income	\$ 253	41	(37)	(99)	71	(52)	208	(6)	5

Table 21.4 provides the amounts recognized in cumulative OCI (pre-tax).

Table 21.4: Benefits Recognized in Cumulative OCI

(in millions)	December 31, 2020			December 31, 2019		
	Pension benefits			Pension benefits		
	Qualified	Non-qualified	Other benefits	Qualified	Non-qualified	Other benefits
Net actuarial loss (gain)	\$ 3,465	194	(370)	3,226	186	(357)
Net prior service cost (credit)	1	—	(136)	1	—	(146)
Total	\$ 3,466	194	(506)	3,227	186	(503)

Plan Assumptions

For additional information on our pension accounting assumptions, see Note 1 (Summary of Significant Accounting Policies). Table 21.5 presents the weighted-average assumptions used to estimate the projected benefit obligation.

Table 21.5: Weighted-Average Assumptions Used to Estimate Projected Benefit Obligation

	December 31, 2020			December 31, 2019		
	Pension benefits			Pension benefits		
	Qualified	Non-qualified	Other benefits	Qualified	Non-qualified	Other benefits
Discount rate	2.46 %	2.15	2.31	3.21	3.03	3.10
Interest crediting rate	2.66	0.87	N/A	2.70	1.35	N/A

Note 21: Employee Benefits and Other Expenses (continued)

Table 21.6 presents the weighted-average assumptions used to determine the net periodic benefit cost.

Table 21.6: Weighted-Average Assumptions Used to Determine Net Periodic Benefit Cost

	December 31, 2020			December 31, 2019			December 31, 2018		
	Pension benefits			Pension benefits			Pension benefits		
	Qualified	Non-qualified	Other benefits	Qualified	Non-qualified	Other benefits	Qualified	Non-qualified	Other benefits
Discount rate (1)	2.95 %	3.12	3.10	4.30	4.10	4.24	3.65	3.65	3.54
Interest crediting rate (1)	2.68	1.46	N/A	3.22	2.05	N/A	2.74	1.68	N/A
Expected return on plan assets	5.74	N/A	4.00	6.24	N/A	5.75	6.24	N/A	5.75

(1) Includes the impact of interim re-measurements as applicable.

To account for postretirement health care plans, we used health care cost trend rates to recognize the effect of expected changes in future health care costs due to medical inflation, utilization changes, new technology, regulatory requirements and Medicare cost shifting. In determining the end of year benefit obligation, we assumed an average annual increase of approximately 7.80% for health care costs in 2021. This rate is assumed to trend down 0.30%-0.40% per year until the trend rate reaches an ultimate rate of 4.50% in 2030. The 2020 periodic benefit cost was determined using an initial annual trend rate of 8.30%. This rate was assumed to decrease 0.40%-0.50% per year until the trend rate reached an ultimate rate of 4.50% in 2028.

Investment Strategy and Asset Allocation

We seek to achieve the expected long-term rate of return with a prudent level of risk, given the benefit obligations of the pension plans and their funded status. Our overall investment strategy is designed to provide our Cash Balance Plan with a moderate amount of long-term growth opportunities while ensuring that risk is mitigated through diversification across numerous asset classes and various investment strategies, coupled with an investment strategy for the fixed income assets that is generally designed to approximate the interest rate sensitivity of the Cash Balance Plan's benefit obligations. The Cash Balance Plan currently has a target asset allocation mix comprised of the following ranges: 65%-75% fixed income, 20%-30% equities, and 5%-10% in real estate, private equity and other investments. The Employee Benefit Review Committee (EBRC), which includes several members of senior management, formally reviews the investment risk and performance of our Cash Balance Plan on a quarterly basis. Annual Plan liability analysis and periodic asset/liability evaluations are also conducted.

Other benefit plan assets include (1) assets held in a 401(h) trust, which are invested with a target mix of 40%-60% for both equities and fixed income, and (2) assets held in the Retiree Medical Plan Voluntary Employees' Beneficiary Association (VEBA) trust, which are predominately invested in fixed income securities and cash. Members of the EBRC formally review the investment risk and performance of these assets on a quarterly basis.

Projected Benefit Payments

Future benefits that we expect to pay under the pension and other benefit plans are presented in Table 21.7.

Table 21.7: Projected Benefit Payments

(in millions)	Pension benefits		
	Qualified	Non-qualified	Other benefits
Year ended December 31,			
2021	\$ 763	47	39
2022	806	45	38
2023	732	43	36
2024	710	42	35
2025	716	40	34
2026-2030	3,397	173	146

Fair Value of Plan Assets

Table 21.8 presents the classification of the fair value of the pension plan and other benefit plan assets in the fair value hierarchy. See Note 17 (Fair Values of Assets and Liabilities) for a description of the fair value hierarchy.

Table 21.8: Pension and Other Benefit Plan Assets

(in millions)	Pension plan assets				Other benefits plan assets			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Carrying value at year end								
December 31, 2020								
Cash and cash equivalents	\$ 68	154	—	222	46	145	—	191
Long duration fixed income (1)	1,032	6,092	—	7,124	—	—	—	—
Intermediate (core) fixed income (2)	—	333	—	333	—	186	—	186
High-yield fixed income	—	232	—	232	—	—	—	—
International fixed income	—	136	—	136	—	—	—	—
Domestic large-cap stocks (3)	647	242	—	889	—	74	—	74
Domestic mid-cap stocks	216	121	—	337	—	20	—	20
Domestic small-cap stocks	212	10	—	222	—	12	—	12
Global stocks (4)	—	417	—	417	—	—	—	—
International stocks (5)	260	440	1	701	12	25	—	37
Emerging market stocks	51	216	—	267	—	—	—	—
Real estate	133	44	2	179	—	—	—	—
Hedge funds/absolute return	73	77	—	150	—	—	—	—
Other	174	65	9	248	5	—	24	29
Plan investments – excluding investments at NAV	\$ 2,866	8,579	12	11,457	63	462	24	549
Investments at NAV (6)				572				—
Net receivables				32				—
Total plan assets				\$ 12,061				549
December 31, 2019								
Cash and cash equivalents	\$ 3	287	—	290	53	145	—	198
Long duration fixed income (1)	821	5,259	—	6,080	—	—	—	—
Intermediate (core) fixed income (2)	—	167	—	167	—	177	—	177
High-yield fixed income	—	217	—	217	—	—	—	—
International fixed income	33	97	—	130	—	—	—	—
Domestic large-cap stocks (3)	700	290	—	990	—	73	—	73
Domestic mid-cap stocks	210	113	—	323	—	19	—	19
Domestic small-cap stocks	201	9	—	210	—	11	—	11
Global stocks (4)	92	374	—	466	—	—	—	—
International stocks (5)	567	120	—	687	12	22	—	34
Emerging market stocks	—	249	—	249	—	—	—	—
Real estate	141	35	7	183	—	—	—	—
Hedge funds/absolute return	68	50	—	118	—	—	—	—
Other	57	48	9	114	4	—	24	28
Plan investments – excluding investments at NAV	\$ 2,893	7,315	16	10,224	69	447	24	540
Investments at NAV (6)				478				—
Net receivables				61				—
Total plan assets				\$ 10,763				540

- (1) This category includes a diversified mix of assets, which are being managed in accordance with a duration target of approximately 12 years and 10 years, for December 31, 2020 and 2019, respectively, and an emphasis on corporate credit bonds combined with investments in U.S. Treasury securities and other U.S. agency and non-agency bonds.
- (2) This category includes assets that are intermediate duration, investment grade bonds held in investment strategies benchmarked to the Bloomberg Barclays Capital U.S. Aggregate Bond Index, including U.S. Treasury securities, agency and non-agency asset-backed bonds and corporate bonds.
- (3) This category covers a broad range of investment styles, including active, enhanced index and passive approaches, as well as style characteristics of value, core and growth emphasized strategies. Assets in this category are currently diversified across eight unique investment strategies with no single investment manager strategy representing more than 2.0% of total plan assets.
- (4) This category consists of five unique investment strategies providing exposure to broadly diversified, global equity investments with no single strategy representing more than 1.5% of total Plan assets.
- (5) This category includes assets diversified across five and four unique investment strategies for December 31, 2020 and 2019, respectively, providing exposure to companies in developed market, non-U.S. countries with no single strategy representing more than 2.5% of total plan assets in both years.
- (6) Consists of certain investments that are measured at fair value using NAV per share (or its equivalent) as a practical expedient and are excluded from the fair value hierarchy.

Note 21: Employee Benefits and Other Expenses (continued)

Table 21.9 presents the changes in Level 3 pension plan and other benefit plan assets measured at fair value.

Table 21.9: Fair Value Level 3 Pension and Other Benefit Plan Assets

(in millions)	Balance beginning of year	Gains (losses) (1)	Purchases, sales and settlements (net)	Transfer into/ (out of) Level 3	Balance end of year
Year ended December 31, 2020					
Pension plan assets	\$ 16	(1)	(4)	1	12
Other benefits plan assets	24	—	—	—	24
Year ended December 31, 2019					
Pension plan assets	22	4	(10)	—	16
Other benefits plan assets	24	—	—	—	24

(1) Represents unrealized and realized gains (losses). All unrealized gains (losses) relate to instruments held at period end.

VALUATION METHODOLOGIES Following is a description of the valuation methodologies used for assets measured at fair value.

Cash and Cash Equivalents – includes investments in collective investment funds valued at fair value based upon the fund’s NAV per share held at year-end. The NAV per share is quoted on a private market that is not active; however, the NAV per share is based on underlying investments traded on an active market. This group of assets also includes investments in registered investment companies valued at the NAV per share held at year-end and in interest-bearing bank accounts.

Long Duration, Intermediate (Core), High-Yield, and International Fixed Income – includes investments traded on the secondary markets; prices are measured by using quoted market prices for similar securities, pricing models, and discounted cash flow analyses using significant inputs observable in the market where available, or a combination of multiple valuation techniques. This group of assets also includes highly liquid government securities such as U.S. Treasuries, limited partnerships valued at the NAV, registered investment companies and collective investment funds described above.

Domestic, Global, International and Emerging Market Stocks – investments in exchange-traded equity securities are valued at quoted market values. This group of assets also includes investments in registered investment companies and collective investment funds described above.

Real Estate – includes investments in real estate, which are valued at fair value based on an income capitalization valuation approach. Market values are estimates, and the actual market price of the real estate can only be determined by negotiation between independent third parties in sales transactions. This group of assets also includes investments in exchange-traded equity securities and collective investment funds described above.

Hedge Funds / Absolute Return – includes investments in registered investment companies, and limited partnerships, as described above.

Other – insurance contracts that are stated at cash surrender value. This group of assets also includes investments in registered investment companies and collective investment funds described above.

The methods described above may produce a fair value calculation that may not be indicative of net realizable value or reflective of future fair values. While we believe our valuation methods are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine the fair value of certain financial instruments could result in a different fair value measurement at the reporting date.

Defined Contribution Retirement Plans

We sponsor a qualified defined contribution retirement plan, the Wells Fargo & Company 401(k) Plan (401(k) Plan). Under the 401(k) Plan, after 1 month of service, eligible employees may contribute up to 50% of their certified compensation, subject to statutory limits. Eligible employees who complete one year of service are eligible for quarterly company matching contributions, which are generally dollar for dollar up to 6% of an employee’s eligible certified compensation. Matching contributions are 100% vested. The 401(k) Plan includes an employer discretionary profit sharing contribution feature to allow us to make a contribution to eligible employees’ 401(k) Plan accounts for a plan year. Eligible employees who complete one year of service are eligible for profit sharing contributions. Profit sharing contributions are vested after three years of service. Total defined contribution retirement plan expenses were \$1.1 billion in both 2020, 2019 and \$1.2 billion, in 2018.

Effective January 2021, we implemented the following changes to the 401(k) Plan: (1) added a new base contribution of 1% of certified compensation for employees with annual compensation of less than \$75,000; (2) replaced the discretionary profit sharing contribution with a discretionary contribution for employees with annual compensation of less than \$150,000; (3) revised the contribution and vesting timing, whereby the match, base and discretionary employer contributions require one year of service, vest after three years of service, and are made annually at year-end for employees who are eligible for benefits on December 15; and (4) allow participants to elect installment distributions in addition to lump sum and partial lump sum distributions.

Other Expenses

Regulatory Charges and Assessments expense, which is included in other noninterest expense, was \$834 million, \$723 million, and \$1.1 billion in 2020, 2019 and 2018, respectively, and primarily consisted of Federal Deposit Insurance Corporation (FDIC) deposit assessment expense.

Note 22: Restructuring Charges

The Company is pursuing various initiatives to reduce expenses and create a more efficient and streamlined organization. Actions from these initiatives may include (i) reorganizing and simplifying business processes and structures to improve internal operations and the customer experience, (ii) reducing headcount, (iii) optimizing third-party spending, including for our technology infrastructure, and (iv) rationalizing our branch and administrative locations, which may include consolidations and closures. The evaluation of potential actions will continue in future periods.

Restructuring charges are recorded as a component of noninterest expense on our consolidated statement of income.

The following costs associated with these initiatives are included in restructuring charges.

- Personnel costs – Severance costs associated with headcount reductions with payments made over time in accordance with our severance plan, as well as payments for other employee benefit costs such as incentive compensation.
- Facility closure costs – Write-downs and acceleration of depreciation and amortization of owned or leased assets for branch and administrative locations, as well as related decommissioning costs.
- Other – Impairment of other assets and costs associated with our technology infrastructure.

Table 22.1 provides details on our restructuring charges.

Table 22.1: Accruals for Restructuring Charges

(in millions)	Personnel costs	Facility closure costs	Other	Total
Beginning balance at January 1, 2020	\$ —	—	—	—
Restructuring charges	1,371	80	144	1,595
Payments and utilization	(105)	(80)	(100)	(285)
Changes in estimates (1)	(96)	—	—	(96)
Ending balance at December 31, 2020	\$ 1,170	—	44	1,214

(1) Represents reduction of expense for changes in previously estimated amounts based on refinements of assumptions.

Note 23: Income Taxes

Table 23.1 presents the components of income tax expense (benefit).

Table 23.1: Income Tax Expense (Benefit)

(in millions)	Year ended December 31,		
	2020	2019	2018
Current:			
U.S. Federal	\$ 389	5,244	2,382
U.S. State and local	(291)	2,005	1,140
Non-U.S.	211	154	170
Total current	309	7,403	3,692
Deferred:			
U.S. Federal	(2,460)	(2,374)	1,706
U.S. State and local	(794)	(863)	236
Non-U.S.	(60)	(9)	28
Total deferred	(3,314)	(3,246)	1,970
Total	\$ (3,005)	4,157	5,662

The tax effects of our temporary differences that gave rise to significant portions of our deferred tax assets and liabilities are presented in Table 23.2.

Table 23.2: Net Deferred Taxes (1)

(in millions)	Dec 31, 2020	Dec 31, 2019
Deferred tax assets		
Allowance for credit losses	\$ 4,871	2,587
Deferred compensation and employee benefits	3,225	2,969
Accrued expenses	1,098	874
Basis difference in debt securities	555	690
Net operating loss and tax credit carry forwards	366	363
Other	906	1,276
Total deferred tax assets	11,021	8,759
Deferred tax assets valuation allowance	(310)	(306)
Deferred tax liabilities		
Mark to market, net	(4,043)	(4,146)
Leasing	(3,849)	(4,413)
Mortgage servicing rights	(2,647)	(3,080)
Basis difference in investments	(1,894)	(1,626)
Net unrealized gains on debt securities	(994)	(504)
Intangible assets	(605)	(511)
Insurance reserves	(586)	(561)
Other	(851)	(890)
Total deferred tax liabilities	(15,469)	(15,731)
Net deferred tax liability (2)	\$ (4,758)	(7,278)

(1) Prior period amounts have been revised to conform with the current period presentation.

(2) The net deferred tax liability is included in accrued expenses and other liabilities. Balances as of December 31, 2020, include a \$322 million impact as a result of the Company's adoption of CECL.

Deferred taxes related to net unrealized gains (losses) on debt securities, net unrealized gains (losses) on derivatives, foreign currency translation, and employee benefit plan adjustments are recorded in cumulative OCI. See Note 25 (Other Comprehensive Income) for more information.

We have determined that a valuation allowance is required for 2020 in the amount of \$310 million, attributable to deferred tax assets in various state and non-U.S. jurisdictions where we believe it is more likely than not that these deferred tax assets will not be realized due to lack of sources of taxable income, limitations on carry back of losses or credits and the inability to implement tax planning to realize these deferred tax assets. We have concluded that it is more likely than not that the remaining deferred tax assets will be realized based on our history of earnings, sources of taxable income in carry back periods, and our ability to implement tax planning strategies.

At December 31, 2020, we had net operating loss and tax credit carry forwards with related deferred tax assets of \$366 million. If these carry forwards are not utilized, they will mostly expire in varying amounts through December 31, 2040.

We do not intend to distribute earnings of certain non-U.S. subsidiaries in a taxable manner, and therefore intend to limit distributions to non-U.S. earnings previously taxed in the U.S., that would qualify for the 100% dividends received deduction, and that would not result in any significant state or non-U.S. taxes. All other undistributed non-U.S. earnings will continue to be permanently reinvested outside the U.S. and the related tax liability on these earnings is insignificant.

Table 23.3 reconciles the statutory federal income tax rate to the effective income tax rate. Our effective tax rate is calculated by dividing income tax expense (benefit) by income

before income tax expense (benefit) less the net income from noncontrolling interests.

Table 23.3: Effective Income Tax Expense (Benefit) and Rate (1)

(in millions)	December 31,					
	2020		2019		2018	
	Amount	Rate	Amount	Rate	Amount	Rate
Statutory federal income tax expense and rate	\$ 62	21.0 %	\$ 4,978	21.0 %	\$ 5,892	21.0 %
Change in tax rate resulting from:						
State and local taxes on income, net of federal income tax benefit	(20)	(6.8)	896	3.8	1,076	3.9
Tax-exempt interest	(358)	(121.0)	(460)	(2.0)	(494)	(1.8)
Tax credits	(2,014)	(680.6)	(1,715)	(7.2)	(1,537)	(5.5)
Nondeductible expenses	199	67.2	799	3.3	500	1.8
Changes in prior year unrecognized tax benefits, inclusive of interest	(938)	(316.9)	(88)	(0.4)	432	1.5
Other	64	21.5	(253)	(1.0)	(207)	(0.7)
Effective income tax expense (benefit) and rate	\$ (3,005)	(1,015.6)%	\$ 4,157	17.5 %	\$ 5,662	20.2 %

(1) In 2020, we reclassified certain items within the effective income tax reconciliation. Prior period amounts have been revised to conform with the current period presentation.

All three years include the impact of litigation accruals that are not deductible for U.S. federal income tax purposes. The 2018 effective tax rate reflects \$164 million of income tax expense resulting from the final measurement of our initial estimates regarding the impacts of the Tax Cuts & Jobs Act (Tax Act) signed into law December 2017. In addition, the 2018 effective tax rate includes the reconsideration of reserves for state income taxes following the U.S. Supreme Court opinion in *South Dakota v. Wayfair, Inc.*

Table 23.4 presents the change in unrecognized tax benefits.

Table 23.4: Change in Unrecognized Tax Benefits (1)

(in millions)	Year ended December 31,	
	2020	2019
Balance at beginning of year	\$ 6,996	7,143
Additions:		
For tax positions related to the current year	52	268
For tax positions related to prior years	263	91
Reductions:		
For tax positions related to prior years	(1,820)	(378)
Lapse of statute of limitations	(3)	(5)
Settlements with tax authorities	(662)	(123)
Balance at end of year	\$ 4,826	6,996

(1) Prior period amounts have been revised to reflect the impact of certain refund claims, which also impacted the balance at the beginning of the year ended December 31, 2020. The revisions did not impact income tax expense (benefit).

Of the \$4.8 billion of unrecognized tax benefits at December 31, 2020, approximately \$3.4 billion would, if recognized, affect the effective tax rate. The remaining \$1.4 billion of unrecognized tax benefits relates to income tax positions on temporary differences.

We account for interest and penalties related to unrecognized tax benefits as a component of income tax expense. As of December 31, 2020 and 2019, we have accrued approximately \$951 million and \$998 million, respectively, for interest and penalties, net of tax. In 2020 and 2019, we recognized income tax expense, net of tax, of \$10 million and \$35 million, respectively, related to interest and penalties.

We are subject to U.S. federal income tax as well as income tax in numerous state and non-U.S. jurisdictions. We are routinely examined by tax authorities in these various jurisdictions. With few exceptions, Wells Fargo and its subsidiaries are not subject to federal, state, local and non-U.S. income tax examinations for taxable years prior to 2011. It is possible that one or more of the examinations or appeals may be resolved within the next twelve months resulting in a decrease of up to \$1.4 billion of our gross unrecognized tax benefits. Table 23.5 summarizes our major tax jurisdiction examination status as of December 31, 2020.

Table 23.5: Tax Examination Status

Jurisdiction	Tax Year(s)	Status
United States	2004-2007	Administrative appeals
United States	2011-2014	Administrative appeals
United States	2015-2018	Field examination
California	2015-2016	Field examination
New York State and City	2015-2016	Field examination

Note 24: Earnings and Dividends Per Common Share

Table 24.1 shows earnings per common share and diluted earnings per common share and reconciles the numerator and denominator of both earnings per common share calculations. See Note 1 (Summary of Significant Accounting Policies) for

discussion on share repurchases, and the Consolidated Statement of Changes in Equity and Note 19 (Common Stock and Stock Plans) for information about stock and options activity and terms and conditions of warrants.

Table 24.1: Earnings Per Common Share Calculations

(in millions, except per share amounts)	Year ended December 31,		
	2020	2019	2018
Wells Fargo net income	\$ 3,301	19,549	22,393
Less: Preferred stock dividends and other (1)	1,591	1,611	1,704
Wells Fargo net income applicable to common stock (numerator)	\$ 1,710	17,938	20,689
Earnings per common share			
Average common shares outstanding (denominator)	4,118.0	4,393.1	4,799.7
Per share	\$ 0.42	4.08	4.31
Diluted earnings per common share			
Average common shares outstanding	4,118.0	4,393.1	4,799.7
Add: Stock options (2)	—	0.8	8.0
Restricted share rights (2)	16.2	31.5	26.3
Warrants (2)	—	—	4.4
Diluted average common shares outstanding (denominator)	4,134.2	4,425.4	4,838.4
Per share	\$ 0.41	4.05	4.28

(1) The years ended December 31, 2020, 2019 and 2018, includes \$301 million, \$220 million and \$155 million, respectively, from the elimination of discounts or issuance costs associated with redemptions of preferred stock.

(2) Calculated using the treasury stock method.

Table 24.2 presents the outstanding securities that were anti-dilutive and therefore not included in the calculation of diluted earnings per common share.

Table 24.2: Outstanding Anti-Dilutive Securities

(in millions)	Weighted-average shares		
	Year ended December 31,		
	2020	2019	2018
Convertible Preferred Stock, Series L (1)	25.3	25.3	25.3
Restricted share rights (2)	1.1	—	—
Stock options (2)	—	—	0.3

(1) Calculated using the if-converted method.

(2) Calculated using the treasury stock method.

Table 24.3 presents dividends declared per common share.

Table 24.3: Dividends Declared Per Common Share

	Year ended December 31,		
	2020	2019	2018
Per common share	\$ 1.22	1.92	1.64

Note 25: Other Comprehensive Income

Table 25.1 provides the components of other comprehensive income (OCI), reclassifications to net income by income statement line item, and the related tax effects.

Table 25.1: Summary of Other Comprehensive Income

(in millions)	Year ended December 31,								
	2020			2019			2018		
	Before tax	Tax effect	Net of tax	Before tax	Tax effect	Net of tax	Before tax	Tax effect	Net of tax
Debt securities:									
Net unrealized gains (losses) arising during the period	\$ 2,317	(570)	1,747	5,439	(1,337)	4,102	(4,493)	1,100	(3,393)
Reclassification of net (gains) losses to net income:									
Interest income on debt securities (1)	532	(132)	400	263	(65)	198	357	(88)	269
Net gains on debt securities	(873)	213	(660)	(140)	34	(106)	(108)	27	(81)
Other noninterest income	—	—	—	(1)	—	(1)	(1)	—	(1)
Subtotal reclassifications to net income	(341)	81	(260)	122	(31)	91	248	(61)	187
Net change	1,976	(489)	1,487	5,561	(1,368)	4,193	(4,245)	1,039	(3,206)
Derivatives and hedging activities:									
Fair Value Hedges:									
Change in fair value of excluded components on fair value hedges (2)	(31)	7	(24)	(3)	1	(2)	(254)	63	(191)
Cash Flow Hedges:									
Net unrealized gains (losses) arising during the period on cash flow hedges	10	(2)	8	(21)	5	(16)	(278)	67	(211)
Reclassification of net losses to net income:									
Interest income on loans	215	(53)	162	291	(72)	219	292	(72)	220
Interest expense on long-term debt	4	(1)	3	8	(2)	6	2	—	2
Subtotal reclassifications to net income	219	(54)	165	299	(74)	225	294	(72)	222
Net change	198	(49)	149	275	(68)	207	(238)	58	(180)
Defined benefit plans adjustments:									
Net actuarial and prior service losses arising during the period	(510)	126	(384)	(40)	10	(30)	(434)	106	(328)
Reclassification of amounts to noninterest expense (3):									
Amortization of net actuarial loss	152	(37)	115	141	(35)	106	127	(31)	96
Settlements and other	114	(26)	88	(8)	5	(3)	126	(29)	97
Subtotal reclassifications to noninterest expense	266	(63)	203	133	(30)	103	253	(60)	193
Net change	(244)	63	(181)	93	(20)	73	(181)	46	(135)
Foreign currency translation adjustments:									
Net unrealized gains (losses) arising during the period	53	(2)	51	73	(2)	71	(156)	1	(155)
Net change	53	(2)	51	73	(2)	71	(156)	1	(155)
Other comprehensive income (loss)	\$ 1,983	(477)	1,506	6,002	(1,458)	4,544	(4,820)	1,144	(3,676)
Less: Other comprehensive income (loss) from noncontrolling interests, net of tax			1			—			(2)
Wells Fargo other comprehensive income (loss), net of tax			\$ 1,505			4,544			(3,674)

- (1) Represents net unrealized gains and losses amortized over the remaining lives of securities that were transferred from the available-for-sale portfolio to the held-to-maturity portfolio.
(2) Represents changes in fair value of cross-currency swaps attributable to changes in cross-currency basis spreads, which are excluded from the assessment of hedge effectiveness and recorded in other comprehensive income.
(3) These items are included in the computation of net periodic benefit cost (see Note 21 (Employee Benefits and Other Expenses) for more information).

Note 25: Other Comprehensive Income (continued)

Table 25.2 provides the cumulative OCI balance activity on an after-tax basis.

Table 25.2: Cumulative OCI Balances

(in millions)	Debt securities	Fair value hedges (1)	Cash flow hedges (2)	Defined benefit plans adjustments	Foreign currency translation adjustments	Cumulative other comprehensive income (loss)
Balance, December 31, 2017	\$ 171	11	(429)	(1,808)	(89)	(2,144)
Transition adjustment (3)	(118)	—	—	—	—	(118)
Balance, January 1, 2018	53	11	(429)	(1,808)	(89)	(2,262)
Reclassification of certain tax effects to retained earnings (4)	31	2	(89)	(353)	9	(400)
Net unrealized losses arising during the period	(3,393)	(191)	(211)	(328)	(155)	(4,278)
Amounts reclassified from accumulated other comprehensive income	187	—	222	193	—	602
Net change	(3,175)	(189)	(78)	(488)	(146)	(4,076)
Less: Other comprehensive loss from noncontrolling interests	—	—	—	—	(2)	(2)
Balance, December 31, 2018	(3,122)	(178)	(507)	(2,296)	(233)	(6,336)
Transition adjustment (5)	481	—	—	—	—	481
Balance, January 1, 2019	(2,641)	(178)	(507)	(2,296)	(233)	(5,855)
Net unrealized gain (losses) arising during the period	4,102	(2)	(16)	(30)	71	4,125
Amounts reclassified from accumulated other comprehensive income	91	—	225	103	—	419
Net change	4,193	(2)	209	73	71	4,544
Less: Other comprehensive income (loss) from noncontrolling interests	—	—	—	—	—	—
Balance, December 31, 2019	1,552	(180)	(298)	(2,223)	(162)	(1,311)
Net unrealized gains (losses) arising during the period	1,747	(24)	8	(384)	51	1,398
Amounts reclassified from accumulated other comprehensive income	(260)	—	165	203	—	108
Net change	1,487	(24)	173	(181)	51	1,506
Less: Other comprehensive income from noncontrolling interests	—	—	—	—	1	1
Balance, December 31, 2020	\$ 3,039	(204)	(125)	(2,404)	(112)	194

(1) Substantially all of the amounts for fair value hedges are foreign exchange contracts.

(2) Substantially all of the amounts for cash flow hedges are foreign exchange contracts for the years ended December 31, 2020 and 2019, and interest rate contracts for the year- ended December 31, 2018.

(3) The transition adjustment relates to our adoption of ASU 2016-01 – Financial Instruments – Overall (Subtopic 825-10): *Recognition and Measurement of Financial Assets and Financial Liabilities*.

(4) Represents the reclassification from other comprehensive income to retained earnings as a result of our adoption of ASU 2018-02 – Income Statement-Reporting Comprehensive Income (Topic 220): *Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income* in third quarter 2018.

(5) The transition adjustment relates to our adoption of ASU 2017-08 – Receivables – Nonrefundable Fees and Other Costs (Subtopic 310-20): *Premium Amortization on Purchased Callable Debt Securities* in first quarter 2019.

Note 26: Operating Segments

We reorganized our management reporting into four reportable operating segments: Consumer Banking and Lending; Commercial Banking; Corporate and Investment Banking; and Wealth and Investment Management. All other business activities that are not included in the reportable operating segments have been included in Corporate. We define our reportable operating segments by type of product and customer segment, and their results are based on our management reporting process. The management reporting process measures the performance of the reportable operating segments based on the Company's management structure, and the results are regularly reviewed by our Chief Executive Officer and Operating Committee. The management reporting process is based on U.S. GAAP and includes specific adjustments, such as funds transfer pricing for asset/liability management, shared revenues and expenses, and taxable-equivalent adjustments to consistently reflect income from taxable and tax-exempt sources, which allows management to assess performance consistently across the operating segments.

Prior period reportable operating segment results have been revised to reflect the reorganization of our management reporting structure. The reorganization did not impact the previously reported consolidated financial results of the Company.

Consumer Banking and Lending offers diversified financial products and services for consumers and small businesses with annual sales generally up to \$5 million. These financial products and services include checking and savings accounts, credit and debit cards, as well as home, auto, personal, and small business lending.

Commercial Banking provides financial solutions to private, family owned and certain public companies. Products and services include banking and credit products across multiple industry sectors and municipalities, secured lending and lease products, and treasury management.

Corporate and Investment Banking delivers a suite of capital markets, banking, and financial products and services to corporate, commercial real estate, government and institutional clients globally. Products and services include corporate banking, investment banking, treasury management, commercial real estate lending and servicing, equity and fixed income solutions, as well as sales, trading, and research capabilities.

Wealth and Investment Management provides personalized wealth management, investment and retirement products and services to clients across U.S.-based businesses including Wells Fargo Advisors, The Private Bank, Abbot Downing, and Wells Fargo Asset Management. We serve clients' brokerage needs, and deliver financial planning, private banking, credit, and fiduciary services to high-net worth and ultra-high-net worth individuals and families. We also provide investment management capabilities delivered to global investment institutional clients through separate accounts and the Wells Fargo Funds.

Corporate includes corporate treasury and enterprise functions, net of allocations (including funds transfer pricing, capital, liquidity and certain expenses), in support of the reportable operating segments, as well as our investment portfolio and affiliated venture capital and private equity partnerships. In addition, Corporate includes all restructuring charges related to efficiency initiatives. See Note 22 (Restructuring Charges) for more information on restructuring charges. Corporate also includes certain lines of business that management has determined are no longer consistent with the long-term strategic goals of the Company, including our student loan and rail car leasing businesses, as well as previously divested businesses.

Basis of Presentation

FUNDS TRANSFER PRICING Corporate treasury manages a funds transfer pricing methodology that considers interest rate risk, liquidity risk, and other product characteristics. Operating segments pay a funding charge for their assets and receive a funding credit for their deposits, both of which are included in net interest income. The net impact of the funding charges or credits is recognized in corporate treasury.

REVENUE AND EXPENSE SHARING When lines of business jointly serve customers, the line of business that is responsible for providing the product or service recognizes revenue or expense with a referral fee paid or an allocation of cost to the other line of business based on established internal revenue-sharing agreements.

When a line of business uses a service provided by another line of business or enterprise function (included in Corporate), expense is generally allocated based on the cost and use of the service provided.

TAXABLE-EQUIVALENT ADJUSTMENTS Taxable-equivalent adjustments related to tax-exempt income on certain loans and debt securities are included in net interest income, while taxable-equivalent adjustments related to income tax credits for low-income housing and renewable energy investments are included in noninterest income, in each case with corresponding impacts to income tax expense (benefit). Adjustments are included in Corporate, Commercial Banking, and Corporate and Investment Banking and are eliminated to reconcile to the Company's consolidated financial results.

Note 26: Operating Segments (continued)

Table 26.1 presents our results by operating segment.

Table 26.1: Operating Segments

(\$ in millions)	Year ended December 31,						
	Consumer Banking and Lending	Commercial Banking	Corporate and Investment Banking	Wealth and Investment Management	Corporate	Reconciling Items (1)	Consolidated Company
2020							
Net interest income (2)	\$ 23,378	6,191	7,501	2,993	247	(475)	39,835
Noninterest income	10,638	3,547	6,319	11,519	3,216	(2,734)	32,505
Total revenue	34,016	9,738	13,820	14,512	3,463	(3,209)	72,340
Provision for credit losses	5,662	3,744	4,946	249	(472)	—	14,129
Noninterest expense	26,976	6,908	7,703	12,051	3,992	—	57,630
Income (loss) before income tax expense (benefit)	1,378	(914)	1,171	2,212	(57)	(3,209)	581
Income tax expense (benefit)	302	(238)	330	552	(742)	(3,209)	(3,005)
Net income (loss) before noncontrolling interests	1,076	(676)	841	1,660	685	—	3,586
Less: Net income (loss) from noncontrolling interests	—	5	(1)	4	277	—	285
Net income (loss)	\$ 1,076	(681)	842	1,656	408	—	3,301
2019							
Net interest income (2)	\$ 25,786	8,184	8,005	3,917	1,950	(611)	47,231
Noninterest income	12,105	4,154	6,223	11,815	5,859	(2,324)	37,832
Total revenue	37,891	12,338	14,228	15,732	7,809	(2,935)	85,063
Provision for credit losses	2,184	190	173	2	138	—	2,687
Noninterest expense	26,998	7,068	7,432	13,363	3,317	—	58,178
Income (loss) before income tax expense (benefit)	8,709	5,080	6,623	2,367	4,354	(2,935)	24,198
Income tax expense (benefit)	2,814	1,266	1,658	590	764	(2,935)	4,157
Net income before noncontrolling interests	5,895	3,814	4,965	1,777	3,590	—	20,041
Less: Net income (loss) from noncontrolling interests	—	6	(1)	9	478	—	492
Net income	\$ 5,895	3,808	4,966	1,768	3,112	—	19,549
2018							
Net interest income (2)	\$ 26,985	8,748	8,345	4,317	2,259	(659)	49,995
Noninterest income	12,930	4,332	5,726	11,552	4,013	(2,140)	36,413
Total revenue	39,915	13,080	14,071	15,869	6,272	(2,799)	86,408
Provision for credit losses	1,931	(79)	13	(9)	(112)	—	1,744
Noninterest expense	26,162	7,368	7,471	12,551	2,574	—	56,126
Income (loss) before income tax expense (benefit)	11,822	5,791	6,587	3,327	3,810	(2,799)	28,538
Income tax expense (benefit)	2,915	1,456	1,663	831	1,596	(2,799)	5,662
Net income before noncontrolling interests	8,907	4,335	4,924	2,496	2,214	—	22,876
Less: Net income (loss) from noncontrolling interests	—	27	(7)	1	462	—	483
Net income	\$ 8,907	4,308	4,931	2,495	1,752	—	22,393
2020							
Loans (average)	\$ 376,463	211,436	255,324	78,775	19,790	—	941,788
Assets (average)	432,042	228,653	521,861	87,505	673,440	—	1,943,501
Deposits (average)	722,085	200,381	234,332	162,521	56,692	—	1,376,011
Loans (period-end)	362,796	188,977	244,456	80,785	10,623	—	887,637
Assets (period-end)	420,995	209,134	508,793	89,380	726,861	—	1,955,163
Deposits (period-end)	784,565	208,284	203,004	175,515	33,013	—	1,404,381
2019							
Loans (average)	\$ 379,766	229,354	248,310	74,986	18,540	—	950,956
Assets (average)	439,396	248,169	520,973	83,590	621,316	—	1,913,444
Deposits (average)	629,110	186,942	238,651	139,151	92,407	—	1,286,261
Loans (period-end)	385,002	224,781	253,436	77,140	21,906	—	962,265
Assets (period-end)	448,971	244,984	538,383	86,505	608,712	—	1,927,555
Deposits (period-end)	647,152	194,469	261,134	143,873	75,998	—	1,322,626

- (1) Taxable-equivalent adjustments related to tax-exempt income on certain loans and debt securities are included in net interest income, while taxable-equivalent adjustments related to income tax credits for low-income housing and renewable energy investments are included in noninterest income, in each case with corresponding impacts to income tax expense (benefit). Adjustments are included in Corporate, Commercial Banking, and Corporate and Investment Banking and are eliminated to reconcile to the Company's consolidated financial results.
- (2) Net interest income is the difference between interest earned on assets and the cost of liabilities to fund those assets. Interest earned includes actual interest earned on segment assets as well as interest credits for any funding of a segment available to be provided to other segments. The cost of liabilities includes actual interest expense on segment liabilities as well as funding charges for any funding provided from other segments.

Note 27: Parent-Only Financial Statements

The following tables present Parent-only condensed financial statements.

Table 27.1: Parent-Only Statement of Income

(in millions)	Year ended December 31,		
	2020	2019	2018
Income			
Dividends from subsidiaries (1)	\$ 42,578	21,930	22,427
Interest income from subsidiaries	1,295	3,356	3,298
Other interest income	3	43	49
Other income	(231)	(162)	(424)
Total income	43,645	25,167	25,350
Expense			
Interest expense:			
Indebtedness to nonbank subsidiaries	155	664	644
Short-term borrowings	—	—	2
Long-term debt	3,591	4,931	4,541
Other	—	2	3
Noninterest expense	794	1,327	286
Total expense	4,540	6,924	5,476
Income before income tax benefit and equity in undistributed income of subsidiaries	39,105	18,243	19,874
Income tax benefit	(1,694)	(945)	(544)
Equity in undistributed income of subsidiaries	(37,498)	361	1,975
Net income	\$ 3,301	19,549	22,393

(1) Includes dividends paid from indirect bank subsidiaries of \$1.8 billion, \$21.8 billion and \$20.8 billion in 2020, 2019 and 2018, respectively.

Table 27.2: Parent-Only Statement of Comprehensive Income

(in millions)	Year ended December 31,		
	2020	2019	2018
Net income	\$ 3,301	19,549	22,393
Other comprehensive income (loss), net of tax:			
Debt securities	(10)	(45)	(12)
Derivatives and hedging activities	(2)	(12)	(198)
Defined benefit plans adjustments	(178)	75	(132)
Equity in other comprehensive income (loss) of subsidiaries	1,695	4,526	(3,332)
Other comprehensive income (loss), net of tax:	1,505	4,544	(3,674)
Total comprehensive income	\$ 4,806	24,093	18,719

Note 27: Parent-Only Financial Statements (continued)

Table 27.3: Parent-Only Balance Sheet

(in millions)	Dec 31, 2020	Dec 31, 2019
Assets		
Cash, cash equivalents, and restricted cash due from:		
Subsidiary banks	\$ 14,817	14,948
Nonaffiliates	—	1
Debt securities:		
Available-for-sale, at fair value	—	1
Loans to nonbank subsidiaries	185,046	145,383
Investments in subsidiaries (1)	172,844	208,076
Equity securities	144	1,007
Other assets	5,857	4,608
Total assets	\$ 378,708	374,024
Liabilities and equity		
Accrued expenses and other liabilities	\$ 8,249	8,050
Long-term debt	181,956	152,628
Indebtedness to nonbank subsidiaries	3,616	26,200
Total liabilities	193,821	186,878
Stockholders' equity	184,887	187,146
Total liabilities and equity	\$ 378,708	374,024

(1) The years ended December 31, 2020, and December 31, 2019, include indirect ownership of bank subsidiaries with equity of \$173.5 billion and \$170.4 billion, respectively.

Table 27.4: Parent-Only Statement of Cash Flows

(in millions)	Year ended December 31,		
	2020	2019	2018
Cash flows from operating activities:			
Net cash provided by operating activities	\$ 50,193	27,601	19,024
Cash flows from investing activities:			
Equity securities, not held for trading:			
Proceeds from sales and capital returns	2,333	326	355
Purchases	(1,479)	(1,052)	(220)
Loans:			
Net repayments from (advances to) subsidiaries	10	(3)	(7)
Capital notes and term loans made to subsidiaries	(38,547)	(5,286)	(2,441)
Principal collected on notes/loans made to subsidiaries	558	1,703	756
Net decrease (increase) in investment in subsidiaries	425	(384)	2,407
Other, net	16	22	109
Net cash provided (used) by investing activities	(36,684)	(4,674)	959
Cash flows from financing activities:			
Net increase (decrease) in short-term borrowings and indebtedness to subsidiaries	(22,613)	(636)	12,467
Long-term debt:			
Proceeds from issuance	34,918	20,369	1,876
Repayment	(15,803)	(8,143)	(9,162)
Preferred stock:			
Proceeds from issuance	3,116	—	—
Redeemed	(3,602)	(1,550)	(2,150)
Cash dividends paid	(1,290)	(1,391)	(1,622)
Common stock:			
Proceeds from issuance	571	380	632
Stock tendered for payment of withholding taxes	(340)	(302)	(331)
Repurchased	(3,415)	(24,533)	(20,633)
Cash dividends paid	(4,852)	(8,198)	(7,692)
Other, net	(331)	(275)	(248)
Net cash used by financing activities	(13,641)	(24,279)	(26,863)
Net change in cash, cash equivalents, and restricted cash	(132)	(1,352)	(6,880)
Cash, cash equivalents, and restricted cash at beginning of year	14,949	16,301	23,181
Cash, cash equivalents, and restricted cash at end of year	\$ 14,817	14,949	16,301

Note 28: Regulatory Capital Requirements and Other Restrictions

Regulatory Capital Requirements

The Company and each of its subsidiary banks are subject to regulatory capital adequacy requirements promulgated by federal banking regulators. The FRB establishes capital requirements for the consolidated financial holding company, and the OCC has similar requirements for the Company's national banks, including Wells Fargo Bank, N.A. (the Bank).

Table 28.1 presents regulatory capital information for Wells Fargo & Company and the Bank in accordance with Basel III capital requirements. Our capital adequacy is assessed based on the lower of our risk-based capital ratios calculated under the Standardized Approach and under the Advanced Approach. The Standardized Approach applies assigned risk weights to broad risk categories, while the calculation of risk-weighted assets (RWAs) under the Advanced Approach differs by requiring applicable

banks to utilize a risk-sensitive methodology, which relies upon the use of internal credit models, and includes an operational risk component. The Basel III capital requirements for calculating Common Equity Tier 1 (CET1) and tier 1 capital, along with RWAs, are fully phased-in. However, the requirements for determining tier 2 and total capital are still in accordance with Transition Requirements and are scheduled to be fully phased-in by the end of 2021. Accordingly, the information presented below reflects fully phased-in CET1 capital, tier 1 capital, and RWAs, but reflects total capital still in accordance with Transition Requirements.

At December 31, 2020, the Bank and our other insured depository institutions were considered well-capitalized under the requirements of the Federal Deposit Insurance Act.

Table 28.1: Regulatory Capital Information (1)

(in millions, except ratios)	Wells Fargo & Company				Wells Fargo Bank, N.A.			
	December 31, 2020		December 31, 2019		December 31, 2020		December 31, 2019	
	Advanced Approach	Standardized Approach	Advanced Approach	Standardized Approach	Advanced Approach	Standardized Approach	Advanced Approach	Standardized Approach
Regulatory capital:								
Common Equity Tier 1	\$ 138,297	138,297	138,760	138,760	150,168	150,168	145,149	145,149
Tier 1	158,196	158,196	158,949	158,949	150,168	150,168	145,149	145,149
Total	186,934	196,660	188,333	196,223	164,412	173,719	158,615	166,056
Assets:								
Risk-weighted assets (2)	1,158,355	1,193,744	1,165,079	1,245,853	1,012,751	1,085,599	1,047,054	1,152,791
Adjusted average assets	1,900,258	1,900,258	1,913,297	1,913,297	1,735,406	1,735,406	1,695,807	1,695,807
Regulatory capital ratios:								
Common Equity Tier 1 capital (2)	11.94 %	11.59 *	11.91	11.14 *	14.83	13.83 *	13.86	12.59 *
Tier 1 capital (2)	13.66	13.25 *	13.64	12.76 *	14.83	13.83 *	13.86	12.59 *
Total capital (2)	16.14 *	16.47	16.16	15.75 *	16.23	16.00 *	15.15	14.40 *
Regulatory leverage:								
Total leverage exposure (3)	\$	1,963,971		2,247,729		2,041,952		2,006,180
Supplementary leverage ratio (SLR) (3)		8.05 %		7.07		7.35		7.24
Tier 1 leverage ratio (4)		8.32		8.31		8.65		8.56

*Denotes the binding ratio based on the lower calculation under the Advanced and Standardized Approaches.

- At December 31, 2020, the impact of the CECL transition provision issued by federal banking regulators on the regulatory capital of the Company was an increase in capital of \$1.7 billion, reflecting a \$991 million (post-tax) increase in capital recognized upon our initial adoption of CECL, offset by 25% of the \$10.8 billion increase in our ACL under CECL from January 1, 2020, through December 31, 2020. The impact of the CECL transition provision on the regulatory capital of the Bank at December 31, 2020, was an increase in capital of \$1.7 billion.
- RWAs and capital ratios for December 31, 2019, have been revised as a result of a decrease in RWAs under the Advanced Approach due to the correction of duplicated operational loss amounts. RWAs for the Company and the Bank included an increase of \$1.4 billion under the Standardized Approach and a decrease of \$1.4 billion under the Advanced Approach related to the impact of the CECL transition provision on the excess allowance for credit losses as of December 31, 2020.
- The SLR consists of tier 1 capital divided by total leverage exposure. Total leverage exposure consists of total average assets, less goodwill and other permitted tier 1 capital deductions (net of deferred tax liabilities), plus certain off-balance sheet exposures.
- The tier 1 leverage ratio consists of tier 1 capital divided by total average assets, excluding goodwill and certain other items as determined under the rule.

At December 31, 2020, under transition requirements, the CET1, tier 1 and total capital ratio requirements for the Company included a global systemically important bank (G-SIB) surcharge of 2.00%. The G-SIB surcharge is not applicable to the Bank. In addition, the CET1, tier 1 and total capital ratio requirements for the Company and the Bank included a stress capital buffer of 2.50% under the Standardized Approach and a capital conservation buffer of 2.50% under the Advanced Approach. The Company is required to maintain these risk-based capital ratios and to maintain an SLR of at least 5.00% (comprised of a 3.00% minimum requirement plus a supplementary leverage buffer of 2.00%) to avoid restrictions on capital distributions and discretionary bonus payments. The Bank is required to maintain an SLR of at least 6.00% to be considered well-capitalized under applicable regulatory capital adequacy rules. Table 28.2 presents the risk-based capital and leverage requirements under Transition Requirements to which the Company and the Bank

were subject as of December 31, 2020 and 2019, which were the same under both the Standardized and Advanced Approaches.

Table 28.2: Risk-Based Capital and Leverage Ratios – Transition Requirements

	Wells Fargo & Company	Wells Fargo Bank, N.A.
	Dec 31, 2020 and Dec 31, 2019	Dec 31, 2020 and Dec 31, 2019
Common Equity Tier 1 capital	9.00 %	7.00
Tier 1 capital	10.50	8.50
Total capital	12.50	10.50
Tier 1 leverage	4.00	4.00
Supplementary leverage	5.00	6.00

Note 28: Regulatory Capital Requirements and Other Restrictions (continued)

Capital Planning Requirements

The FRB's capital plan rule establishes capital planning and other requirements that govern capital distributions, including dividends and share repurchases, by certain large bank holding companies (BHCs), including Wells Fargo. The FRB conducts an annual Comprehensive Capital Analysis and Review exercise and has also published guidance regarding its supervisory expectations for capital planning, including capital policies regarding the process relating to common stock dividend and repurchase decisions in the FRB's SR Letter 15-18. The Parent's ability to make certain capital distributions is subject to the requirements of the capital plan rule and is also subject to the Parent meeting or exceeding certain regulatory capital minimums.

On December 18, 2020, the FRB announced that it was extending, with certain adjustments, measures it announced on June 25, 2020, limiting large BHCs, including Wells Fargo, from making any capital distribution (excluding any capital distribution arising from the issuance of a capital instrument eligible for inclusion in the numerator of a regulatory capital ratio), unless otherwise approved by the FRB. For first quarter 2021, the FRB has generally authorized BHCs to (i) provided that the BHC does not increase the amount of its common stock dividends to be larger than the level paid in second quarter 2020, pay common stock dividends and make share repurchases that, in the aggregate, do not exceed an amount equal to the average of the BHC's net income for the four preceding calendar quarters; (ii) make share repurchases that equal the amount of share issuances related to expensed employee compensation; and (iii) redeem and make scheduled payments on additional tier 1 and tier 2 capital instruments. The FRB is expected to announce by March 31, 2021, whether these capital distribution limitations will be extended for another quarter.

Loan and Dividend Restrictions

Federal law restricts the amount and the terms of both credit and non-credit transactions between a bank and its nonbank affiliates. These covered transactions may not exceed 10% of the bank's capital and surplus (which for this purpose represents tier 1 and tier 2 capital, as calculated under the risk-based capital rules, plus the balance of the ACL excluded from tier 2 capital) with any single nonbank affiliate and 20% of the bank's capital and surplus with all its nonbank affiliates. Covered transactions that are extensions of credit may require collateral to be pledged to provide added security to the bank.

Federal laws and regulations limit the dividends that a national bank may pay. Dividends that may be paid by a national bank without the express approval of the Office of the Comptroller of the Currency (OCC) are limited to that bank's retained net profits for the preceding two calendar years plus retained net profits up to the date of any dividend declaration in the current calendar year. Retained net profits, as defined by the OCC, consist of net income less dividends declared during the period. Our national bank subsidiaries could have declared additional dividends of \$3.6 billion at December 31, 2020, without obtaining prior regulatory approval. We have elected to retain higher capital at our national bank subsidiaries to meet internal capital policy minimums and regulatory requirements.

Our nonbank subsidiaries are also limited by certain federal and state statutory provisions and regulations covering the amount of dividends that may be paid in any given year. In addition, under a Support Agreement dated June 28, 2017, as amended and restated on June 26, 2019, among Wells Fargo & Company, the parent holding company (the "Parent"), WFC Holdings, LLC, an intermediate holding company and subsidiary of the Parent (the "IHC"), Wells Fargo Bank, N.A., Wells Fargo Securities, LLC, Wells Fargo Clearing Services, LLC, and certain other direct and indirect subsidiaries of the Parent designated as material entities for resolution planning purposes or identified as related support entities in our resolution plan, the IHC may be restricted from making dividend payments to the Parent if certain liquidity and/or capital metrics fall below defined triggers or if the Parent's board of directors authorizes it to file a case under the U.S. Bankruptcy Code. Based on retained earnings at December 31, 2020, our nonbank subsidiaries could have declared additional dividends of \$28.3 billion at December 31, 2020, without obtaining prior regulatory approval.

Cash Restrictions

Cash and cash equivalents may be restricted as to usage or withdrawal. Table 28.3 provides a summary of restrictions on cash and cash equivalents.

Table 28.3: Nature of Restrictions on Cash and Cash Equivalents

(in millions)	Dec 31, 2020	Dec 31, 2019
Required reserve balance for the FRB (1)	\$ —	11,374
Reserve balance for non-U.S. central banks	243	460
Segregated for benefit of brokerage customers under federal and other brokerage regulations	957	733
Related to consolidated variable interest entities (VIEs) that can only be used to settle liabilities of VIEs	14	300

(1) Effective March 26, 2020, the FRB no longer required each of our subsidiary banks to maintain reserve balances on deposit with the Federal Reserve Banks. The amount for December 31, 2019, represents an average for the year ended December 31, 2019.

Report of Independent Registered Public Accounting Firm

To the Stockholders and Board of Directors
Wells Fargo & Company:

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheets of Wells Fargo & Company and Subsidiaries (the Company) as of December 31, 2020 and 2019, the related consolidated statements of income, comprehensive income, changes in equity, and cash flows for each of the years in the three-year period ended December 31, 2020, and the related notes (collectively, the consolidated financial statements). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2020 and 2019, and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 2020, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2020, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission, and our report dated February 23, 2021, expressed an unqualified opinion on the effectiveness of the Company's internal control over financial reporting.

Change in Accounting Principle

As discussed in Note 1 to the consolidated financial statements, the Company has changed its method of accounting for the recognition and measurement of credit losses as of January 1, 2020 due to the adoption of ASU 2016-13, Financial Instruments – Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments (CECL).

Basis for Opinion

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. Our audit included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audit also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audit provides a reasonable basis for our opinion.

Critical Audit Matters

The critical audit matters communicated below are matters arising from the current period audit of the consolidated financial statements that were communicated or required to be communicated to the audit committee and that: (1) relate to accounts or disclosures that are material to the consolidated financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

Assessment of the allowance for credit losses for loans

As discussed in Note 1 to the consolidated financial statements, the Company adopted ASU 2016-13, Financial Instruments – Credit Losses (ASU Topic 326), as of January 1, 2020. The total allowance for credit loss for loans as of January 1, 2020 (the January 1, 2020 ACL) was \$9.1 billion. As discussed in Notes 1 and 4 to the consolidated financial statements, the Company's allowance for credit losses for loans as of December 31, 2020 (the December 31, 2020 ACL) was \$19.7 billion. The January 1, 2020 ACL and the December 31, 2020 ACL include the measure of expected credit losses on a collective basis for those loans that share similar risk characteristics utilizing multiple credit loss models. The Company estimated the January 1, 2020 ACL and December 31, 2020 ACL for commercial loans by applying probability of default and severity of loss estimates to an expected exposure at default. The probability of default and severity of loss estimates are statistically derived through historical observation of default and losses after default for each credit risk rating. The Company estimated the January 1, 2020 ACL and December 31, 2020 ACL for consumer loans utilizing credit loss models which forecast expected credit losses in the portfolio based on historical experience of delinquency and default rates and loss severity. The Company's credit loss models utilize economic variables, including economic assumptions forecast over a reasonable and supportable forecast period. The Company forecasts multiple economic scenarios and applies weighting to the scenarios that are used to measure expected credit losses. After the reasonable and supportable forecast period, the Company reverts over the reversion period to its historical loss rates, evaluated through historical observations of default and losses after default. A portion of the January 1, 2020 ACL and December 31, 2020 ACL is comprised of adjustments for qualitative factors which may not be adequately captured in the loss models.

We identified the assessment of the January 1, 2020 ACL and the December 31, 2020 ACL as a critical audit matter. A high degree of audit effort, including specialized skills and knowledge, and subjective and complex auditor judgment was involved in the assessment of the January 1, 2020 ACL and the December 31, 2020 ACL. Specifically, the assessment encompassed the evaluation of the January 1, 2020 and the December 31, 2020 ACL methodology for collectively evaluated loans, including the methods and models used to estimate (1) probability of default and severity of loss estimates, significant economic assumptions, the reasonable and supportable forecast period, the historical observation period, and credit risk ratings for commercial loans, and (2) the adjustments for qualitative factors that may not be captured in the loss models. The assessment also included an evaluation of the conceptual soundness and performance of certain credit loss models. In addition, auditor judgment was required to evaluate the sufficiency of audit evidence obtained.

The following are the primary procedures we performed to address this critical audit matter. We evaluated the design and tested the operating effectiveness of certain internal controls related to the measurement of the January 1, 2020 ACL and the December 31, 2020 ACL estimates, including controls over the:

- development of the ACL methodology
- development of certain credit loss models
- performance monitoring of certain credit loss models
- identification and determination of the significant assumptions used in models
- development of the qualitative factors, including certain significant assumptions used in the measurement of the qualitative factors
- analysis of the ACL results, trends, and ratios.

We evaluated the Company's process to develop the January 1, 2020 ACL and December 31, 2020 estimates by testing certain sources of data, factors, and assumptions that the Company used, and considered the relevance and reliability of such data, factors, and assumptions. In addition, we involved credit risk professionals with specialized skills and knowledge, who assisted in:

- evaluating the Company's ACL methodology for compliance with U.S. generally accepted accounting principles
- evaluating judgments made by the Company relative to the development and performance testing of the credit loss models by comparing them to relevant Company-specific metrics and trends and the applicable industry and regulatory practices
- assessing the conceptual soundness of the credit loss models by inspecting the model documentation to determine whether the models are suitable for their intended use
- evaluating the methodology used to develop the economic forecast scenarios, underlying assumptions and weighting applied to scenarios by comparing it to the Company's business environment
- assessing the economic forecast scenarios through comparison to publicly available forecasts
- testing the historical observation period and reasonable and supportable forecast periods to evaluate the length of each period
- testing individual credit risk ratings for a selection of commercial loans by evaluating the financial performance of the borrower, sources of repayment, and any relevant guarantees or underlying collateral
- evaluating the methodology used to develop the qualitative factors and the effect of those factors on the ACL compared with relevant credit risk factors and consistency with credit trends and identified limitations of the underlying quantitative models.

We also assessed the sufficiency of the audit evidence obtained related to the January 1, 2020 and December 31, 2020 ACL estimate by evaluating the:

- cumulative results of the audit procedures
- qualitative aspects of the Company's accounting practices
- potential bias in the accounting estimates.

Assessment of the residential mortgage servicing rights (MSRs)

As discussed in Notes 1, 8, 9, 10, and 17 to the consolidated financial statements, the Company's residential MSR asset as of December 31, 2020 was \$6.1 billion on an underlying loan servicing portfolio of \$859 billion. The Company recognizes MSRs when it purchases servicing rights from third parties or retains servicing rights in connection with the sale or securitization of loans it originated and has elected to carry its residential MSRs at fair value with periodic changes reflected in earnings. The Company uses a valuation model for determining fair value that calculates the present value of estimated future net servicing income cash flows, which incorporates assumptions that market participants use in estimating future net servicing income cash flows. These assumptions include estimates of prepayment speeds, discount rates, default rates, cost to service (including delinquency and foreclosure costs), escrow account earnings, contractual servicing fee income, ancillary income and late fees. The estimated fair value of MSRs is periodically benchmarked to independent appraisals.

We identified the assessment of the valuation of residential MSRs as a critical audit matter. A high degree of audit effort, including specialized skills and knowledge, and subjective and complex auditor judgment was involved in the assessment of the MSRs. Specifically, there was a high degree of subjectivity used to evaluate the following assumptions because they are unobservable and the sensitivity of changes to those assumptions had a significant effect on the valuation: (1) prepayment speeds (2) discount rates, and (3) costs to service. There was also a high degree of subjectivity and potential for management bias related to updates made to these significant assumptions due to changes in market conditions, mortgage interest rates, or servicing standards.

The following are the primary procedures we performed to address this critical audit matter. We evaluated the design and tested the operating effectiveness of certain internal controls related to the critical audit matter. This included controls related to the:

- assessment of the valuation model
- evaluation of the significant assumptions (prepayment speeds, discount rates, and costs to service) used in determining the MSR fair value
- comparison of the MSR fair value to independent appraisals.

We evaluated the Company's process to develop the MSR estimate by testing certain sources of data and assumptions that the Company used, and considered the relevance and reliability of such data and assumptions. In addition, we involved valuation professionals with specialized skills and knowledge, who assisted in:

- evaluating the design of the valuation model used to estimate the MSR fair value in accordance with relevant U.S. generally accepted accounting principles
- evaluating significant assumptions based on an analysis of backtesting results and a comparison of significant assumptions to available data for comparable entities and independent appraisals
- assessing significant assumption updates made during the year by considering backtesting results, external market events, independent appraisals, and whether other circumstances that a market participant would have expected to be incorporated in the valuation were not incorporated.

Assessment of goodwill impairment analysis

As discussed in Notes 1 and 10 to the consolidated financial statements, the Company's goodwill balance as of December 31, 2020 was \$26.4 billion. The Company tests goodwill for impairment annually in the fourth quarter, or more frequently if events or circumstances indicate that the carrying value of goodwill may be impaired, by comparing the fair value of the reporting unit with its carrying amount, including goodwill. Management determines the fair value of its reporting units using a discounted cash flow income approach and a market approach that utilizes observable market data from comparable publicly traded companies.

We identified the assessment of the goodwill impairment analysis for the Commercial Banking reporting unit, which had \$2.9 billion of allocated goodwill as of December 31, 2020, as a critical audit matter as it involved a high degree of challenging and subjective auditor judgment due to the significant estimation required. We performed sensitivity analyses as a risk assessment procedure over assumptions used to estimate the fair value of the reporting unit and determined that certain forecasted financial information and the discount rate used in the discounted cash flow income approach represented the significant assumptions. These assumptions for the reporting unit were the most sensitive to changes and were challenging to test as they represented subjective determinations of future financial results. Additionally, the audit effort associated with this estimate required specialized skills and knowledge.

The following are the primary procedures we performed to address this critical audit matter. We evaluated the design and tested the operating effectiveness of certain internal controls related to the Company's determination of the estimated fair value of the Commercial Banking reporting unit, including controls over the:

- development of the assumption regarding certain forecasted financial information
- selection of the discount rate assumption used to develop the estimate.

We evaluated the reasonableness of certain forecasted financial information for the reporting unit by evaluating historical performance and current industry and economic trends. We also evaluated the consistency of certain forecasted financial information by comparing the projections to other analyses used by the Company and inquiries performed of senior management regarding the strategic plans for the reporting unit. We compared certain historical forecasted financial information to actual results to assess the Company's ability to accurately forecast. In addition, we involved a valuation professional with specialized skills and knowledge, who assisted in:

- evaluating the discount rate used in the fair value determination, by comparing the inputs to the discount rate to publicly available data for comparable entities and assessing the resulting discount rate
- evaluating the reasonableness of the total fair value through comparison to the Company's market capitalization and analysis of the resulting premium to applicable market transactions.

/s/ KPMG LLP

We have served as the Company's auditor since 1931.

San Francisco, California
February 23, 2021

Quarterly Financial Data

Condensed Consolidated Statement of Income – Quarterly (Unaudited)

(in millions, except per share amounts)	2020				2019			
	Quarter ended				Quarter ended			
	Dec 31,	Sep 30,	Jun 30,	Mar 31,	Dec 31,	Sep 30,	Jun 30,	Mar 31,
Interest income	\$ 10,470	10,800	11,801	14,727	15,595	16,499	16,986	17,003
Interest expense	1,195	1,432	1,921	3,415	4,395	4,874	4,891	4,692
Net interest income	9,275	9,368	9,880	11,312	11,200	11,625	12,095	12,311
Noninterest income								
Deposit and lending-related fees	1,689	1,651	1,465	1,797	1,888	1,854	1,841	1,710
Brokerage fees	2,440	2,336	2,117	2,482	2,380	2,346	2,318	2,193
Trust and investment management fees	747	737	687	701	728	729	795	786
Investment banking fees	486	441	547	391	464	484	455	394
Card fees	943	912	797	892	1,020	1,027	1,025	944
Mortgage banking	1,207	1,590	317	379	783	466	758	708
Net gains (losses) from trading and securities	984	1,274	1,552	(1,100)	574	1,235	871	1,296
Other	154	553	474	863	823	2,244	1,426	1,267
Total noninterest income	8,650	9,494	7,956	6,405	8,660	10,385	9,489	9,298
Total revenue	17,925	18,862	17,836	17,717	19,860	22,010	21,584	21,609
Provision for credit losses	(179)	769	9,534	4,005	644	695	503	845
Noninterest expense								
Personnel	8,948	8,624	8,916	8,323	8,819	8,604	8,487	9,218
Technology, telecommunications and equipment	838	791	672	798	936	821	734	785
Occupancy	826	851	871	715	749	760	719	717
Operating losses	621	1,219	1,219	464	1,916	1,920	247	238
Professional and outside services	1,664	1,760	1,676	1,606	1,789	1,737	1,715	1,504
Advertising and promotion	138	144	137	181	244	266	329	237
Restructuring charges	781	718	—	—	—	—	—	—
Other	986	1,122	1,060	961	1,161	1,091	1,218	1,217
Total noninterest expense	14,802	15,229	14,551	13,048	15,614	15,199	13,449	13,916
Income (loss) before income tax expense (benefit)	3,302	2,864	(6,249)	664	3,602	6,116	7,632	6,848
Income tax expense (benefit)	108	645	(3,917)	159	678	1,304	1,294	881
Net income (loss) before noncontrolling interests	3,194	2,219	(2,332)	505	2,924	4,812	6,338	5,967
Less: Net income (loss) from noncontrolling interests	202	184	47	(148)	51	202	132	107
Wells Fargo net income (loss)	\$ 2,992	2,035	(2,379)	653	2,873	4,610	6,206	5,860
Less: Preferred stock dividends and other	350	315	315	611	327	573	358	353
Wells Fargo net income (loss) applicable to common stock	\$ 2,642	1,720	(2,694)	42	2,546	4,037	5,848	5,507
Per share information								
Earnings per common share	\$ 0.64	0.42	(0.66)	0.01	0.61	0.93	1.31	1.21
Diluted earnings per common share	0.64	0.42	(0.66)	0.01	0.60	0.92	1.30	1.20
Average common shares outstanding	4,137.6	4,123.8	4,105.5	4,104.8	4,197.1	4,358.5	4,469.4	4,551.5
Diluted average common shares outstanding	4,151.3	4,132.2	4,105.5	4,135.3	4,234.6	4,389.6	4,495.0	4,584.0

Average Balances and Interest Rates (Taxable-Equivalent basis) – Quarterly (1) – (Unaudited)

(in millions)	Quarter ended December 31,					
	2020			2019		
	Average balance	Interest income/expense	Interest rates	Average balance	Interest income/expense	Interest rates
Assets						
Interest-earning deposits with banks	\$ 222,010	57	0.10 %	\$ 127,287	523	1.63 %
Federal funds sold and securities purchased under resale agreements	67,023	8	0.05	109,201	472	1.72
Debt securities:						
Trading debt securities	93,877	563	2.40	103,818	811	3.12
Available-for-sale debt securities	214,042	955	1.78	261,526	1,910	2.92
Held-to-maturity debt securities	192,697	942	1.95	153,152	965	2.51
Total debt securities	500,616	2,460	1.96	518,496	3,686	2.84
Loans held for sale (2)(3)	29,436	262	3.56	25,350	249	3.91
Loans:						
Commercial loans:						
Commercial and industrial – U.S.	255,112	1,655	2.58	283,650	2,747	3.84
Commercial and industrial – Non-U.S.	60,812	328	2.14	67,307	577	3.40
Real estate mortgage	121,228	855	2.81	122,136	1,255	4.07
Real estate construction	22,559	177	3.13	20,076	239	4.71
Lease financing	16,757	182	4.34	19,421	214	4.41
Total commercial loans	476,468	3,197	2.67	512,590	5,032	3.90
Consumer loans:						
Residential mortgage – first lien	287,361	2,240	3.12	292,388	2,678	3.66
Residential mortgage – junior lien	24,210	253	4.16	30,147	403	5.32
Credit card	36,135	1,072	11.80	39,898	1,233	12.26
Auto	48,033	582	4.82	47,274	600	5.04
Other consumer	27,497	314	4.55	34,239	571	6.60
Total consumer loans	423,236	4,461	4.20	443,946	5,485	4.92
Total loans (3)	899,704	7,658	3.39	956,536	10,517	4.37
Equity securities	25,744	132	2.04	38,278	269	2.81
Other	7,896	—	—	6,478	22	1.36
Total interest-earning assets	\$ 1,752,429	10,577	2.41 %	\$ 1,781,626	15,738	3.51 %
Cash and due from banks	22,896	—	—	19,943	—	—
Goodwill	26,390	—	—	26,389	—	—
Other	125,157	—	—	113,885	—	—
Total noninterest-earning assets	\$ 174,443	—	—	160,217	—	—
Total assets	\$ 1,926,872	10,577		1,941,843	15,738	
Liabilities						
Deposits:						
Demand deposits	\$ 225,577	32	0.06 %	\$ 63,292	174	1.09 %
Savings deposits	611,674	46	0.03	732,705	1,094	0.59
Time deposits	56,308	75	0.53	119,427	596	1.98
Deposits in non-U.S offices	32,170	10	0.12	54,751	208	1.50
Total interest-bearing deposits	925,729	163	0.07	970,175	2,072	0.85
Short-term borrowings	57,304	(12)	(0.08)	115,949	439	1.50
Long-term debt	214,223	956	1.78	230,430	1,743	3.02
Other liabilities	25,949	88	1.38	27,279	141	2.04
Total interest-bearing liabilities	\$ 1,223,205	1,195	0.39	\$ 1,343,833	4,395	1.30
Noninterest-bearing demand deposits	454,371	—	—	351,738	—	—
Other noninterest-bearing liabilities	63,548	—	—	53,879	—	—
Total noninterest-bearing liabilities	\$ 517,919	—	—	405,617	—	—
Total liabilities	\$ 1,741,124	1,195		1,749,450	4,395	
Total equity	185,748	—	—	192,393	—	—
Total liabilities and equity	\$ 1,926,872	1,195		1,941,843	4,395	
Interest rate spread on a taxable-equivalent basis (4)			2.02 %			2.21 %
Net interest margin and net interest income on a taxable-equivalent basis (4)	\$ 9,382		2.13 %	\$ 11,343		2.53 %

- The average balance amounts represent amortized costs. The interest rates are based on interest income or expense amounts for the period and are annualized. Interest rates and amounts include the effects of hedge and risk management activities associated with the respective asset and liability categories.
- In fourth quarter 2020, loans held for sale and mortgage loans held for sale were combined into a single line item. Prior period balances have been revised to conform with the current period presentation.
- Nonaccrual loans and related income are included in their respective loan categories.
- Includes taxable-equivalent adjustments of \$107 million and \$143 million for the quarters ended December 31, 2020 and 2019, respectively, predominantly related to tax-exempt income on certain loans and securities. The federal statutory tax rate was 21% for the periods ended December 31, 2020 and 2019.

Glossary of Acronyms

ACL	Allowance for credit losses	HTM	Held-to-maturity
AFS	Available-for-sale	LCR	Liquidity coverage ratio
ALCO	Asset/Liability Committee	LHFS	Loans held for sale
ARM	Adjustable-rate mortgage	LIBOR	London Interbank Offered Rate
ASC	Accounting Standards Codification	LIHTC	Low-income housing tax credit
ASU	Accounting Standards Update	LOCOM	Lower of cost or fair value
AUA	Assets under administration	LTV	Loan-to-value
AUM	Assets under management	MBS	Mortgage-backed security
AVM	Automated valuation model	MSR	Mortgage servicing right
BCBS	Basel Committee on Bank Supervision	NAV	Net asset value
BHC	Bank holding company	NPA	Nonperforming asset
CCAR	Comprehensive Capital Analysis and Review	NSFR	Net stable funding ratio
CD	Certificate of deposit	OCC	Office of the Comptroller of the Currency
CECL	Current expected credit loss	OCI	Other comprehensive income
CET1	Common Equity Tier 1	OTC	Over-the-counter
CFPB	Consumer Financial Protection Bureau	OTTI	Other-than-temporary impairment
CLO	Collateralized loan obligation	PCD	Purchased credit-deteriorated
CLTV	Combined loan-to-value	PCI	Purchased credit-impaired
CPI	Collateral protection insurance	PTPP	Pre-tax pre-provision profit
CRE	Commercial real estate	RMBS	Residential mortgage-backed securities
DPD	Days past due	ROA	Return on average assets
ESOP	Employee Stock Ownership Plan	ROE	Return on average equity
FASB	Financial Accounting Standards Board	ROTCE	Return on average tangible common equity
FDIC	Federal Deposit Insurance Corporation	RWAs	Risk-weighted assets
FHA	Federal Housing Administration	SEC	Securities and Exchange Commission
FHLB	Federal Home Loan Bank	S&P	Standard & Poor's Ratings Services
FHLMC	Federal Home Loan Mortgage Corporation	SLR	Supplementary leverage ratio
FICO	Fair Isaac Corporation (credit rating)	SOFR	Secured Overnight Financing Rate
FNMA	Federal National Mortgage Association	SPE	Special purpose entity
FRB	Board of Governors of the Federal Reserve System	TDR	Troubled debt restructuring
GAAP	Generally accepted accounting principles	TLAC	Total Loss Absorbing Capacity
GNMA	Government National Mortgage Association	VA	Department of Veterans Affairs
GSE	Government-sponsored entity	VaR	Value-at-Risk
G-SIB	Globally systemic important bank	VIE	Variable interest entity
HQLA	High-quality liquid assets	WIM	Wealth and Investment Management